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SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: NSS 316

COURSE TITLE: Concise Behavioural Sciences for Nursing

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MODULE 1: SOCIOLOGY

MODULE 2: GENERAL PSYCHOLOGY

MODULE 3: EDUCATIONAL PSYCHOLOGY

MODULE 4: ECONOMICS

UNIT 1 APPLICATION OF BEHAVIOURALSCIENCES IN HEALTH

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1.0 Introduction

This Unit will help a health care provider to learn the social evolution of man, the rise of society from savagery to civilization and the social and

health implications arising as a result of social changes taking place along with the social evolution. This requires not only fe-orientation in medical and nursing education, but also the need for social orientation to health care and the integration of traditional and modern systems of medicine.

2.0 Objectives

In this unit, you will learn about the importance and application ofbehavioural sciences in relation to health. After studying this unit, you should be able to:

- define behavioural sciences and explain its nature and scope,
- explain the relevance of behavioural sciences in health and development of Medical Sociology ,
- describe the role of the nurse as change agent against the backdrop of overall changes in the society and the forthcoming challenges of Primary Health Care, and
- explain the concept of social development and enumerate its indicators as applied to health.

3.0 Main contents

3.1 Definition and scope of behavioural sciences

Behavioural Sciences is the knowledge of human behaviour with an interdisciplinary approach to understand the human needs in the context of wider societal problem. Behavoural Sciences include Sociology, Anthropology (minus Archaeology), Technical Linguistics, and most of Physical Anthropology, Psychology, Psychology (minus Physi- ological Psychology) and behavioural aspects of Sociology, Economics, Geography, Law, Psychiatry and Political Science.

Luthans has shown the relationship between behavioural science and other disciplines as follows:

- Arts and Sciences
- Humanities
- Physical Sciences
- Biological Sciences
- Social Sciences .Economics
- History
- Political Science
- Behavioural Science
- Anthropology

- Sociology
- Psychology

In fact, Behavioural Science is a total systems approach to understand human behaviour, which does not take human being in isolation but views man as a product of socio-psy- chological and cultural factors. Thus this Science analyses man's behaviour keeping in view his psychological framework, interpersonal orientation, group influence and social and cultural factors. This helps to find solutions to problems arising due to man's complex nature.

3.2 Relevance of behavioural sciences in health

Medical science alone cannot cope with the complexity. In order to be adequate and effective, the socio-behavioural sciences must form a significant part of the content of the education of health care professionals.

Socio-behavioural science inputs

Inputs from the following behavioural sciences are desirable parts of the education of health care professionals.

a) Geography
Society and its ecology
Human settlement patterns
Human movements/migrations and the spread of disease Physical geography and health Sanitation
Environmental pollution
Town and regional planning and health
Spatial patterns of health systems, morbidity, mortality.

b) Social anthropology
Marriage, family, descent and kinship Culture, symbols and symbolism Language and socio-linguistics
Belief systems including religion
Diets, food habits, taboos and health/ill health behaviour
Human development cycle and associated health problems Indigenous political and economic systems Value systems
Social institutions and norms.

c) *Sociology*
Society and the social system
Social differentiation and straqtification -age, sex, class, caste
Social mobility

Poverty, inequality, exploitation and alienation Demography Criminology
Urban and rural societies
Racial and ethnic relations
Groups and group behaviour
Status, roles and access to scarce resources Social Control.

d) Psychology
The psychic and mental processes
Ego, personality and social behaviour
Feelings
Emotions
Crisis and coping with personal/emotional and social disorders Motivations
Attitudes
Stress (frustration, threat, conflict, aggression, depression, anxiety).

e) Political Science
Government structure and processes
Public administration
Bureaucracy
Use of power in society
Pluralism and democracy
Interest pressure groups
Political parties
Policy formulation and execution
Political socialization and behaviour
Politics and law in society
International politics and economy and the super powers.

f) Economics
Production, distribution and consumption of goods and services
Markets and the relation of supply to demand
Budgets and national income and expenditure
Taxation and social amenities
Labour, employment, underemployment and unemployment
Cost-benefit analysis
Economic determination of human behaviour
Economic changes and health conditions

These subjects provide an adequate insight into the science of medicine as a body of knowledge, and the art of the profession, being the health delivery systems and the social organization of medical care in particular cultural contexts.

Apart from providing an adequate cultural and social context for interpreting and solving health problems and without the depths that will turn the health care professionals into specialists, each of the above subjects is relevant and effective only when discussed casually and explanatorily in relation to the phenomenon of health or ill health in a particular society.

Each of the subjects should thus be treated as 'in' rather than 'of medicine, following the kind of analytical distinction which Strauss made to separate sociology 'of medicine that is, studying medicine to illuminate sociological concerns, from sociology 'in' medicine, which focuses primarily on the sociological causes and explanations of such problems as diseases, illness and patients' preference for particular drug stores and places of medical care. Together, the subjects should constitute a body of knowledge with reference to the structure of health care delivery system and also the relationship between the social structure and health or ill health in particular societies, as contexts for understanding and interpreting health and ill health behaviour.

3.3 Evolution of medical sociology

3.3.1 Sociology as a Discipline

The commonly accepted definition of Sociology as a special science is that it is the study of social aggregates and groups in their institutional organization and the causes and the consequences of changes in institutions and social organization (International Encyclo- paedia of Social Sciences, Vol. 15, 1972).

Prasal (1977) defines Sociology as an academic discipline that utilizes the scientific method in accumulating knowledge about man's social behaviour. It studies the pat- terned, shared human behaviour, the way in which people act towards one another. It specifically studies social groups, soicialo behaviour, social customs, institutions, social class, status, social mobility and prestige.

Sociologists are primarily interested in human being as they appear in social interaction, the major systems of which are: Social groups (e.g. family, peer group), social relation- ships (social roles and dyadic relationships) and social organization (e.g. formal and normal). In this regard, various sociological theories have been developed from time to time that describe the social evolution of man.

3.3.2 Origin of Sociology as a science

Sociology emerged as a special discipline among the social sciences towards the end of the nineteeth century. To attribute its rise to a particular man is somewhat arbitrary. Nonetheless, one can argue strongly that sociology as a special science of society had its origin in France and that the sociologist who contributed the most to its emergence was Emile Durkheim.

3.3.3 Fields of Sociology

In 1902, Durkheim classified Sociology into: a) General Sociology; b) luridicial Socio- logy; c) Moral Sociology; d) Criminal Sociology; e) Religious Sociology; f) Economioc Sociology; and g) Social Morphology. The other sub-fields of Sociology are -a) Industrial Sociology; b) Family Sociology; c) Educational Sociology; and d) Health Sociology.

In the very recent times, the field of sociology has extended towards Medical Science too. "Health Sociology" or "Medical Sociology" has been the subject to describe and learn about Medicine as a Social Science. We shall give you a brief orientation about the subject in the following paragraphs.

Health, defined as physical, mental and social well-being, should be adequately concep- tualized in organic as well as non-organic terms. There is the dire need to integrate the socio-behavioural sciences - geography, social anthropology, sociology, psychology, political science, and economics -in the education of health care professionals. The two components of this education, medicine and health care and the socio-behavioural sciences, should prepare professionals adequately to practice the science of medicine and the art of professional in varying socio-cultural context co-existing health care systems. It is only those institutions which integrate the socio-behavioural sciences in their programme of health care education that are on the path of progress by keeping scientific; pace with our ImrIerstarding of the structural realities in contemporary society. The science of sociology as applied to medicine owes its origin to the study of relationshi!:,s between health phenomena and social factors in medical context. A sociological approach to the study of history of medicine gives a better understanding of the past in order to gain insight into the current trends and developments in the sphere of medical science and thus develops an integrated knowledge to relate the life processes to the existing social phenomena and health in a meaningful manner.

3.3.4 The field of medical sociology

The field of medical sociology relates to sociology of medicine and sociology in medicine as coined by Strauss (1957). Various authors in the field of social sciences have defined Medical Sociology in different ways.

Robert Strauss (1957) has visualized the spectrum of Medical Sociology as that field of Sociology which can provide information concerning the purpose, scope and organiza- tion of the elements of medicine which will affect the lay man and professionals alike. ' Uncomittantly, medical training imbues in the practitioner a unique way of viewing the disease and the patient as well. Medical sociology enables the practitioners with infor- mation about medical institutions. The study of distribution of diseases, culotural perspectives, attitudes and values emerging from social organization of treatment centres, relationship of treatment facilities and support facilities and fall within the purview of medical sociology.

In more concrete terms, therefore, Sociology of medicine refers to the study of the various broad socio-cultural, economic and political forces that shape the health services system of a country at the macro level.
Sociology in medicine refers to the health problems, health pracdtices, health institutions and health behaviour of the people at the micro level.
There is increasing emphasis for the need of behavioural scientists or health social scientists (NIHAE, 1970) than sociologists or anthropoligists or psychologists in the health field. Without getting further involved with the above distinction, one thing is certain that Medical Sociology, as a discipline has to develop and grow as an area within the general field of Sociology.

3.3.5 The field of medical anthropology

The sub-fields of Anthropology are of direct relevance to health management pro- grammes. They are:

a) ethno-medicine
b) medical anthropology
c) cultural ecology

Each one has significant relevance from the point of health care both at individual and cultural levels. Let us has a brief orientation about the subject.

Medical Anthropology analyses the medical-clinical-curative systems in different so- cieties. Broadly, medical anthropology has been defined as

the branch of science of man which studies biological and cultural aspects of man from the point of view of under- standing the medical, medico-historical, medico-social and public health problems of human beings (Hasan and Prasad, 1959).

In the light of the above definition, a holistic approach to the understanding of the above science, we may define Medical Anthropology as "the holistic study of health, illness and related misfortunes, as these are culturally perceived, labelled, classified, experi- enced and communicated on the one hand and socially constructed roles, statuses and institutional networks which are believed to help in the health enhancing process, on the other, with a view to identify cross cultural similarities and variation in the patterning of such behaviour".

The anthropologists, therefore, have to appreciate that the place of Medicine in any society is determined by the current social and economic structure, the value that society places on health and disease, the tasks, that are assigned to different categories of practitioners and the technology of medicine available to them. Incidentally, the World Health Forum has referred ethno-medicine as "popular medicine" or "popular health culture". Polgar (1962) has further distinguished "professional health culture of medical practitioners from the popular health culture of unspecialized lay practitioners". It has to be appreciated in the above context that the modern culture certainly lays a great deal of stress upon scientific medicine as opposed to folk or indigenous medicine. However, one cannot forget that socio-cultural forces play an important part in determining the meaning of illness, function of illness and ways of counteracting it.

In the above backdrop, health sociology in the context of developing nations, especially Nigeria, has a far greater challenge to face in the field of health that may provide new configurations of knowledge on social realities related to health.

EXERCISE 1

1) Fill in the blanks:
   a) Behavioural Science is the knowledge of…..with an ……..approach.
   b) The field of Medical Sociology refers to Soiciology …….Medicine and Sociology…….Medicine.
   c) The sub-fiends of Anthropology that are in direct relevance to health are: i)…….. ii)…….. and iii)……

2) Write T for True and F for False.
   a) Sociology of Medicine refers to health services system at Micro level.
   b) Sociology in Medicine refers to health problems, health practices, health institutions and health behaviour of the people.

3.4 Role of a nurse as a change agent in rendering primary health care in contemporary Nigerian society.

In the light of the principles of primary health care and the commitment to the goal of HFA by 2000 A.D., it has been proposed to make available the preventive, promotive and rehabilitative aspects of health care services closer to the doorsteps of the people who require them most, more particularly the weaker and deprived sections of thesociety.

The eight essential elements and the five principles of primary health care call for preparation of nurses to assume responsibility specially for the provision of first level care in the community and thus act as a change agent in bringing about a good quality of life to the people at large. This calls for not only a reorientation of the training programmes but also requires a different approach to view their traditional roles in the context of primary health care by understanding the structural realities in a contemporary society.

A review of the traditional roles of nurses in promotion of primary health care as identified by WHO Study Group, 1985 are as follows:

3.4.1 Direct Health Care Provider to the Community

The move has to be in the direction towards caring for people in their every day life in the community rather than stick to the narrow vision of hospital oriented care. In this regard the nurse has to be sensitive to the health needs of the people in the context of broader social changes.

3.4.2 Educator

In the context of overall social development and achievement of HFA, the primary role and involvement of good quality of life, prevention of disease and disability and promotion of health.

At the same time, the nurse has to impart this knowledge of new focus of nursing care with inputs from behavioural sciences to health and health related functionaries in order to sensitize them to the needs of the people.

3.4.3 Manager and supervisor

The nurse in the community. setting has to act as a community organizer and to some extent as a leader in planning, organizing and implementing health services through community participation.

3.4.4 Planner

As a planner the nurse should be able to:

- make a diagnosis of peoples' belief and practices to various diseases
- identify some of the socio-cultural barriers and promoters rel,ated to treatment prevention of diseases and promotion of health
- identify community resources available for the purpose
- select suitable health education methods
- develop a plan of operation by involving local people and others engaged in community development keeping in mind the social realities.

This also requires supportive supervision on the part of the community health nurse.

3.4.5 Research

This role involves updating of skills and knowledge, monitoring and evaluating acti- vities, analysing health conditions of people and bringing about changes and innovation in health care based on research. Last but not the least the emerging role of a nurse as a change agent must be visualised as a social scientist too.

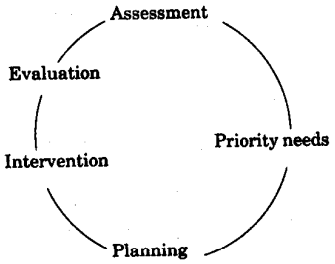
3.4.6 Role of a nurse as a social scientist

Realising that man has to be understood as a member of the society and that his behaviour is dynamic which has a tendency to act and react equally within his dynamic socio-cul- tural environment, the nurse has to clearly understand the needs of each segment of the society.

This will enable the community health nurse broadly to know:

- needs of the women
- needs of the children
- needs of the adolescent
- needs of the aged
- needs of the families including the eligible couples.

Curr. Characteristics	*From*		*To*
Focus	Sick individual	→	Individual/Family/Community
Primary setting for learning	Hospital–Centre–Homes	→	Community–Home–Centres–Hfospital
Nursing concerns	Conditions requiring hospitalization	→	Health needs of community
Nursing goals		→	
• Prevention	Focus on secondary and tertiary levels	→	Focus on primary level
• Therapeutic	Till patient is discharged	→	Till patient/family/community/ develops self-reliance
Nursing Practice	• Nursing care of individual • Patient/Family participation in care • OPD follow-up (sometimes)	→	• PHC approach • Induvidual/family/community/ participation in care • Care of special risk groups
Nursing approach	Intervention through individual family • Task oriented	→	Problem solving through assessment



Evaluation	• Patient discharged and classified under illness category • Frequency of contact with hospital	→	• % of health coverage of population • Rise of service utilization by high risk group • Rate of change of health status • Rate of response, e.g. immunization

Fig. 1.1: Direction towards Community Health Orientation to Nursing Practice
(***source:*** Modified from WHO, *A Guide to Curriculum Review for Basic Nursing Education*, WHO, Geneva, 1985, p.11.)

As a social scientist, the nurse has also to study the broader issues of community involvement in health service development requiring the knowledge of:

a) cultural aspects of health, health services, health institutions, health problems and health practices prevailing.
b) modes of production
c) social structure
d) distribution of power and political organizations
e) mobilisation of resources and pattern of their uses within the community in the content of cultural perception and cultural meaning of the health problems.

3.4.7 Key ingredients for nurse as change agent.

a) Rigorous self examination of one's values -both individual and social.
b) Effective communication skills, listening skills, critical evaluation and accurate observation skills are most crucial.

c) Need for emotional soundness, awareness of various pressures of life and maturity in accepting the challenges and required.
d) Developing work habits to increase efficiency and effectivity.

EXERCISE 2

1) Fill in the blanks:
   a) Traditional role of a nurse has been visualized as…….
   b) As a planner, the nurse should be able to:
   i)…….. ii)…….. iii)……. iv)……. v)……..

2) As a Social Scientist, the nurse needs to know broadly the targeted segments of the Society. These are needs of the
   a)
   b)
   c)
   d)

3) The four key ingredients for a nurse as a change agent are:
   a)
   b)
   c)
   d)

3.5 Understanding social development

In ordinary sense development means 'a gradual unfolding' a fuller working out of the details of anything; the growth of what is the germ (Oxford English Dictionary). It is in this sense that we can speak of the development of a child, or of a disease. But it is difficult to speak in the way of social development.

Social development implies that there are only two (related) social processes to which it seems possible to apply the term 'development', namely, the growth of knowledge and g~wth of human control over the natural environment as shown by technological and economic efficiency.

In most recent sociological writings, the term development has been used in quite a different way; first, to differentiate two broad types of society (industrial and the agricultural) and secondly, to describe the process of industrialisation or modernisation. This kind of knowledge has been represented in a simple historical model as a movement of society through three stages mainly: traditional society, transitional society and modern society, where the development of human power of

production is the most significant element in the transformation of society.

The critics of the modernisation theory of development however have conceptualised development not only in terms of economic growth, but also emphasised that development is (a) the removal of poverty, (b) unemployment, (c) inequality, (d) ill health, (e) ensuring participation in health programmes, and (f) attain good quality of life in the context of overall development of the society. This holistic approach is embodied in the concept of sustainable development.

The World Population Conference in Bucharest (1974) recognised the linkages between population and sustained development. Population policies and programmes were to be reflected as specific national imperatives.

In the Nigerian context social development implies:

a) eradication of poverty
b) improving productivity
c) provision of minimum needs
d) development of human resources
e) raising status of women
f) improving technical and managerial aspects

Special efforts have been initiated to provide a social safety net to the poor. These efforts have been directed to break the complex nexus of low literacy, ill health and high fertility. Let us have a brief look at the programmes directed towards social development.

3.5.1 Agricultural development programmes

The new approach in the 8th five year plan has been to shift government activities for agriculture and the poor from subsidy, towards:

a) increased provision of appropriate support and infrastructure.
b) social services to raise productivity.
c) provide safety nets designed to protect against agriculture and other fluctuations
d) provide income support for disabled and poor

3.5.2 Development for Women's Welfare

The aim has been to bring women into the main stream of development of the society. Various schemes have been started for women to raise the employment status, education and health. A National Commission for

Women (NCW) has been established in 1992. The National Perspective Plan for Women (1988 to 2000) indicates directions to protect the rights and interests of women.

A number of special schemes for education, vocational training, employment, reservations in elective offices in government have been started. Legislation exists to protect women, to eliminate discrimination and empower them politically. Specific statutes cover inheritance and rights to property, marriage, divorce anda1imony, suppression of immoral trafficking in females, prohibition of dowry practice and provision of equal remuneration and misuse of prenatal diagnostic technique for sex preselection and abortion of female foetuses.

For improving health status of women, the following schemes and activities have been started:

a) scheme of profilaxys against nutritional anaemia: for pregnant and nursing mothers
b) training of untrained birth attendants: to ensure safe delivery
c) vaccination against tetanus: for improved antenatal care
d) specioal centers for imparting nutrition education
e) mass education and media acdtivities: to promote and create awareness against early marriage
f) ICDS is being extended to the welfare of the adolescent girls to enable them to grow up as better young women

3.5.3 Significant barriers in Nigeria's social development

a) widespread poverty illiteracy
b) low income levels of large sections of people
c) shortfall in human resource development which restricts productivity
d) nexus between high fertility, poverty, ill health and low level of education

3.6 Indicators of social development

In the context of Health For All by 2000 AD., a level of health has to be achieved in order to permit the people to lead a socially and economically productive life. With regard to his, certain variables which are valid, objective, sensitive and specific are necessary to be evolved as indicators of social development. This indicators could be developed at the micro (individual) level as well as macro (community/national) level.

Indicators for social development would include the following:

3.6.1 Human development index (HDI)

It is a composite measure of human development contaqining indicators representing hree equally weighted dimensions of human development.

These are:

a)	longevity (life expectancy at birth)	-	85 and 25 years
b)	knowledge (adult literacy)	-	100% and 0%
	(means years of schooling)	-	15 and 0 years
c)	income (purchasing power)	-	PPP$ 40,000 & $200
d)	high human development	-	0.8
e)	medium human development	-	0.5 to 0.8
f)	low human development	-	less than 0.5

3.6.2 Social Indicators

United Nations Statistical Office has divided social indicators into 12 categories:

a) populaltion
b) family formation
c) families and households
d) learning and educational services
e) income earning activities
f) distribution of income, concumption and accumulation
g) social security and welfare services
h) health services and nutrition
i) housing facilities and its environment
j) public order and safety
k) time use
l) leisure and culture
m) social stratification and mobility

3.6.3 Environmental indicators

These reflect quality of physical and biological environment in which diseases occur and a.ffect people. These include:

a) pollution of air and water
b) solid waste disposal
c) exposure to rediation and toxic subgstances
d) accessibility to safe water
e) adequate sanitation facilities at home and surroundings

3.6.4 Basic needs indicators

ILO has listed certain indicators like:

a) calorie consumption
b) access to water
c) life expectancy
d) deaths due to disease
e) illiteracy
f) doctors and nurses per population
g) rooms per population
h) GNP per capita

3.6.5 Health For All Indicator

WHO has listed the following four points:

1) Heath policy indicators
   - political commitment to health for all
   - resource allocation
   - degree of equity of distribution of health resources
   - community involvement
   - organizational framework and managerial process

2) Social and economic indicators related to health
   - rate of population increase
   - GNP or GDP
   - income distribution
   - works conditions
   - adult literacy rate
   - housing
   - food availability

3) Indicators for the provision of health care
   - coverage of primary health care
   - coverage of the referral system
   - availability, accessibility, utilization, quality

4) Health Status Indicators
   - low birth weight (percentage)
   - nutritional status and psychosocial development of children
   - infant mortality rate
   - child mortality rate
   - life expectancy at birth
   - material mortality
   - disease - specific mortality

- morbidity - incidence and prevalence
- disability prevalence

Uses of these indicators

a) provide yard stick where by countries can compare their own progress with those of others
b) illustrate the differences in health situation and socio- economic status within the country
c) assist in planning by providing adequate and meaningful information regarding socio-economic, health and other developmental progress
d) reflect progress towards correcting the social inequalities
e) monitor overall socio-economic development of a country including health programmes
f) assist in identification of socio-economic, health and developmental priorities for planning appropriate strategies
g) used as markers of progress towards reaching the developmental goals of the societies.

EXERCISE 3

1) Fill in the blanks:
   a) In the Nigerian context social development implies mainly:
   i)
   ii)
   iii)
   iv)
   v)
   vi)
b) Some of the significant barriers to social development are:
   i)
   ii)
   iii)
   iv)
   v)
c) The twelve categories of social indicators that have been classified by UN Statistical Office are:

i)	vii)
ii)	vii)
iii)	ix)
iv)	x)
v)	xi)
vi)	xii)

d) The holistic approach to development implies:

i) ii) iii)

iv) v) vi)

3.7 Contemporary social issues

The achievement of health for all goal calls for dramatic changes, a sort of social revolution in development of health. It calls for a change in people's thinking, restruc- turing of health system, reorientation and training of those working in the health sector. This symbolises a holistic thinking for providing an acceptable level of healthy living to all people. The new approach in primary health care requires a. coordinated effort in integrating education, agriculture, industry, housing and communication with community health and medicine. This is so because contemporary thinkers in the field are of the view thaqt health is not just the availability of services but a personal well being which enables individuals to lead a socially and economically productive life within his socio-cultural environment.

4.0 Summary

In this unit we have studied the applications in health. This has given us insight into the role of the nurse as a change agent in the backdrop of overall social changes. The development of medical sociology, though new, has enough scope in order to understand the application of social science in health. Medical anthropology, which studies man in relation to society gives us an understanding of health in its holistic perspective.

5.0 Answers to exercises

Exercise 1

1) a) human behaviour, interdisciplinary
b) OF, IN
c) i) ethno-medicine
ii) medical anthropology
iii) cultural ecology

2) a) F
b)T

Exercise 2

1) a) educator, direct care provider, manager and supervisor
b) i) Make a diagnosis of people's belief and practices to various diseases
ii) Identify sosme of the socio-cultural barriers and promoters related to treatment, prevention of diseases and promotion of health.

iii) Identify community resources available for the purpose.
iv) Select suitable health education methods.
v) Deveiop a plan of operation by involving local people and others engaged in community development keeping in mind the social realities.

2) a) Women
b) Children
c) Adolescent
d) Aged

3) a) Regourous self examination of one's own values both individual and social.
b) Effective communication skills, listening skills, critical evaluation and accurate observation skills.
c) Need for emotional soundness, awareness of various pressures of life and maturity in accepting the challenges.
d) Developing work habits to increase efficiency and effectivity.

Exercise 3

1) a)
i) Eradication of poverty
ii) Improving productivity
iii) Provision of minimum needs
iv) Development of human resources
v) Raising status of women
vi) Improving technical and managerial aspects.

b)
i) Widespread poverty
ii) illiteracy
iii) Low income levels of large sections of people
iv) Shortfall in human resource development which restricts productivity
v) Nexus between high fertility, poverty, ill health and low level of education.

c)
i) Population
ii) Family formation
iii) Families and households
iv) Learning and educational services
v) Income earning activities
vi) Distribution of income, consumption and accumulation
vii) Sopcial security and welfare services

viii) Health services and nutrition
ix) Housing facilities and its environment
x) Public order and safety
xi) Time use
xii) Leisure and culture

d)
i) The removal of poverty
ii) Unemployment
iii) Inequality
iv) ill health
v) Ensuring participation in health programmes
vi) To obtain good quality of life.

6.0 References

Bhaduri, A. (1990) "Emerging Challenges in Nursing Education", *Nursing Journal of India,* Vol. LXXI, No.4, (Apr, 90)

Bose, A, Desai, P .B., Milttra, A., Sharma, J.N. (eds.) (1974)," An Alternative Approach to India's Development," *Population in India's Dev;elopment 1947-2000,* Indian Association for the Study of Population, Delhi.

Bottomore, T.B. (1972) "Chanbge Development, Progress", *Sociology - A Guide to Problems and Literature* (revised ed., Third Impression), Blackie and Son (India) Ltd.

Department *of* Family Welfare, GOI (1994) "Population Policy, Planning and Programme Framework", *India: Country Statement,* International Conference on Population and Devel- opment, Cario.

Fairchild, H.P. (Ed) (1964) *Dictionary of Sociology,* Littlefield, Adams & Co., Paterson, New Jersey, U.S.A.

Gore, M.S. (1988) "Social Development: The Asian Experience", *Bharatiya Samajik Chintan* (Special Issue), Vol. XI, No. (1-4), Mar-Dec. 88, Indian Academy of Social Sciences, Allahabad.

International Encyclopaedia of Social Sciences, Vol. 15, 1972.

Joshi, P .C., Mahajan (Ed.) (1992) *Studies in Medical Anthropology,* Reliance Publishing House, New Delhi.

Luthans, F. (1977) *OrganisationalBehaviour,* McGraw Hill, New York, p. 25

Mehta, S.R. (1992) *Society and Health -A Sociological Perspective,* Vikas Publishing House Pvt. Ltd.

Mhetras, V.J. (1966) "Diagnosis and Evalution", *Understanding Social Case Work,* Manaktalas, Bombay.

Nayar, P.K.B. (Ed) (1982) *Sociology. in India -Retrospect and Prospect,* B.R. Publishing Corporatioin, Helhi-52.

Prasad, L.M. "Nature of Behavioural Science", *Organisation Theory and Behaviour,* Sultan Chand & Sons, 23, Daryaganj, New Delhi.
Strauss, R. (1957) "The nature and Status of Medical Sociology", *American Sociology Review,* 22 (April) pp. 200-04.
Wooldridge, P.J. *et al.* (1968) "The Behavioural Sciences and the Health Related Profession", *BRhavioural Science. Social Practice. and the Nursing Profession.* The Press of Case Western Reserve University, Cleveland, Ohi0-4II06.

Unit 2 The Development of Society from Precivilization to Civilization

Table of Contents

1.0 Introduction

The origin of social evolution of man can be traced back to the prehistoric times, which over a period of many years has evolved from one, stage of development to another. Archaeological evidence shows that the social evolution of man took place right from the primitive stages of life of the hunting and gathering activities leading to shifting cultivation and gradually to settled agriculture. As a result of settled agriculture, villages were formed near the agricultural lands. Whenever people depended on settled agricul- ture they tended to be sedentary. They had to till the land, sow the seeds, protect the growth of crops, water the plants and remove the weeds. All these activities required much labour. When land became the object of human labour, people gradually got attached to it and formed farming communities.

2.0 Objectives

In this unit you will learn about the various phases of social evolution of man from savagery to civilisation.

After completing this unit you should be able to:

- explain the rise of human society.
- understand the relation between the social and cultural phenomenon in health.
- explain the role of the family as a social unit in promoting health and preventing diseases, and
- explain the role of culture and cultural practices with relation to health and health programmes.

3.0 Main contents

3.1 **The rise** of human **society**

In this unit, you will learn that this movement of man gave rise to human societies. We hope that this knowledge will help you to gain a deeper understanding of the society as a whole. This is important as nursing too has a social purpose. As members of the society, nurses have to discharge their social responsibilities, social obligations and social commitments towards their fellow human beings. This makes it all the more necessary for us to understand the social environment of man in relation to health and disease. Such an analysis would help us to identify some of the critical elements of the social and cultural environment in which man lives. Some of these are the social values, culture, beliefs, traditions, social attitudes, social relationships, social institutions, class structure, social pressure and group dynamics. These concepts in Sociology are required for nurses and others in the health field to have a perfect understanding of our society in relation to both health and disease.

3.1.1 The origin of understanding society

For thousands of years men have observed and reflected upon the societies and groups in which they lived. The study of evolution of man can be dated back to 1859 when Darwin published 'Origin of Species'. This may be said to bve the date of the birth of the Anthropology (study of man and society) as also of all evolutionary study. Darwin's contemporary. Herbert Spencer came to the conclusion that evolution of man had not taken place only with respect to physical aspects of mailing but also in human social life. August Comte, who loomed large on the intellectual horizon of those times conceived of the science of human society and named it as social physics or sociology in the early 18th century.

Sociological approach to understand human society: Briefly tracing the origin of the science of society, we find that the sociological history of sociology suggests that the study of human society, broadly, has had a four fold origin in political philosophy, philosophy ofhistory, biological

theories of evolution and the movements for social and political reform which found it necessary to undertake surveys of prevailing social conditions of those times. The philosophy of history was born out of the two revolutions -the industrial revolution in England and political revolution in France. Under the influence of this philosophy of history, reinforced later by the biological theory of evolution, the science of society sought1o identify and account for the principal stages in the social evolution which will be discussed shortly. In due course of time the science of society also took into its stride the prevailing social problems arising out of the political and economic revolutions of the 18th century. This gave a totally different scientific approach to the study of society unlike that of the earlier encyclopaedic approach concerned mainly with the entire historical and social life of man.

The sociological thinkers like, Marks and Spencer of 18th and 19th century gradually developed 'Science of the New Industrial Society', which enabled them not only to identify particular prevailing social phenomena like poverty, giving rise to certain prevailing socio-economic problems as beggary, malnutrition etc, but also to conduct relevant social surveys in order toassess.theextent of the social conditions and identify the roots of the social evils. This, accordingly develops social actions (reforms in order to eradicate those social evils. This would lead to certain predominant social changes according to them. Thus, we see that these intellectual movements, the philosophy of history and the social surveys were not isolated from the social circumstances of the 18th I and the 19th centuries in western Europe. The new interest in history and in social development brought about by rapidity of social changes aroused a 'reaction of tradi- tionalism against analytical reason' which gave birth to reorientation of social thought and understand the human society in transition from time to time. This 'conservatism' vs 'radicalism' in social thinking by sociologists like Marks, Spencer helped to under- stand the nature of human society, identify and define the social processes, classify the different types of societies and enumerate the various stages of social development. This gave rise to various terminologies and formation of sociological theories needed for understanding society in general.

In the recent times, the understanding of society grew wider with the works of C. Wright Mills (1959) who wrote the 'Sociological Imagination' which gives a vivid account of the social and political problems of the post war period. This brought about certain advanced thinking on the part of the sociologists, who began analysing society in terms of:

a) larger aspects of the social structure and its changes
b) examination of basic characteristics of industrial society

c) investigation of origins and consequences of social movements and revolutions
d) social implications of rapid advances in science and technology
e) processes of industrialisaqtion and economic growth. Although this approach has been rather critical and controversial in nature, yet the modern sociologists with dynamic thinking are no longer satisfied with the mere descriptions of social phenomenon.

They are interested in analysing the factors that are responsible for the occurence of these social phenomena. Gradually, attempts have been made to integrate the study of society with the other social sciences in order to get a holistic view of the society. For instance, in Economics, certain sociological studies were extended to important areas like:

a) structure of industrial societies b) industrial relations
c) economic systems in relation to social problems
d) social changes brought about by economic planning and economic growth
e) new problems arising out of technological progress and so on.

These social aspects of economic activities are equally important to understand the society. Gradually, sociologists began to explore the interrelationship of the social environment and cultural factors with the occurence and frequency of disease among different social groups. **In** this, they studied the influence of belief systems, values, norms, lifestyles, education, political system and socio-economic conditions of living on the response of people to the event of sickness and disease. These studies ultimately paved the way for the development of new field of research in Sociology called Medical Sociology, which mainly studies medicine as a social institution.

These instances give us an idea about the nature of the sociological approach that developed from time to time in understanding the society. Initially, the study of the society dealt with fragmented aspects like religion, family, social structure, urban life all in isolation. However, in recent times, sociologists have an integrated approach to study all aspects of human social life in totality.

Functional approach to understand society: According to this approach the study of society today has become more specific and ethnocentric due to the vast accumulation of historical developments of the past and the existing social phenonena of contemporary times. This holistic view helps us to develop a deeper vision to understand the problems of society constantly in transition.

Development of social complexities: With regard to understanding of society, it is important to mention here the various complexities that developed in the society with changes in civilisation, more specifically, the economic activities of man. Agriculture began to develop as the main occupation of man for his survival. As the farming communities developed, intense activities of agriculture required the cooperation of the different groups of people living together. This required some sort of bond for availability of people. Thus extended families (2 to 3 generations of people living together under one root) came into being through strong ties of blood and marriage. Tasks became divided among various members of such family who could be relied upon to contribute their labour.

Family labour: Simple mode of production: Each family contributed, as mentioned earlier, their labour and received a share of what they produced. Each person's share of the family produce depended upon the value placed on his or her labour. This is the reason why women received less of whatever was produced and consumed by the family as their contribution to labour was considered of no value.

Emergence of complex socio-economic groups: Gradually, sharp differences arose in the amount of ownership ofland as more and more people began to concentrate around fertile soils. Land began to be concentrated in the hands of few people who had already settled earlier, while the others who were landless began to work in the farm of the land owners. This gave rise to different types of social relationships where land owners took the advantages of their hired labour by not only payingt then less but also accumulating wealth with surplus extracted through extra-economic coercion.

Social interaction among the different socio-economic groups, shall be discussed with special reference to the Nigerian social context on the basis of ownership of land and means of production:

a) land-lords
   - i) own largest share of land, agricultural technology and live stock
   - ii) get their land cultivated by hired labour
   - iii) richest sections of population and act as money lenders

b) farmers
   - i) work whole time physically in the field
   - ii) also employ others to work on their land
   - iii) do not work on others land
   - iv) include big or middle farmers

c) poor peasants with land
   i) own small bits of land
   ii) use own family labour
   iii) cannot afford to hire labout
   iv) work on others land as share croppers or labourers to add to family income
d) poor peasants without land
   i) work for survival on others land
e) non-agriculturallabourers .
   i) have no direct relation to land
   ii) earn their livelihood as non-agricultural wage labourers

Organisation of society and rise of different modes of systems of production: Historical evidence reveals that the nature of social organisation also grew complex with the development of society from simple to complex. The primitive society worked out an efficient system of division of labour, whereby, the males would go to distant places for hunting while the females, children and the old did the gathering activities.

As settlements began around fertile soil and water, numerous clans carne together and this ultimately paved the way for the 'slave' system. Let us discuss in brief some of the features of each mode of production.

1) Slavery
   a) It evolved as an institutional system:
   b) Large scale employment based on slave-labour;
   c) Slaves toiled hard throughout their lives;
   d) Became bounded to the tyranny of their rich masters.
2) Feudal System
   a) With further progress of civilization and technological development, agricul- tural processes grew complex requiring individual attention and decision. Thus, the stage was set for feudal mode of production.
   b) Slaves transformed into tenants, artisans, craftsmen and soldiers.
   c) Masters became petty chieftains, lords and priests
   d) Social control was mainly through control of land.
3) Capital System of Production
   a) Grownth of trade and manufacture marked the beginning of trasition from feudalistic to capitalist economy.
   b) Money was in flow and profits were reinvested to make further profits
   c) New class of merchants developed
   d) Scientific and technological discoveries lead to the process of industrial revolution.

e) Great upheavals to place in social, economic and political sphere.
f) New merchantile class acquired wealth as well as political status.
g) Industrialisation revolutionarised agriculture and production reached new heights.
h) Large factories and concentrated production brought about collective production.
i) This collectiveness promoted awareness among industrial workers a sense of common interest as a workers class.

Society defined: Society is defined not merely as an aggregate of individuals and groups living together, but is explained as a concept of sociology, where a system of set pattern mechanism exists comprising of a complex web of norms, interactions and interrelations of individuals and groups that keep them bound together with a common purpose of co-habitation from generations together within a given territorial dimension.

In a nut shell, by society we mean a social system which comprises of definite structure and functions.

Social structure comprises of social organisations such as,
a) economic, political, religious and educational institutions
b) norms, values, traditions etc.
c) social stratification
d) family kinship and marriage etc. :

Social functions include:
a) social status of people
b) social roles of different segments of society
c) social interactions within different social groups

Society classified

a) Evolutionary scheme of classification: Societies have been classified by earlier sociologists like Spencer and Durkheim based on the type of social groups and nature of relaltionships. They have classified society mainly into four types:
i) simple societies
ii) compound society
iii) doubly compound society
iv) trebly compound societies

These types of societies are distinguished primarily in terms of size, extensive division of labour, more elaborate political organisation and social stratification. However, this classification does not carry much significance as it is believed by many critics that the first three types

comprise of only the primitive society, while all civilised socieites are grouped together in the fourth type.

b) Classification by phases of intellectual development: Hobhouse, in 1906 has at- tempted to classify in the following five phases:

i) formation of elements of articulate thought in primitive societies
ii) proto-science in East (Babylonia, Egypt, China)
iii) stage of reflection in later East (China, Palestine, India)
iv) stage of critical systematic thought (Greece)
v) stage of experiential reconstruction of society by modem science

c) *Classification to mode of production and class relations:*
i) Primitive ii) Asiatic iii) Ancient
iv) Feudalistic
v) Capitalistic

d) Modern classification: Sociologists of contemporary times, however, suggest that a comprehensive classification of societies would require the definition of types of society in terms of:
i) system of institutions
ii) number and character of social groups within society
iii) nature of predominant social relations
From the above course of discussions it may be inferred that the social circumstances that led observations and formation of ideas by various philosophers and social thinkers of the 18th century have enabled the contemporary sociologists to evolve interdiscipli- nary approach to understand the changing human society in a holistic manner.

Relevance of this knowledge in nurses and other healthfunctionaries
A thorough analysis of human society enables us to gain a systematic understanding of how society developed from simple to complex states and how associations of people in those days led to congregation of families by division of labour. Gradually, organised, social groups developed with the rise of social complexities. These social groups performed fixed social roles recognised by the society. This social recognition developed social controls by those who were at the top of the social hierarchy at result of ownership of means of production. This phenomenon gave birth to particular social order giving rise to different social problems. All these elements created the basis of existence of :lefinite social system. Gradually, this gave rise to different social pres~ure groups bearing social relationships (elite vs the poor).

[t is extremely essential for nurses and others in the health sector to understand the significance of a stratified society, as ours in Nigeria. In the context of health care, it is evident that in a stratified society, with

varying socio-economic groups, those at the bottom of the strata are entagled in the network of exploitations in all spheres of life and have the least access to aqll resources. They are virtually deprived of not only wealth but also health, as they are more exposed to disease and degradation in their unhealthy environment. An understanding of this aspect of human social life helps us, in this field, not only to gain a deeper understanding of the dynamics of the human society, but also develop sensitivity towards the prevailing socio-economic problems in the community at large as well as towards the people facing them in the hospitals or in their homes.

It is of great relevance to understand not only certain social, economic and health implications brought about by the bygone industrial revolution way back centuries ago, but also the tremendous social changes that occurred in the society there after for years to come in the future. We shall be discussing this later in the following units in detail. From the available knowledge of the society of the past and present, we gain enough information about the chaning health and reproductive behaviour of people which are an outcome of various social, economic, cultural, political, organisational and technological factors existing within our society.

From the above course of discussion regarding the significant social changes brought about by the various social forces, which have in fact, altered the traditional structure of our society bringing in large scale social transformation and social mobility. This gives rise to the concept of social class and social institutions like family, religion, education etc., which have been playing a vital role in reinforcing some of the existing social inequalities. These will be discussed at length.

All the above give us a deeper insight into the concept of social reality specially with respect to Nigerian social context where majority of the people are helpless to bring about a good quality of life as a result of the social changes and social control exercised by the powerful groups on every aspect of their lives.

The above aspects in understanding society is important for every health care provider because health can never be viewed in isolation. It is to be seen as a subsystem of the entire social system in which we live. This concise understanding helps us to relate the social development in relation to health and environment. Today, it makes us aware as lealth personnel, that urbanisation and rapid industrial development have infact changed people's relationship with land, technology and production. Those in the subsistence iector have become marginalised and made poorer by these factors of development. This luge chunk of humanity

lives in grim struggle for existence due to object poverty resulting in not only social deprivation but also ill health.

EXERCISE 1

1) Fill in the blanks:
a) The major approaches to understand society are ……and approaches.
b) In family mode of production, women received ……for whatever was produced and consumed by the family.
c) The four major different types of socio-economic groups that arose with civilisation are: ……,……,…… and……..
2) Match the following

Social Groups	**Socio-economic Conditions**
a) Land-lords	i) use own family problem
b) Farmers	ii) work for survival on their land
c) Poor peasants with land	iii) get their land cultivated by hired labour
d) Non-agriculturallabourers	iv) work whole time physically in the field
e) Poor peasants without land	v) have no direct relation to land

With respect to human societies the world over, the institutions of family and marriage are basic and fundamental. The basic aim of marriage is to institutionalise, control and regulate social behaviour of human beings. The basic aim of family as a social unit is to promote and protect reproductive habits of human beings and thus ensure societal continuity, withy marriage comes family which sets pace for continuity of human life.

Need for studying family: The study of human fertility involves the study of family and marriage, their institutional characteristics and the soio- economic functions. The study of family gives us an understanding of both fertility and mortality and interrelationship with not only the family structure, socio-cultural aspects of marriage but also behaviour of individuals within the family and the socio-economic structure of the population living in the society at large.

Definition/concept of family: Accordisng to the most acceptable and common view, the family has been defined as a group *of* persons united py ties *of* marriage, blood or adoption constituting a single household.
The above world view *of* family implies that:

a) usually this small kin-group is a single economic unit;
b) all members share a common culture.
c) authority may be vested in one or many persons of the household

Family is generally seen as a functional and a socio-cultural unit of the society. It involves the recognition of just those who are closely related to oneself through constant (a) physical continuity, (b) physical cooperation, (c) emotional bonds, and (d) blood ties. The sex and hunger drives of man, his economic compulsions and cultural traditions within which he is bound have provided theoretical justification for the recognition of the existence of family. The birth of offsprings cements and integrates *his family life.*

Distinctive features of family

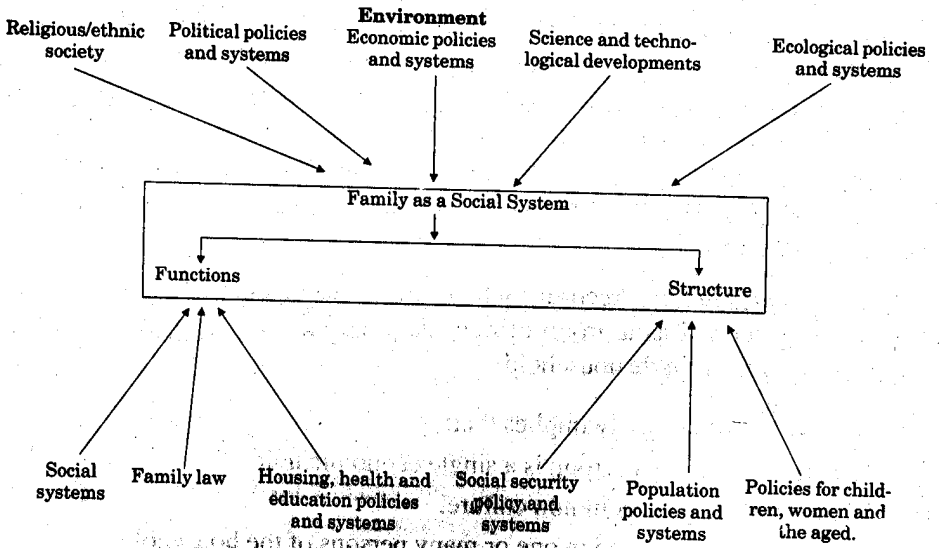
MacIver has *enlisted* the *following* features of the family:

a) *lmiversality: family is* found all over the *world* and all *levels* of culture;
b) *emotional bond:* an outcome of mutual *love* and affection and blood *ties;*
c) *limited size:* characterised by decision-making role of the *couples* to meet the demands and challenges of the world out *side* home;
d) *nucleus of individual growth:* minvolves socialisation and *child* rearing activities;
e) *feeling* of personaI responsibility to each other: mutual *ties* make the farnikIy members *feel* accountable to one another's welfare;
f) *means of social control:* by imposing certain restrictions on all members for their behaviour and smooth functioning of the family; -
g) *subject to constant change:* as a back drop of overall social changes.

Types of family

a) *Classification based on household patterns*

i) *Jointlextendedfamily:* comprise of two or more elementary families, bound together by common movable or immovable property and mayor may not staying together. A joint household means a joint family *living* together (Shah, 1973)
ii) *Elementary or nuclear family:* comprise of *couples* and their unmarried children. It *is* generally financially independent of other *families* (Desai, 1956)



iii) Alternate family: has a family pattern which do not fit into society's norms regarding usual family patterns. Following situations give rise to such families:

- childless families (due to infertility or out of choice)
- single parent families (due to unwed motherhood, death of spouse, desertion, separation, divorce or migration of spouse)
- recoinstituted/step families
- consensual unions

b) ***Classification based on the power-structure in the family***

i) *Patriarchial:* power and authority rests with oldest man in the family

ii) *Matriarchal:* where women hold the decision making power. These are rarely to be found in true sense of the word.

iii) *Egalitarian:* where equal distribution of power exists between female and male members of the family.

c) ***Classification based on lineage or descent***

i) Patrilineal: descent based on father's family.

ii) Matrilineal: descent on mother's family.

d) ***Classification based on residence***

i) Patrilocal: where woman resides in husband's house after marriage.

ii) Matrilocal: where husband goes to reside in the spouse's house after marriage.

Functions of the Family

a) *Biological:* include sexual and procreative activities in a socially approved manner. This is also termed as biological reproduction.

b) *Economic:* at one time the family was the unit of production and consumption, where males hunted and women and children gathered good for the survival of the family. In the preindustrial society, women took active part in economic survival of the family based on the activities centered around home. However, with the advent of industrialisation women seek jobs in home based economic activities as well as outside the house and playa significant role for the survival of the family.

c) *Socio-cultural:* Entire process of socialisation operating from childhood is clearly visible through the process of imitation and identification. The child gradually acquires orientation about his roles within the family and is taught to accept the social control as exercised by the family to maintain discipline and decorum in the society at large. This function is termed as the social reproduction of labour power.

Family is the first unit in which the child is nurtured and has continuous contact with other people outside the family too. Interesting with them, he learns various skills and develops appropriate values in accordance with the value system of the society in which he lives. Therefore, family is the first agency through which culture operates on any individual.

Family is said to be the cradle of the future society as it produces the necessary labour power for the on-going production of the society. Women play an important role in the family in this social reproduction of labour power.

Women's *role with regard* to *socio-culturalfunctions*

The traditional role of the woman in this regard relates to the unbringing of children especially of upbringing of girls, inculcating within them the type of socialisation and imparting of such education to make them prepared for the role of a bride, mother and mother-in-law. Women, therefore, have always been valued for their biological reproduction of the family. However, women's labour is not just reproductive and social with regard to the upbringing of the family and care taking functions which she does out of mere love for her family. This is productive work as this aspect of women's work helps to build and set in motion the work-force of the society as a whole. This Immense responsibility of the entire household which is actually socially productive labour is not valued by the society. In fact, according to a report by the Department of

Women and Child Development (1988) if women stop doing this work (so crucial to the survival of the society) and no one takes it up, then, all factories, transport, construction, food production and so on will come to a stand still; disease and hunger will spread leading to a virtual collapse of the entire social organisation.

Family in *transition* and *implications for socialisation*

Backdrop of overall social change: To understand the changes that are taking place in thee family, one has to view the phenomenoa against the general backdrop of large-scale and rapid changes that are taking place in the developing countries. The processes of the socio-cultural and individual transformation that started in the west especially with the French and Russian revolution, breakdown of feudalism, agricultural and industrial revolution, the radical changes in the life-style brought about through scientific and technoligical innovations, have taken many centuries to come about.

These changes have produced certain unsettling conditions for both the society and the individual. It is against this background that the changes that are taking place in the family have to be understood. Therefore, when we analyse the women's social role within the family, we find that this household labour which she performs in up-bringing her family, requires tremendous patience, will power, self-sacrifice and devotion for such painstaking, time consuming and labourious work. Although aimed at the tremendous task of social reproduction of labour power of the society at large, yet this household labour does not seem to be visible and therefore, the value of domestic work remains ignored and unpaid. On the contrary, it is termed as 'nonwork' and considered 'unproductive'.

Moreover, due to the impact of economic and social pressures of life, the woman is forced to seek work outside home but this work is considered to be 'secondary' activity being done in leisure time. Not only does, she become exposed to double burden of household work and income-earning work outside home, but also she becomes a victim to all forms of exploitation even at the place of work.

Factors affecting changes in *the family*

Some of the factors affecting changes in the family are:

a) Industrialisation
b) Urbanisation
c) Migration of population from village to cities
d) General spread of education, especially among women.
e) Changes in occuPational structures.
f) Conferment of political and property rights

g) Modification in the legal status of women and then taking up of various occupations.
h) General weakening of the cast as asocial force

Transitional phase of Nigerian family

With the modemisation and social changes that are taking place in the country, the structure and role of the family have altered, and interrelationships within it have been radically transformed. Growth of industrialisation has radically altered the employment structure with the possibility of going beyond their caste and family occupations. Migration has inevitably led to separation from the family and created a situation in which individuals have began to resent income sharing with other members of the family. Uprooting of population due to migration has also generated new values and rejection of many traditional valaues of which joint family has been the repository. Kapadia (1966) notes that although the younger generation often complains of the suffocating atmos- phere of the joint family, at the same time it appears to be conscious of certain benefits derived from the joint family:

a) economic help
b) refuge in many crises situations,
c) proper upbringing of younger children, and
d) restraining influences on classes between husband and wife.

In short, the joint family is still capable of meeting certain needs of its members.

EXERCISE 2

Fill in the blanks:
a) The world view of the family pertains
   i)
   ii)
   iii)
b) Source of the distinctive features of the family are:
   i)
   ii)
   iii)
   iv)
   v)
   vi)
   vii)
c) The immense responsibility of women towards the entire household which is socially productive labour (pertaining to the socio-cultural functions of the family) in termed as reproduction.

3.1.3 Role of family in health and disease

Introduction

The role of the family in health and disease can be, in fact, viewed in the light of the changes that the family has undergone under the pressure of social changes.

The deleterious conditions that have been created by rapid urbanisation: unemployment and migration on the one hand, and environmental pollution and social degeneration on the other, have made health and well-being in the family a dream at best.

With the advent of industrialisation and urbanisation, within a few decades, millions of individuals who had been raised on farms and in small towns were suddenly uprooted and exposed to the humanised conditions of industry. Thus, the broader relationship between the existence of the family within a particular social structure determines its role and status in prevention of disease and promotion of health.

Nurturing and *Protective Role of Family in Prevention of Disease* and *Promotion of Health.*

Migrants in the urban slums, for instance, families find the patterns of behaviour in cities conflicting with their basic traditional values. Moreover, maladjustment in the work place as well as allievation within the home environment with high rates of drug abuse, alcohol consumption, sexually transmitted diseases and other mental disorders have an adverse effect on the over-all health and well-being of the family.

Those belonging to the urban, poor migrant families suffer mainly from suicidal tendencies, alcoholism and drug abuse as mentioned earlier, crime and juvenile delin- quency, are most frequent. Many of the physical ailments too are the direct result of adjustment to the new social environment. Long hours of exhausting toil in deplorable conditions, poor housing, inadequate food and rest and some of the main causes of chronic diseases like Tuberculosis and other upper respiratory infections. The viscious circle of poverty and the constant struggle for existence leads to further deterioration of living conditions of sanitation, quality of drinking water, shelter, clothing and disinte- gration of the social environment within the family exists. Indepth study of poverty conditions reveal that under-nutrition and gross malnourishment are permanent featurtes of these poor class families.

'Poverty' is the root cause of diseases like TB, leprosy, skin infection and chronic eye infections etc., diseases also strike them in the form of medical catastrophies more often than in families of other socio-economic groups.

Loss of wages due to sickness has profound impact on the economy of the entire household. In a desperate bid to avert any such catastrophies like obstructed labour, severe bleeding during child birth, accidents and casuality etc, they fall prostrate before the hated land-owner or money lender. These poor people readily agree to the terms directed by them and thus barter away whatever they possess and in turn get bonded as their labourers forever.

The situation of indebtedness, deprivation of basic services and appalling living conditions in the slums traps these poor families in a web of helplessness.

The criss-cross of such strains and tensions necessarily erodes the fabric of family relations, gradually reaching a breaking point in the nurturing and protective role of the family. Prolonged frustration breeds decadence in the quality of life and children caught in the web of confilict and tension cannot find the support they need in their rural homes. Thus, when they are lead to find their way out in the search of any means of livelihood, the stree becomes their only refuge and they live to face a life of instability and insecurity. This agony becomes even worse when such children are faced with unhappy situations at home due to conflicts, separation or dealth of parents. The conflicts may be due to an alcoholic father, a step father or the lack of care and understanding because of the absence of the parents. In such circumstances, the children take to undesire social deviant activities like gambling, cards- playing, smoking, with a few taking to drugs and even prositution. Thus, we find what a crucial role the family can play in the prevention of social deviance and crime among children in the society.

Role of family in *wtderstanding the physical* and *the psycho- social needs of the chad*

In the Nigerian society, procreation has traditionally been considered not only as a right but also as an objection. Marriage and procreation are in consequence held in an exaggerated sanctity that no thought is given to too many children being born of early marriages or of parents genetically deficient in many of the families, especially belonging to the lower socio-economic state of the society. There is seldom any thought given to the lot of the child despite the resources for its care and upbringing being much too inadequate in a family. Poverty and the hold of social values thus continue to deprive the Nigerian child, especially of

the poor class families of the opportunities for reasonable physically growth and development.

According to many researches in the field of child health, it has been observed that growth is also inversely related to the number of children in the family. Limitation of family size to three or less would significantly bring down the incidence of malnutrition and mortality among children even under the existing economic conditions and present food resources. The dismal consequences of the communication of poverty with neglect, apathy and ignorance not only increase childhood mortality and morbidity but also very often forces many a child out of countless families to become vagrant and spend better part of his growing years in a children's jail.

Thus, we find how important the role of responsible parenthood in the family is in understanding the interplay of nutritional, environmental as well as social, psychological and educational influences in the young child's life.

Role of the famUy in *the context of women's health* in *Nigeria*

Born into indifference and reared on neglect, the girl child is caught in a web of cultural practices and prejudices that divest her of her individuality and mould her into a submissive self sacrificing daughter and wife. Her labour ensures the survival and welbeing of her family but robs her not only of her childhood but also of her right to be free of hunger, ignorance, disease and poverty. For most of the familites in Nigeria, from the day of her birth, a girl is viewed as a burden and a liability. The universal desire for sons, and obsession that cuts across all differences of caste, class and region determines both the quantity and quality of the investment that parents make in their female children. For the vast majority of Nigeria's daughters, gender determines their meagre share of the family's affections and resources. Sons are considered ritually and economically desirable and essential not only to light the funeral pyres of their parents and release their souls from the bondage of their bodies, but also to ensure the continuation of the lineage and become the economic support of the parents in their old age. This contrasts sharply with the view of the girls as a drain on the family's previous resource which gets expended on her own self with no hope of any return because when she gets married, her father has to collect a sizeable dowry, which symbolically marks the transfer of the burden from one family to another. So deeply entrenched is this view of the girl as a liability and the son a valuable resource that even when girls step over the barrier of their upbringing to become wage earners for supporting their parents, this is seen as an aberration, a grudgingly accepted reversal of the ideal that even the neediest parents find some

what demeaning. The low status of the girl child is thus inextricably linked to the low status of the woman.

Family structures and the values function in such a way that the daughters grow up looking upon themselves as inferiour and subservient, entitled to less of every thing than the sons -less opportunity, less property, less status, less power and virtually no choices.

The girl child's perception herself and her role is conditioned by her early socialization. She grows up in this hostile home environment with a poor self image and regards her own daughter later in life in the same light.

There is difference in the treatment of the boys and girls by parents and other members of the family too. The son is fondled by the mother or her surrogates. He receives a favoured treatment throughout and is frequently provided with better food and clothing. There is continuous ministration to his needs and prolonged breastfeeding which fosters the development of basic trust, dependency, sense of security, positive self image and the capacity to receive and give affection and a conception of the world as good.

Such a 'favoured' treatment does not fall to the lot of the female child who is brought up in an environment that tends to develop in her envy, jeolousy, a negative selfimage and a conception of the world as being basically unfair. She has a feeling of perpetual dependancy and has an idea that life is not going to be happy for her. As she goes older her personal mobility is strictly restricted and is progressively inducted into domestic work and into the role of a family woman. Fed with religious concepts, she is taught to regard her future husband as God, symbolising life-long sacrifice and complete submergence of individuality in the family. Gratifying the need of her husband, at all costs and time, is emphasised and there is pressure for complete conformity to the standard imposed by the family tradition.

Girls in poor households, already expoited and discriminated against are even worse hit when an economic crisis overtakes the family. They are caught in the web of ill health and deprivation.

Statistics on health status of the girl child show the glaring desparity in the morbidity (sickness) and mortality (death) rates between male and female infants. In fact, today, rejection of girl begins even before birth with pre-natal sex determination tests, followed by abortions if the verdict is a girl. Researches show that those allowed to survive often meet their death soon after by stragulation, drowning, poisoning or

being burried alive.In Nigeria the discrimination against the girl child does not end there. A girl's health is of minor significance to the family which is reflected by the following observations in researches conducted in this respect:

a) girls do not achieve their full height and weight potential.
b) their diet is inferior and more girls than boys in most families, in the same age-group suffer from malnutrition.
c) girls are given less nutritious food than boys.
d) fewer girls than boys receive timely medical attention in most house-holds.

The perilous path of life which girls lead in our country has been depicted here diagramatically.

Womanhood-perception and *role of family*

When the girl gets married, her role as a daughter-in-law is also one of subservience and neglect, and she is dominated by other elders in the family. There is, however, some enhancement of her status with the birth of a son. It is only with mortherhood that she comes into her own as a women, and can make a place for herself in the family, in the community and the life-cycle (Kakar, 1978). On the other hand, if she is childless, she is despised and there is complete loss of status when widowed. Widowhood means relinquishing of ornaments and she is compelled to ear a widow's dress for the rest of her life. She is regarded as the bearer of ill-luck and is avoided. She is expected to avoid festive occasions and not show any signs of joy. In some cases, she is considered responsible for the death of her husband. As a widow, she is quite frequently ill-treated and becomes the scapegoat for family frustrations.

Figure adapted from SAARC Year of The Girl Child, 1990.

Fig. 2:

Thus, in short the family's perception of a woman as the presiding deity of the household, glorifying her as the pivot of the household, yet underestimating her double burden, has in fact, led to not only her neglect in tennsof nutritional deficit, but also made her to yield to the socio-economic pressures demanding early,frequ~nt and prolonged child-bearing. These unbearable pressures, generation after generation, today, make the woman pay the price of modernisation and development.

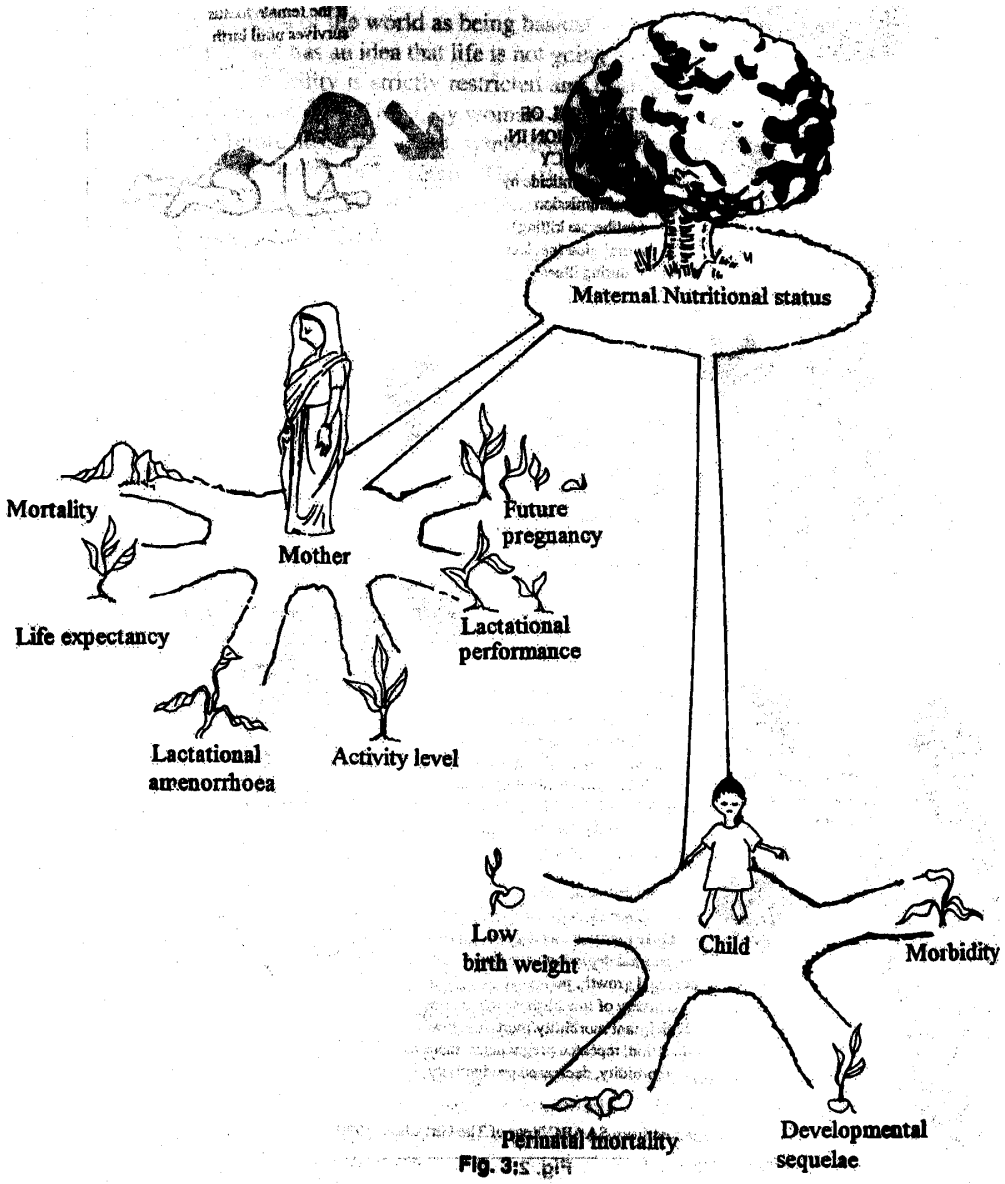


Fig. 3:5 pg

The preceding discussion leaves one in no doubt of the mental trauma and anguish to which the woman is subjected as a consequence of discrimination in all spheres of her life. There are several reasens for a woman to woman to suffer high degree stress.

Yet for most women in Nigeria, the sn:ess of domestic and occational work leaves them with little time for self-awareness and their own psychological needs. Further more, placed in an alien, often hostile environment in the homes of their inlaws, they cannot voice any complaint. They are virtually cut-off from their natal homes and have no sympathiser to share their problems. These bottled feelings then often manifest in the form of psychological disorders.

While, men are more easily manifest their problems through alcoholism, drug abuse, etc. women's problems are neglected to be suffered in silence and isolation. The factors that contribute to women' ill-health

begin with the process of socialisation itself the pirysical and mental trauma of discriminatio~ between sexes, within the family 3.nd in the occupational spshere violence within the home, experience with sexual abuse or rape, oppressive norms of marriage with the institution of dowry taking a hold of their lives, illiteracy and lack of educational skills, intimidating and often violent conjugal homes with little or no help from their natal homes -the list is endless. There factors, combined with the fact that the 'adjustments' to be made are always the responsibility of women, take their toll on the ability of the woman to survive in the larger social milieu. Those who fail to do so, collapse psychologically and become psychiatric survivors.

Some of the levels of stress and meantal hardship that a woman faces in her family lies in the very social structure in which she lives.

Stressors *faced by* most *women* in Nigeria

a) Economic
-Inadequate food for family.
-Inadequate financial resources for other basic needs -shelter, health and clothing
-Inadequate financial resources for maintenance and improvement of assets - land and live stock etc.

b) Social
-Women's low status in family and society.
-Purdah system

c) Cultural
-Oppresive interpretation of myths, stories.
-Harmful food taboos, especially during pregnancy/lactation

d) Occupational
-Insufficient wages and earning opportunities.
-Exploitation at work -economic, physical, sexual work over load and ignored occupational hazards. Migration of self or hushand.

e) Familial
-Status in family
-Early marriage
-Role expectations
-PhysicaVsexual stress and violence *,it -Inadequate food -Work overload f) Personal*
-Poor self image
-Frustration due to unmet needs and desires *l'Iii}Vl'* -Anxiety/insecurity due to lack of physical safety *tlsd% ,-I* .., -Deprivational stress due to loneliness i..,

~
Nutrition statUs
of1a~ting
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worn
Fig. 4:

Thus, we find that the isolation, poverty and the low social status of women contribute to manifold reproductive health problems. The role of the family lies not only in understanding such factors that actually are responsible for women' s problems as a whole but also, lies in changing the attitudes regarding women's social and health status. So long as preference for boys over girls prevails and unless our values are overhauled, nothing is likely to change. Unless the family reconises the need to teach the girl child to value herself and also values her contribution to the household. Unless the society as a whole recognises that contribution, the cycle of neglect, indifference and concious discrimination will continue unabated with all its adverse consequences.
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Role of the family in *mental health care*

Despite the breakdown of social ties and norms, the family and society remain the pivot of Nigerian social structure. The family members are an important resource in mental health care at several levels:

a) family members as care providers in the hospital setting. b) family involvement in therapy

c) family members a trainers of the mentally retarded

d) family members as a pressure group for policy change and better facilities. While Nigerian familites have always been an important source of strength in the care of mentally ill (Verghese 1971), initiatives to involved the family in care and rehabilitation of patients have now become the trend in the West.

Socio-cognitive approach of family in *health care*

In view of the above context, it might be concluded that family as a social unit in today' s world, plays an important role, keeping in mind the changing roles of men and women in the family, which have in fact caused many marital and family problems. The inter-personal relationships get fixed only by our agreement to act as if it is so, but the fact is that they are always conti gent, always subject renegotiation and change.

The interpersonal difficulties can often be ameliorated by taking the role of the other. The aim of socio-cognitive approach in family health is one of empowering rather than healing, fixing or reprogramming dysfunctional families.

Many of the problems discussed above in the context of roles of family in health and disease, it has been observed that many of the problems of

the family, apart from being related to larger societal problems, are related to faulty confusing or maladaptive communication pattern.

The family as a system, maintains a relationship with the social environment through t communication; family relations are themselves products of communication which are defined by self-regulated norms, established by family members for different set of roles. Conflict within the family arises when duties and privileges assigned to each role of family members, including that of provider and house-keeper, child rearer, sexual-part- ner, theupeutic and kinship roles including the care child socialisation fall short of family's expectations. In the Nigerian situation, marital roles are strongly interlinked with family roles towards the family of orientation and family of procreation. This brings

us to the role of the family in conflict management. *Role of family* in *conflict management*

This basically involves the role of the family to initiate healthy environment for growth of interpersonal relationship among the family members, which .mainly includes the

! following:

! a) developing awareness, sensitivity and responsiveness towards members belong-

\ing to all ages;

b) developing sense of tegethemess and belonging;

c) realignment of relationships as required;

d) developing ~n egalitarian decision making plan on vital aspects of family life, e.g. whether or not and whento have the first baby and plan to use contraceptives accordingly.

\ e) developing equality with regard to role, power and status of members in the

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family; sk f) sharing and managing house-hold tasks efficiently including child-rearing; th. g) distributing family resources equitably; n h) helping adolescents/youth to develop positive social behaviour, such as self w(discipline, sense of responsibility, good judgement and the ability to get along Frl with others in the wider family circle as well as the society at large; ci,

i) helping the other young people in the family to develop a strong commitment gu: towards their own kith and kin, school teachers and peer groups; Th

j) exploring effective ways to resolve fainily conflicts fairly and peacefully; exi k) developing listening skills to understand each other's problems and respond b) positively which will increase communication within the family.

Ma The basic purposes of these are closely related to the purposes of maintaining the family Acl as a social institution in terms of: whi a)

socialisation; of (b) societal adoption and stability in a changing world; "', .-' trad
c) building relationships and developing intimacy; , ": '~~i!:'>,.:'~1,.. ::
d) self-expression; .-" .,
e) release of tensions and handling of feeling; ~~ f) controlling each other.
Mar
This completes in a nutshell an over-all view of the role of family in health and disease. thin. especially in the Nigerian social context. is th and,
II II fore,
II» Exercise 311 then from
1) Enumerate the role of the family in health and disease All t1 2) The various stresses that a woman is likely to face are: and (a) d) 3.2.2
b) e) CulitJ
c) f) us tol secur
3.2 Role of culture in understanding health mora] guide
3.2.1 *Concept of culture* i$wh The study of man in relation to society does not only relate to human evolution and human growth, but it also studies man, irrespective of whether he is savage of civilised, i.e. man at all levels of culture. This study of man includes the understanding of his feelings, thinking, action-patterns and value-system which mould his life in a particular fashion. This in other words, is the study of human culture.
However, anthropologists have given a different connotation to the term and expressed the meaning of culture with various world views which are described below in brief.
a) Sensate view of culture Tylor was the first anthropologist to define and make extensive use of the term. He defined culture as beliefs, ideas, customs, laws, morals, arts and other capabilities and

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skills acquired by man as a member of society. What is emphasized in this definition is that culture is a social heritage; it is the gift of society to an individual,
This social heritage is said to consist of 'material' and 'non- material' aspects. In other words, culture is a total way of life of man living in a society.
IFrom the above discussion Bidney concludes and describes culture as a product of civilisation (agrofacts), industry (artifacts), social organisation (socio-facts) and lan- guage and religion (mentifacts).
The aboye view of culture stems from the belief that culture is a st,lbstantive reality which exists perse.
h) *Humanistic view of culture*

Malinowski and Radcliffe Brown take the instrumental, humanistic view of culture. According to this view point, culture is regarded not only as the total way of the life which secures for an individual the satisfaction of his bio-psychic drives and fulfillment of other wants, but also as 'cultivation' of the process of handling down and acquiring traditions, as a resulot of which society is perpetuated. The functions take a holistic view; culture as a whole, is regarded as the unit of study and not a cultural trait (i.e. an item from a culture).

c) *View point of differentiation of actual human behaviour (culture)* and *'culture construct' Many anthropologists are of the view that understanding way of life of people is one thing, while studying and writing about it is another thing'. This implies that the former is the 'reality existing' which they call 'culture'; while, the latter is the understanding and patterning our perception about the existing reality, i.e. 'culture construct'. There- fore, according to this view-point, culture is only a model constructed, not by people themsleves, but by an anthropologist who studies their life, which is to be differentiated from the actual conduct of life.*

All the above view-point of culture emphasize the role that individuals play in fashioning and changing culture. This makes them the creators.

3.2.2 *Importance of study of culture*

Culture plays the important role as a guide for most people. The study of culture helps I us to understand that it lays down norms of behaviour and provides the mechanism which ! secure for an individual his personal and social survival. Culture is thus regarded as the moral, spiritual and intellectual attainments of man. It stands for symbols and values that guide man in his social circle. It sifnifies the primary and basic thing, it is inside us, and

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3.2.3 *Components of culture a) Nonns*

Norms of a society or group constitute the standards for acceptable behaviour. These are infact rules of conduct that specify what people should do.

h) *Beliefs*

I Beliefs are descriptive statements of the society's mental attitude which are a charter for I observance of certain ritual performances. Beliefs allow certain practices of man to

adhere to and prevail in the society for generations together and of-course vary from

0 society .

Ice to the belief-systems and the social norms are said to be 'sanctioned' by the Non-adherance to the social sanctions lead to social deviations which are ,Ie by the society (social 'ostracism').

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n 'values' may refer to 'interests, pleasures, likes, preferences, duties, moral)ns, desires, wants and etc. and may have of her modalities of selective orienta- *uemational Ency, a/Social Sciences,* Vol. 15, pp. 283)

-system represents what is expected or hoped for, required or forbidden. It is system of criteria by which conduct is judged and sanctions applied.

)nally, a cultural value-system is the inductively based, logically ordered set of ,f evaluations, constructed from explicit value judgements and inferences from cit, value-related behaviours. Functionally, it is the set of principles whereby is directed and regulated and a guide for individuals and the social group.

e above discussions on culture, we inter that culture strongly determines human ur in the society, including health behaviour and the health status of any society ltely related to its value-system -its philosophical and cultural traditions besides aI, economic and political organisations.

tltural practices influencing health and health programmes

~ts *of healths culture*

s an aspect of culture and as such beliefs and practices of people, as the prejudices grated with aspects of culture.

ltended that, in a given community, perception of health problems meaning of ~ of health and disease, response to various institutions that exist for dealing with ~alth problems, all form an integrated, interdependent and interacting whole.

plies that the entire way of life of a community (i.e. its culture), including social nomic conditions form a major category of factors, which along with biological ironmental factors, determine the nature, size and distribution of health problems)mmunity. Again, the cultural response of the community to the health problems lted by its determines the way individual members perceive different way of with health problems. The health behaviour of community is also determined by Ire. Indeed all these elements form an interacting sub-system within the overall

system of the society. .words, it is sub-cultural complex which can be termed as a 'Health Culture of t1munity' .

other aspect of culture, health culture of a community is influenced by innova- ulture diffusion and purposive intervention in changing the health culture of a nity. In this context, the Government health programmes in a community can be :red purposive interventions into the existing health culture of that community, he objective of bringing about a desired change in that (pre-existing) health Further, as health culture of the community is in fact a sub-culture of the overall of the community - the overall way of life, it is intimately linked with changes Iverall culture of the community that are mediated by various social, economic

litical forces, this concept of health culture is cultural to an understanding of gy of health care in a country.

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; context, it is apt to mention that health problems and health practices arise in the lunity mainly due to abject poverty and extreme adverse social and ecological tions in which the people live. These conditions create a viscious cycle for these e -they exert a negative influence on the state of their health and at the same time :onsiderably reduce power of these poeople to cope with various problems con- ng them.
, culture, irrespective of its simplicity or complexity has its own beliefs and Ices concerning diseases and evolves its own system of medicine in order to treat diseases. It is, therefore, important to study in depth the various cultural determi- affecting health besides the social and ecological factors.
ural *practices with special reference* to *maternal and child health*
is context, it will be most appropriate here to present the findings in brief of an opological research study, "Maternal and Child Health Care; Beliefs and Practices e Thakurs" conducted by R.D. Tribhuw;m in Raigad district of Mahashtra as an ration (Appendix I). This study, though has it own limitation~, sample being small, gives us an in-depth insight into some of the cultural practices related to the peoples' fsystems of Thakur community that influence the mother and child health of that cular community and thereby act as either impediments or catalysts in implements e M.C.H. programme.
liral *practices influencing contraceptive behaviour with special refer- ~ to family planning*
) Early marriage of women in Nigeria exposes the reproductive period of her life (fertility span) and before they attain even physical maturity they bear a large number of children
I) Desire of people to have more children, especially among the rural poor so as to contribute to family labour on the agricultural land. The rate of infant ande; child survival being low in most parts of rural Nigerian results in low use of contraceptives.
:) Preference for sons in the Nigerian society is another contributory factor that prevents the majority in Nigeria to adopt early contraception.
I) Misuse of modem technology for pre-determination of sex has been rampant in this regard in many parts expecia1ly of Delhi and Haryana. This is followed by high rates of abortions and detection of female foetus. This practice of sex pre-selection and predetermination of sex acts as a hindrance in the acceptance of any family planning method.
~) *Religious beliefs and social taboo:* In some parts of Nigeria it is believed that a woman who is menstruating is unclean, and therefore, is not supposed to participate in household chores, religious activities and agricultural work. Many of the fertility regulating methods cause changes in their bleeding patterns resulting in excessive and irregular

menses. This strains not only her conjugal relation but also prevents her from participating as a agricultural labourer resulting in loss of wages. Therefore, such belief system acts as hindrance in adoption and use of contraceptives.

f) *Low social status of women:* Women in our society hold a subservient position in every respect as mentioned earlier.

i) They have no say of their own regarding the use or non use of any contracep-

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tive methods even if they wish to postpone next child birth.

ii) The decision making in majority of the Nigerian families, especially with regard to reproductive choices of women rests not with them but with the significant members of the family -the husband and the mother-in-law.

iii) The social worth of the woman increases only after she gives birth to at least two make children. This is another aspect where contraceptive practices are delayed.

iv) Barrenness or infertility of a woman is considered as a curse by our Nigerian culture.

Such socio-cultural taboos, religious belief, customs and traditions influence the contra- ceptive practices in the community resulting in non-acceptance and discontinuous rates. The lack of such knowledge by the health care providers only creates a gap in under- standing the health and contraceptive needs of the people and successful implementation of family welfare services.

Cultural practices influencing health and *health care prograJTUnes with reference* to *nutJition*

Social and cultural factors influence the food consumption pattern of our population, which in turn have a significant impact on nutritional status.

a) Selection of food items in the Nigerian diet is determined as much by economic constraints as traditional and tenacious food habits.

b) Breast-feeding practices; discrimination against female child decreases the duration of breast-feeding.

c) Weaning practices; (timing, duration, quantity and type of food). d) Intra-familial food distribution (made vs female).

e) Crucial-feeding practices (who feeds the child -mother, siblings, others etc.) f) Occupation status of mother and nature of job. g) Nuclear or polygamou~ family.

h) Decision-making within the family and woman's role i) Traditional food taboos.

Anyone of these factors can determine whether a child will be well nourished or malnourished and to what degree.

j) Besides infants, pre-school children, pregnant and lactating mothers, other groups affected are the lower socio-economic groups of the society due to their low purchasing power and reduced food availability and accessibility. As a result of poverty and insanitary conditions, the land-less labourers and urban slum- dwellers are greatly malnourished due to undernutrition leading to high rates of infectious diseases and mortality this exacerbating the problem further.

Cultural practices influencing health with reference to SillS *and AIDS in the Nigerian s.ocieiy.*

a) Homosexuality among many factors have been said to be responsible for the spread of AIDS. This indiscriminate sexual behaviour normally is not common in Nigeria as in Western countries, although government frowns at such prac- tices.

b) Conservative value-system and the belief that there should be only single partner sex life in marriage (which is held in great sanctity in Nigeria) is responsible for

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not spreading the disease so rampantly.

c) Practice of intravenous drug addiction is another cause of rampant spread of AIDS in many countries

d) Women, being physically weak and socially. vulnerable fall easy prey to their male counterparts. This is being said keeping in mind the increasing rate of crime and violence against women. Several cases of female abuse (rape) result in

transmission of the dreaded disease. e) Sexual taboo in our society is one factor responsible for spread of sexually transmitted disease including AIDS, as discussions on sexual behaviour are never held openly. Teachers and parents are unwilling to talk about sex in general and AIDS in particular. This results virtually in creating prejudice and discrimination against people having Sill and HIV infection. This low degree of cultural openness about sex has far reaching effects in preventing sex ed~cation in schools and health education in general about understanding the disease and its *mode* of transmission.

t) Poverty, illieracy and ignorance about the diseases drive many poor women into prostitution and become the high risk group in spreading infection. Hence, there is a myth that AIDS is a woman's disease. Infact, the reality is that the risk of tramission of AIDS from men to women is high than from women to men who

~ transfer the infection to their wives after visiting prostitutes. Still worse is the fact that these men and women do not easily come for treatment because of the socdial stiogma attached to the disease and fear of the unknown.

g) Because of the cultural inhibitions in our society, even people in general remain ignorant about the mode of transmission and the spread

of such diseases. They fail *to* understand that AIDS other than the sexual transmission of HIV and infected blood transfusion does not spread by casual contact at work or school,
~ by shaking hands, touching, hutting or kissing. Further, it is also not spread *r* through food or water, by sharing cups or glasses, by coughing or sneezing, in
swimming pools or in toilets. No mosquitoes or other insects help in spreading the disease. This means there is no danger of becoming infected through ordinary social contacts which remains a barrier in the knowledge of our people.
In view *of* the above reasons embedded in the social cultural fabric *of* our society, health
education which is a major component in prevention of such diseases becomes im- possible as they do *not* come to light amongst people with blissful ignorance.
1) Why culture is important?
2) What are the component of culture?
3) How cl.lltural factors effect on family planning?
4) What~~e~~~~o~~~~~r~ii;'~?: ~ ~ : : ~ ~ ~ ~ ~ ~ : .
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4.0 Summary
In this unit we have had a concise understanding about the social evolution of man, development of society with reference to different modes of production and the emer- gence of different economic groups with growing complexities. This understanding of development of society is particularly essential of the health care providers as health had to be understood in the context of the overall development of society. Family, being a unit of society plays an important role in the socialisation of man as a child till his adulthood. In addition to this, family plays an important role in upbringing of the girl child, whose value and acceptance in the society at large is determined by the perception of the family first. Culture too plays an important role in influencing health of the peoploe. Various, studies in anthroplology have indicated that family of orientation, parents- in-.law, indigenous mid wives, elderly women, folk and indigenous medical practitioners and government health functionaries are all responsible in influencing health of the people in a society.
5.0 Answers to exercises
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!, , "" i. l
Exercise :I
1) a) Sociological, functional b) less

c) Land-lords, Farmers, Poor peasants with land, Poor peas- ants without land
2) a)-iii), b)-iv), c)-i), d)-v), e)-ii)
Exercise2
" ,
a) i) Marriage :c',!;" I ii) Blood
iii) Adoption
b) i) Universality
ii) Emotional bond iii) Limited size
iv) Nucleus of individual growth
v) feeling of personal responsibility to each other
vi) means of social control .. vii) subject to constant change l'
c) Biological
Exercise 3
1) a) Nurture and protector of man in prevention of disease and promotion of health;
b) Role in understanding psycho-social needs of a child;
c) Role of the family in caring and promoting for women's health;
d) Role of the family in mental health care; *I* !
44

Ie) Role of the family in conflict management. '~OI\: -',,:;, ; 2) a) Economic ~(1IJ -~, ;.' b)S.1 .jl)i1."~""\ ~\,,' C)c:~~:ral!ii!'.'iJ ;.. "j: "},"':~'.;:;:!;; ;.,:;
d) Occupational
t
; e) Familial f) Personal Exercise 4
1) Culture helps us to understand the people that helps us to know the behaviour
of individual, moral, spiritual and intellectual attainment of man. 2) The components of culture are norms, belief and values 3) Cultural factors effect on family planning due to -
-Early marriage of women bear a large number of children
-Rural people desire to have more children for family labour and infant mortality is high in rural area. -Preference for sons.
'. -Pre-determination of sex.
-Low social status of women.
4) The nutritional effect of cultural practices are: -Traditional and tenacious food habits. -Discrimination against female child. .-Weaning practices
8; -Crucial feeding practices
; -Occupation status of mother and nature of job.
-Decision making within the family and women's role.

6.0 References

Banerji, D. (1982). *Poverty, Class and Health Culture in India*, Prachi Prakashan, New Delhi. Bottomore, T .B. (1972) *Sociology -A Guide to Problems and Literature*, (Third Impression),
Blackie and Son (India, Ltd.)
Chakraborty, B. (1992) "AIDS -Fighting the Fear and the Virus", *Swasth Hind,* (Nov-Dec. 1992), Vol. XXXVI, No. 11-12, New Delhi.
Chatterjee, M. (1993) "Occupational Health of Self-Employed Women Workers", *Health for Millions,* Vol. No.1, (Feb, 93), Women and Health Series, VHAI, New Delhi.
Desai, M. (1993) "Family Dynamics and Developmental Programmes: Curriculum Planning", *Indian Journal of Social Work* (Jan., 1993) Special Issue -Family Development, Vol.LIV, No. I, Tata Institute of Social Science, Deonar, Bombay.International *Encyclopaedia of Social Sciences* (1972), Vol. 15.
Mazumdar, D.N. Madan, T.N. (1988) *An Introduction to Social Anthropology,* National Publish- ing House, New Delhi.
Mehryar, A. (1992) "AIDS Education at School and at Work", *SwasthHind(Nov-Dec.* '92), Vol. XXXVI,No.ll-12,NewDelhi
Patnaik, R. (1991) "Women in Society", Social Implications of Reproductive Technology with Special Focus on Indian Women, M.Phil, Dissertation, Centre for Social Medicine.and Community Health, School of Social Sciences, Jawaharlal Nehru University, New Delhi.
Sathyamala C., etal (1986) *Taking Sides* -The *Choice Before a Health Worker,* ANTRA, 32nd Cross, Besant Nagar, Madras,
Tribhuwan, R.D. (1993) "Maternal and Child Health Care: Beliefs and Practices of Thakurs",
45 '"

Unit 3: Social Changes and Community Action
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1.0 Introduction

..
From the previous unit we come to understand that societies have undergone several changes over a period of time and this change is an important feature of all societies. Man himself evolved through time by

changing social institutions. Social change is nothing but changes of these social institutions that have occurred due to variety of reasons from time to time.

2.0 Objectives

In this unit you will get an orientation regarding the significance and dynamics of social change and how community involvement brings in the desired change for the good of the society. After completion of this unit you should be able to: .explain the concept and dynamics of social change,

.discuss and explain each major factor of social change and the health problems resulting from these social changes,

.explain and evaluate the social changes/factors of change that have been respoinsible for bringing in changes in the overall traditional Nigerian societY, and

.explain the significance of community participation in health care.

3.0 Main contents

3.1 Dynamics of social change

This implies the need to analyse change in society in terms of:

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a) what is it that changes? !", , b) how does it change? (forces of change) *11,"]0;* ,

c) what is the direction of change? d) why did the change occur?

e) what are the principal factors in social change?

) *Concept of social change*

ocial change is a process through which social organisations, social relationships and)rms of values and beliefs of the people in the society are altered.

~very society undergoes changes whenever new social, economic or cultural forces of ~ansformation undergo change. These changes may be either endogenous (internal) or xogenous (external) forces.

r) *Forces of Social Change*

! ,

l) Endogenous forces (internal to *society)*

rlcrease or decline in population gorwth due to factors like: *:rl";* 'c" i) migration -mainly rural to urban in Nigerian country.

ii) practice of contraception. ,. "'c iii) infant and child mortality rate. iv) maternal mortality rate. v) high rate of abortions.

vi) introduction of government policies directed towards change. vii) social reform movements.

I) *Exogenous forces (external* to *society)*

i) French and Russian revolutions/wars. , ,. ., ii) emergence of Renaissance period interwest. iii) breakdown of feudalism.

iv) agricultural and industrial revolutions.

v) radical changes in life style through scientific and technological innovations. vi) nature of trade relations.

~) *Direction of social change*

:'his refers to the historical description of facts and their interpretation which gives us orne inferences regarding the dominant trends of change that have occurred due to the 'arious social forces described above and many more.

» *Rate of social change*

~ate of social changes refers to the acceleration of social and cultural change in modem imes. Ogburn and Nimkoff (1982) were the first to observe that there are discrepancies aking place in many aspects of social life in many societies. They termed this as ' cultural ag', meaning a major disharmony between the rapid growth of technology and the slower ransformation of familial, political and other institutions and of traditional beliefs and lttitudes (religious, moral etc.)

~) *Why changes occur*

~esides the factors/forces of social changes mentioned. Morris Ginsberg (1958) has done l systematic analysis of these factors to explain social change.

-

a) conscious desire/decisions of individuals to adopt/accept changes (e.g. accept- ance of a small family system by westerners).

b) individual acts influenced by changing social and economic conditions (e.g. people migreate to cities in search of employment as a consequence of rapid industrialisation).

c) Structural changes and structural strains (e.g. the changes in technology grqadually brought in changes in the economic structure in Nigeria. These have brought in changes in the family structure resulting in problems of migration and urbanisation).

d) external influences (social changes occuring due to foreign aggression). e) outstanding individuals/groups.

F) Principal factors of social change

a) Education -both informal and formal education imparts the accumulated social heritage of the past to the new generations.

b) Growth of knowledge due to advances in education and other social and economic organisations. This gives rise to social conflicts, thereby bringing in

change.

c) Social and cultural innovations in the society too bring in upheavals in the social life of man.

...

G) *Parameters of social changes as observed in developing countries*

a) Development process in these countries aim at change in social structure, communications, political and economic institutions, sOCial institutions and value-systems governing social behaviour of man.
b) Influence of ethnic, religious and traditions strongly influenced by introducing new social sanctions or restrictions as 'Acts' or punishments to curb the wrong-doings in the society. This creates upheavals and brings in revolts and crises within the society. .
c) Culmination of social movements: Social and religious mov~ments of the 19th
century have brought, in major changes in the Nigerian society like prohibition of 'Sati' and widow remarriage.
d) Nature of relations that existed between the developing and developed world: As trade relations increase with the industrialised nations, the developing world was caught in a grip of what is called "neo-colonialism". Western culture has ushered newer forms of economic and social changes in our social system.
e) General international climate has a bearing on the social changes that are
occuring in them.
II~~ ,
~xerc~ ji.,tJ:,,()
lj The dynamics of social change implies the analysis of:
a)
2) Briefly describe parameters of social change in developing countries.
An

In the above context, we have discussed dynamics of social change. The spcial changes are taking place in the Nigerian society as a result of industrialisation, urbanisation and modernization of our society,
3.1.1 *Urbanisation* ";Il,.~~i:i':>;,;
Process of urbanisation
Urbanisation has been one of the strongest factors in the transformation of the Nigerian society. The process of urbani sat ion takes place due to the mobility of the people from the rural to the urban areas, mainly in search of employmenL This social mobility is termed as migration in simple words. "
Migration
Factors of 'migration process' (finding of a study on street children).! (;j
i) extreme poverty in the rural areas due to large families
ii) natural calamities
iii) unemploymentfor the poor farmer caused either by mechanisati01;l of agricul-
tural sector or due to seasonal unemployment
"';
iv) urban thrill: to want to face adventures of city life ,,', v) loose social links in urban areas

vi) caste wars in rural areas vii) secondary poverty due to wasteful expenditures in villages,
"Dimensions of urban poverty: a situational analysis" specifically lists the reasons for rural-urban migration of families belonging to poor social class:
i) insufficient food, shelter, clothing (basic necessities of life due to extreme
poverty)
ii) indebtedness towards money-~enders , "'
iii) no land for cultivation -;"::Ir.';.": "'c iv
)low wages *i'/~d<"\:5*
, "
v) caste discrimination ;,~l;::f;ij!:j I:;>
.)II,*'ml"* -
VI seasona emp oyment ",',:::;' vii) unemployment viii) large family ,co; ; ;
ix) division of land ~ ~ x) crop-failure and insufficient price for their goods.
Migration, in a broader sense, results due to regional disputes created between urban and rural areas characterised by disproportionate planning and expenditure by the government.
The consequence of this disparity is inevitably visible by a high level of mass-migration to urban areas, in general, and to high income cities like Lagos, Port ~ Harcourt, lbadan and Abuja in particular. For this reason, the plight of the slum' popula~ion is much worse in metropolitan cities than in smaller cities and towns~
to B!~lHIJB ~U~&q~I;t1~~ ~.,' .-
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c,- ',.."'
I UNICEF: "Street Children of Hyderabad," Nationallnstifute of Urban Affairs, *Research Study Series* No. 25 (1988)
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Decay of urban environment/ degeneration of urban eco-system
The deleterious conditions that have been created by rapid urbanisation - unemployment and migration on the one hand, and environmental degradation on the other, have made health and well-being only a wishful thinking! The decay of the urban environment along with growing poverty have created conditions in which the "existing health and mobility patterns in urban-slums are even worse than those in rural areas" (VHAI, 1988). It is most severe in the large metropolitan cities already mentioned, where majority of the slum dwellers reside. Within the next ten years these cities will have more than double in population, the majority of whom will still be the urban poor. The slum population is growing at a rate faster than the total population because of this urban drift. This is hastening the destruction of the whole

urban environment. Lagos is especially worst hit. In this context, it may also be appropriate to mention that slumification and urban decay are not merely the result of the skewed development favouring the rich classes only. This can be shown by way of an example; In Lagos, for example, in spite of the disproportionately high expenditure on services, there is a marked shortage of clean drinking water and environmental hygiene for more than half the city's population. Many houses in urban Lagos now has bore holes. In the slum Lagos, hand-pumps are inevitably surrounded by pools of stagnant water because of poor drainage. Water taps are built barely inches off the ground. The pressure of the water is so low that often they are almost mouth to mouth with open drains. Open drains which pass in front of houses also carry sewage, and are a particular risk to young children who may fall in and, as happened in the past, even die. It is rare to find a drain that is not clogged with garbage, sewage, animal dung or debris.

To add to this misery is the air population as a result of diesel-powered registered industries and two thermal power plants, along with half of the sewage being untreated. It is the urban poor who does not avail of the basic services, who have to contend with pollution. They are not compensating by the far existing and functioning dispensaries or hospitals and have to face the ills associated with the social environment as well as drug addiction, prostitution and so on.

The continuous creation of the new, and in some caSes in Lagos and Abuja, unplanned settlements and the extension of the existing ones have resulted in unprecedented pressure on urban land, a steady deterioration of the fully stretched urban services and an environmental degradation symbolised in a nutshell by: i) slum settlements ii) over crowding

iii) chaotic traffic hazards

iv) haphazard development

v) derelect naighbourhoods

vi) inadequate water-supply and sanitation vii) insufficient services

viii) low standards of civic management

Basic survival at a stake

In addition to the above problems, the miserable living conditions and the absence of the security of home, make the family's survival of the slum dwellers the main pre-occupation. Children have to put up with congestion, heat and smoke of their huts, absence of basic amenities like water and sanitation, and long hours of work with no

recreaqtion. Children cannot attend school regularly as these conditions of life make it de impossible for them to do so. The families are under constant threat of eviction and bc harassment from municipal authorities which makes it difficult 10 keep normal records a 1 in schools, birth certificates and rationcards. Hence, they become drop.ou~s soon and Fr

start worshipping and growing up as illiterate and unskilled child 1abOurers with very 'fi little chance of upward mobility or ability to change their socio-economic status. It is ex however, ironical that although they are being deprived of childhood, they are being used th by society for a real. contribution through their labOur but there is no care to improve all their chances for a better life. Chances for a better life are even less for a girl child in pr such caqses than those of the boys because they are economically much more dependant in and culturally more restricted. While the girl enjoy~ the protection o~ the family, her *H* capacity for decision-making are far more controlled.

St

Street children: Consequence of urban decay ill The fac~ors affecting the life of the children in slums who make the option of breaking away from the family in search of a better alternative is shown in Figure 3.1. While he enjoys the freedom of what he wants to do, he also experiences the harshness of the

:i. " authorit~e~ who do not recog?ise his right 10 survive. He. is pushed out, beateri,caug~t **t**9n SQspICIon, made to part WIth what he earns. These chIldren not only face economic

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deprivation and bitter experiences of family break-up, but also, at the same time, are bogged down with the stark reality of the future ahead. This, of course tends to give them a tremendous resilience to cope with the multiple strains on their lives (UNICEF, 1991). From the above discussion we find that the urban slum population is heterogenous 'floating' migratory group that is not onloy economically and socially deprived but also exposed to most deplorable conditions of ill-health and disease. It is surprise, therefore, **I**that these are the same underpriviledged social groups that have the highest morbidity and mortality rates, mental stress and social ills. Thus, as already mentioned, health problems of people within a deteriorating environment cannot be viewed in isolation from the environment in which they are living.

Health problems associated with urbanisation

Several studies (UNICEF, 1984; VHAI, 1992) in this regard reveal that the common illnesses among the slum dwellers are:

a) respiratory diseases, including TB
b) fevers
c) gastro-intestinal disorders d) skin diseases
e) intestinal and parasitic infections f) eye infections g) malnutrition
h) viral infections i) malaria
j) occupational health hazards including chronic toxicity due to industrial pollu- tants
k) road accidents
1) sexually transmitted diseases

m) social diseases and addiction like: i) prostitution ii) drug abuse
iii) alcoholism, crime and delinquency iv) rape and other forms of violence

As the urban poor generally build their own homes without any government subsidies, they are forced to use inexpensive and hazardous materials. Asbestos roofing in Nigeria slums is a common sight. This material is said to have a carcinogenic effect. Several homes had brick walls with black polethene which is believed to be associated with high incidence of cold, cough, pneumonial and TB, as polethene forms an inadequate cover against cold and damp. Also these are prone to fire hazards.

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Malaria and intestinal parasitic infections are linked with the general low level of sanitation -open sewers, location of solid waste disposal, pollution of bodies of water and flood-affected low-lying areas after the rains.

Diseases like scabies, leprosy, trachoma, conjunctivities which are quite prevalent among slum-dwellers are the result of water scarcity in these areas. Gastro-intestional disorders are especially related to the contaminated water and bad hygiene.

Malnutrition, which is rampant in these areas are obviously a consequence of under-nu- trition, poverty condition and inaccessible to fOOd resources.

The social diseases mentioned are obviously related to their psycho-social stresses of the environment and if one carries out health and morbidity survey in urban slums of Lagos, for instance, it would not be surprising to find that:

a) population below the poverty line would vary *from* 46.8% to 19% in different
slums;

b) about 70 to 78% of the women would be illiterate; ; .

c) there would be a high incidence of neonatal, infant and maternal mortality;

d) a greater prevalence of malnutrition in females and children would be ob
served;

e) poor coverage by immunisation, ICDS and Vit-A Prophylaxis Programme would be prevalent; and

t) there would be poor availability of community-based health services.

Family break-up

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'nstraints impeding environmental health in urban slums

e constraints can be classified according to three broad headings: a) Unequal access to: i) land

ii) public utilities and

iii) urban infrastructure, including industries.

b) Proximity to an industrial or other polluting source without provision ofmedi-

cal dispensaries that can deal with chronic or acute toxicity, respiratory prob- ;::","' lems and other industrial related health hazards.

c) Inadequate living space for the population, which has an adverse impact on the social and physical environment of the home.

esent health programmes / related strategies

)rtunately, the present democratic environment has created the environment that has en too many piece-meal on-site slum improvement projects launched by some state)vemments and several NGOs towards upgrading squatter colonies and providing em access to basic services. In each of these cases of slum improvement, the aims of ie improvement are captured in any of the following areas: a) to provide safe drinking water

b) to create appropriate shelters according to individual specifications c) to construct drains, sewage channels and latrines d) to build roads and other community centres

e) to set up vocational training programmes and schemes to generate additional Income

f) to establish community oriented health services and non-formal education units.

:he success of these initiatives is the recognition that only an integrated development Irogramme including adequate community participation can help address the social md physicalo problems related to urbanisation. ,

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1.7.2/ndustr;a/;sat;on

With the advancement of science and technology in the west, industrial revolution look place which had brought in tremendous social, economic, cultural, technological and political changes both in the developed and gradually the developing world. The influence of the west brought its changes in the Nigerian society too.

Social changes

The impact of industrialisation in Nigeria is the rapid transformation of the people into describable social class system of lower, middle and upper classes. Extended family gradually gave way to nuclear families, bringing in a rural-urban continuum.

&onomic changes

Subsistence economy was r~placed by the commercialised economy where goods and services were excpanged with money. Monetisation

took the place of the barter system, Affluence in the society became evident even in the midst of squalor.

Environmental changes

With greater social mobility from rural ro urban ar:e~~ in attraction 9f jobs in industries, migration takes place creating problems of its own for the people trying to adjust to the city life as mentioned previously in 'urbani:;;ation'.

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Problems of lndustrialisation

The social and environmental problems associated with industrialisation have already been mentioned while discussing 'Urbanisation'. We can confine ourselves here mainly I with the health hazards due to industrialisation, though in brief we may mention some of the social changes that have taken place over a period of time. a) *Problems in social sphere*

With the introduction of large scale machinery, intensive agrobusiness and industry land, wealth concentrated into the hands of a few rich. Landlessness, unemployment

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Inger increased. Growing unrest brought in more repressive measures of social control. Ie number of industries started growing and concentrated in the urban planes in the odern industrial society. The small and large scale industries consequently absorbed e cheap labout that was flowing in from the rural areas. Forced by poverty, even young)ys and children started entering the poorly paid informal labour markets. The enrol- lent in education at both primary and secondary levels fell as emphasis is placed on l~ney~making ac~i~ities by serving as apprentices in retail tradings.

--" Ilgratlon to the CInes can be stopped by: a) Resettlement of both urban and rural youth in rural areas b) Establishing new industries in the rural areas

c) Creating more job oppc,rtunities and self~employment opportunities in rural

areas.

lue to incr~ased urban social pressures on families to maintain themselves, families ave had to cut comers to make ends meet. The cost of maintenance of wife and children ~main the same beside extra expenditures onpetrolm, kerosine, house rent, school fees nd, medical bills. Except for the rich (upper) social class, the average Nigerian family ; bogged down with familiar social pressures of the modem industrial life and more Ilen are being caught in the psych~logical trap

of guilt of not being able to fulfil their lasic obligations towards looking after their family well

lIus, we find the problems of people especially belonging to the poor and middle classes, nodemisation along with industrialisation have not receded but increased manifold with 'aried dimensions.

b) Problems of children

['he problems of children from the poor section of society in the modem post-industrial :ociety are endless.

:ertain industries employ a majority of children in their workforce and some of these lfe the match and fireworks industries, stone quarries, mines, handloom industries, bidi ndustries glass, pottery units, gem polishing, construction work; apart from domestic work, rag-picking and such haz;ardous occupations.

[he unorganised sector accounts for a whole army of child labour working as domestic ;ervants, helps in hotels, way-side shops, canteens, sweepers, shoe-shine boys, etc, Jesides many others.

:hildren working in such industries, both in the organised and unorganised sectors are ;ubjected to excessive exploitation in terms of low remuneration with long hours of work, ~azadous work and unsafe working conditions. Coupled with this, the children face ~hysical and psychological abuses which have life long impact on their tender minds. One of the single largest causes of cpncern is the danger to life and health posed to these children while working in hazardous environments, be it agricultural or industrial undertakings.

However, as far as the child worker is concerned, every occupation is hazardous for the growth, development and general well-being of the child. The child, working for long hours at minimal pay being subjected to physical abuse and working in unsafe working conditions suffers not only physically but also mentally.

d) Health problems associated with industrialisation

Health hazards due to industrialisation may be classified as: 1) Toxic hazards

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, *c*,

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a) exposure to skin burns ., ,

toxic fumes irreversible visual entertainment colouring substances accidents

coal furnace fatigue and exertion exposure to hard, long hours of labour malnutrition

b) lack of nutrition due to starvation vulnerable to diseases like TB,lung diseases lack of shelter and protection from law cuts and swelling

exposure to severe form of exploitation vulnerable to become alienated from home and exposed to social deviance and delinquency

exposure to noise pollution deafness

,"o?--
e) *Industrial deaths*
While statistics on injuries and deaths on industrial in Nigeria are highly inadequate, information from other developing economies reveals that the chemical industry kills more workers every year than any other. Primary causes of these deaths are: a) explosions
b) spills and leakages of acids and obnocious gases, non-soluble effluents c) ingestion of chemicals/absorption of chemicals
d) contamination of drinking water with industrial effluents.
IE~;;;~
The environmental degradation of the urban basic services are in a nutshell symbolised by:
a)
b) c) d) e) f)
3.1.3 *Agricultural modernisation*
Sociological implications
With the advent of industrialisation, modemisation took place in agricultural activitie too bringing in certain sociological changes and implications in the health of the peop in Nigeria. The adoption of modem methods of farming i.e. agricultural technology' often upheld as an effective way by which poverty can be greatly reduced. In the ru
context, this implies that technology will increase the total productivity within agricul ture. This implies that since more will be produ,?ed, each person engaged in agricultu will get a proportionately larger amount of produce. Further, it is believed that ev peasants with small amounts of land will be able to increase their earnings by adoptin modem farming methods.
Modemisation in agriculture brought in changes in the use of technology which consis of:
a) *machines:* like harvestors, tractors, threshers etc. which can do faster work th manual means.

.
b) *improved seeds:* high yielding variety (HYV) giving better quality of quantity of grain per acre.
c) *fertilisers:* to. improve the fertility of soil
d) *pesticides:* which help to control destruction of crops by pests.
e) *irrigationjacilities:* which can provide sufficient water whenever required.
Each of these is useful by itself toa farmer. But the maximum benefit it achieved only when they are used in recommended combination and not singly. This means, for instances, that a farmer will have to use fertiliser and irrigation facilities in the right proportion to create necessary ideal conditions because of the fact that these seeds are

Ideveloped in laboratories and give the best results only when identical conditions of soild ana water exist. Moreover, as these seeds are not naturally resistant to pests, use of
pesticides therefore becomes essential too. Hence, as HYV seeds along with irrigation, fertiliser and pesticides are intended to increase productivity of land and since machines
I are intended to work faster and with more efficiency than human beings, the maximum i benefit will come to a farmer who has large plot of land and is able to use all of these
technolo§es together.
These agricultural technologies have been in use in our country for the last 20 years, An analysis of the results show that they were most powerful increasing production of wheat and paddy.
Sociologically, the above context reveals that the effect of technology or modemisation in agriculture in our country has brought in sufficient changes:
Income of the landlords and farmers increased considerably and they became still richer because they were in a position to purchase the technology with the accumulated wealth. . The peasants and the poor farmers were not only denied the mod~m technological inputs in farming but also often forced to sell part of their produce to the large farmers to repay loans that they take from them, at the event of any crisis situation in the family. This
.made them even more dependent on the landlords for their livelihood.
Thus, even when a need opportunity (like technology) which can potentially improve the standard oif living of every body is introduced, every body in the village does not have an equal change to benefit from it. On the contrary, the rich got richer, while poor
got poorer.
The introduction of modem technology in agriculture has therefore resulted in increasing .the concentration of land in the hands of few. Unable to compete with the landlords, the
small farmers chose to sell off their lands or encourage their able-bodied children to
move to urban times.
and joined hands with the already large group of landless labourers searching for employment. In the 10 year period (1961-62 and 1971-72), the number of male agricultural labourers increased by 87.5% while rural population in the same period
increased by only 21.11 %
In fact, rapid industrial growth was advocated to absorb the surplus labour from rural areas. The growth of small and cottage industries was also emphasized to provide more employment. In reality, none of this happened. Not only is the employment generation low, but often due to the changes in demand for machine made goods or because of the introduction of new 'machinery itself, labour is 'retrenched' or thrown

out of jobs by industf:)!. This has not only raised the level of unemployment in the country but also has led to the systematic destruction of the traditional means of livelihood of people and
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t"lg.4
made them more improverished.
Health implications
Health problems in this respect are visible predominantly from mainly two angles: a) health problems related to farming activities;
b) health problems due to lack of social and distributive justice regarding food production, food distribution and food utilisation despite the enormous achieve- ments of the green revolution. Let us analyse these in brief.
a) *Health problems related to farming activities*
With the use of modem farming methods such as fertilisers, machines etc, a whole new set of health problems have also become associated with agricultural work. Problems due to use of chemicals, pesticides and insecticides are extremely poisonous often resulting in death. Chronic exposure, however, can lead to blindness, cancer, diseases 0 liver and the nervous system. A study showed that 73% of workers in cottop grow areas had developed symptoms of cardo-vascular and intestinal problems. Besides affecting the health of the worker, these chemicals also affect the workers' families an it cxan lead to the birth of congentitally malformed babies, stunning of growth in childre
etc.
i) Problems due to use of machines
.injury due to use of threshers, often leading to permanent disabiliti due to amputation of limbs.
.fatigue (tiredness) was also responsible for such accidents
62

.accidents couldalso occur due to intoxication or addiction to alcohol which workers normally consumed due to over exhaustion.
ii) Health problems as a lack of social and distributive justice despite Green Revolution. It is not an established fact that Nigeria is no longer deficient in food grains. The question then arises as to why the problem of malnutrition assumed
alarming proportions in Nigeria ?This must be so, primarily because the majority of the population does not have the purchasing power to satisfy their daily food requirements.
It is not at all surprising then, that groups most vulnerable to malnutrition are those who belong to the lowermost strata of society the same landless living below the poverty line. Any analysis of the nutritional status of Nigeria's population takes into account several. direct and indirect factors:

a) purchasing power of people
b) level of nutrition knowledge, good consumption patterns .c) distribution of income d) distribution of food
e) levels of employment f) unsafe drinking water
I g~\ poor sanitation facilities
I
i h) illiteracy and ignorance
i) non-availability of health services.
In sum, the problem of malnutrition is a culmination of: a) constraints of food
b) people's purchasing power
c) number of people sharing available food and money, i.e. food poduction,
purchasing power and population growth. These have been very well presented in Fig. 5
Although the Green Revolution has resulted in a significant increase in the production of cassava and maize, it has had no impact on the production of legumes, which ensure the protein content in cereal based diets, or in coarse grains and oil seeds. In fact the price of legumes (beans) and edible oils have increased to levels that make them inaccessible to lower income groups whose need for these is most acute. Unfortunately, it is the nutritionally vulnerable groups who are least able to get coarse grains, cheap pulses and vegetable oils. In years we are thus faced with the cruel paradox of Green Revolution that has augmented cereal production while indirectly, contributes to an impairment of the nutritional status of poor households.
The steep rise in the price of coarse grains resulted in a decline in the average intake of calories among the rural population.
Concept of public distribution system
The public distribution system too has failed to reach the most deprived, both in the rural and urban slums. The faulty distribution system contributes to extensive losses in the sense that often surplus production of certain perishable foods results in a glut in the local market, while the same commodity are found to be scarce in other parts of the country. The inadequate distribution faciloities merely result in the crop being destroyed.

fficient system of transferring surplus to deficient areas;
[lore food to the poor people, whether in rural, urban slums, tribal or hilly areas; quitable distribution from state to state;
easonable (subsidised) food pricing and food distribution policies.
i'ill in the blanks:
l) An analysis of nutritional status of Nigeria population takes into ,he account various direct and indirect factors. These are:
a) b) c) d)

e)
f) g) h)
~) A sound Public Distribution System ensures:
a)
b) c) d)
ange of traditional society tlisation and modernisation have brought in tremendous changes in the social an right from the primitive times. The dynamics of these social changes reveal itional society has undergone changes in various aspects of social, cultural, c and political areas ~d in the sphere of health too. We shall discuss here in
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[le of the relevant aspects related to the social changes in the traditional society. ooings have continuously made changes in their way of life from time to time 18 brought them in contact with different sets of diseases-producting factors in nging social environment. It is the tremendous capacity of human beings to adapt changes that has kept them alive for so long. These adaptive mechanisms lay their biological and cultural systems. In this regard, let us discuss about how tood place from primitive society to the modern one.
~e *society* and *disease pattern*
and gathering population were small groups of highly mobile people who lived g whatever they could find. These populations were constantly subjected to which spread from person to person without requiring an intermediate host (e.g. lice, mites and ticks, which they carried on their own body). Because of their : mobility, they were less susceptible to diseases which were spread by faces or lich required an intermediate host.
[rural society and changed disease pattern
~ase pattern changed when people took up agriculture as their way of life. The :1 66

population was now stationary and repeatedly came into contact with same set of disease-producing agents. Diseases caused by hookworms, round worms, amoeba etc, which spread through faecal contact now became a characteristic feature of this popula- tion. Health problems such as tetanus, snake bites, scorpion bites etc, were most common. Storing of foodgrains after harvest attracted several pests like rats, cockroaches and ticks which brought with them a new set of parasites. Diseases such as Bovine- TB, anthrax and rabies also became part of the disease pattern in this society because of the domestication of animals. Agricultural societies were, therefore, subject to a smaller range of diseases which spread repeatedly throughout the same population because of the process of infection and reinfection in their stationary way of life. Emergence of industrial society: Change of traditional society
a) *Change in food values*

With the emergence of industrial society, the disease pattern once again changed. As we have seen earlier, that with industrialisation corning in a big way, a large part of the population was no longer involved in agricultural activity and that is the reason they were not much iri contact with the disease-producing agents of that environment. Food was produced CD a large scale and it became necessary to use chemical agents such as artificial fertilisers and insecticides. Food grown in this way became contaminated with these chemical agents. Disease-producing chemical agents thus started being consumed along with food, creating bio-chemical changes in the human body never experienced before. As people in this society no longer produced food for themselves they had to buy it. The amount of food purchased by them began to be determined by their wages. Because of the wide disparities in wages some people consumed more food than required, while others were deprived of even the minimum food required due to their low purchasing power. Nutritional diseases became a predominant feature of the society, both because of undernutrition and over- consumption of food.

Artificially produced food stuffs, colouring agents, preservatives and highly processed food, all of which are widely promoted through aggressive advertising are responsible for the health problems in the industrial society today. Because of their low nutributional value and their potential to cause these foods produce unsurmountable health problems.

b) Changes in disease pattern

Industrial society is characterized by a concentration of a large number of people in urban cities. This concentration of the population in one place, provides one of the precondi- tions for infectious diseases such as measles, mumps, smallpox, whooping cough, influenza, TB etc. to exist in endemic form. Apart from these, social diseases like prostitution, alcoholism and drug abuse, crime and delinquency have also been quite rampant in such societies.

Industrial society has reduced the necessity for physical labour which was required in agriculture and hunting and gathering societies. This, combined with over-consumption of food has led to the presence of heart diseases, stroke, diabetes etc, in significant proportions. The environment in the factories exposes the workers to chemical agents (dust, cotton fibre, acids and metals) and physical agents (noise, vibration, heat, hu- . midity) in very high doses. Constant exposure to one or more of these has resulted in the

workers being affected by diseases ranging from physical disability to cancer.

c) *Changes in value system*

The values inherent in industrial society have also added new diseases factor to the environment. The impersonal attitude of people, the breakdown of family ties, the constant urge to compete and accumulate money in a fast changing environment are

predominant factors that produce stress in the human mind today. The effect of stress on the disease process is sufficiently proved by studies related to hypertension and peptic ulcer.

d) Changes in family and value of child

In traditional agrarian societies, children (particularly sons) were valued as economic assets, and couples wanted large families because of the labour, income and security that children contributed to the family unit.

The changing social and economic conditions have altered the value and costs of large families. In many countries, children's labour has diminished in importance with substantial urbanisation. However, due to the stresses of urban life in Nigeria, the situation has not only aggrevated pathological behaviour and social disorganisation but also increased child labour in industries to a great extent. Added to this are the problems of discrimination between men and somen, child marriage, atrocities on women and scheduled castes despite the increase in women's participation in labour force in industrial society.

e) *Increase in neglect of women*

The position of women has been traditionally that of a 'dependent'. The demographic profile of our country which shows sex-ratio, life expectancy, literacy rate and economic participation rate suggest that women in general are exposed to exploitation, helplessness and insecurity inspite of the constitutional provisions and various legislation provided by the modern society. In~act the inequalities and discrimination inherent in our tradi- tional social structure have vehemently increased with the introduction of modern health technologies like amniocentesis and ultra sound which have been in misuse for the purpose of sex preselection and sex determination. This misuse of modern technology by the doctor, the parents, the family and the society at large has resulted in increased rates of abortions and female foeticide. This however, only reinforces the fact that the value of the girl child and position of women in the family and the society are still held in low esteem.

3.1.5 *Community participation in health care*

"Primary health care starts with people and their problems, and since they have a major role to play in solving these problems they have to be actively involved in doing just that rather than being passive recipients of care from above." This was the statement by Halfdan Mahler in his address to World Health Assembly in 1986.

When the idea of primary health care was launched, community participants was one of the most important components. Community participation was also part of the more recent idea of health promotion. However, this term has no~ been very well understand as a concept.

The *concept of community participation*

The most important question that one needs to first consider is, what does community participation really mean? What does it really mean when we say the community needs to be involved and participating in improvement of health?

In fact, the word 'community' itself means more than just a group of people who live close together, it implies that they live not only in the same geographical area, and share common interest at a local level, but also it implies their sharing and working together in some way towards the achievement of some common goal.

In this sense, community participation in health care can be explained as a process by

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which people (individuals, families and other social groups) assume certain responsi- bilities in not only prevention of diseases but also promotion of their own health and welfare. As individuals and as groups, people in the community know their situation better and feel motivated to solve their own problems by searching the possibilities for change in their own environment and develop the capacity to contribute towards their own community development.

Before proceeding further, it is essential to know that health care delivery has to be based I on the felt needs of the community.

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i Concept *of felt* need Felt needs include:

a) person's or community's assessment of the present situation and potential change;

b) these judgements may depend on beliefs about the extent and nature of health problems, their causes and prevention and cure;

c) these beliefs are influenced by people's own previous experience, education, understanding of epidemiology and biology. In short, what the people 'feel' or their 'wants' are.

However, it may be mentioned here that often these felt needs are distinguished from their 'real' needs which often lay hidden and overlap

with their felt needs. The 'real' needs are the epidemiologically defined needs of the community.
The social dimensions of epidemiological approach tends to translate the technically defined epidemiological parameters of the health problems into a problem of a human suffering, as perceived and felt by the people in a given social, and economic milieu.
I This concept of felt need is of far reaching significance in formulating a community health programme. When there is an overlap of epidemiologically defined area (or 'real'
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need) and the area defined by the need that is actually felt as a problem of suffering by the people/patients, obviously, this area of overlap becomes the over riding priarity for action by administrators of the Community Health Services as shown in Figure 7 above, This is possibly only by , going to the people and learning from them' the various social, cultural, economic and political facts of their lives along with an understanding of their 'health culture' against the broader background of the overall way of their lives. *A* people-oriented health service system can be evolved on the basis of such an under,
standing which forms the basis of community participation in health services.
Degree of community Participation
David Wemer and Susan Rifcin have evolved a check list of following questions which can be applied to ensure how much Participation is really taking place:
.is the community involved in planning, management and control of health pro granline at the community level?
.where the felt needs if the community found out at the outset of the programme? .What forms of social organisation exists in the community, and to .what extent have they been involved in decision making?
.is there a machanism for a dialogue between health system personnel and govern
ment?
.is there a mechanism for community representatives to be involved in decision at higher levels?
.are the deprived groups, such as poor, landless, unemployed, women adequately represented in the decision making process?
.are the local resources used in terms of labour, buildings, transport and money?
.is the community involved in evaluating the programme and in drafting the fin report?
The *community approach*

The community approach to primary health care aims at building self-reliance an gaining social control over the infrastructure and health related technologies. In *thi*
respect, realising the fact that a community is capable of becoming the change agent 0 its own development, there is a need to involve the local people in planning, implemen tation, maintenance and restoration of health care services. Here the role of the heal care provider is very important in identifying, selecting and apprising the local peop]
who would involve themselves in health care programmes with adequate and appropria information required for the purpose.

Community involvement and community action

Involvement of local people in health care programmes enable them to;
a) assess the health problems in general;
b) define the specific health problems prevailing rampant;
c) prioritise the health problems;
d) developing self-reliance, confidence, empowerment and problem solving skill
e) planning actions by developing better relationship with health care provide and'
t) making decisions to implement the programmes in a locally relevant and *sociall* acceptable manner.

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Types of community groups

a) reptesentative groups of the community; b) pressure groups e.g. activist groups;
c) traditional organisations e.g. mahila mandalslmahila swasthya sangth, rotary clubs etc. who are well established groups, usually meeting the needs of a particdular section of the comm.unity;
d) welfare groups exist to improve social welfare of the people e.g. voluntary organisations, youth groups and non-governmental organisations running schemes and other community development programmes.

Community pwticipation as a process

:ommunity participation is an active process of working groups to define needs of the :ommunity. This takes place based on dialogue, sharing of understanding and ensuring that the needs that are acted upon are based on informed decision making and represent the interest of all sections of the community. The phases of community participation can be explained as shown in Figure 3.8.

Entry phase: Getting to know the community

The starting point of any community-based activity is to get to know the community. This requires informal discussions with opinion leaders, community groups, families, women groups, field workers from

government and non-governmental organisations. This helps to make a community profile regarding: .social structure of the community;
.what community feels are its needs;
.success/failures of previous health programmes if any; .minority sections with their needs;
.any conflicting interests of vested power groups etc.
Listed here below is a range of information that you as a health care provider find useful
in planning your programmes along with the local people:
Information required for making the community profile *Ellvironment* geography, urban/rural, transport, land use, recreational facilities, housing.
History: history of area, activities of local groups, issues that the community have expressed concern about in the past; previous government and NGO activities on health, previous history of community action.
Gelaeral data: total population, age distribution, children under 14 years, population 65 years under-fives, turnover of population, birth rate, family sizes, vulnerable groups, e.g. single-parent families and handicapped, ethnic groups, religion, social class, employment.
Health and other services: utilizationofhospitals/clinics/private doctors, traditional healers; social services, agriculture, commUnity development, adult education, schools: other government services; relationships with community and other agencies, degree of conflict and cooperation between agencies.
Perceptions of area: residents perceptions of problems of area, attitudes towards other residents, agencies, officials, local politicians, attitudes and beliefs concerning health and felt needs for health education and health care services.

Community structure, norms and traditions: networks of information, influence and care: family structure, opinion leaders, divisions and conflicts; power structure, norms that determine people's attitudes to taking action to achieve some chan norms that govern the role of women, norms that govern health and illness behaviour.
Organization: religion organizations; women's groups, youth groups, non-govern- mental organizations; - Communications: local newspapers, newsletter, notice boards, radio, television. [~.. Power and leadership: existing community organizations, committes, etc, business; trade unions' elected politicians, political parties; local political forums, such as ward councils; officials in health services, housing and education, etc.
The contribution of local leaders to community health education 1. 1. Bring people to meetings,
2. 2. Arrange for and find meeting places,
3. 3. Help reach more people by telling others.
4. Help people in the community know you and gain confidence in you.

5. Give general information about the programme and help interpret it to the people,
6. Help identify problems and resources in the community,
7. Help plan and organize programmes and community activities. 8. Help plan and organize any services that might be provided. 9. Give simple demonstrations. 10. Conduct meetings
11. Lead youth groups and various individual projects. 12. Interest others in becoming leaders, 13. Help neighbours learn skills,
14. Share information with neighbours.
15. Serve an office in an organization or chairperson of a committee.
Benefits of community participation Emphasizes community rather than individuals. Makes programmes relevant to local.
Ensures community motivation and support. Improves take-up of services.
Promotes self-help and self-reliance.
Improve communication between health workers and community. Enables the develo ment of rim health care.
Adapted from Peace Corps (1978). *Community Health Education in Developing Countries -Getting Started.*
Phase of initial actions
This involves holding discussions and community meetings and working with large groups which provides an opportunity for every body to participate and know their problems which lie even beyond the health section. This gives an insight to the issues related to establishment of intersectoral co-ordination. The success of these intial actions depend much on the power structure and opposing vested interests of the community. In this regard, areas of common interest concerned with the welfare of the common masses will have to be pooled out so that the differing groups can to some extent agree upon the proposals.
Phase *of evaluation* and *reflection*
This is the phase of test for any community. After having gone through the initial phases of 'Conscientisation' or consciousness-raising is encouraged to critically reflect on their citation, their achievements and share in making long term plans for the future and how they might transform it through action. This helps to empower the community to action

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which are socially acceptable, locally relevant and epidemiologically meaningful acti- vities.
Community Based Approach to Reproductive Health Care Maternity care and family planning remain the major concerns of the present day reproductive health care system in the country. while gyneacological care is more often than not, neglected. The situation is even more acute

in the rural areas where due to social taboos and cultural constraints, women do not articulate thier gyneacological and sexual problems (see figure below).

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Basic facts on reproductive health worldwide
.Over 100 million acts of sexual intercourse take place each day.
.These result in 10,000 conception and 356,000 sexually transmitted bacterial and viral infection.
.About 150,000 unwanted pregnancies are terminated every day by induced abortion. .One-third of these abortions are performed under unsafe conditions and in an adverse
social and legal climate, resulting in some 500 deaths everyday.
.1,370 women die everyday in the course of their physiological and social duty of pregnancy and childbirth and many times more narrowly escape though not without significant physical and psychological injuries.
.A steep decline of infertility with an accompanying rise in contraception use have been obeserved in developing countries.
.Family planning not only plans birth, it also saves the lives of women and children. Yet 300 million couples do not have access to family planning services.
(Sources: Federal Ministry of Health, Abuja) ,
Maternal and child health in Nigeria Nigeria has a public health care system that includes federal, state and community hospitals, clinics and health centers. In addition, a large component of health care is provided in private fee-for-service centers usually with some beds, which are often referred to as clinics or hospitals. Therefore, no clear distinction exists in the private sector between physician practices, clinics and hospitals.
World Health Organization (WHO) characterized good health as an individual's state of complete physical, mental and social well-being, and not merely the absence of diseases or disability. Good health is an individual's priceless asset and it is a function of the environment.
Environmental Protection AgencyDe~reeof 1988 included water, air, land and all plants,
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f hul'.1an beings and animals living theI;ei~ with the inter-relationship, which exist among
lthese or any of them. ~o put i~¥i~~l~ ;~??~more ~uccinctIY, an~thi~g,. which is not part of our body cells and tIssues, Isa part of Qijr environment. An mtnnsic property of the
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environment is its continuously c~a,?g'i~&ria:t(}.re, which constantly place demands on the health of the individuals. The improvement of perinatal and maternal health in the
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developing world canon],ybe acnieve'dff family planning, prenatal care and selection of high risk pregnancies works in parallel with a sound organization implemented and supported by the government. It was considered that medical advances in the care of pregnant women and neonates will increase survival rates of the low birth weight (LBW) infants and in the future, when the perinatal mortality rates will approach a minimum constant, there will be a minimal fetal death rate.
Literature reports showed that late neonatal deaths are most of the time attributed to perinatally related events and the increase in the survival of infants at 24-27 week gestation depends on the effectiveness of perinatal and maternal care. Despite high per capita health care expenditure, the United States has crude infant survival rates that are lower than similarly developed nations. Although differences in vital recording and socioeconomic risks have been studied, a systematic, cross-national comparison of perinatal health care systems is lacking. When Nigeria is compared with the other western countries such as United States, the United States has significantly less neonatal intensive care resources per capita, without having consistently better birth weight-specific mor-
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tality. Improving the quality of medical care focusing mainly on process issues will help to lower avoidable child maternal mortality rates. Kuti et al reported a study of a 5-year retrospective analysis of perinatal mortality carried out at Wesley Guild Hospital, lIesa Nigeria between January 1996 and December 2000, which showed that the perinatal mortality rate during the study period was 77.03 per 1,000 total births. There was a steady increase in rate over the study period. The most common cause of perinatal death was asphyxia (55.2%), immaturity (23.1 %), and macerated stillbirth (18.3%). The high incidence of unbooked patients, multiple pregnancies and low birth weight babies were the main reasons for the high perinatal mortality rates in the Nigerian environment. Education of the public on danger signs of prolonged labour and regular retraining of health personnel on intrapartum care in addition to upgrading neonatal facilities were important measures necessary to reduce the currently high perinatal mortality rate in Nigeria. The very preterm birth was more often than not a result 0 f a complicated pregnancy. The infant was often sick before birth, and for its survival highly dependent on the highest level of perinatal care. In Nigeria professional midwives are trained in

interpersonal communication and lifesaving obstetric skills, which together with modern referral hospitals refurbished and equipped have reduced maternal and perinatal mor- tality in Nigeria.

Global perinatal mortality figures showed that of the 132 million births per year, there were between 6 and 7 million perinatal deaths. While 90% of these births were in less developed countries, perinatal deaths took 98% of the global share. These statistics showed on average the rates as they were in England during the 1930s. The most common recorded medical causes of perinatal deaths were also similar in the l!?ss developed countries, and the common denominators were early childbearing, poor maternal health and above all, the lack of appropriate and quality services. Although life-saving practices for most infants have been known for decades, currently a third of mothers s till have no access to services during pregnancy and almost ,half do not have access to services for childbirth. There are enormous variations both among and within countries.. It takes innovation to find the best fit between the needs of women, infants and resources. A he~th worker with excellent knowledge and skills. is the key resource and the best investment. The cost is moderate, and the investment pays a high dividend in improved health of both the mother and her baby, and better health for the next generation at lower cost. Q~ality of perinatal care available in the area of residence, as measured by the presence of consultant obstetricians and a paediatric consultant unit has shown to be significantly related to a reduction in deaths from intrapartum asphyxia, but it appeared not to be related to antepartum fetal deaths.

Up to the early part of the 20th century, infectious diseases were the primary health menace to mankind. Pneumonia, influenza, tuberculosis and malaria were the main causes of mortality, while measles, dysentery, cholera and other intestinal infection continually and regularly preyed on the population and still do in many parts of the world. i In the present era of improved control of the environment, proper management of human waste, improved personal hygiene, medical facilities and dispensation including vacci- nation, there has been substantial reduction in the incidence and effect of these diseases. Although life expectancy has increased considerably, changing conditions are replacing the old health problems with more disability and chronic illness, where treatment and management prove very expensive to undertake. Infancy is a delicate stage of life and the individual is prone to a lot of disease conditions, because of immature tissues, organs and cells and also because of the behavioral patterns of these mentally immature beings. The formative stage of life is also a period of adaptation for the new creature that battles

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i to survive the onslaught of most environmental factors. The age bracket of infancy falls between the first to the sixth year of life. Pregnancy and the period of lactation of the newborn by mothers is another difficult period for most women in their lifetime. The mother's body goes through a lot of psychological, anatomical and psychological metamorphosis that need to be handled properly in order to reduce the morbidity, mortality rates of most maternal health problems.

In Nigeria, infants a nd maternal health prospects is a controversial issue, because of the laissez-faires attitude of government and the general populace. This negative side stems from factors such as ignorance, apathy, poverty, lack of commitment, illiteracy and corruption. Therefore this review is aimed at examining the history, expectations and the solutions that may be recommended towards improving the health of mothers and their children. This is essential to the progess of developing countries like Nigeria.

Historical Perspectives

In considering the health of mothers and their new born in Nigeria, it is important to mention here that racial differences playa significant role towards immunity to disease conditions. For instance West Africans and their descendants, African-Americans, are resistant to vivax malaria and to hookworm in the case of the malaria, because their red cells lack the Duffy antigen that acts as the receptor by which the vivax parasite gains entrance to the cell. Carriers of hemoglobin as Sickle-cell trait and glucose 6 -phosphate dehydrogenate deficiency (G6PD) display a relative resistance to severe forms of P. falcipanum such as cerebral malaria. In hyperendemic areas, a child is protected from malaria in utero and for a time after birth by maternal antibodies. Thereafter attacks of malaria are frequent up to the age of five after which they decline gradually until puberty. From data gathered from the Federal Ministry of Health in 1996 malaria was the highest cause of death allover Nigeria, but especially in the north.

One of the nightmares o~ most nursing mothers in the past was measles infection, which presented clinically with symptoms such as rash and fever simulating the symptoms of malaria except for the skin spots. This one disease condition has caused a lot of disability to children in Nigeria in past decades. Polio has also been a major issue in Nigeria, because of the number of disabilities and deaths that it has caused. Many children who survived are now beggars, handicapped, crippled and devastated by the effect of poliomyelitis. Diphtheria is another disease with a high mortality rate in Nigeria.

Tetanus was and is still a major cause of death in most mothers and infants, who are exposed to the bacteria during childbirth or wound injury. The organism which is the causative agent of this disease is known as Clostridium tetani, a saprogenic bacteria that causes lockjaw and seizures in patients with a very high mortality rate. The disease is one of the major reasons early vaccination was introduced in Nigeria.

Maternal morbidity and mortality has been caused by septic abortion, threatened abor- tion, puerperal fever especially if streptococci enter the uterus after delivery thereby causing endomteritis. Malaria, anemia, measles, tuberculosis, gonorrhea, chlamydial infection, worm infestations, syphilis, meningitis and recent HI V-AIDS have been challenging issues in maternal health.

For most infants streptococcal sore throat occurred as a subacute nasopharyngitis with a thin serous discharge with little fever, but with a tendency to extend to the middle ear, the mastoid and the meninges. This infection has caused high morbidity rates in Nigerian children. In Nigeria also many cases of subacute endocarditis often involved abnormal valves (congenital deformities and rheumatic or atherosclerotic lesions). Other disease **I**conditions found in childhood include scarlet fever, acute glomerulonephitis, rheumatic

fever and pneumonia. 1

Urinary ttact infections congenitally have also affected the life expectancy of children I in Nigeria. Records have also shown various cases of cholera, meningococcal pneu- monia, tuberculosis, leprosy, hemolytic disease of the newborn, tumors, systemic lupus erythematosis hyperthyroidism, hemolytic anemias, thrombocytopeanias, allergic encephalitis, chronic thyroiditis and various types of autoimmune diseases.

Fungal Infections

Fungal infectious like tinea corporis (ring worm, tinea pedis (athlete's foot), tinea curis Uock, itch), tinea capitis, tinea barbas, tinea unguium (onychomycosis, dermatophylid), subcutaneous and systemic mycosis, opportunistic mycosis and candidiasis is also on record as part of the health problems that have affected both infants and mothers, Vesicovaginal fistulae (WF) are destroying many women in Nigeria (about 1.5%) especially in modem Nigeria.

Parasitic Infections

Parasitic infection have not been less merciful on infants, including Giardiasis, Tricho- moniasis, leishshamiasis, amoebiases, toxoplamosis, ascariasis, angiostronyliasis, cys. ticercosis, drancotiasis, schistosomiasis tapeworm infestations, trichinosis, trichuniasi trichosttongyliasis, onchocerciasis, loiasis and hookworm infestations, paragonimias' and filanasis has been of serious concern in some northern and eastern part of Nigeria.

Viral Infections

Viral infections have even worsened the already improved childcare programmes i Nigiera. Some of these viral infections include chickenpox, yellow fever, rabies, he simplex, meningoencephalitis of mumps, parainfluenza, respiratory synctial virus pne monia and chronchiolistis adenovirus, common cold (caused by many viruses),

aden virus conjunctivitis, rubella virus and papilloma viruses have also conttibuted minimall to the problems of infants and mothers.

Summarily the figures obtained from various data collected for these groups showed t parasitic infectious caused 40% mortality and 40% morbidity rates, bacterial infecti caused 200/0 mortality and 30% morbidity rates, fungal infections caused about I mortality and 100/0 morbidity rates, while viral infections caused about 25% mortali and 20% morbidity rates. "IV-AIDS have also resulted in both disability, morbidity mortality.

Immunization Programs in Nigeria

The World Health Organization and the Nigerian government have made progress wi the introduction of the expanded program on immunization (EPI) as it is formerly kno but now known as National Program on Immunizations (NPI) with the sole focus immunizing all infants and mothers in Nigeria. The various types of vaccines that a currently i n use a re I ive attenuated type with the following as examples: measles, po' rubella, yellow fever, small pox, anthrax, BCG for tuberculosis. Killed vaccines are in constant usage within Nigeria and these include polio, influenza (pertussis, cholera). Also toxoids and microbial submits are now currently used often in Nig These include diptheria, tetanus, capsular polysaccharides of pneumococci, menin cocci and hemophilus influenzae and the surface antigen of hepatitis B virus.

In Nigeria two months old babies are administered the OPT (Oiphteria, Pertussis Tetanus), trivalent (l,ll,lll) oral live poliomyelitis virus vaccines. This is repe every two months until the ape of 58 months, when measles vaccines are no administered. Again BCG vaccines are administered from the time of birth to about

months. This gives immunity against tuberculosis for the next ten years before any other ! can be administered. This reduces and eradicates military T8 and T8 meningitis. OJ7f I vaccines are always safe and give protection for between 3-10 years while the oral polio

(Sabin) give protection for about 3-10 years, but unsafe in cases of agrammaglobulenae-

mia.

In the year 2004, progess was stopped, when several states refused for their children to be immunized. Consequently the wild strain of the polio virus was detected and Kano served as the focal point for the spread of the virus to Niger, Chad and other neighboring West Africa countries. It seems that the controversy has been solved, but the aftermath and consequences of that singular action continue to linger, unless action is taken towards mass immunization in these focal areas.

Some policies by government such as the National Health Insurance scheme have also contributed a lot to the prospect of infant and maternal

health in Nigeria. The scheme, if well managed, can increase the health status of all Nigerians to about 80% improvement as the vision of the Health for all Nigerian by the year 2010 draws nearer. Contributions
i from citizens by way of regular payment to the scheme and financial property, provision i of adeq~ate and essential drugs by Health centers for these programs are important I towards the success of this program. Another laudable health policy by the Nigerian t government was the establishment of primary Health Care Centers (PHC) in villages and 'communities. This has helped to bring health nearer to the people, but again provision
of experts and manpower is dragging the wheel of progress of this palatable program. Government should provide more funds to the centers. The annual national's budget for health related matters is still below the WHO standards and requirements.

Conclusions

The review of Infant and maternal health prospects in Nigeria is on-going.1n the light of rapid population growth, decline in oil revenue and increased risks of adverse environmental health exposures the maternal and child health prospects could be a serious national public health problem.

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1) Explain the concept of community participation with relevance to health care. l : 2) What are the benefits of community participation?

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3.2 Key words

~ *Famil}' of orientation:* Family where person is born. *Family of Procreation:* Family formed by marriage.

Social control: The sum total of the processes where by society, or any sub-group

within society, secures conformity to expectation on the part of its constituent units, individuals or groups.

Social evolution: The development, planned and unplanned, of culture and forms of social relationship or social interaction.

Social group: A number of persons between whom exists a psychic interaction and who are set apart by that interaction in their own minds and in those of others as a recognised entity.

Social inequality: Difference in social prestige, based chiefly on differences in family backgrounds, social conventions, wealth, income, political influence, education etc.

Social institutions: The sum total of patterns, relations, processes and material instruments built up around any social system.

Social order: Totality of human relationships and culture of any given area or time. *Social orientation:* The general direction of the thought and effort of a social group, as
determined by its dominant social values.
Social problem: A situation inherently requiring treatment, which either:
a) arises out of conditions of society/social environment;
b) calls for application of social forces and social means for its improvement.
Social process: Any social change or interaction in which an observer sees a consistent quality or direction to which a class name is given.
Social reality: The basic content of sociology.
Social reform: The general movem,ent of people which attempts to eliminate or mitigate the evils that result from the malfunction.
Social relationship: A form of pattern of social conduct.
Social status: A position in a social group or in society.
Social stratification: The arrangement of societal elements into groups on different horizontal levels.
Social tension: An emotional state resulting from existing among social groups. *Socialization:* A socio-psychological process, whereby the personality is created
under the influence of educational institution.

4.0 Summary

In this unit we have learnt about the factors that are responsible for bringing in changes in society. This knowledge is relevant for all health carec providers as it gives an insight into the changes that take place not only in the social and economic sphere of life but also creates unsurmountable health problems. **In** order to bring in the desired direction of change community participation plays an important role. Genuine community partici. pation brings in sincere involvement of local people in implementing concrete com. munity action.

5.0 Answers to exercises

Exercise 1
1) a) What is it that changes? b) How does it change?
80

c) What isw the direction of change? d) Why did the change occur?
e) What are the principal factors in social change? 2) Refer to Section 3.2 Exercise 2
a) slum settlements b) Overcrowding
c) Chaotic traffic hazards
I. d) haphazard development e) direlect neighbourhoods
f) inadequate water supply and sanitation Exercise 3
1) a) purchasing power of people
b) level of nutrition knowledge, good consumption patterns c) distribution of income ~*i'* d) distribution of food
II" e) levels of employment '" f) unsafe drinking water

I": g) poor sanitation facilities : h) illiteracy and ignorance
, 2) a)efficient system of transferring surplus to deficient areas: ...b) more food to the poor people, whether in rural, urban slums,
., tribal or hilly areas;
.,;" c) equitable distribution from region to region;
d) reasonable (subsidised) food pricing and food distribution policies.
Exercise 4 1) Refer to Sub-sec 3.2.5. 2) Refer to Sub-sec 3.2.5.
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6.0 References

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Banerji, D. (1981) "Challenges to Social Sciences in Formulating Altern'ative Health Services in Nigeria," Paper prepared for presentation at the Medical Sociology Seminar, Jodhpur, (1982), CSMCH, JNU, New Delhi
Bottomore, T.B. (1975) "Factors in Social Change," *Sociology -A Guide to Problems and Literature,* Blackie and Son (Nigeria) Ltd.
Peace Corps (1978) *Community Healty Education in Developing Countries.*
Qadeer, 1. (1993) "Tuberculosis Control Programmes -A Sociological Presentation", *Health/or Millions,* Feb. 1993, VHAI, New Delhi.
Sathyamala C. et al. (1986) *Taking Sides,* ANITRA, New Delhi
Kunzel W, Herrero J, Onwuhafua P, Staub T, Hornung C, Maternal and Peri:tatal Health in Mali, Togo and Nigeria. *Euro J Obstet Gynecol Reprod Bioi,* 1966; 69(1): *II-Ii.*
USAID, Integrated HIV/AIDS, *Child Survival and Reproductive Health Care in Nigeria,* 2004. Website [www.usaid.gov/ng/s04.htm]
Delta State Government (2004). *National Programme on .T'1lmunization,* 2004. Website: [www .deltastate.gov .mg./diarrh04]

.

UNICEF. *Immunization Prospects in Nigeria. Guidelines for Treatment of Sexually Transmitted Diseases.* MMBOR 2003; 647: 1-118. Website: [www.cdc.gov/publications.htm].
Federal Ministry of Health. *A Survey of Matemal Health and Indices in Nigeria.* Abuja, Nigeria:
Fed Min Health, 2004.
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Unit 4: Sociological Perspective in (--
Health and Disease

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1.0 Introduction

Health is a function, not merely of medical care, but of the overall integrated development of society -cultural, economic, educational, social and political. The objectives of integrated development are to:
.eliminate poverty and inequality .spread education
.enable poor and underpriviledged to assert themselves
,

~ 2.0 Objectives

~ In this unit, you will be able to learn about the concepts of health and illness with the i sociological perspective. After completion of this unit, you should be able to: ~ i .explain and discuss the relationship between Society and Health,
.explain concepts of health and illness from the sociological point of view, .explain the definition of sickness from the point of view of the doctor, .discuss the concept of quality of life in relation to health,
.relate the socio-economic status of people in relation to disease,

.enumerate the different systems of medical care and its relation to health seeking behaviour with reference to Nigeria, and
.explain the pattern of utilisation of the health system.

3.0 Main contents

~." ~~~ 3.1 Society and health

3.1.1 *Relationship between health and society*

Health status of a society is intimately related to its value system, its philosophical and cultural traditions, and its social, economic and political organisation. Each of these aspects has a deep influence on health, which in turn influences all these aspects. Hence, it is not possible to raise the health status and quality of life of people unless

such efforts are integfrated with wider effort to bring overall transformation of society.
Good health and good society to together. This is possible only when supportive services such as nutrition and improvements in the environment and in education reach a high
level.

3.1.2 *Concept of Health*

Mechanistic view

Long back in the 19th century it was viewed that every illness was the disturbance, exaggeration, cessation of a corresponding normal function of the human body. This was a mechanistic approach where the human body was compared to a machine which, if affected by disease would obviously breakdown. Implicit in this notion was the concept
to health as merely absence of disease. This concept is also termed as the germ theory of disease and ill-health. This theory, however, failed to explain the causal factors of major psycho-social problems in the society like malnutrition, social diseases, mental illnesses, diseases related to ecological degradation. There was a need felt to change the
concept of health.

Psycho- social paradigm

This concept of health visualised the importance of the social, cultural, political, economic reasons for influencing health and causing ill-health. This concept, infact, realised and emphasized upon the psycho-social stressors in life that caused ill-health. Some of the psycho-social stresses are related to:

a) economic -inadequate family resources for basic survival stressors i
b) social -startvation status in society belonging to high class of
-society or underpriviledged social groups
c) cultural --social taboos hindering functioning effectively d) occupational -exploitation
-hard, long hours of labour -ack of rest and sleep -insufficient wages
-,- accident and disability and related psychological -set-back
e) familial --status in family 84

.
-role expectations -early marriage
personal -poor-self esteem -frustration
edical ecology, which conceives disease as a convergence in time, space and within ~ person of the patient of environmental stimuli (organic, inorganic, socio-cultural) :IS asserts a relationship between environment, disease and man.
; indicated above, 'the environment' in which we live is an ecosystem or an integration physical and social relations. Therefore, the conditions of ill-health are usually the suIt of a multiplicity of events, and, a correlation between environment and ill-health not easy. Scientists determine environmental factors through clinical testing of the sease and

its causal agents, but this is only half the story. What is necessary is to :construct some of the social and physical relations in order to establish preventive :a1th measures. It is through such an exercise that we can identify some of the Ivironments that are directly related to ill-health.

HO has defined health as a state of "complete physical, mental and social well being Id not merely the absence of disease and infirmity".

nplied in this definition is the 'physical, mental, social well- being' what is of prime nportance for the maintainance of optimum level of health. Well-being is defined as a armonious relationship between individuats, groups within the physical, biological and :>cia-cultural environments. This holistic view of health which encompasses many other imensions of health, has been depicted here below:

fuman health -holistic view

~e holistic view of health encompasses: a) *Individual and group health*

ndividual and group health being determined by human biology, the environment, the ways of life of the community, and the health care system, as shown below:

Human biology
I
""!ljays of life of the a .Health care
community .\\,,:~~~~-_/) system
j
Environment Fig. 1

The implementation of a health programme leads to a change in individual and group behaviour. Thi~rocess, as shown below, can be influenced by members of the principal social insti\;Utions in the country.

Health services
(scientific/traditional)
Education \
""""""""" "...:" 1 / Religious bodies
Industry and *f* a -'J ~ Government agriculture ; ,~~ V :
LI,t'tt' /1""""""""""""""""""" Mass media ega inS I U Ions
,1 ., Ii'" '
""",,: "" 'fi
,,' i';' .'
c " , ;
Fig. 2

b) *The family and family health*

The family is one of the oldest and strongest social institutions. Its members share genetic traits, envionment, general attitudes, and life styles. Through their interactions and mutual dependencies, the family functions as a unit; factors impinging on one member
affect all other members to some degree. The state of health of one member and his response to illness influences and is influenced by

physical and psychological support mechanisms operating within the family, A child's growth and development reflects the interaction of genetically determined biological factors and the family environment. poor housing, overcrowiding, inadequate
food, and inadequate education affect all members of the family, and behaviour patterns, including those governing health care, are shared by the family. It is logical, therefore, to consider the health needs and problems of the family as a whole and to deal with individual health problems within the framework of a comprehensive family health programme.
Families are the basic productive and reproductive units of society. So it is there the efforts for reproductive health and safe motherhood must be focused upon. For effective change to happen, women must be given more choice arid men must accept more responsibility. Only then can health interventions begin to be really effective in improv-
ing lives.
Family health, therefore, must be a key element of reproductive and other health policies,
Reproductive health affects, and is also affected by other aspects of life:
i) nutrition
ii) health during infancy and childhood
iii) adolescent sexual behaviour and fertility iv) unwanted pregnancy
g"

v) life styles ;,; -
,
vi) environment -, vii) status of woman viii) individual health
ix) family health: including women's health, child health, adelescent behaviour and health of the aged
x) community healthy
c) *Health in the village (rural) environment*
lt is important to distinguish between the village (rural) and the city (urban) environments because of the basic differences in the hazards to health in these external environments. In the village environment, infrastructual development is creating an adverse environ- ment for those not benefiting from rapid industrialisation. Infrastructure, an integral part of industrialisation and urbanisation, has helped to change people's relationship with land, technology and production. Those in the subsistency sector are increasingly marginalised by these forces. The landless and others, whose means of survival is being appropriated through the capitalisation of human and natural resources, are those who suffer the highest rates of mortality and morbidity.
d) Health. in the rural workplace environment
The workplace too promotes both health and disease. If the workplace does not provide basic amenities and job security, it adyersely affects the health and productivity of the workers. In addition, the workplace

has an impact on those who live arount it, on the families of the workers, and on all those people affected by any alterations in the physical environment due to pollution hazards.

The factors that impinge on a persons' health can be found in many settings, within the home or at the workplace, in the rural or urban environments. Let us briefly examine these settings.

e) Health in the home environment ,

The home environment plays a crucial role in the prevention of diseases, not merely by providing physical surrounds such as a house, or access to potable drinking water, but also, and more importantly, in terms of its non-physical and psycho-social dimention. The home environment helps to condition a fixed set of habits and behaviours and it determines our linkages with the community, the natural surroundings outside and the larger society. These are all important factors in the kind of health that is maintained. A good home environment then, plays a very important role in achieving good health.

f) Community health

Community health refers to the health status of the members of the community, to the problems affecting their health, and to the totality of health care provided for the community.

The assessment of health requires an understanding of the general population to be served. Major categories of information required on health are outlined in the following paragraphs.

1) Demographic data

l -present and projected population according to age, sex, location -population density

r-migration , -life expectancy

\

n

-probable birth rates -literacy rates

2) Environmental characteristics -housing conditions -working conditions

-educational opportunities

-sources of water supply, water quality

-waste water disposal and water pollution control

-solid wastes management, including sanitary handiling and disposal -vector control and the control of alternative hosts of disease

-environmental pollution

-climate

-structural organization and administration of environmental health services

Thus the holistic interpretation of health would be to take into account the cultural dimensions of health, including the beliefs, customs, practices connected with health and disease besides the interplay of

social, economic and political factors. It also includes relating such a holistic perspective to the overall culture of the concerned community.

1) List the objectives of integrated development of society.

2) Why is it important to know the holistic view of human health?

,. 3) Why illness of one member influences the other members of the family?

3.1.3 *Quality of life*

From the previous discussions on the concept of health, we conclude that though health is a relative concept varying from culture to culture, it is visualised as a dynamic phenomenon and a process of constant change. It is considered a basic right of man and a world-wide social goal: which is absolutely necessary for the satisfaction of basic human needs and improved quality of life.

In Nigeria, where the majority of the poor masses are subjected to economic exploitation, deprivation and social ostracism, the low health status and low quality of life are natural out-comes of their low social status. Some of the following characteristics are reflected in their low quality of life:

a) wide-spread poverty b) illiteracy

c) malnutrition

d) lack of personal hygiene " '";

e) lack of safe drinking water "j'"" --

:IJ

f) lack of safe sanitary conditions ,...;.;;; I g) poor MCH and FP services .c'! 'J '.,; 88

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h) ineffective coverage by national health and nutritional services

i) presence of communicable/non communicabie dise'ases denigrating life in slums

etc. ;

n such d~gradlng~onditio~~"ofl~w quality:l1f~ the most hit ate the~iii1de~riviledge

..

ections of society who can be broadly divided into the following soci"algroups: a) mothers and children

b) urban slum population

c) handicapped children' , ., ,

d) other backward communities (nomads, landless labourers, tenants: without occu- pancy rights, small land owners with uneconomic land holdings, artisans and

)ccupational classes.

rhese underpriviledged sections of our society face social stigma ,forcing them *to*)ccupy the lowest rung of the social ladder, leading *to* exploitation and victimisation.)bsiously, the situation bars them *from*

education, service, trade and, commerce and eading good quality of life, which the so called advanced section of the population ~njoys. Theirso~io-c.ultural milieu prevents them .rromleading a good qu~lity of life. In the contrary, it makes them victims ofs,ocial, p~litical and religious turmoil.

fhis simply highlights the facts that good quality of life definitely has *to* be seen in the perspective of positive health of man enmeshed in a network of soc;ial relationship within which he is settled.

Government programmes for improving health status arid quality of life pI underpriviledged groups ...

A number o(schemes hav~ been initiated in order *to* improve the h~alth st~tusand quality of life of the people, especi~lly belonging *to* the poorer sections of the Socjety. However, a *few* bottlenecks in implementation of the above government schemes can be enumerated below:

a) inaccessible terrain b) extreme poverty

c) lack of awareness and motivation

d) magico-religious beliefs and superstition

e) alienation of people *from* modem way of life

i t) social *forces* working against development of downtrodden including bonded la- I bour, discrimination towards children and women, and encouragement of child

labour etc.

~E~~~~i] , ' , ; ;..' .-

Fill in the blanks

a) The psycho-social paradigm describes the concept of health emphasising the f.ollowingstressors in health:

i) iv ii) v iii) vi b) The holistic view of health encompass,es:

i) lv :..C..,"::.", \)1 v ,.. ..;:. ..

iii) V1 ;,.,c".' ,;

(In

ii) v iii) vi c) Individual and group health are determined by following four

factors:

i) iii ii) iv d) Some of the characteristics of low quality of life are: i) iv ii) v iii) vi e) The under priviledged sections of the society are:

i) iv ii) v iii) vi t) Some of the bottlenecks in implementation of the governmental

schemes to improve quality of life are:

i) iv ii) v iii) vi 3.1.4 *Concept of illness*

As we know that health is a dynamic phenomenon and a process of continuous change, we may visualise that this continuum ranges from optimum well-being to various levels of dysfunction, including total dysfunction or death.

Perceived susceptibility .., .Readiness to act

Perceived seriousness of outcome ~--'" *I'* t

Perceived availability of action ~ ~ Assess~ent of, --Action benefit of action i
Triggerihg factor
Fig.3: Rosenstock's model
Perceived stress ---+ Coping responses ~ A
(ctiOnrt' 'k)\ repo Ing SIC
Perceived symptomatology ~ ~ Inclination to
adopt the sick
role
Fig. 4: Mechanic's model (p,86)
Therefore, the concept of health and illness can perhaps be distinguished from one another for a qualitative understanding.
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Whereas, we have sufficiently dealt with the concept of health, let us slightly elaborate on the concept of illness. From the above discussion we know that illness refers princip.llly to a person's subjective experience of lack of health and is indicated by feeling of pain, discomfort and the like.
According to Kasel and Cobb (1966), health behaviour is the activity undertaken by a person who believes himself or herself to be healthy for the purpose of preventing disease, while illness behaviour is the activity undertaken by a person who feels ill for the purpose of defining that illness and seeking relief from it.
It has been suggested that the concept of illness as a deviant behaviour be replaced or at least supplemented by the concept of illness as evidence of maladaptation to the social system. In this context, illness is viewed as evidence of the system's failure to meet a potential threat to its ability to survive. There are many models regarding to type of human behaviour during illness. These are diagramatically presented here. These modeles have identified certain individual and group oriented factors to illness beha- Viour.
Social status ..Social group -.Individual .Source of medical
structure medical care orientation
Fig. 5: Suchman's original model Demographic Perceived health
factors " .status
., II~---~ Individual medical /i i orientation and response
'J 1 "~;
/"""~Social rou" , "
g P.", MedIcal care
,structure ,.c:..."':,,:",,,.
"1 J!~. !1;"""~:lJ&IC
Fig. 6: Suchman's revised model
According to this model, an individual's perceptions that he is personally susceptible and that the occurence of the disease would have severe

implication of a personal nature motivate him to go in, for preventive practices to avoid illness.

The usefulness of this framework (see next page for Fig. 7) is limited in the sense that it has been applied mostly to preventive situations in involving voluntary behaviour. However, most people seek medical health on this basis of clear and d~finite symptoms of the diseases. One has to see whether people would be motivated to seek health care services in order to improve their health and avoid further disease or not.

3.1.5 Illness: Sociological view

Health and illness form a continuum ranging from total well-being to death with many

intermediary stages. The transition from optinum health to illness may be caused due to various reasons.

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.., f: ,Performance of ".

Assessment of , , j?isturbances of '. interpre~i~e work ; ": ' co~sequences of ,equilibrium (recognition of act'on

l; , disturbance.

identification of

., condition and possible course of action)

..

Change in health Body struc!lJre and Change in ' , , ' knowledge function biological events

Decision to act

Fig. 7: Basic structure of illness action model (p.87)

From the sociological point of view, ill h~alth is an outcome of poverty. Poverty is measured not only through low per capita income, but also in terms of:

a) malnutrition

b) poor clothing c) poor health d) shelter

e) poor sanitation

t) ignorance

These conditions are reflected through the poor living standards of people. The in under-developed countries suffer from higher incidence

of diseases, such ~s chronic bronchitis, being diseases etc. due to mainly substantial lack of nutritional intake and poor standar,d of living.
The vicious circle of poverty states that there is a circular unending relationship between poverty and ill health. ,
Various aspects of the most over-whelming health problems of faced by the rural population in Nigeria are related to the problem of hunger. Poverty also leads to further di'sintegratiori'of the 'environment and of living conditions. One of the most precious'andpoteritially dangerous consequences of extreme poverty is that it tends to numb the senses of the victims -itisjust like numbness due to destruction of nerves as in leprosy. A highly anaemic;grosslym~lnourished and under-nourished woman who carri'es all sorts of infections, still thinks she is normal because that is the sort of life she had' been living for as long as she remembers. Her parents also li~ed such a life. Affected by the so called' -d.iseases of poverty' and loss of wages due to sickness, there is profound impact on the economy of the entire household. Moreover ,being illiterate and ill-informed, with no money to approach practitioners or to meet the cost of transportation of a patient to a hospital, these poor people somehow manage to cling' to their lives amidst the worst conditions often considered incompatible with human survival. In the above context, it may therefore be said that traditionally, evidence of a state of 1 illness in the human organism is weighted heavily with biological factors, such

elevation of temperatures, change of pulse beat and respiration, swelling of tissues and so on. Biological and physical factors are no doubt i~portC;tnt in tbebackground and the onset of the illness state. However, illness is not solely a biological and physical phenomenon as discussed above but an event that occurs in a socIal context and reflects the intimate association of the person with other human beings.'Both'the intra and inter-personal environments and important sources {though subtle and intricate) that affect the human organism relative to,illness.
3.1.6 *Patient's definition of sickness ,r , ; '1;(;,..(,; l...i:; Illness is a subjective evaluation by an individual that somethiQg was \Yfongwith him "~san iQdivi4qal"a9d u~ually first noted in te:Ims of ~ reduced,ability to performI:oles inthe normalday:-tQ-day routin~~ " '*
Reacting to the onset of illness; the individual starts assu:ming a different $oci;11 r9le involving the right to be excused from normal duties and to depend upon othersfof; care during the peri9d of illnes~~ This isterwed_a~th~ "sick rQle", The 'sick rgl,e', however also oblig~testheincumbenttopercei":v'e h~s illnes,s as undesirable, to recQv,er as quickly as possible" and t~ seek o~~~dco-operate with co~petent technical help. Thus, as$uming ~he 'si~ r~le', the individual legitimises .the temporary non-perfo~ance a,s a ~ick member and r:ninimi~es the disruption in the role

i p~rform~ce of.othermer:n~ers,in ~ social circl~ (e,g. famiJy, place of~ork etc). l Therefore, by viewing the response tQ illness as a seriesQf shapes, an individual's definition of illness orpatt~.rns of response can be identified i~ fivy stages:
a) symptom experience ' b) assumption of sick role, .-
" -, .,,'-:'
c) medica)c~re contact ,.
, ' .-." ..
d) dept:nde~,t-pat~en~'role and ,"I;: .1;' " '~" ;,.j'..., , e) re;covery and renapilitation :'
...'-;'.', , -", : ' ;' ," .,'" ;" .? '
In most C(ase~ th,e, ipdividual, do~,snot,or. has littfe kI1owledge about th~ 'dis~ase afflicted but responds to illness involving the above stagesmentioned,)n additi~n ,19,. the above, it may be relevant to mention here that 'a risk factor to illness is it characteristic pertaining to individuals or groups that is associated:,with an increased chance of an unwanted outcome such as illness or death. The,above mentioned conditions of man's social life are attributable as risk factors to illness. Tliese risk
" c"'" '" ..-
factors are also associated with several outcomes. Few of these may be enumerated' below:- ' ., .';
-*Environmental:* pertain to individual's surroundings, e.g. poor sanitation, drought, lack of water, lack of access to clean water, type of housing structure,
-*Biological:* These factors are intrinsic to the individual, e.g. age, malnutrition, infections, decreased immunity, developmental abnormalities, maternal height.
-*Socio-economic::* income; societal status of women, education, employment, poverty status, illiteracy, large families, working moth~rs.
-*Behavioural:* these factors are primarily determined, by cultural and/or religious beliefs like:
-Male preference.: ; , :,-.' .'. C"~"T~}~""i.. ~fj'r1~j Ir -Local perc~ption of the problem :';~ -Local health practices
:t~
~,. -Local healt~ institutions ... ..-*Entry* mamage
Traditions and rituals
0"2,

-Entry marriage
-Traditions and rituals
-*Health care related:*
-Inaccessible health services -Improper outreach programmes -Poor quality of health care
-Unavailability of supplies and medicines 3.1.7 *Sickness as viewed by doctor*

The physician is more likely to view sickness in terms of disease, while the individual suffering from illness is labelled as the 'patient'. He generally does not view the disease as a human suffering. His perspective is limited to 'Organic malfunctioning' only. Thereby, this discrepant approach of the doctor becomes the cause of discord between his patient and himself. This alienates him from the individual suffering from illness as he tends to treat the disease in isolation rather than treat an ailing individual within his social, economic and cultural setting. That the social environment is a major contributory factor in causation of disease remains a blissful ignorance for the patient as well as for his indifferent doctor, who forgets to throw a sociological perspective to the disease his patient is suffering from. This view of defining the disease only within the narrow perspective of clinical paradigm thus ignoring the root causes embedded within human ecology was responsible for the promotion of the curative cdare rather than the preven- tion of diseases and promotion of health strategy within the health care delivery system that is existing today.

With the field of modern medicine becoming more and more specialised in nature and fragmented, doctors concentrated their services on the limited target of the urban rich. The suffering and diseases of poverty to the common masses lost their importance. While curative services gained control, preventive and promotive levels of health care receded at the back with such an approach.

~~:;;;;J

1) Briefly enumerate the four risk factors associated with health

2) What is the individual's definition of illness in five stages. 3) Briefly describe the viscious circle of poverty and illness.

4.3 Socio-economic status and disease

As we know that because our health conditions are an integral part of our environment, we cannot always assume that ill-health is manifested by disease alone. Rather, ill-health is usually a condition of weakness or stress, and regardless of the sympton, there is an accompanying loss of 'balance' or 'homeostasis', owing to change in the environment. It is important to diagnose and reverse this weakening process before more serious consequences occur. An understanding of the person's socio-economic status and the overall social environment within which he lives, is therefore essential to know the risk of health hazards that the individual is confronted with.

3.2.1 *Smoking -Tobacco-related diseases*

It has been proved that smoking has a deleterious effect on health. It has become the most prevalent form of drug dependance. Nicotine is an alkaloid that affect the CNS and is probably the cause of the smoker's dependance on the habit. On litting the cigarette, the nicotine gets transferred from the burning tobacco to the smoke, where it mixes with

minute droplets of tar. As the smoke is inhaled the nicotine is absorbed easily in the blood stream.

Tobacco fact sheet

.Tobacco kills closely to 5 million people in a year worldwide with over 70% occurring in developing countries including Nigeria.

.Tobacco is one of the major causes of death in Nigeria and kills almost 4 million people through cancer, stroke, vascular diseases and tuberculosis.

.Tobacco smokers are less productive, less educated, prone to poverty and results in
poor feeding.

.Tobacco smoking contributes to environmental pollution.

.The Federal_Government of Nigeria promulgated a decree in 1990 against tobacco
smoking in public places.

.As at 31 st October 2005, 93 countries plus the European Community have accepted the WHO Framework Convention on Tobacco Control (FCTC). Nigeria was able to ratify the convention status.

.The national survey on tobacco control in Nigeria 1990-1991 shows that 4.14 million out of which 10% of Nigerians over the age of 15 years were smokers while 1.26 million are heavy smokers -those that smoke more than 10 sticks of cigarette in a day. The prevalence of heavy smoking is 16.3% in the 2003 survey compared to 2.1% in 1990.

The main cause of cancer in the composition of tobacco smoke lies in certain chemical substances present in it. It has been reported that smokers who developed lung cancer were found to have higher concentrations of the undesirable chemical compounds (aril-hydrocarbon hydroxilase) than the cancer free controls. There are other irritant substances in the smoke which casue bronchial glands to secret mucus in great quantities which becomes hazardous for breathing.

The most recent cause for concern is the large number of Nigerian women taking to cigarettes without recognising the drastic physiological changes that threaten them.

There is sufficient evidence to suggest that smoking affect the meanstrual functions too. Pregnant women, especially from the lower socio-economic strata of society who smoke transfer nicotine to the foetus, cause the child to grow up with congenital respiratory afflictions. Nicotine can also be passed to children through breast milk making them

births and abortions are also. being asSQciated, with.. m()~~~, i~hQ..,~re !,,~o~~rs. . Smoking, it has been o~served by certain studies results in prenatal deaths top making I babies who are 20010 300'gms under-weight,particularly Vulilerabl'e;to'death.

;, , ' '- ;,::

3.2.2 *Diarrhoea* ."

The health problems that occur among those belonging to the l.ower socio.,economic strat.a of the society living in most subhuman cQnditions are in fact rel~ted to: their basic survival, Malnutrition and lack of potable drinking water ar,e oftenmahi.f~.st~e~ in gastroenteritis and giarrhoea, leading to ~ighermortality a~oJ:1g childr~n. ,;,

Diarrhoea is globally associated with some 5 miUionq~~thspef year~ I.tis'~~i~ated that 1.5 million of these occur in developing countries like Nigeria. A majority of these deaths are preventable caused by dehydration and are linked to malrtutriti'on. .Theincidencc'of diarrhoeal disease is. less between *0-6* months iI'l breast fed children, the majority of deaths in that group would occur in infants between 6 mQnthsand one year of age.

'Apart from major pathogens causing the disease, multiple socio~ ~conomic.and 'clim:atic factors contribute to the high magnitude of the disease including safe water supply; poor hygiene and sanitation, illiteracy, drought, floods and inadequate treatment of the disease, particularly withholding of food and liqu~d..

.'

Susceptibility to diseases, particularly diseases of the digestive system and to infections as a result of unsafe drinkihg water ,poor sanitation and unhygienic living conditions are equally important determinants contributing to:what is called 'nutrition

, leakage'. Interestingly, the human body has been compared to a leaking nutrition bucket, where in poor society, nutrition!is sometimes drained away faster from the human body than it is possible to pour. The holes in the bucket arenotonly iJ:1adequate food, education and information, lack of immunisation, weaning diarrhoea, infections, intestinal and para~itic diseas_es, lack Of.prev~ntiye health care etc. All th~se proble~s ,are clear manifestations of pQyerty and und~rdevelopment, and lhereforemustbe viewed both as a cause and consequence of 'low socio-economic status and social inequality. '

, .These 'social inequalities' are klanngly visible when we look at the c'ycle- of uIider-nutrition given below: Severafstudies that'the problem of malnutrition among girls and women are much greater than their male counterparts.. Further, it is a well established fact that infections further impair the nutritional status of these people by altering absorption and metabolism and through the excretion of nutrients in the case of diarrhoea and vomiting.

3.2.3 *Tuberculosis*

A wider understanding of the cases of ill-health reveals that diseases like TB is a probleri1~fhuman s\lffering most prevalent among the impoverished and exploited

, 'segments 6fthe society. Th~ root causes, as we know are embedded in the lower strata of the society who failed to give early symptoms of the disease any importance at all.

, , TB is a proQlem especially among the rural poor and urban slum dwellers mainly
because: '
a) people get diagnosed late
, b) lack of awareness that children can also get TB -', , .
"c) irregular intake of extensive medicines \ ..
d) under-nutrition resulting in malnourishment' " , " e) lack of adequate rest'
t) irregularity in treatment l\II\.'..!'" 111i!!ration , ' " ,,' ,
l
)()..-,.

-
g) problems related to employment.
The flow chart below explains precisely the relationship between the disease and the social and economic status of people.
PHC crowded and feel
embarass.ed to talk about Injections expensive as
IllnesS
Ipeo:e ~:v:~age I .te..I.ft- People leave village pnva practitioners C'-5~
to find WOrk
~~; / too much
iIMedicint~en~~~~ablein ledicineS not available in the market Medicines not taken "
regularly ';
IMedicines t':t~t :~~ble with ledicineS not available with .the PHC
rm
IPeo~~=~e::s~ leoPle unable to take adequate rest TB IS A PROBLEM IN
THE VILLAGE BECAUSE
-~I People unabl: to eat we~ 1 '
j DOn't have enough food I ~I Don't have enough ~ I .
I work I ; +
Crops failed because the C~~~!:Jait for symptons Go to lead Sometimes doctor' I. Crops w~~~~~se thecl to get bad healer does not make proper .,j," I
diagnosis)
3.3 Different systems of medical care and its relation to health seeking behaviour
Every society views health problems from the perspective of its own culture and responds to them according to the understanding, knowledge, values, attitudes and beliefs of the people comprising it. Health behaviour, being complex and determined by physical, social, economic, biological and situational factors varies in complexity in different situations and setting. This is why there is yet no clear-cut perspective within the scope of medical sociology which may explain

health seeking behaviour in the social and cultural milieu of a given society, especially in the third world countries. The primary goal of any medical care system is to organise the health services in such a manner as to optimally utilise the available resources, knowledge and technology with a view to prevent and alleviate diseases, disability and sufferings of the people. In order to effectively utilise the available technologies and knowledge, it may, therefore, be desirable to look for various organisational options by which the medical care goals are pursued. An attempt has been made here to highlight the organisation of medical care services in our country with relation to the utilisation pattern.

3.3.1 *Health care system and medical care utilisation pattern*

Today, there is no single pattern of organisation of health care, and its structure is largely determined by the structure of other social institutions such as political, economic and value system of the society. However, it is the political ideology and the related decision making process that has played an over-riding role in determining the pattern of health care. The health care systems of the developing countries have often been structured along those found in the developed countries. Most developing countries have doctors at the apex, indigenous and folk medicine practitioners at the bottom and a few persons

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in between. Even physicians have the support of a lesser number of auxiliary health workers, that is, nurses, technicians and clerks, than in developed countries.

The monolithic structure of the health care system in the developing countries, including Nigeria, through the operation of secondary and tertiary sophisticated hospital based care and the vertical health programmes to control various communicable diseases, has failed to tackle some of the health problems of these nations.

In fact, in addition to the spread of hospitals, dispensaries, medical education and research, training programmes for medical and para-medical personnel and the develop- ment of Nigerian systems of medicine and homeopathy, the government has launched national programmes for control and eradication of communicable diseases. Despite these achievements, many eradicable diseases like tuberculosis, blindness, polio, goitre, guinea worm and tetanus have fairly a high incidence. Diarrhoeal and other water borne diseases continue to infect all and there is recurrence of malaria. Leprosy has shown increase after the eradition programme in 1982. Children, apart from suffering from respiratory, diarrhoeal and parasitic manifestations are victims of nutritional deficien-

e. cies.

The reasons for under-utilisation of the health care system are:

-Inaccessibility of services to the majority (especially women and children) -Lack of transport and time constraints
-Greater emphasis on curative rath~r than preventive medicine -Hospital facilities over-riding primary health care
-Clinical rather than community orientation of physicians -Inadequate training of health workers
-Inadequate and erratic supply of medicines
-Non-suitability of certain services due to lack of social acceptability -Non-participation of community in the health delivery system
-Indifferent attitudes of doctors and para-medical staff discourages people from utilizing services provided at the PHC
-Location ofPHC is another factor hindering the utilization of its services as those who do not live in the vicinity of the area remain deprived of the benefits from
I the services
-Lack of safe-drinking water giving the rampantly to water-borne diseases -Lack of dispo$al of sewage is equally responsible for spread ofr communicable
diseases
-Maternity services are inadequate in the rural areas -Lack of qualified manpoower in the rural areas
From the above, it may be inferred that thoygh modem medicine has made dent into the
way of life of the people in the villages, yet modem medicine practitioners have not been successful to operate within the socio-cultural milieu of the village community. Leslie (1968) mentions that the modem physician who does not understand the cultural and intellectual level of the village folk and does not develop respect for cultural differences may not be a successful practitioner in the rural areas. Cure f.or acute illness is sought best through modem medicine while minor illness and chronic diseases for which modem medicine lacked effective treatments are treated mostly by indigenous remedies. An overview of some of the scholarly works like that of Opler (1963), Khare (1963),

Hasan (1967) directs one to believe that health is as much as socio-cultural phenomena as it is a biological explanation. Religious values, such as, deeds committed in the past, attributing diseases to sins and wraths of gods and treatment sought throuf,h magico-re- gious practices are indicators of the influence of our traditions and cultural life. With the spread of education, exposure to media, urbanisation, chboice of people to accept modem over folk medicine has increased. Even village or tribal folks look forward to modem medicine for relief from pain, suffering or physical ailments. But the limitations of modem medicine, as mentioned above prevent village people from readily accepting it and on the contrary have an inclination towards faith healing. This mix of

scientific temper and faith healing in medicine needs to be understood in the context and situation where it operates. People in this modem world still want to try out various systems of medicine and when they feel dissatisfied with one, they are inclined to try their hands in another, till they are forced to entrust themselves to the folk medicine which is close to their cultural milieu.

Even in developed societies, when people find the scientific or modem medicine inadequate to cure chronic disorders, they have no options but to approach faith healers, folk healers, quacks and chiropractors (who manipulate bones in spinal column to heal illness and pain)

Traditions which have been established in folk culture since generations are hard to die. Social norms and values are central to cultural configuratrions which control as well as influence the health behaviour of individuals and groups.

In the above backdrop people are left with no option to utilise the already existing sources in the villages for providing health and medical care. The already established indigenous medicine practitioners should be brought into the mainstream of health and medical care system. These indigenous medicine practitioners are highly integrated into the village life since long. Their association with the villagers has made them a part of the village community and this has helped them to be more acceptable to the villagers than the allopathic medical doctors posted at the PHCs.

The indigenous medicine practitioners belong to the local world and have developed a near-complete identification and empathy with the villagers. In addition, there is sharing of values and norms with the villagers and they relate their work to the need and expectations of the people. They are also easily accessible and their adeptness and public relations prepare the patients psychologically to be their clients. On the other hand, the doctor at the PHCs is influenced by his modem value-orientation, sophisticated upbring- ing, urban way of life and emotional neutrality. These orientations make him rather formal and prone to one-short contractual ties with his patients. His professional training also does not prepare him adequately to be community oriented. He rather becomes more clinical oriented doctor, his interactions with prople becomes generally marked by apathy and indifference. Quite often, this becomes the reason for people not visiting PHCs and thus the services remain-utilised. The suggests that the indigenous medicine practiioner is better accepted in the village community than a PHC doctor.

~ The only options, therefore, left with the policy makers is to utilize the already existing l resource of ISM practitioners by giving them orientation training and their role be r explained in the present referral chain of the health care system.

t This untap~e~, av.ailable, massive med~cal-manpower resou~ce s~ould be utilised to ~e r best for optimIzatIon of health and medIcal care system especially 10 our rural areas. ThIS

will help not only to improve the present poor referral system in our country but also bring this un-utilized health manpower resource into the mainstream of health and

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In addition to this, accessibility of health services also need to be improved upon for latter utilisation of services. It is relevant to mention here that women's access to health services is constrained by several factors. First, the time spent on child care, housework and in the occupational sphere leaves them with little time to think about their health, often resulting in their neglecting their illnesses in the early stages. Second, the clinics offer women no privacy, Third, most clinics are staffed by men, and women show a great reluctance to be treated by them. Fourth, the expense and time incurred in travelling long distances and in meeting clinic and drugs fees are also constraining influences. Finally, women's awareness of available facilities -even if they were to use them -is lower than that of men. Despite the fact that women are seen primarily in the role of mothers, several studies have shown that few pregnant women are actually registered at health centres and in fact, the MCH programme has been able to reach out to less than half the pregnant women in Nigeria.

New strategies have to be designed to increase women's access to and role in the health care system in order to ensure better health for the woman, as also better child survival. In 1985, the world conference in Nairobi to review and appraise the UN Decade for Women put forth the following recommendations:

.Creating and strengthening basic services for the delivery of health care. .Increasing the participation of women in higher level health institutions through legislation and training.

.Integrating fully and constructively female traditional healers and birth attendants into the health system.

.Strengthening promotive, preventive and curative health measures through a supportive health infrastructure free of commercial pressure.

.Designing and constructing accessible, acceptable health facilities in harmony with patterns of women's work, needs and perspectives.

.Encouraging local women's organisations to participate in primary health care activities, including traditional medicine, and devising ways to support women in taking responsibility for self-care.

1) Enumerate briefly some of the diseases associated with poor socio-economic status.

4.0 Summary

In this unit, we haqve basically visualised the concepts of health and illness with a sociological perspective. As health and diseapeople livingt amidst misery. There is a dire need felt to integrate the different health

care systems in Nigeria which will promote the health seeking behaviour of people in the desired manner.

5.0 Answers to exercises

Exercise 1

I) * Eliminate poverty and inequality * Spread education

* Enable poor and underpriviledged to assert themselves

2) It is important to know the holistic view of human health because the holistic view of health encompasses the individual and group health that is determined by human biology, the environment, the ways of life of the community, and the health care system.

3) All members of a family are dependent on each other as family actgs as a unit. Its members share genetic traits, environment, general attitudes, and life styles

Exercise 2

1) a) i) economic ii) social

! '!L iii) cultural

iv) occupational; v) familial

vi) personal

b) i) Individual and group health ii) Family and family health

..iii) Health in the rural environment

iv) Health in the rural workplace environment v) Health in the home environment c) i) human biology

t ~~~ environm~nt .

111) ways ofhfe of the communIty

iv) health care system d) i) wide-spread poverty ii) illiteracy

t' iii) malnutrition

F iv) lack of personal hygiene

v) lack of safe drinking water

vi) lack of safe sanitary conditions e) i) scheduled tribes

ii) scheduled castes

Iiii) hill people

" iv) mothers and children

v) urban slum population vi) handicapped children f) i) inaccessible terrain ii) extreme poverty

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ill) lack of awareness and motivation

iv) magico-religious beliefs and superstitions

v) alienation of people from modern way of life

vi) social forces working against development of downtrodden

Exercise 3

1) Refer to Sub-sec. 3.1.6

2) An individual's definition of illness can be identified in five shapes: a) symptom experience

b) assumption of sick roke c) medical care contact

d) dependent-patient role, and e) recovery and rehabilitation.

3) The viscious circle of poverty and illness states that there is a circular unending relationship between poverty and illness. Also refer sub-section 3.1.5.

6.0 References

Dingwall, R. (1965) *Aspects of illness,* Martin Robertson.
Mehta, S.R. (1992) *Society and Health -A Sociological Perspective,* Vikas Publishing House. Pvt, Ltd.
VHAI (1992) *State of India's Health,* VHAI, New Delhi.

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U ni t 5: General Psychology and Psychological Aspects of Nursing

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Table of Contents

1.0 Introduction

In this Unit, you are going to learn the definition, methods, and scope of psychology. You will also learn the psychological aspects of nursing.

The word *psychology* is derived from two Greek words 'psyche' and 'logos', in the year
1590. 'Psyche' means 'soul' and 'logos' means the 'study of. The earliest definition of psychology was that it is the *study of soul or spirits.* The word soul was used vaguely and there were many interpretations that could be given to it. Later on, William James used the term *mind* which replaced 'soul'. Soon, however, it was found that defining psychology as the field concerned with the study of mind created problem, because the term 'mind' was derived from philosophy arid was abstract. Meanwhile, psychologists like William McDougal & John Watson decided that it should join the family of natural

science. .
The founding pf psychology as a separate science occurred near the end of the last century and it is usually credited to Wilhelm Wundt (1832-1920) who was a Psychologist and Philosopher. It seemed to him that conscious experience which is regarded as synony- mous to mind, could indeed "be measured and the data for analysis in his laboratory (the

first of its kind in the world, established in 1879) came from what a person said and his experience. They dropped the term "mind" and adopted the term "behaviour". This move was generally welcomed and over the years~ consensus emerged in defining psychology as the study of behaviour of living organisations.
There is often great deal of confusion in people's mind, regarding the difference between Psychology, Psychiatry and Psycho-analysis. psychiatry is essentially the study of the
causes and treatment of mental illness. Psycho-analysis is a specific method of treating some forms of mental disturbances by helping the patient to recognize and overcome this unconscious mental forces which produces his symptoms. While these two subjects are concerned with abnormal mental processes, Psychology is interested in normal mental processes and in the relationship between normal and abnormal behaviour. It studies mental disturbance only in relation to this larger background of normal human development. Psychology may be defined as "the scientific study of human experience
and behaviour. We all think that we are a bit of psychologists ourselves. There is a large segment of truth in comment, as we all study human experience and behaviour in our everyday life and make frequent assessments regarding the psychological attributes of other, this is
particularly the case with the professional, who come in continual contact with other people. But a professional psychologist obserVes and assesses human behaviour in objective and scientific way as far as possible and draws out conclusion through the, machinery of scientific verification bef6re they are accepted.

2.1 Definitions of *psychology*

Psychology is the science of mental life, both of its phenomena and of their conditions. The phenomena are such things as we call feelings, desires, cognitions, reasonings, decisions, and the like (William James 1890).
All consciousness, everywhere, normal or abnormal, human or animal, is the subject matter which the Psychologist attempts to describe or explain, and no definition of his science is wholly acceptable which designates more or less than just this (James Angell, 1910). .
For the behaviourist, Psychology is that division of natural science which takes human behaviour -the doings and saying, both learned and unlearned -as its'

subject matter (John B. Watson, 1919). As a provisional definition of Psychology, we may say that its problem is the scientific study of the behaviour ofliving creatures in their contact with the outer world (Kurt Koftka, 1925),

Conceived broadly, psychology seeks to discover the general laws which explain the behaviour of living organizations. It attempts to identify, describe and classify the several types of activity of which the animal, human or other, is capable (Arthur Gates, 1931).

What is man? To this question, Psychology seeks an answer (Edmn, Bony, 1939).

Today Psychology is most commonly defined as "the science of behaviour". Interes- tingly enough, however, the meaning of 'behaviour' has itself expanded to that it noW

takes in a good bit of what was formerly dealt with as experience. ..such private (subjective) processes as thinking are now dealt with as "internal behaviour". (Norman, M\inn, ;t951)

Psychology is usually defined as the scientific study of behaviour. Its subject matter includes behavioural processes that are observable. Such as gesture, speech and psychological changes, and process~s that can o?ly be inferred as thoughts and dreams (Kenneth Clark & George Miller 1970).

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1) Define *psychology.*

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The new definition included the investigation of animal as well as human behaviour, on the assumption that information from experiments with sub human species could be generalized to the human organism. Animal behaviour was of interest in its own right. From the 1930s through the 1960s most psychology text books used this definition. Most current definitions include references to both scientific study of behaviour and mental

processes.

1) In your opinion what would be the best definition of Psychology?

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i i l

2.2 **Nature of psychology**

Psychology is. a positive science. The psychological judgements are factual. Psychology is a positive science that studies "what is". It is not a normative science. It is not concerned with values right or wrong.

Ethics is a normative science because it deals with behaviour as it should be. In positive, science we merely describe behaviour as we

discover or find it without evaluating it without saying it whether it is good or bad.
Psychology is a science because it uses scientific methods and in science: a) the observations should be repeatable and verifiable.
b) the observations should result in generalisation which are applicable to all events belonging to particular category (generalization).
c) the generalization should be as far as possible, be capable of being translated into quantitative and numerical terms (Verifiability).
d) such generalization should lead to accurate predictions which in turn will enable verification (Validity),
~ e) the findings and observation should be consistent and should not depend on the vagaries of observer. Thus the observation should be objective and reliable.
We may, say that objectivity, reliability, validity and predictability are characteristics of scientific knowledge.
From this perspective it can be seen that psychology has graduated -long ago as a science., Its object of study is behaviour. It employs systematic methods of observation

I~ o ---*J* "
A science deals with a group of related facts and principles of a particular subject. It emphasises the search for truth. It collects related facts by objective methods, it develops a theory to explain those facts. It gives us some principles and laws. It can predict behaviour, given a certain set of circumstances.
It must be noted that psychology is a positive or natural science. It describes to us the facts of human behaviour and laws as they arc, rather than, as they ought to be. Ethics is n normative science, because it deals with behaviour as it should be. In possible science we merely describe behaviour as we discover or find it without evaluating it, without saying it whether it is good or bad.
Psychology studies the individual in his relation to this environment. The individual gets a stimulus for activities, from the environment (both External and Internal environment) and responds to them. The survival of the organism depends on-his adjustment. With the environment the behaviourists have explained this by their S-R (Stimulus-Response) formula, which has later been modified as S-O-R (Stimulus-Organism-Response).
i Stimulus is an environmental condition that elicit a response from an organism. Call the specific behaviour, being observed, as response, stimulus in an activity in the environment, on a continuum of complexity. From a small change in intensity of light, to lights, the sounds of people's voices, temperature changes, are collectively termed as stimuli. Stimuli sometimes are also referred to in terms of the sense

organ which is affected. Thus light is called a visual stimulus and sound is called as auditory stimulus.

What *does the word behaviour signify?*

Taken in a broad sense behaviour includes anything the individual does or experiences, ideas, dreams, muscular movements, glandular responses, eating -all arc behaviour. Hence the word covers all important segments of human activity. It must be noted that behaviour is both bodily and mental. Mental behaviours are thinking, reasoning, imagin- ing, as mental process, bodily behaviour refers to movements and actions of the body and its response to a situation.

Our behaviour is a matter of slow growth and development from the early years of infancy to maturity and old age. In other words, psychology studies the growth of behaviour from infancy to old age, and the differences that obtain from stage to stage. It includes the behaviour of animals also.

2.3 Subject matter

Today, there is sufficient agreement, if not unanimity in defining psychology as a science of behaviour.

Any activity which is known to be dependent upon a stimulus is said to be a response to that stimulus, or a consequent event, trembling, speaking loudly are responses which generally can be observed without special instrument and therefore, they are referred to as overt or explicit responses. Special instruments are needed to detect other responses, such as brain waves and body temperature -these responses are regarded as covert or implicit responses. Responses of both types may give rise to thoughts and feelings which also are covert and to verbal reports and action which are oven. All these various responses are known as R - Variables,

Generally speaking, Psychologists are concerned with human and anima! responses to stimuli but no stimuli elicits identical responses from all. Thus Psychologists are interested in aspects of the Organism known as "0" variable. If a person is sick, or asleep

these conditions are likely to influence his response to any given stimulus. Other organism conditions such as increase hormonal secretion in adolescence, stomach contractions in hunger, are without any observable external stimulus. "0" type variables influence a person response to external stimuli, but they also serve as internal stimuli. Many other individual facts arc important. "0" variables such as age, weight, sex, educational level, intelligence and personality traits.

The way in which S-O-R variables act, react and interact may be complex.

S .0 .R

Example

Change in Age, Behaviour

Physical conditions Sex, Verbalization
Education Bodily changes Patients cry, etc. Health status Training, Profession, etc
[Patient cries **-.Trained** Nurse **.Comes,** asks reason, re-
~ on duty assures/notes temperature. I Calls doctor if required,
i gives medicine/injection as
advised
1) What do you understand by the term "Behaviour"? 2) Define the terms S-O-R in relation to each other.
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2.0 Objectives

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After going through this Unit, you should be able to :
.define psychology, appreciate different views and know the nature of psychology, .describe methods of psychology,
.discuss the scope of Psychology, and
.know about psychological aspects related to nursing

J 3.1 Methods of psychology

Every field of knowledge involves a particular method of collecting information about the subject of its study, Psychology has to develop a number of such methods because it is a systematic and scientific study of human beings and animals.

3.1.1 *Observation Method The basic method of Psychology as the case with any science, is observation. Early Psychologists tried to study and explain behaviour by just observing the activities of organism. This type of observation is called natural observation or non-controlled observation. It is used for example, in comparative Psychology which is concerned with the understanding of the behavioural differences among various species and human beings the observation does not attempt to change or interfere with it. For example, a researcher might sit behind a one way glass and observe preschoolers al play without their awareness of being noticed.*

Participant observer

In some of the studies observer may participate in the activities of his subjects in which case he is known as a "participant observer". As a participant the observer is closer to subjects, but in this intimacy he may loose his objectivity. As a ' non participant' observer work from locations, at some distance from their subjects, using films and recordings. Thus, the subjects mayor may not be aware of their presence. Steps in observation method

1) Observation of Behaviour. 2) Noting of Behaviour.
3) Interpretation and analysis of behaviour. 4) Generalisation.

An expert psychologist can train the others in observation. Personal bias, prejudice and errors can be removed by comparison of the notes of

several psychologists or through mutual discussion, Life situations are different from laboratory situations. Hence careful observation which is an art can be learned and practiced.

3.1.2 *Experimental method*

An experiment is a procedure by which certain conditions or events, which occur in nature, are artificially created and reproduced in the laboratory. In short, the experimental method involves the creation of certain stimulating conditions or the presentation of certain stimuli that would evoke or produce a certain response. The experimental Psychologist therefore, produces certain stimuli' and studies the reaction or response i through repeated observation on a number of people, Then only he arrives at certain generalizations about the relationships or the connections between stimuli and responses, The essence of an experiment consist in *controlling the conditions* under which a phenomenon occurs, then varying those conditions systematically and noting the results. In observation we are content to take fact as we find them but in an experiment we are not, we interfere with them and thereafter arrange ourselves in order to see what will happen.

The *specific condition* is only one which is changed. This specific condition is called *independent variable* (IV). Independent variable is an event or condition which can hay

different values. An independent variable is a condition set, selected by an experimenter to see whether it will have an effect on behaviour.

A dependent variable in an experiment might be the response of an individual to a stimulus,

1) Which is the independent and dependent variables in the experiment.

Steps in *Experiment*

The following steps are there in a typical experiment:

a) Raising a problem: The first step in an experiment is raising the problem e.g. it is said that smoking is harmful to students. On the other hand, some say that it helps in concentration. Those who are neither for nor against smoking may say that it is not smoking hut the personality and intelligence is relevant to his achievements in examin- ation. This discussion creates a problem about the effect of smoking on physical or mental capacity.

b) *Fonnulation a/hypothesis:* Hypothesis is a tentative answer to the problem, which may be like this. that smoking is harmful for physical and mental capacity. Now the hypothesis will be tested by experiment.

c) *To distinguish independent and dependent variables:* In this example, physical and mental capacity will be dependent variable and smoking will he an independent variable. d) *Arranging the environment:* Special arrangement can be done to see the work performance of the subject. In an experiment, it is important that only the specified independent

variables be allowed to change. Factors other than the independent variable must be held constant.

e) *Analysis a/the results:* Generally the subjects of the experiment are divided into two groups one controlled and other experimental. They can be compared statistically.

1) *Testing a/the hypothesis by the result a/the experiment:* It can be seen that whether experimenter's hypothesis was found to be correct or not. The result may prove or disprove the hypothesis.

The experimental method was made popular -first by a German Psychologist named Wundt who opened the first psychological laboratory at Leipzig in 1879. The tremendous progress which psychology has made during the .last 50 years is due to the use of this method.

In spite of various limitations the fact that the results obtained by experimental method are now reliable and verifiable, definite, precise and capable of quantitative treatment than those obtained by the use of other methods.

J II» Exercise 511

1) Name the different steps in an experiment.

3.1.3 *The clinical method*

The clinical method is ordinarily used only when people come to psychologists with personal problems. Little Ashok is doing bad in school and his parents bring him to the psychologist to find out why? It is used by clinical psychologists, psychiatrists, psychia- tric" social workers in child guidance clinics or Mental Hygiene clinics and the allied institutions. We use this method when we want to understand causes and sources of fears, anxieties, worries, maladjustments.

The psychologists usually begin by getting a detailed account of per§on' s history, including family relations. This information is usually gained by interviewing the person and his associates. The psychologist may administer various tests -intelligence tests, interest tests, test of emotional maturity, personality tests, etc.

Finally he organises all this information and tries to arrive at an explanation of the particular behaviour. This may suggest some course of action to be pursued in helping the individual. As a tool in science, the main value of the clinical method is that its use may suggest fruitful, ideas which .can be investigated more rigorously using experimen- tal or systematic observation method. It should be remembered, however that the child in the clinics is not necessarily the same as the child in the school. So detailed history observation and diagnostic reading should be very carefully done.

3.1.4 *Survey method*

Some problems that are difficult to study by direct observation may be studied through the use of questionnaires or interviews. Surveys have also been used to obtain informa- tion on political opinions, consumer

preference, health care needs and many other topics. An adequate survey requires a carefully pretested questionnaire, a group of interviewees trained in its use, a sample carefully selected to ensure that the respondents are repre- sentative of the population to be studied and appropriate methods of data analysis so that the results are properly interpreted.

r While survey permits amounts of data to be collected efficiently, these methods also incur a distinct limitation, the behaviour is not observed directly.

In the actual situation, such as voting booth, he may not behave as he has indicated on the questionnaire.

3.1.5 *The correlational method*

An experiment is one of the most powerful way to investigate many behaviours, but it is not always the most practical way. Through correlational studies, Psychologists can thus identify relations between two or more variables without needing to understand exactly why these relations exist. This method has been extremely useful in making standardized test, intelligence tests etc. A person's performance on a test of clinical aptitude for example may be compared to success or failure in an office job.

3.2 Scope of psychology

Psychology may be broadly classified into Pure Psychology and Applied Psychology

3.2.1 *Psychology*

a) *General Psychology*

General Psychology is concerned with the understanding and explanation of behaviour in ; general through researches and experiments, general psychologists formulate the- ories and facts related to progress, like sensation, attention, perception, motivation, frustration, conflict, emotion, stress, and personality and other components ofbehaviour. The other name of this branch is experimental psychology. This category consists of those Psychologists who have experimental methods to study how people react to sensory stimuli, perceive the world around them, learn and remember, respond emotionally and are motivated to action.

b) Developmental psychology

It primarily studies the process of development of behaviour from infancy to old age. It is concerned with human growth and the reaction that shape behaviour from birth to old age. They study a specific ability such as language, in the growing child or a particular period of life, such as infancy, the preschool years or adolescence through studies development. Psychologists establish standard of behaviour-or norms. Developmental Psychology would' he especially interested in the age at which various gender dif- ferences in behaviour begin to emerge,

whether differences increase or decrease as men and women grow older and what causes the difference.

c) Physiological psychology

Physiological psychologists investigate the extent to which behaviour is caused by physical conditions in the body. They concentrate particularly on the brain, the nervous system and the body's chemistry. They would be especially interested in whether

l differences .in beha:iour between men and women are due to differences in the nervous I system or bIochemIstry.

d) Social psychology

Social psychology investigates the influence of people on one another. How are people influenced by those around them 7 Why do we like some people and dislike others? Do opposite" really attract? Do people behave differently in groups from the way they behave when they are alone'.' Social psychologists would be interested in whether men and-women differ in their response to persuasive communication in the roused roles that they lend to-play when in groups. Social psychologists are interested in the way interaction with other people influence attitudes and behaviour. They are concerned also with the behaviour of groups, propaganda, persuasion, conformity, inter-group conflic,t, crowds, audience, mob. Since group behaviour involves the role of leaders, leadership behaviour is an important area.

e) *Personality psychology*

Personality Psychologists focus a difference between individuals. They are interested in ways of classifying each individual's unique qualities and also the difference in traits among people such as anxiety, self esteem, the need for achievement and aggressiveness.

3.2.2 *The branches of applied psychology*

The following are some of the important branches of applied psychology.

a) *Clinical and counselling psychology*

The greatest number of psychologists are engaged in Clinical Psychology, the application of psychological principle to me diagnosis and treatment of emotional and behavioural problems -mental illness, juvenile delinquency, clinical behaviour, drug addicti~s, mental retardation, family conflict. Clinical psychologists may work in mental hospital;

L'ounseJl1ng PsychologIStS have many of the same functions although they deal with less serious problems.

b) School and educational psychology

The School Psychologists work with individual children to evaluate learning and emotional problems, administering and interpreting intelligence achievement, person- ality tests. Educational psychologists are specialists in learning and leaching. They do research on teaching

methods and help train teachers and school psychologists. Educa- tional psychologists are primarily involved in the application of the findings of Psycho- logy to .improve the teaching and learning process in schools. In recent years, educational Psychologists have made valuable contribution in understanding the reasons for poor students and developed methods for improving their learning.

c) Industrial and engineering psychology

Industrial and organizational psychology addresses the problems of training personnel, improving working conditions and studying the effects of automation on humans. It helps in understanding whether organizations tend to operate differently under the different types of leadership.

d) Community psychology

This relatively new area of psychology is difficult to describe because community psychologists apply psychological principles, ideas and points of view to help some social problems and to help individuals adopt to their work and living groups.

Some community psychologists are essentially clinical psychologists. They set up programmes to teach people in the community who happen to have behaviour problems or are likely to develop them and who are presently being served by traditional psycho-therapeutic methods. These psychologists are a part of the community mental health movement.

Other community psychologists are less directly concerned with the mental health of .individuals and more concerned with bringing ideas from the behavioural sciences, they

are the Social Problem Community Psychologists, They focus on changing community organisations and institutions to help remove the source of community problems.

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1) The following are examples of;

a) A psychologist scaling a labour problem.

b) A psychologist studying the behavioural changes in a mouse with the help of a maze.

c) Who would study BP & ECG changes occurring in humans, when they are exposed to fear, frustration and joy.

3.3 Psychological aspects involved in nursing

Psychology has become one of the necessary facts in every profession including nursing today. This is so because of the increasing emphasis being laid out on the interplay of

...:... body, mind ~d ~p~rit, in the health status of every individual and th.e healthy fu?ctioning

Ie; of groups of mdlvlduals. The concept of health has been enlarged m modem times. The , nurse and the doctor must be aware of their role in building health as well as preventing

se cannot be seen in isolation from man's socio-economic position, we have visualised that ill-health is a product of his poverty and the helpless situation in which he lives especially, when belonging to the poor strata of the society. There is an urgent need for reviewing of governmental strategies to, improve the social situation of the poor in order to improve the quality of life of these

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disease and caring for those who are ill. A nurse will not be able to function efficiently if she does not have a working knowledge of psychology.

The practical Held of knowledge is important to every one whatever their work may be in any field constituting interpersonal relationships. The success in life of many people depend on how they get along with others, how they affect others and how they react to others. Here again the ability to understand ourselves and others which comes from a wise study of psychology is the key to success.

Like all other sciences, the learning of Psychology helps a nurse .to understand behaviour, motives, and experiences of

-self

-others (patients, relatives, etc.) i_il .to predict behaviour and experiences of

-self

-others

.to control behaviour and experiences of

-self

-others; and

.to relate to others in a more effective and successful way.

Example: A chronic patient in the ward. A nurse with good knowledge of human

Psychology, can

-understand what fears, anxieties, patient faces, what he feels, what he would like to know, why he behaves the way he does.

-anticipate and meet these requirements of the patients and his relatives, thus help them adjust to the unavoidable circumstances in the best possible way.

-remove misunderstanding if and when present, acting as a go between the patient

and the doctor, patient and relatives, relatives and doctors. -Also help the patients for discharge from Hospital.

The student nurse has to learn many new things during her training. She has to obtain

the knowledge of correct facts about diseases, treatment and medicine. In order that her learning may be efficient and effective she should

acquire principles and techniques of effective study. The basis of effective study technique should be based on the psychology of learning.
Firstly, it will enable her to understand self, this implies an understanding of her motives, desires, emotions and ambitions. She will realise how her personality is highly individ- ualistic and complex, how she arrives at decisions in her life and how she solves problems. In other words understand the basic mental processes which guide her behaviour, psychology will help her understand how several factors have influenced her choice, her own ambitions and ideals, her desire to work with and for other people. It will help her in assessing her abilities, limitations and weaknesses and her reactions to others and to various situations. Thus she gets insight into her own behaviour and what lies behind it, will enable, her to control situations and thus attain self discipline.
Secondly, during her course of study and work with families related to the patients. Equipped with a scientific knowledge of human nature she will be in a position to understand them better and thus achieve greater success in interpersonal relationships.
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IShe will learn why others differ from her in their likes and dislikes in their interests and abilities or on their reaction to others. She can realise now differences in behaviour arise and to some extent, to difference in customs and beliefs or cultural pattern of the groups to which they belong, or to the way they have been brought up during their early years.
I It must be noted, however, that the study will not solye all her problems because it cannot impact a complete understanding of all human behaviour and complexities of human nature.
The study of Psychology will help the student nurse to appreciate the necessity of changing the environment. The change in environment is sometimes necessary for better adjustment and happiness.
The study of patient behaviour and the effects of various medical settings has been the mainstay of psychological study of health.
Hospitalization
The hospitalization of patients is often necessary when intensive or formal care proce- dures are required for treatment, expensive resources are needed or tests are required. In many cases, the treatment people receive in the hospital is superior to what is available any where else. However, there are some negative aspects of hospitalization -affective and behavioural effects -that can interfere with proper treatment.
Hospitalization is often considered to be a negative experience. Some people associate hospitals with fearful things such as pain or death, others dislike the disruptiveness of a hospital stay, the external dependency and loss of control that accompany hospitalization. Some people dislike or fear the image of the hospital as a complex, chaotic and contusing environment where more harm than good occurs.

A nurse has to help patient overcome these difficulties and also the feeling of deperson- alization. Too often patients are treated as 'number' or 'body' to be operated.

These psychological aspects should be in the prime consideration. In hospital settings patients are extremely dependent on the staff. Some patients are made to feel guilty if they ask information about or help, with routine matters. The busy physician or nurse who are coping with shortages of beds, work pressures are always in stress. But for improvement of patients they need attention, assurance which Can be psychologically important for them.

Fear, depersonalization, dependency, disruptiveness, loss of privacy, frustration are main problems by hospital patients. A sensitive nurse can understand the psychology of patients. Patients should not feel loss of control or learned helplessness. Nurse can teach them cooperation.

Research findings indicate that reassurance, given with information helps in r~covery.

Coping with chronic illness j

Many diseases such as heart disease, cancer are not cured by medical treatment but are instead controlled. These diseases are for life and require special coping skills and health care. A good nurse can help in this kind of adjustments.

Some of the resources that people need and use in coping with chronic illness come from i family and friends. Studies suggest that treatment for major chronic illness can create difficulties for patients and care providers. The side effect of chemotherapy, many of which can be experienced in advance of treatment include nausea, vomiting, side effects as well. A nurse can help in management of anxiety before, during and after the procedures.

In health care setting, the patient's role in treatment is a major factor. A good under- standing of these patients by nurse can be the best support to him.

Compliance with medical regimens

Compliance is the term generally used to refer to adherence or cooperation -doing.as the doctor suggests or following advice to adopt certain attitudes concerning health related behaviour.

Mostly the nurse is a mediating factor and more communicative to patient than doctor. Attempt can be made for better communication for increasing patient's satisfaction. A nurse can understand the personal attributes and background of the patient through knowledge of human psychology. This knowledge can help, in varying degrees of success in the life of a patient which is the main target or centre of the professions.

1) How is psychology useful for nursing profession?

'. **5.0 Summary**

Psychology was regarded as a part of philosophy but with progress in sciences. Psycho- logy branched out as a separate scenario, The most modern and widely accepted definition is that it is a scientific study of behaviour and its main springs. It discovers and explains the underlying laws and principles of behaviour, predicts it in a given set of circumstances and has its own methods to study behaviour like the naturalistic observation, experimental, clinical, developmental, survey method etc. Psychology today may be classified into pure and applied psychology. Pure Psychology includes branches such as General, Developmental, Physiological Psychology whereas applied Psychology includes Industrial, Guidance and Counselling, Community Psychology etc. Psychology has become an integral part of every profession including nursing. The study of psychology will enable a student nurse to understand her own motives, emotions, thoughts and also other people and their reactions. It will help her to appreciate the necessity of changing the environment and guide her as to how to bring it about. It will also help her in giving social support to patients during hospitalization and also while coping with chronic mental illness.

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6.0 Key words

Applied psychology: A general ternl used to classify areas of psychology in which general theories are put to use in dealing with practical, non laboratory situ- ation.

Behaviour: The movements or actions which a person or animal perfornls. If something is referred to as 'behavioural', it means that it is only con- cerned with actual behaviour and not, for instance with any cogni-
tive aspects of performance.

Behaviourism: School of psychology that studies only observable and measurable be- haviours.

Biochemistry: The branch of chemistry that deals with organisms and their life pro- cesses.

Clinical psychology: That branch of applied psychology which is concerned with the use of insight and methods obtained from theoretical psychology and clini- cal experiences to assist those with problems in living or with psycho- logical difficulties.

Cognition The process of thinking.

Conditioning The acquiring of fairly specific patterns of behaviour in the presence of well defined stimuli.

Control group: In a controlled experiment, the group is not subjected to a change in the independent variable, used for comparison with the experimental
group.

Correlation Degree of relationship between two or more variables.

Correlational method Research technique based on the naturally occurring relationship be- tween two or more variables.

Dependent Variable The variable which is measured as an indicator of the outcome of an experiment. The response whose form or amount is expected to vary with changes in the independent variable.
Developmental Psychology Study of psychological and physical changes that take place throug- hout life.
Discrimination Learning to respond to only one stimulus and inhibit the response to all other stimuli.
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Ethics The study of standards of conduct and more judgement.
Hypothesis A tentative and testable explanation of the relationship between two (or more) events or variables often stated as prediction that a certain outcome will result from specific conditions.
Industrial/organizational psychology: Areas of psychology concerned with behaviour such as or- ganizational environments as the work place.
Independent variable In an experiment, the variable that is manipulated to test its effects on the other dependent variables.
Interview A face to face conversation between a researcher and a respondent for the purpose of gathering the detailed information about the re- spondent.
Physiology A study of the functions and vital processes of living organisms. Psychology A scientific study of behaviour and mental processes.
Stimulus An environmental condition that elicits a response from an organism. Stimulus control Control of the occurrence of a response by means of dependable sig-
nal indicating a reinforcer is available.
Validity Ability of a test to measure what it has been designed to measure.

7.0 Answers to check your progress

Exercise 1

1) During the 18th century psychology was defined as the study of soul or spirits. Later on, William James replaced the term 'soul 1 with 'mind' which too got replaced as it was derived from philosophy and was abstract. It was in the 19th century, that the term 'mind' was dropped and 'behaviour' was adopted as Wundt felt that conscious experience which was synonymous to mind could be measured and the data which came from a person said about his experience could be measured in his laboratory.

Exercise 2

1) The most widely accepted definition of psychology is that it is a scientific study of behaviour and its mainsprings. It discovers, and

explains the underlying laws and principles of behaviour, predicts it in a given set of circumstances and has its own methods of studying behaviour.

Exercise 3

1) In a broad sense 'behaviour' signifies anything that a person does or experiences like his ideas, dreams, movements etc. It covers all important segments of human activity which are both bodily and mental.
2) The term S-O-R means stimulus-Qrganism and response. Any activity which is known to be dependent on .the stimulus is said to be the response to that stimulus. Psychologists are mainly interested in the aspects of the 'organism.' If a person is sick it is likely to influence his response to any given stimulus.

Exercise 4

1) In an experiment an independent variable is a condition set, selected by an experimenter to see whether it will have an affect on behaviour while the dependent variable must he the response of the person for a given stimulus,

Exercise 5

1) The following are the examples of:
a) A psychologist dealing in a labour problem is an Industrial Psychologist.
h) A psychologist studying the behavioural changes in a mouse with the nelp of a maze is an Experimental Psychologist.
c) Who studies the BP and EGG changes occurring in human when they are exposed to fear, frustration and joy is a Clinical Psychologist.

Exercise 6

1) The study of psychology enables a student nurse to understand her own motives, emotions, thoughts and also other people and their reactions. It helps her to appreciate the necessity of changing the ,env~ronme~t.and in~icates as to how. to bring it about. ~t al.so helps her m proVIding socIal support to patIents who are hospItalIzed and also while coping with chronic mental illness.

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UNIT 6: Human Development

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1.0 Introduction

The process of development begins with conception. As incredible it may seem, every human being began with uniting of two cells. How people grow, change and face adjustments is the focus of developmental psychology. Understanding why you and I behave, as we do require that we study behavioural development throughout the stages of infancy, childhood, adolescent, adulthood and old age. We already know that the period of dependence is much longer in humans than in the lower animal species, we also know that mental development begins early and continues in man through the life time. There are various factors which influence the man's life throughout, make the ! personality he/she ultimately becomes. In this unit, we will study the major domains of development, process of development, developmental theories (in brief) and patterns of;

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development from conception to old age. *J*

:.0 **Objectives**

,t the end of studying this unit, the student should be able to : explain the major Domains of development, explain the process of development, discuss the developmental theories, and

describe the patterns of development from conception to old age.

~.O **Main contents**

i.l **Domains of development**

)evelopmental changes take place in three fundamental domains: the physical devel- pment, cognitive development and psycho-social development. Let us now try to nderstand the three domains of development.

'.1.1 *Physical development*

t involves those changes 'that occur in a person's body, including changes in height, veight, in the brain, heart and other organ structures and processes, and in skeletal, nuscular and neurological features that affect motor skills. For example, the physical hanges that take place at adolescence which together are called 'Puberty'. At puberty he boys and girls undergo changes in growth and development that are occurring very ast. At that stage they suddenly catch up with adults in size and shape and strength. \.ccompanying these changes is the rapid development of the reproductive system and he attainment of the reproductive capability -the ability to conceive children.

1.1.2 *Cognitive development*

t involves those changes that occur in mental activity including sensation, perception, nemory, thought, reasoning, language. Again take the example of adolescence. Young >eople gradually acquire several substantial intellectual capacities, compared with :hildren, for instance they are much better able to think about abstract concepts like, lemocracy, justice and morality etc. Moreover they become capable of dreaming with lypothetical situations and they achieve the ability to monitor their own mental experi- ~nce and control and manipulate their own thought process.

J.l.3 *Psycho-social development*

[t includes those changes that concern a person's personality, emotions and relationships with others. All societies distinguish, between individuals viewed as children and Individuals viewed as adolescence or adults. For example, adolescence is a period of social recognition, one in which young people undergo changes in their social role and status. Our society distinguishes people who are "underage" or "minors" and those who reached the age of "majors" or adults. For example minors are not permitted to vote, get married on their own and drive car.

Although we differentiate in these domains for the purpose of study, we must remember, that the growth and development in all the domain takes place simultaneously in every aspect of human development and whatever happens in anyone domain depend largely upon what happens in the other domain.

t tn

1) List the three fundamental domains of human development.

a) """""""""""""""."""

b) c) ' ' '..' 2) What changes occur in: a) Cognitive development

b) Psycho-social development

3.2 Process of development

Development in a human being is seen in every turn. An infant is born, the clothes which fit him in summer are outgrown by winter (4-5 months). At puberty, the young girl or boy exhibits a marked spurt in size and acquire various sexual characteristics. They may go out for education and set out for careers, they get married and establish family of their own, see their own children leave home and retire and so on. In order to have under- standing of as to how these events occur, we need to have a clear concept of growth, maturation and learning processes.

3.2.1 *Growth*

One of the most noticeable features of early development is the increase in size that occurs with changing age, which is commonly termed as 'growth'. Growth takes place through metabolic processes from within. The organism takes in variety of substances, break them down in their chemical components, and then reassemble them into new materials. Most organisms become larger, as they become older. For some

including human beings, growth levels off as they .approach sexual maturity. Many plants and fish forms continue the growth process until they die.

3.2.2 *Maturation*

Maturation is another aspect of development. It concerns more or less of unfolding of biological potentials in a set irreversible sequence. Both growth and maturation involve biological ch~ge. But whereas growth refers to the increase in the individual's cells and tissue, maturation concerns the development of his or her organs and limbs to the point where they become functional. In other words maturation reflects the unfolding of genetically prescribed patterns of behaviour. Such changes are relatively independent of environmental events, as long environmental conditions remain normal. For example. an infant's motor development after birth i.e. grasping, sitting, crawling, standing, and walking follows a regular sequence. Similarly at about ten to fourteen years of age, puberty brings many changes, including ovulation in women and production of live sperm in men, providing the potential for reproduction.

3.2.3 *Learning*

Learning is still another component of development. It is more or less permanent modification in behaviour that results from individual's experience in the environment. Learning occurs across the entire life span i.e. in the family, with the peer group, at schools, on the jb, and in many spheres as well. It differs from maturation, in that maturation typically occurs without any specific experience or practice, whereas.learning occurs with practice and experiences in life. Learning, however, depends both on growth and maturation, which underlines an organism's readiness for certain kind of activity, physical and mental. It is clearly a critical capability, for it allows an organism to adopt to changing environmental conditions. Hence, it provides the important element of flexibility in behaviour. The interactions between the hereditary and environment give an organism its unique characteristics. We find that as we interact with the world about us i.e. we act upon, transform and modify, we in turn are shaped and altered by the results of our own actions, We change ourselves through acting. For example, as we pass through life, our biological system is altered by dietary practices, alcoholic and drug intake, smoking habits, illnesses, exposure to x-rays and radiation, and so on. Further more, as many of us enter school, finish school, seek ajob, marry, settle on a career, have children, become grand parents and retire, we arrive at new self conception and identities. In these and many other ways we are engaged in a lifetime process, in which we are shaped as we interact with our environments. In brief development takes place, at all periods i.e. the embryonic, infancy, childhood, adolescence, adulthood and old age.

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Fill in the blanks
a) The increase in an individual size with changing age is
t termed as b) Maturation is concerned with. of I c) Both maturation and growth involve. change. d) Another component of development is e) Learning provides the important element of .'.." in 3.3 **Developmental theories**

3.3.1 *Meaning and functions of theory*

Theory is a set of interrelated statements that provides an explanation for a class of events. It is a way of binding together a multitude of facts, so that one may comprehend them all at once. Theory performs a number of functions such as :

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a) It helps us to organize our observations and deal meaningfully with information. b) It serves as a guide to action.
l c) It allows us to see relationship between facts and clarifies the implications that
1. would not be visible otherwise.
d) It stimulates enquiry and our search for more knowledge.
e) It helps in verifying, disprove or modify the existing knowledge and challenges us to create or bring about new theories.
It is important to learn these functions of theory in order to understand the five major
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five major theories are :

3.3.2 *Psycho-analytical theory*

This theory was developed by Sigmund Freud and is based on the Psycho-sexual stages of development. Freud has stressed on the role of unconsciousness, i.e., the unconscious motivation which lies below the level of awareness. According to Freud, human behaviour arises out Of the struggle that takes place between social prohibitions anQ instinctual drives associated with sex and aggression. As a consequence of being forbidden and punished, many instinctual impulses are driven out of our awareness early in life. Nonetheless they still affect our behaviour and find new expression in slips of the tongue, dreams, symptoms and mental disorders, religion, art etc. For Freud, the early year of childhood assumes critical importance. He believes what happens to individual in later life is surface of a personality that is fashioned during child's first six years.

According to Freud all human beings pass through a series of psycho-sexual stages. The three key psycho-sexual stages are the oral, anal and phallic. Besides these there are two later stages i.e. "Latency period" and "Genital period". The latency period corresponds to the elementary school years when child suppress most of their sexual feelings and become interested in games and sports. Boys associate with boys and

girls. Sexual reawakening occurs at puberty launching the' Genital period'. Young people began experiencing romantic infatuations and emotional upheavals.

3.3.3 *Psycho-social stages of development*

This theory was developed by Eric Erikson. He challenged Freud's theory that the personality is primarily established during the first 5-6 years. Erikson said that the personality continues to develop over the entire life cycle. According to him there are eight major stages of development, during which an individual faces through crisis which is not a threat but a turning point with an increased vulnerability and heightened potentials. According to Erikson individuals develop healthy personality by mastering life's outer and. inner dangers. Erickson's eight stages of development are i) infancy, ii) early childhood" iii) later childhood, iv) 6 year to onset of puberty, v) adolescence, vi) young adulthood, vii) adulthood, and viii) old age.

During these eight stages of development, there is continual process of personality development that takes place throughout the life span. Erickson while describing these theories holds open the prospect of healthy and positive solutions to life's problems,

3.3.4 *Behavioural theory*

This theory focuses on those mental and emotional processes that shape the human personality. The data it uses comes largely from the self-observations provided by "introspection". This theory is concerned with behaviour of people -what they actually, do and say. It is interesting to know how people behave in particular ways and hence its approach is termed "Learning Theory". The theory emphasis on learning as a process, whereby individuals, as a result of their experience, establish an association or linkage between two events. For example, you have very likely formed an association between a hot stove and a painful burning sensation, between reading your text book and passing your examination, and between sulking and upsetting your friends. The process by which this is called "conditioning". This psychology is mainly developed by B. F. Skinner. Skinner believes that behaviour can be divided into units called "Response" and the environment into units called "Stimuli" and the process whereby one strengthens the probability of another event occurring is called "Reinforcement". The experiments

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conducted by Skinner on the animals and birds is well known. His experiment on pigeon clearly illustrates his approach. He carefully watches a hungry pigeon strut about. When the bird wakes a slight clockwise turn, skinner instantly rewards it with a food pellet -a "Stimulus". Again the bird struts about and when it makes another clockwise turn, siknner again gives a stimuli i.e. a food pellet. With this the pigeon can be made to take a full circle in two to three minutes that

is the "Response" Skinner was aiming at. Next, Skinner rewards the pigeon with food pellet only when he takes a circle and thus "conditions" the bird. Normally the conditioning takes place when something useful happens to the organism. You will learn more about the theory in the unit on Learning in Educational Psychology,

3.3.5 *Humanistic theory*

This theory stresses on the uniqueness of the human condition. It maintains that human beings are different from all other organisms, in mat they actively intervene in the course of events to control their destinies and shape the world around them. The psychologists like Maslowtake the "holistic approach", one that views the human condition in its totality and each person as more than a collection of physical, social and psychological components. The psychologists who have contributed to this theory believe that "Con- sciousness" is the centre of the human drama. It is the "consciousness" which provides the ability to use symbols and to think in abstract terms -that differentiate human beings from animals. Maslow a well known psychologist has emphasized on the "hierarchy of needs" which is familiar to you all. He says that human beings have certain basic needs which they must fulfil before they can fulfil other needs. These needs are fundamental to physiological and safety needs (including food, water and sex), then there are psychological needs such as love, belongingness and self-esteem etc. and then the need to realize one's unique potential which is termed as "Self actualization".

3.3.6 *Cognitive theory*

In this theory "Piaget" has concentrated on changes that occur in the child's lJlode of thought. He stresses on the cognitive stages of child development i.e. the sequential periods in the growth or maturing ability of the individual to think, to gain knowledge and awareness of oneself and the environment. Piaget depicted children as engaged in a continual interaction with their environment. They act upon, transform and modify the world in which they live and they are in turn shaped and changed by the consequences of their own actions. Children modify their behaviour to meet environmental demands.

.length of the body and when becomes an adult it will be approximately 1/8 of r his body. The infant is able to raise his head first and then his shoulder; he sits

up with support and later without support; and eventually he can stand by holding on to a stationary object and then he begins to walk with support. When he reaches the age of 14-15 he can usually walk unaided.

ii) Study of infancy have also demonstrated that the gross muscles are used before the smaller muscles, the young baby will stretch his arms towards his mother, while the little hand will remain in a fixed position until control of use of hands and fingers become possible.

Growth differences are observable following birth and they have also developed in sequence in utero. The principle of differentiation in living

organisms, proceed from simple to complex, from general to specific and from homogeneous to heterogeneous.

3.4.1 *Infancy*

In infancy the development is in the direction of complexity and variety. The baby responds as a whole to feeding, to noise or to whatever stimulus enters his early awareness. Gradually the tissues, the organs and the interacting systems make possible a wide range of responses to many of the stimuli.

It is also common knowledge that the new born does not grow at a uniform rate all the time. The various parts and systems grow, or mature at various rates at different times. Spurts in growth may be followed by periods of relative quiescence which are again replaced by obvious signs of continued physiological development. The interesting part of infant growth and development pattern is that no one can exactly predict when the changes will take place. Although general statements as given below are made.

Motor *Developmental Sequence*

Age

02-04 months -"" Head and back can be raised with support. 04-06 months -Can sit with support

08-10 months -Can sit without support 10-12 months -Can stand with support 12-14 months -Can walk with support 14-16 months -Can walk alone

You will note here that a range of 2 months is given for variations.

The third principle/of development and its effect on behaviour is Functional subordina- tion. As various parts of systems interrelate and function for the well-being of the infant, some fetal functions are subordinated or lost, just as in later growth, activities that are absorbing may change to organized pattern of response. The child with a crayon may be delighted with the marks he can make on paper, on the walls and in the books, eventually this activity becomes writing and with continued maturation, it is not the activity but the information or ideas recorded that involve the attention of the writer.

Progressive development of the whole child -physical, mental, social and spiritual proceed at different rates and are interrelated.

Mental, social and emotional development: Having discussed the physical growth of development of infants, let us have a look at the mental, emotional and social changes which take place during this time. Not only is food basic for favourable development,

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lIt a personal relationship with the mother is necessary for a happy baby. As co-ordina- on of the muscles of the eyes develops, baby begins to focus on the mother's face as 1e talks and smiles. He learns to smile and coo when life is pleasant, he also comrnuni- ites his needs, as he

becomes aware of them, and protests when his demands are ignored. Ie learns to repeat behaviours, which achieve fulfilment of his wants. The interrelation f growth and interaction of individual with the environment, physical and social, have luch influence in the adjustment that evolve into patterns of behaviour as the personality eve lops.

is obvious that how easily a young child can develop anxieties in the many strange ltuations that confront him. Although the nature of personality that develops is deter- lined both by heredity and environment, whereas heredity cannot be changed, the nvironment which is in large part, can be made conducive for the healthy growth and evelopment of the child. Demonstrations of love and affection given freely, contact lith gentle flrIn hands, calm surroundings and a minimum of loud unexpected noises nd sudden movements contribute to feelings of security as well as pleasure in the social ontacts the infant experiences, the universal urge for love and affection as it is gratified nd feelings of pleasure, experienced by the infant will enable him to make responses 1at give pleasure to those who love him.

)n the other hand, when he is frustrated and his needs are not met, his aggressive ehaviour reflects vigorous opposition to the situation, and insistence on correction. A laby who feels accepted and loved by parents will feel worth and lovable and will levelop positive self concept. By consistently satisfying baby's needs, parents can help he child to develop a sense of trust and will feel secure with people they know, but they Ire afraid of strangers. In addition to affection, baby needs stimulation. Even during first lear of life, babies prefer novel things; infants enjoy mobiles and are fascinated with lew surroundings. They explore and manipulate objects. Touching, smelling and listen- ng are important to them. Their security is hightened when they start crawling. Explor- ltion of surroundings keep them stimulated. They often talk to themselves while playing t>ut words are usually mispronounced. For example, 'blanket' may be called 'blah-blah.' We are all familiar with this type of talk. Should the baby be corrected? Many psycho- logists feel it should not be as it will frustrate the child. But the parents should not repeat the baby's mispronunciation. Rather, they should pronounce the word correctly. The children should not be confused and frightened by difficult language, expressions and authoritative tone which they misunderstand.

Dreams create another area of confusion. Young children are often frightened of darkness and have difficulty in explaining their fears. Keeping the night lamp on, pulling the curtains, etc. allays their fear.

The most important accomplishment is the development of independence. From the newborn who are totally dependent on the parents, babies gradually learn to understand, talk, walk, feed themselves, become toilet trained and partially dress themselves. They should be encouraged to do things on their own. As the babies become more accom- plished, they also try to assert their independence. Two-

year olds are pleased with their skills and want to be recognized as individuals. "No" is a popular word with them. They have their own ideas and are unwilling to accept adult rules as readily as they do in the first year of their life.

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This period is also called "pre-school" period. However, today most of the children attend some sort of nursery school or day care schools, where the focus is more on play activivities.

Playing is an important occupation in early childhood. Through play activities the child can let out his (1) aggressive feelings, (2) feelings of frustration against siblings can be released by throwing stuffed dolls and toys. (3) It provides for other emotional ex- pressions such as showing affection. (4) It provides opportunity to interact with other children, share their toys and learn to talk to each other. Social play is considered to be the most important activity of pre-school child. If other children are not available for interaction, the preschool child's development can suffer. (5) Play activities help the children to develop more co-ordination, running, skipping, block building, see-saw and slide activities develop gross motor co-ordination, whereas sketching, colouring, cutting, pasting, doing jigsaw puzzles aid in the development of finer motor skills. The child must be exposed to these activities both at home and school. With the advent of television, many children spend their time watching television. Unfortunately, these children are not learning important social skills and developing crucial motor skill. Parents must monitor what the child is watching.

Eating habits: Young children's eating habits can be a source of frustration for most parents. Because the growth rate slows down during early childhood, there is less interest in the food and child first picks on the food. Meal time is often a continuation of play activities, sometimes appetite is diminished. Parents have the difficult task of being certain that nutritious food is eaten.

Disciplining a child: Most children base their morality and sense of right and wrong on rewards and punishments. Actions that are punished are presumed to be bad. Rewarded actions are considered good. Young children base their values on the attitude of their parents and other people they care for. The parents should not criticize and scold the child but their actions. For example, if the child has thrown the papers or toys around the room, the parents should not call the child "stupid" or "untidy" but the punishment should be focused on the disarray of the toys allover the room. A parent can add "that the room will look tidy if you put your toys in the bin". This way parents can help their children to develop a better understanding of values along with a positive self-image.

3.4.3 *Later childhood*

This period from the age of six to puberty brings many changes. Although physical growth is initially slow. There is vast intellectual, social and moral expression. But school children still need time to play and improve their health and motor co-ordination. Physical exercise in school age improve academic achievement.

Around age seven, there is major advances in intellectual development. Memory im- proves and becomes more organised. Children solve difficult problems and become aware of their achievements. They compare themselves with their friends and make judgement about their school performance as well as social and athletic skills.

During the elementary school years, children become more aware of their own sex. They tend to select the playmate of same sex and play in groups and by puberty most narrow their friendship to one or two companions.

Moral development proceeds as the children accept the standards and rules of their friends and teachers. The morality is based on whether the rules are kept or broken.

.4.4 *Adolescence*

fassive changes up to the age of 12 and a finally grown child emerges. Now through hysical, social and mental changes, the child must develop into an adult. This transition eriod from childhood to adulthood is} known as "adolescence". Let us briefly discuss lese changes.

) *Physical change:* Towards the end of later childhood, sexual changes or puberty egins. Secondary sexual characteristics develop: enlarged hips and breast development 1 girls and muscular development and voice changes in boys, Both sexes begin to grow ubic hair. Puberty is completed when primary sexual functioning occurs. Girls men- truate and boys develop a larger penis with potential for ejaculation. The age for pubic hanges vary widely. Generally girls attain puberty two years before the boys.

) *Social change:* Adolescence is often viewed as a stormy period, a time of critical hanges that have lasting effects. You must remember that adolescent may not be a period f "turbulence" as thought earlier. You may recall your own adolescence period. You robably remember some of your own worries and fears. You had group of friends you referred. Undoubtedly you worried about, what your friends thought of you. You might ave tried to talk and dress like your best friend. Most adolescents prefer friend of the aIDe race, economic group and opinions. They constantly pressure each other to confirm) the standards. Often teenagers develop social fears, shyness is common and such tasks s speaking before class are dreaded. This is also an age of identity crisis. Although most dolescents prefer to be with their friends, they also need time for themselves. They like) assert independence and fluctuate between dependence on parents and attempt to assert !ldependence. This normally takes the form of arguments and unwillingness to adhere () family rules. Parents lack of understanding of the psychology of the

adolescents can esult in rebellious attitude. The problems of drugs, smoking etc. start due to the lack of)roper handling by the parents.

1.4.5 *Young adulthood*

rhere is no set age when adolescence is completed. Many people in their thirties still ;how some adolescent problems. But usually some adult responsibilities are accepted luring the late teens. The individuals who remain in the school or with their parents longer, mature slower and the adolescence is prolonged. Acceptance of adult responsi- bilities requires important decisions. Amongst the most crucial are choosing a marriage partner and a career. The young adult usually begins with goals and hopes. Early thirties is a time of reassessing and there is strong desire to achieve these goals. In late thirties adult tries to settle down and become more satisfied.

The twenties and thirties is a period of many changes although immaturities are common i!l the early twenties, by the completion of the young adult stage, a mature person is expected to emerge.

A mature person accepts responsibilities and has some personal specific characteristics. Some of the attributes of maturity are :

-Ability to think for oneself, one may seek others opinions but one decides on his/her own and has his *I* her own values.

-Willingness to accept responsibilities for decisions if one recognizes weaknesses, he/she also accepts the blame.

-Control of fear and anger. One does not panic and fly into rage or bursts into tears. -Willingness to work, rather than shirk responsibilities. Prefer to rely on one's own

self than the parents.

-Capacity for sexual love and lasting relationship. One is able to show inner

feelings and accepts the feelings of others as well, in a deep intimate - relationship.

3.4.6 *Mature adulthood*

After settling down in late thirties and enjoying, most people experience a sense of dissatisfaction. Sometimes, during their forties, physical deterioration becomes obvious. The forties if not taken proper care, develops wrinkles, thickening waistlines and gray or thinning hair. However, men and women who have been pleased with their lifestyle and accomplishment tend to experience fewer problems in coping with the changes of

middle

The changes that occur during adulthood has inspired variety of expressions such as

"Middle age", "Mid Career Crisis", "Middle age slump" -referring to recognition of losing youth and accepting the coming of old age.

In addition to facing changes in their own age, the adults also care for aging parents. Some may face the death of one or both the parents. There is often a sense of loneliness during this period. Children are growing up and leaving or planning to leave the house. The husband and wife relate to each other as spouses rather than as parents.

Earlier it was thought that women go into depressions due to impending menopause,

which has been proved incorrect. The depressions during this period are due to many psychological reasons. Sex life improves as there is little fear of pregnancy. Women who work, generally adjust better than women who stayed at home. This shows that social and psychological factors tend to be as important as the physical changes in the women during this period. Depression during middle age is common both in men and women. Men who are used to heavy .physical work are often upset by their diminishing strength. **I**Although there is no decline in their efficiency. Mature adulthood is not necessarily a period of depression. Individuals who have been pleased with their relationships and accomplishments usually enjoy these years and make excellent adjustments. This period brings a strange acceptance of oneself and one's

lifestyle.

3.4.7 *Aging adult*

Recently, there has been increasing interest in gerontology and study of old age. Aging causes some loss of vitality, as a result he spends more time visiting doctors. Retirement probably has the most severe impact on aging adult, particularly if they have not planned for it. In addition to financial planning, aging adults should plan to develop their interests and hobbies, volunteer work or even beginning a new career are all possibilities. Sometimes when the retirement is unplanned and sudden, it may result into depressions or suicides, as people loose their sense of meaningful ness in life. Unlike in (he past, when the joint family system was existing, today the aged are landing into the homes for aged, which cannot substitute the happiness of living with the family.

Infact there is a change of attitudes about aging. Age is becoming more irrelevant. There are many old persons who are vigorous and healthy. Age itself is a poor predictor of lifestyle. Fewer old people are willing to adhere to the traditional and formal elderly role. An increasing number of aging people are working, involved in community affairs and

generally enjoying their lives. During this period, the organic defects, chronic illnesses and changes in functional processes are observed. Impairment of sense organs, loss of muscular tone, disappear-

ance of subcutaneous fatty tissue and general dehydration occurs. There are but a few of physical manifestations that may be observed in the family and friends as they advance into six decades of life and beyond.

These physical changes affect the behaviour which requires many psychological adjustments. Nutrition in the aging person requires modi-
: fication of diet, changes in the food habits may be required. Older people like children do not like to be told what is good for them. All these factors contribute to feelings of uneasiness and insecurity in old people. They are fearful of becoming dependent upon children and causing financial hardships.

3.4.8 *Life and then death*

As a nurse, you will have the responsibility to help families to face and accept death. All of us know death is inevitable, yet we may be reluctant to think about it, until we have no choice.

Various cultures have different concepts of death, but in our society it is generally something to be feared. The emotional distress among family and friends' require understanding from the nurse when death occurs. She can comfort the bereaved persons by being able to listen and .by indicating empathy, which is probably better expressed in attitudes than in words.

Assisting the dying patient requires that we meet the physical needs of the person gently, willingly and faithfully, but even more important is our emotional support. The patient may know he is dying, but he may pretend otherwise and prefers that nurse co-operates in this attitude; or he may speak of his own death with resignation, almost welcoming the relief it can bring. Also there are patients who are afraid to die and want to be reassured by the nurse that-recovery is possible. The will to live is marvellous thing and one may never deny that miracles can happen. Nurses deed of manner and love for human being will add to the courage and comfort to the person about to die.

There arc five stages in the reactions of dying patients: i) Denial -Patient insists that it was a mistake. The diagnosis is wrong or
something has been overlooked.

ii) Anger -Patients then ask "Why me ?" and become annoyed with God.
; iii) Depression -There is loss of interest and a sense of hopelessness and despair.
;
t iv) Bargaining -Patie~ts mak.e promise~ i~ exchange f~r longer life. They.
I promIse to gIve up addIctIons or promIse to God that they wIll l. lead better life.
r.
v) Acceptance -During the last stage, patients become void of feelings. They develop an inner peace and finally accept death. Understanding and dignity of death are of prime importance. Patients are encouraged to share their feelings, talk about death and even plan their funerals. This concept has been adopted by hospice movement, which has set up places for dying patients.

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1) What is the growth patten1 of a child from 2-16 months of age?

2) What are the advantages of play activity in early childhood?
a) b) c) 3) What place does reward and punishment have in disciplining a child?
4) Which are the areas of development in later childhood? a) b) c) d) e)
5) Give the meaning of the term "Adolescence".
6) List five attributes of a young adult. a) b) c) I ~) e) 7) List the problems of aging adult.
a) f b) g c) h d) i e) j 8) List the five stages of Psychological reaction when an individual
is close to death-
a) b) c) d) e)

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4.0 Summary

The study of human development 'affords unique opportunities for the students to gain the skills and insights that will allow them to lead fuller, richer and more fruitful lives. [n this unit, you have learnt the development theories, principles of development from infancy to old age and dying. Study of this Unit will help you and encourage you to think logically and creatively about yourself, your relationship with others and the world around you.

5.0 Answers to Exercises

Exercise 1
1) a) Physical
b) Cognitive
c) Psycho-social
2) Refer to sub-sections 3.1.2 and 3.1.3.
Exercise 2
" '
a) growth . b) unfolding; biological potentials c) biological d) learning
e) flexibility; behaviour
Exercise 3
1) Refer Sub-section 3.3.1 2) Refer Sub-section 3.3.1 3) Refer Sub-section 3.3.1
Exercise 4
1) Refer Sub-section 3.4.1
2) Refer Sub-section 3.4.2 9
3) Refer Sub-section 3.4.2 ,~,.. .! c" ",',) ;,' ;
4) Refer Sub-section 3.4.3 "{,r;;mmi.'~ (~~;, 5) Refer Sub-section 3.4.4 " ,'b'o'N'(~)f Q"~ 6) Refer Sub-section 3.4.5 "'91Q('","' vI;. Y ~*j* ~rt~ (;) "'9wc:nA 0.3 7) Refer Sub-section 3.4. 7 -~ --- 8) Refer Sub-section 3.4.8 noij~)fJ bo~jnl **0.1**
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Unit 7: Dynamics of Behaviour: **i**
Motivation, Frustration, Conflict, Stress and Stress Management
Table of contents

1.0 Introduction

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Among the many questions which psychologists have to answer, an important one is "Why do animals and human beings behave as they do ?" It is a question regarding the dynamics of behaviour. The word "dynamics" is mostly usecT in physical science and refers to the energy or force that produces motion in physical bodies. The relevance of this term as applied to motivation may be judged from the fact that our concern here is with what moves the organism to do what it does. Any attempt to answer this question bring us face to face with energizers or driving forces which are within the organism; itself. In this unit you shall learn about meaning, nature, classification, theories and

Jltural influences of motivation. The course of motivation does not always run noothly. Things happen that prevent it from reaching the goals towards which we are riven or pulled and there is blocking of behaviour directed towards a goal resulting in ustration. We shall discuss about meaning, sources and reaction to frustration in section .3. Many a ti.mes a human being feels stressed because of a single obstacle and some mes stress results, not from a single obstacle but from a

conflict between two needed r valued goals, in which choice of either alternative entails conflict with regard to other. ve shall focus our attention on conflict in section 3.4. Every organism faces challenges, onflicts and changes in life styles which leads to too many demands on our time. In ddition, interference with our personal ambitions and frustrating job conditions all ontribute to the modem stress equation. Stress is a pattern of specific and non-specific ~sponses an organism makes to stimulus events that disturb its equilibrium and tax or xceed its ability to cope. We shall explain about the definition, sources, factors lfluencing stress and coping with stress in section 3.5. Finally we shall discuss about ole of nurse in stress management. We shall begin our discussion with motivation.

~.O **Objectives**

~fter going through this unit, you should be able to : define motivation, and list its characteristics, I explain theories of motivation,

I classify motives and describe the influences on motivation, ': .define frustration,

r list the sources and reactions of frustration,

.;

L

~ list different mental mechanisms,

t define conflict, and explain the types of conflicts,

~ define stress and list the types and sources of stress, and r explain the methods of coping with stress.

i ~ Need
Relief
L drive
Instrumental
behaviour

Fig. 1: Motivation cycle representing its five stages -
need, drive, instrumental behaviour, goal and relief -

., ;
,ffl '
.-'--

3.1 Motivation

3.1.1 *Definition and nature of motivation and motivation cycle*

The term "motivation" literally means to move or to energize or to activate. In this sense, anything that is responsible for internal or external activity may be called motivation. But *psychologists* restrict the term only to those activities that are motivated from within an organism. Thus, a moti ve may be thought of as some activator that impels an organism to engage itself in a wide variety of which it is capable.

The important features of motivated behaviour may be given as follows:

An internal state of an organism or human being that impels it to some activity which

has some specific goal and which usually originates in some physiological need of the body or some psychological need.

First, we make distinction among need, drives and motives. All such words refer in some way to forces that incite or energize behaviour and give it a direction. The need always refers to some want or deficit in the body; for instance, if an organism is not given water' for a long time, a water deficit will arise. Drive is a state in an organism. It acts as if it pushes the organism to behave in a certain fashion to satisfy his need. Motive, on the other hand, means a state within an organism which energizes and directs its behaviour j towards a particular goal. I

Motivation cycle

Most of the motives have a cyclical nature. For example, a hungry organism may feel the need for food, which may drive it to the instrumental activity of seeking food. The eating of food will bring relief for sometime but after sometime again the same process will repeat.

1) Define Motivation and explain its nature?

2) How are 'drives' and 'need' related to motivation? Explain this relation through an example. !

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3.1.2 *Characteristics of motivated behaviour*

i) Energy mobilisation: This process of the mobilisation of energy is chemical as well as physical. The organism tries to attain the object with as much power as is the urge of the motive behind. When the need is excessive the process of metabolism in the body is also increased in the same proportion and the nervous energy also increases in the same ratio.

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ii) Persistence: An organism cannot leave its work without achieving the goal of its motive.

iii) Variability: Motive has a goal, hence it continuously changes with the view or c;; attainment of goal. In fact the motivated person goes on changing his ways till he arrives

at the way successful for the achievement of the aim. In the beginning his behaviour is trial and error, but after he knows the successful way he always follows it.

1) What do you mean by the term "Theory" ? 2) List the functions of "Theory".

3) Enumerate the five major theories of development.

3.4 **Patterns of development**

Their are several principles of development in the growth of the babies which we need to understand for our own use as well as for guiding new parents, who need to observe and understand their children for infancy onwards.

i) In structure and function, changes proceed from the infants head to his feet. Head size as compared to extremity is surprisingly large. It is 1/4 of that of the entire

.

iv) Restlessness for the attainment of the goal: The motivated behaviour is goal-di- rected. The restlessness observed in such a behaviour persists so long as the goal is not
achieved.

v) Extinction of restlessness after the attainment of the goal: The restlessness of the motivated behaviolU" exhibits itself in following ways of the fulfilment of some internal want or desire, and extinguishes as soon as that want or desire is fulfilled.

3.1.3 *Theories ofmotivation*

i) Homeostasis

Scientists working in the area of psychology towards the early part of this century were fascinated by the concept of Homeostasis. They borrowed this concept from physiology and tried to explain psychological process along these lines. Claude Bernard, a physio- logist coined the word "Homeostasis" to explain the stability of the inner environment or physiological equilibrium. The function of all the biological drives is to regulate and maintain the physiological equilibrium of the individual. When the in~ernal state is disturbed, that condition propels the organism to seek activity. Such activity continues until the equilibrium is restored and this state is called Homeostasis. It is these homeos- tatic mechanisms which are mainly responsible for maintaining the acidity, alkalinity, sugar level, temperature, blood pressure, heart rate, numerous other highly complicated body processes within the permissible limits laid down by nature. The working of these physiological processes and homeostatic equilibrium of the body are made possible by our efforts to supply the requirements of the body.

Criticism

Critics argue that many a time man exhibits such a variety of behaviour that it can be explained neither by static or homeostasis. An organism might behave in such a manner that it deliberately upsets its equilibrium and destroys itself. For example striving for adventure, revolting against society often means an increase in tension, discomfort and disruption of the constant state of equilibrium. So we see that homeostasis though a valuable concept, does not give the entire picture of human motivation.

ii) Machine model

We have already noted that motivation is one of the most important factors in learning. In fact, it explains that the organism operates or behaves in the environment because of reinforcement. Skinner's major contribution to motivation in his concept of primary and secondary drives is clearly demonstrated in our daily life. When you teach a child sitting, dancing etc., correct responses are reinforced with food or

reward and incorrect re- sponses are ignored or punished. The occurrence of selected responses can be decreased.

Criticism

Learning theories are inadequate to explain human beings or even animals completely.

Critics consider that reward and punishment are components of behaviour which facilitate

motivation rather than act as motivators. All the learning theorists have been accused of converting human motivation to the interaction of stimulus-response reinforcement patterns which are not motivators-but which facilitate motivation,

iiQMaslow's theory

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actions in that of humanist psychologist. Maslow complains that the earlier theories have restricted themselves to explaining one side of human behaviour, which is basically darker, evil and fragmented elements. Thus, Maslow's was an attempt to portray a total picture of human behaviour. Maslow's theory holds that we all have a need hierarchy as shown in Fig. 3.2 in which our inborn needs are arranged in a sequ~nce of stages from most 'primitive' to most 'human'.

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Transcendence spiritual needs for
cosmic identification

Self-Actualization
needs to fulfil potential) have meaningful goals Aesthetic needs for order, beauty Cognitive needs for knowledge, understanding, novelty

Esteem needs for confidence. sense of worth and competence. self-esteem and respect of others

Attachment
needs to belong, to affiliate. to love and be loved Safety
needs for security, comfort. tranquility, freedom from fear Biological
". needs for food. water, oxygen. rest,

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Fig. 2: MasloW's Hierarchy of Needs. According to Maslow, needs at the lower levels of the hierarchy dominate an individual's motivation as long as they are unsatisfied. Once these are adequately satisfied, however, the higher needs occupy the individual's attention and effort.

At the bottom of the hierarchy are the basic biological needs such as hunger and thirst. When they are pressing, other words are put on "hold" and are unlikely to influence our actions; but when they are reasonably well satisfied then the needs on the next level- safety need -motivates us. When we are no longer concerned about danger, we become motivated by attachment needs -needs to belong to affiliate with others -to love and be loved. If we are well fed, and feeling a sense of social belonging we

move up to esteem needs. These include the need to like oneself, to see "oneself as competent and effective
and to beheld in esteem by others.
At each level, Maslow argues, the need is inborn, not learned, although the way it is
elicited and expressed is affected by the value learned in one's family and culture. Pathology may occur when needs at any level are frustrated. Frustrated love need, for example, can lead to hostility and perversions of sexuality.
As we move to the top of the hierarchy, we find a person is nourished, safe, loved and loving. Some people go beyond these basic needs in the quest for fullest development of their potentia:ls, or self actualization. A self-actualizing person is self-aware,-self-ac-

cepting, socially responsive, creative, spontaneous, and open to novelty and challenge, among other positive attributes.
Most of us do not make it to the top of the ladder. In most societies, most of the time, physiological needs are pretty well met. So we move up to the safety ends and these preoccupy many of us.
Criticism
The humanistic theory has been criticised for being ove. optimistic about mankind in general. It lacks adequate experimental confirmation. The world is filled with too much violence, evil and destructive behaviour patterns for this goodness model to account for, environmental forces clearly exert strong influences on individual behaviour, even overcoming the best intentions of "innately" good people.
ii) Cognitive Approach They are being used by many psychologists to account for what motivates a variety of personal and social behaviour. It focuses on the concept that significant human motiva- : tion comes not from objective realities, but from our interpretation of them. The reinforcing effect of a reward is lost if we don't believe our action obtained it. What we do now is often controlled by what we think caused our past successes and failures. What we believe is possible for us to do, and what we anticipate the outcome of an action will be, cognitive approaches to motivation focus on higher mental processes like these rather than the arousal of energy drives, other biological mechanisms, or stimulus features -in charge of the acting self.
1) What are the biological basis of motivation? 2) How is learning related to motivation?
;
3) Explain Maslow's theory of Motivation.
,f3.1.4 *ClassifICation of motives*
Woodworth has divided motives into the following three categories:
i) *Organic needs:* Those motives which are aroused by the bodily conditions e.g. hunger,

thirst etc.
ii) *Emergency motives:* Those motives which are aroused when the environmental
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conaitIonS aemana a strong ana qUICK reaCtIon, e.g. the motIve or escape.
iii) Objectives of motives: The object of these motives is impressionistic behaviour with people and the objects in the environment. This class of motives is comprehensive and is created by metabolic processes in the body. The others have different origins. Sex, for instance, is triggered by some special chemicals in the body known as hormones. In all These three motives, certain parts of the brain, playa very important role.
iv) Psychological motives: In civilized countries, food, shelter and protection against physical injury are, in normal times, readily obtained, so that physiological drives are rarely the direct causes of emotional disturbances, Far greater direct significance of happiness, mental health and adjustment are man's psychological drives, which for purposes of distinction, may be termed motives. These psychological needs may be viewed as elaborations of the more basic physiological drives. The following are some of the more widely accepted classifications of psychological motives.
a) *Security:* The desire for security is essentially an anticipation of future organic needs. Economic and political security assures shelter, comfort and nutrition at some distant date. Submission and deference may also be included in this category. Since a willingness to yield and to follow a strong leader often furthers one's own security.
b) *Mastery:* The striving for some degree of achievement, recognition, superiority or popularity has been interpreted both as a further guarantee of security and as an expression of the rage reaction in that the attainment of mastery implies the overcoming and removal of obstacles. This motive in most classifications is under the "will power"
c) *Self-esteem:* The preservation of self-respect, defence of pride and honour are of great importance in deciding choice of action.
v) Social motives: The social motives which we are going to discuss here are given various names by psychologists. Some simply call them acquired or learned motives. Other call them complex or secondary motives. What sort of social motives will activate an individual is dependent upon an individual's own social experience, which is unique to himself and depends upon his ways of perceiving things. His personality make up, his learning capacity, intelligence and his own share of experiences of life. This is the reason why psychologists, have always found it difficult to arrive at a commonly agreed list of social motives, as they have done in the case of biological motives.
a) *Response from others:* Most individuals, are not content with mere membership in a social group. They want to be respected as well as

accepted. They crave recognition and favourable responses from their associates. There is a great need for intimate friendship that finds expression in the joy of sharing experiences and: confidences. The desire to give and receive attention and affection appears in j accentuated form within the family group. Parents strive, sometimes at - great personal sacrifice to win the affection of their children and children are most unhappy when denied the love of their parents.

vi) Psychosexual motive: The need for affectionate responses from others, when intensified and coloured by the sex drive finds special expression in the exchange of love between sweethearts and marital partners. Narrow personal identity and outlook is

expanded to include two lives, to the enrichment and mutual advantages of each.

vii) Habits as motives: Our habits frequently become our masters. Activities that initially L serve as means to an e~d eventua;ily be~ome objects of interest in their .own ri,ght, f~r I example after many active years m service most men would rather continue With thelf
work at half pay than retire on pensions.

a) *New experience:* Most individuals desire adventure, and excitement. This wish for new experience act as a stimulus to,new discovery, research and invention, hut sometimes this experience may lead to delinquency, drug addiction and other
forms in undesirable behaviour.

b) *Aggressiveness:* Whether man is by nature aggressive and destructive is debat- able. Psycho-analysts maintain that each individual as part of his biological inheritance, possesses destructive death urge as well as constructive life urges.

" In most individuals there exists a favourable balance between life and death f urges so that kindness triumphs over cruelty.

c) *Achievement:* Climbing Mount Everest "because it is there", sending rockets into space, all these actions probably have mixed underlying motives. But in all of them there is a desire to excel to overcome obstacle, to exercise power, to strive to do something difficult as well as quickly as possible.

Among the social motives that have been investigated most extensively by cognitive psychologists, the achievement motive tops the list, probably because what is most striking about man is his achievements. Achievement motivation arises out of tendency to define one's goal according to some standards of excellence in product or performance attained. David Meclalland and John Atkinson pointed out that the effective functioning of society, schools, organisations and individuals depends to a great extent on what one
wants,

Relative importance of rrwtives

There is no way of accurately measuring the relative intensity or strength of human motives. Behaviour is generally determined by a mixture of many motives. In attending college, for example, the student is responding to several motives. A college education enhances self-esteem, makes for greater economic security, favours mastery, satisfied the thirst for new experience. However, it is possible to get some idea of the relative strength of motives by the decisions of the person concerned, e.g. a person may decide to forgo further education in favour of economic independence, ~hile another person may decide to suffer economic hardships/part-timejobs in extra time, in order to continue further search for knowledge/skills.

3.1.5 *Cultural Influences on motivation*

Which motive predominates in a given individual will depend largely upon his social environment and personal experiences. Various cultures encourage the development of s6me motives and discourage the expression of others. For example, some cultures encourage co-operation while other cultures may ~ncourage the feelings of competition even at an early age. In one culture non-violence as a mean of protest may be valued, while other culture may consider it cowardice.

Sentiments and ideals

Emotional attitudes toward certain objects or classes of object known as "sentiments"

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and "ideals" are also important sources of human motivation. These are largely built up through experience and training. There naturally are wide individual differences with respect to the nature and intensity of these more complex sources of motivation, even within the same culture.

3.2 Frustration

3.2.1 *Meaning offrustration* J The term frustration refers to the blocking of behaviour directed towards a goal. If j motives are frustrated or blQcked, emotional feelings and behaviour often result. People 1 who cannot achieve their important goals, feel depressed, fearful, anxious, guilty or j angry. Often they are simply unable to drive ordinary pleasure for living, For example over restrictive parents would be a source of frustration to an adolescent girl who wanted to give or attend a party, while a lack of water would he a source of frustration to man lost in the desert. A wide range of obstacles both environmental and internal can lead to frustrations.

3.2.2 *Sources of frustration*

i) Environmental frustration By making it difficult or impossible for a person to attain a goal, environmental obstacles can frustrate the satisfaction of motives. An obstacle may be something physical, such as locked door or lack of money, or it may be people -parents, teachers or

police officer. The restriction placed on behaviour by the rules of society constitute another important source of frustration. In satisfying our manifold desires, our actions must be in conform,: ity with the accepted moral and social code of our culture.

ii) Personal Frustration

Unattainable goals can be important source of frustration. These are largely learned goals that cannot-be achieved because they are beyond a person's abilities. Individuals who aspire to scholastic, professional or social achievements beyond their abilities court psychological disaster.

iii) Competition Most individuals have somewhat similar desires, but they are not equally equipped to satisfy them. In the competition struggle for health, desirable marital partners and other values that make for happiness they encounter fewer difficulties than the less well endowed, achieve. It is a fact that, all things being equal, gpme individuals perform very well in a given task or assignment and some do not care at all about the performance or even the task.

iv) Affiliation We find on the one hand human beings trying to hurt and destroy others physically and psychologically and on the other we find.them trying desperately seeking others, wanting to get close and be close to other human beings and become members of groups. This behaviour of seeking other human beings and wanting to be close to them both physically and psychologically is called affiliation. The affiliation motive is aroused when individ- uals feel threatened or helpless and also when they are happy.

3.2.3 *Reaction to frustration Frustration creates uncomfortable emotional tensions that operate as insistent drives influencing the individual to change in various tension-reducing activities. The variety of reactions to frustration is practically unlimited. The important reactions are as follows:*

i) Direct approach

rhe two principles of direct method of overcoming obstacles are through increased effort md variation in mode of attack.

f these approaches fail, the third direct course of action consists in changing the goal to >ne that is more attainable.

H) Feelings of Inferiority

When increased effort and variation in attack fail and substitute goals are unavailable md unacceptable, individuals often react by developing feelings of helplessness and nadequacy. This emotionally distressing state of mind, popularly known as the infe- iority complex is especially prevalent among individuals who attribute their failure to lttain life objectives to personal inadequacies or defects. An inferiority complex is a form)f self criticism usually involving fear of social disapproval. The common reactions are ~xtreme sensitiveness to criticism,

suspiciousness, envy, expensive response to flattery, :ear of competition, self consciousness, i'roneness to worry and excessive self analysis.

Hi) Aggressive Behaviour

[nstead of adjusting passively to obs~acles by developing defeatist attitudes, many Individuals react aggressively toward the source of frustration. Aggressive behaviour is most common when frustration is caused by some external obstacle, but failure due to personal faults and errors may also evoke this reaction. The target of attack is usually)ome other person or object and the intensity of the attack varies with the amount of frustration.

1) What is Frustration? State an example to explain it. 2) Explain briefly the sources of frustration.

3) How does one react in a frustrating situation?

, 3.2.4 *Mental mechani\'m*

Good solutions to frustrations and inferiority attitudes are not always available. When faced with such a situation, the individual tries to defend himself through certain mechanisms -called *mental mechanisms.* Some common mechanisms are *fantasy, compensation projection, rationalisation, sublimation.* In Fantasy, the individual es- capes the world of reality by imagining *I* fantasyin~ pleasurable events *I* day dreaming, while in compensation he tries to achieve satisfaction by substituting another goal e.g.

excelling in athletics when failure in education. In sublimation, this substitute goal is the one highly valued in the society. Sometimes the individual may think up a "good" reason in place of real reason to justify his actions, e.g. "sour grapes" phenomenon. If I can not reach the grapes, it is good because I do not really want it, they are sour. Another defence is attributing undesirable / unacceptable desires and impulses to others ("I do not want to hurt him, it is he who is trying to harm me").

3.2.5 *Mental symptoms The symptoms of the neurotic and the psychotic usually serve the same general purposes as those served by the mental mechanism of normal people; that is, they adjust the mentally ill to their inner conflict and to the demands of the external environment, throug 1 loss of memory, psychogenic ailments, neurotic escape from distressing life situation.*

3.3 Conflict

In many instances stress results not from a single obstacle but from a conflict between two needs or valued goals, in which the choice of either alternative entails frustration with regard to the other.

3.3.1 *Types of conflicts*

Conflict with which everyone has to cope may be classified as follows:

a) *Approach -approach conflict:* As the name implies, approach-approach con-

flict is conflict between two opposite goals -goals that are equally attractive at the same time, for instance a person is hungry and sleepy at the same time. Such conflicts are usually resolved either by satisfying first one goal and then the other. For example eating and then going to bed. Compared with other conflict situation, approach-approach conflicts are usually easy to resolve and generate little emotional upheaval.

b) *Avoidance-avoidance conflict:* A second type of conflict avoidance-avoidance involves two negative goals and is a fairly common experience. A student must use the next few days studying for an examination or face the possibility of failure. In situation a person can escape from an avoidance-avoidance situation. But the consequences of running always are even worse than his other alterna- tives and so does not do it.

c) *Approach -avoidance conflict:* The third type of conflict, approach-avoidance often the most difficult to resolve because in this type of conflict a person is both attracted and repelled by the same goal object. A person may want to marry for sexual, social and security reason while at the same time fearing the responsi- bility of married life and loss of personal freedom. These situations have negative and positive features both. Since many approach-avoidance conflicts involve multiple alternatives -rather than just one either or choice the term multiple approach avoidance is sometimes used. Thus an individual may be in conflict not only about whether to get married but also about which of several girls would make the best wife. Internal obstacles are generaily harder to deal with than are external areas

People may find ways of getting around external or environmental obstacles but the; difficulty escaping from the obstacles within themselves. The emotional reactions generated by, approach-avoidance ~onflicts in which internal obstacles playa part are -

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the root of many behavioural problems.

It can be seen that this classification of conflicts is somewhat arbitrary and that various combinations among the different types are perhaps the rule rather than the exception

1) How does conflict occur ? ~

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3.3.2 *Some common conflicts Each individual has his own typical share of conflicts forced upon him by his environ- ment or by his own making. Every society or culture also seems to have its own secular conflicts, because it holds some types of behaviour among its members as more desirable than otl:lers. Some of these conflicts which almost every*

individual in the modem industrial so~ieties has to undergo, are outlined below.

i) *Independence vs. dependence:* Because of the long period of dependency in human beings the time at which an individual attempts to stand on his own legs and lead an independent life, is u most crucial period in his life because he-is caught in the conflicts of dependency V s. independence. The old habit of dependency is deep-rooted but social and persona! pressures impel him in the

.direction of self-sufficiency or independence, which is often a difficult thing to achieve because an independent person is burdened with responsibilities that are difficult to tackle.

ii) *Achievement vs. fear of failure:* Modem society may be rightly termed as achieving societies, because nothing is valued by them so much as achievement. Every parent and individual expects to achieve some excellence in some or the other sphere of life. The competition is keen and long is often rough. Every individual is thus caught in a life long conflict, he wants to achieve a place for himself but at the same time is haunted by a fear of failure. Some people even have a fear of success also -of responsibilities increased manifold after achiev- ing success in a safe, protected environment e.g. job after completing happy college life. Hence they may want to continue in the same environment for the maximum possible period.

iii) *Cooperation vs. competition:* In many advanced industrial societies great deal of emphasis is placed on competition and success. The spirit of competition is fostered from early days in life and encouraged by offer: of praise, rewards and reinforcement in school and college curricular and extra curricular activities. Cooperation is almost opposite of competition, which means that one may forgo ahead, but also seek help and understanding from other persons. He is expected to compete hard with others; at the same time he is encouraged to cultivate the team spirit.

iv) *Hostility* vs. *approval:* We have already seen that frustration often leads to aggression which if not expressed may lead to a feeling of hostility, often a conflict arises between the desire to express hostility and the fear of punishment that may follow such an expression. In several situations, we are unable to give vent to our anger because of the disapproval it is likely to call forth from others. Thus, the feeling of hostility always goes with the fear of losing the approval of other people.

3.4 Stress

3.4.1 *Meaning and definition of stress The term stress has many definitions. It has been called a "disease of civilization". The rapid pace of our lives, overcrowded living conditions, too many demands on our time, interferences with our personal ambitions and frustrating job conditions all contribute to our modern stress equation. Stress is an*

unavoidable part of life, because every organism faces challenges from its environment and from its own needs. These challenges are "problems" it must solve if it is to survive and thrive.

Stress is a pattern of specific and non-specific responses an organism makes to stimulus events that disturb its equilibrium and tax or exceed its ability to cope. The stimulus events, include a large variety of external and internal conditions that collectively are called stressors. The physical, environmental and social causes of the stress state are termed as stressors. A stressor isa stimulus event that places a demand on an organism for some kind of adaptive response. The stress response is composed of a diverse combination of reactions on several levels, including physiological, behavioural, emo- tional and cognitive changes.

No doubt you have observed that some people experience one stressful event after another and do not breakdown while others are seriously upset by even low level stress. This happens because the effect of most stressors is not a direct one, but is determined partly by other conditions. These conditions are known as moderator variables. Moder- ator variables change the effect of a stressor.

Stress cycles

Stress has a number of immediate effects and if the stressors are maintained long-term, behavioural, physiological, emotional and cognitive (thinking) effects occur.

The stress of life has four basic variations, although in their most characteristic nonspe- cific manifestations they all depend on the same central phenomenon. Our goal should be to strike a balance between the equally destructive forces of hypo and hyper-stress, to find as much eustress as possible and to minimise distress. We cannot run away timidly from every unpleasant experience; in order to achieve our purposes, we must often put up with unhappiness, at least for a time. Here faint heartedness would in the long run prove even more distressing by depriving us of the job of ultimate success. Unnecessary or too much distress -all distress in general, that does not hold promise of eustress -is what is to be avoided.

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Table 1:

Distress

here stress Change stressors Disease stressors Phobic stressors

mes from Chemical stressors Emotional stressors Physical stressors Commuting stressors Enviromental stressors Social stressors Decision stressors Fami\y stressors Work stressors

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STRESS OVERLOADING

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[lmediate Behavioural (e.g. one Physiological e.g. Emotional (e.g. Cognitive e.g. Fects eating and excessive muscles tension, heightened anxiety. increased
alcohol consumption.) elevated blood depression and anger.) distractibility pressures and rapid decreased
heart beat. concentration.
Jng-term effects Behavioural disorders Medical disorders e.g. Emotional disorders, Cognitive disorders
(e.g. obesity and headache hypertension chronic anxiety and e.g. memory problems alcoholism) and heart disease. depression phobias, obsessive thoughts and
personally changes & sleep disorder. mental illness. verall costs Decreased productivity Decreased enjoyment Decreased intimacy

4.2 *Types of stress and its effect on the body*

aDS Selye (1956,1976) framed the body's response to stressors, the general adaptation mdrome. The general adaptation syndrome consists of three stages.

::: ,:i' 1;]~ OVERSTRESS
tifr ; (Hyperstress)
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I1 ..-
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Good Stress I ~-- --I Bad Stress
(eustress) I Stress 1- (distress)
I I
Understress
(Hypostress)

Fig. 3:The four basic variations of stress

1) *The alarm reaction:* The alarm reaction is essentially the emergency response of the body. In this stage, prompt responses of the body, many of them mediated by the sympathetic nervous system prepares to cope with stressor -here and now.

2) *Stage of resistance:* If the stressor continues to be present, the stage ofresistance begins, wherein the body resists the effects of the continuous stressor. During this stage certain hormonal responses of the body are an important line of defence in resisting the effects of stressors. Especially important among these hormonal responses is increased activity in what is known as the *adreriocorticotropic*

(ACTH) axis, and adrenal cortex (Cortin).

Although there is a greater resistance to the original stressor during this second stress, there is a reduced resistance to other stressors. Even a weak stressor may now produce a strong response if it comes when the body's resources arc engaged in resisting an earlier, more potent stressor. Some people find they get irritated more easily when getting over a cold,

for example, general resistance to disease is reduced in this stage of resistance even though adaptation to the specific noxious agent is improved.

State of exhaustion: If exposure to the injurious stressor continues too long, a point is reached where an organism can no longer maintain its resistance. The interior pituitary and adrenal cortex arc unable to continue secreting their hormones at the increased rate. This means that the organism can no longer adapt to the chronic stress. Many of the symptoms of the alarm reaction now begin to reappear. If the stressor continues destruction of bodily tissues, and even death, may occur.

The concept of the GAS has been exceptionally valuable in understanding many emotionally produced disorders -particularly the psychosomatic disorders.

Psychosomatic disorders (mindlbody): The effect of physiological changes resulting from an emotional state were not realised for a long time. A new branch of medicine known as psychosomatic medicine has now developed, which deals with the diagnosis and treatment xfbodily ailments resulting from sustained emotional arousal. Psychoso- matic disorders are often called *disease of adaptation.*

In the normal course, an individual soon copes with the acceleration of various physio- logical processes brought about by extremely intense emotions. This as we saw, is made possible by the regulatory activity of our parasympathetic system. Often, emotion provoking situation is so frequent in an individual's life that the body is kept in a sort of a continuously alert state. If such a physiological mobilisation continues for a sufficiently long time without any let-up, tissue damage may occur. The term psychosomatic disorders is used to refer to both the symptoms -rapid pulse rate, high blood pressure - and actual tissue damage that may ensue as a result. It is estimated that about half the patients, who visit doctors, have symptoms caused largely by emotional disturbances. Unless, expressed overtly, pent-up emotions may lead to physiolt'gical changes in the stomach, over a period may result in peptic ulcer, high blood pressure, colitis, migrain, back pain, obesity, asthma, and many other physiological disorders.

In recent years psychologists have developed a special questionnaire to find out whether the symptoms of a person have a psychomatic origin or only a physical or organic origin. The questionnaire is known as *schedule of recent experiences.* The SRC research also shows that an individual is able to sustain stress up to a point beyond which it begins to effect the individual adversely.

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1) What do you understand by the term "Stress" ?

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2) What are the basic variations of stress?

3) In how many stages does the body respond to a stressor. What are they?

3.4.3 *Sources of stress*

Stress is a recurring problem. Naturally occurring changes are an unavoidable part of the lives of all of us. We get new jobs, leave home, start college, succeed, fail, begin romance, get married, break up, etc. In addition to the big life changes, there are also "life's little hassles" - frustrating traffic jams, snoring roommates and missed appointments, etc.

Major life stressors

Sudden changes in our life situation are at the core of stressful life events for many of us. Even events that we welcome may require major changes in our routine and adaptation to new requirements. This too can be stressful. Many studies have found that life changes intensity, as measured by Life Change Units (LCU) scale, rises significantly before the onset of an illness. Life stress has been related to sudden cardiac death, tuberculosis, multiple sclerosis, diabetes, complications of pregnancy and birth, chronic illness and many minor physical problems. It is believed that life stress increases a person's overall susceptibility to illness, but illness is itself a major stressor.

i) *Life's little hassles:* Much stress arises from non-events; that is from chronic or repeated conditions of living -boredom, continuing tension on a family rela- tionship, lack of occupational progress, isolation, loneliness, absence of meaning

(and commitment. The hasslers are petty annoyances, irritations,and'frustrations, i. each of these emotional experiences contributing to overall feeling of stress.

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r. Life is filled with low-level frustrations. Your pencil breaks during an examin- ation, you get stuck in traffic or you forget to set alarm. To what extent do these

I' minor irritations pile up to become stressors that play havoc with your health ? The answer is to a bigger extent than you might imagine.

ii) *Conflict:* Of all life's troubles, conflict is probably the most common. Conflict occurs when a person is faced with two or more incompatible demands, oppor- tunities, needs or goals.

iii) *Unemployment:* Joblessness is a major source of stress. Research findings show that death rates go up and psychiatric symptoms get worse not just dunng periods of unemployment, but also during short, rapid upturns in the economy.

iv) *Divorce and separation:* The deterioration or ending of an intimate relationship is one of the more potent of stressors and one of the more frequent reasons why

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people seek psychotherapy. i

v) *Catastrophic events:* Research on the physical and psychological effects of catastrophic events has been prolific. The reaction to disasters are period of stock during which people cannot fully comprehend what was happened. The next phase is automatic action, people try to respond to the disaster and may behave adaptively, but with little awareness of their action and poor later memory of the
experience.

Knowledge of these typical reaction stages provides a model that is helpful in predicting people's reactions, enabling rescue workers to anticipate and help victims deal with the problems that arise. Natural and man-made catastrophes
include floods, earthquakes, violent storm, fires, plane crashes etc.

Chronic societal sources of stress

For today's children the threat of nuclear war is a major source of stress. Even the pollution of our. environment creates psychological stress as well as physical threats.

Many modem day stressors will require solutions not at the individual level, but through cooperation within communities and even across nation. The clearest example .of international concern for combating shared environmental stressors
is the acid rain. vi} *Pressures:* Pressures occur when we feel forced to speed up, intensify, or shift the direction of our behaviour or to meet a higher standard of performance. In part, pressures can arise from within us, from very personal goals and ideals. I Because of our concern about our intelligence, appearance, popularity or talents, we may push ourselves to reach even higher standard of excellence. This kind of pressure can be constructive, on the other hand, internal pressures can be destructive if our aims are impossible to achieve. We are taught to see failure as shameful. Hence the pressure to win can be intense. vii) *Frustration:* It also contributes to stress, frustration occur when a person is prevented from reaching a goal because something or someone is in the way. Horns (1990) identified five basic sources of frustration (i) Delays one has to accept, (ii) Lack of resources; tiii) Losses such as end of love affair, friendship etc.; (iv) Failure, guilt, (v) Discrimination - Being denied opportunities or recognition because of sex, age, religion, skin colour etc. regardless to one's personal qualifications.

viii) *Individual differences in the reactivity of the autonomic nervous system:* A person who characteristically responds to stress with increased secretions of stomach acid may eventually develop ulcers; one who reacts with a rise in blood pressure may develop high blood pressure. Vulnerability of a particular body organ or system as the result of heredity or prior illness. An individual born with a "weak" stomach may develop ulcers or other forms of gastrointestinal disor- ders; one who has had respiratory-infections in the past may develop asthma.

Early learning process in a child who is allowed to stay home from school every time he or she has an upset stomach may be learning the visceral responses that lead to chronic indigestion; one who receives attention whenever allergies cause. Wheezing may pro- gress to full-blown asthma attacks.
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3.4.4 *Factors influencing the severity of stress*
[The effects of stress -the intensity of the anxiety it arouses and the degree to which it !disrupts the individual's functioning -depend on a number of factors. These include some characteristics of the stress itself, the situation in which stress OCcurs, the individ-
ual's appraisal and evaluation of the stressful situation, and his or her resources for Coping
with it.
i) *Predictability:* Being able to predict the occurrence of a stressful event, even if we can't control it, usually reduces its severity. Laboratory experiments show that both human beings and animals prefer predictable aversive events to unpredictable ones.
ii) *Control Over duration:* Having control over the duration of a stressful event also reduces its severity. Research findings show that control over the duration of an aversive event appears to lessen anxiety even if the control is never exercised
or the belief is erroneous.
"iii) *Cognitive evaluation:* The same stressful event can be perceived quite differ- ently by two people, depending on what the situation means to them. The objective facts of the situation are less important than how the individual appraises them. Our evaluation of the degree of threat depends to a large extent on, our confidence in our ability to cope with the situation.
iv) *Feelings of competency:* A person's confidence in his or her ability to handle a stressful situation is a major factor in determining the severity of the stress. Speaking before a large audience is a traumatic event for most people. But individuals experienced in public speaking have confidence in their ability and
feel only minimal anxiety.
v) *Social supports:* The emotional support and concern of other people can make
stress more bearable. Divorce, the death ofJoved one, or serious illness is usually more devastating if one is alone, stress is easier to tolerate when the cause of the
t stress is shared with others.
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Cognitive evaluation what the event means to you ." FeeJingsOf PredictabIlIty of 1Competency Stressful event

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How much stress do yOU feel? Predictability of /" """ Availability of Stressful event social support
Fig. 3:The four basic variations of stress
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3.4.5 *How people cope with stress*
Whatever its source, stress calls for adjustment. Psychologists distinguish between two general types of adjustment: *Direct coping* and *Defensive coping.*
i) Direct coping It refers to any action that we take to change an uncomfortable situation. When our needs or desires are frustrated, we attempt to remove the obstacles-between ourselves and our goal, or we give up. Similarly, when we are threatened, we try to eliminate the source of the threat, either by attacking it or by escaping from it.
a) *Confrontation:* Confrontation means facing a stressful situation forthrightly, acknowledging to oneself that there is a problem for which a solution must be found, attacking the problem headon, and pushing resolutely toward one's goal. It may require trying to change either oneself or the situation.
Confrontation may also include expressions of anger. Anger can be effective, especially if we have really been unfairly treated and if we express our anger with restraint instead of exploding in rage.
b) *Compromise:* Compromise is one of the most common and effective way of coping directly with conflict or frustration. We often recognize that we cannot have everything we want and that we cannot expect others to do juAt what we would like them to do. In such cases, we may decide to settle for less than we originally wanted.
c) *Withdrawal:* In some circumstances, the most effective way of coping with stress is to withdraw from the situation. We often equate withdrawal with simply refusing to face problems. But when we realize that ouf adversary is more powerful than we are, or that there is no way we can effectively change ourselves, alter the situation, or reach a compromise. If the situation is in fact hopeless resignation may be the most effective way of coping. Perhaps the greatest danger is that withdrawal may turn into avoidance of all similar situations in future.
ii) Defensive coping Thus far, we have been speaking of coping with stress that arises from recognizable source. But there are times when we either cannot identify or cannot deal directly with the source of our stress. In all these cases, you are under stress and there is little or nothing you can do to cope with the stress directly. In such situations, people are likely to defensive mechanisms as a way of coping. Defence mechanisms are ways of deceiving oneself about the causes of stressful situation so that pressure frustration, conflict and anxiety are reduced.
Whether or not defence mechanisms operate unconsciously,they do provide a means of coping with stress that might otherwise be unbearable. The major defence mechanisms are as follows:

a) *Denial:* One common defence mechanism is denial; or the refusal to acknow- ledge a painful or threatening reality. Students who deny their need to study and instead spend more nights at the movies, may well fail their exams.

b) *Repression:* Perhaps the most common mechanism for blocking out painful feelings and memories is repression. Repression, a form of forgetting, means excluding painful thoughts from consciousness. The most extreme form of this defence is amnesia, the total inability to recall the past.

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Many psychologists believe that repression isa sign of struggle against impulse that conflict with conscious values. Denial and repression are most basic defence mechanisms. In denial we block out situation. with which we can't cope.. In repression, we. block out unacceptable impulses or thoughts. These mechanisms form the bases for other defensive ways of coping:

c) *Projection:* If a problem cannot be denied or repressed completely, it may be possible to distort its nature so that it can be more easily handled. One example of this is projection, the attribution of one's own repressed motives, ideas or feelings to others, by locating the problem outside themselves. For example, denying that one-is angry by saying that the other one is angry and wants to harm him.

d) *Identification:* I The reverse of projection is identification. Through projection, we rid ourselves of undesirable characteristics that we have repressed by attributing them to someone else. Through identification, we take on the char- acteristics of someone else in order to share in that person's triumphs and to avoid feeling incompetent. The admired person's actions become a substitute for our own. A parent with unfulfilled career may identify with the child's achievements. Sometimes we also identify with the aggressor -as the saying goes -"Join the aggressor if you cannot fight with him."

e) *Reaction formation:* The term reaction formation refers to a behavioural form of denial in which people express with exaggerated intensity ideas and emotions that are the opposite of their own. Reaction formation may also be a way of convincing oneself that one's motives are pure. The man who praises a rival extravagantly may be covering up jealousy about his opponent's success.

t) *Displacement:* Displacement is the redirection of regressed motives and emotions from ..their original objects to substitute objects. Displacement permits regressed motives and feelings to find anew outlet. The man who has always wanted to be a father and learn that he cannot have children may feel inadequate. As a result, he may become extremely attached to a pet or to a sibling's child. A frustrated officer may take put his aggression on his wife or child or pet dog.

g) *Sublimation:* Sublimation involves transforming repressed motives or feelings into a more socially acceptable form(s). Aggressiveness might

be transformed into competitiveness in business or sports. A strong and persistent desire for attention might be shaped into an interest in anything or politics.

We have seen that there are many different ways of coping defensively with stress. Is defensive coping a sign that a person is immature, unstable, on the edge of a breakdown? The answer is no. The effects of prolonged stress can be so severe, as that in some, defensive coping not only becomes essential to survival but even contributes to our overall ability to adapt and adjust. Even in less extreme situations, people can profitably use defence mechanisms to cope ~ith problems and stress.

Altering bodily reactions during stress /reducing stress reaction

"Stress equals tension," for many people. This often means tight muscles, high blood pressure, constricted blood vessels in the brain and chronic over-secretion of hormones. Many of these tension responses can be controlled by a variety of techniques -some ages old, some quite new.

h) *Relaxation:* Relaxation through meditation has ancient root~ in many parts of

the world. For centuries in Eastern cultures, ways to calm the mind and still the body's tensions have been practised.

The relaxation response in a condition in which muscles tension, cortical activity,

heart rate, and blood pressure all decrease and breathing slows. There is reduced electrical activity in the brain, and input to the central nervous system from the outside environment is lowered.

Four conditions are regarded as necessary to produce the relaxation response: a) Quite environment. b) Closed eyes.

c) A comfortable position.

d) A repetitive rental device.

The first three lower input to the nervous system, while the fourth lowers its internal stimulation. The yoga, in the ancient sense, is a way of life, a philosophy and also an act which aims at attaining a higher state of consciousness which is described as a stage of inner tranquility achieved by practising meditation, physical exercises, certain rules of life and diet. Yogis have performed remarkable feats -reduction in heart rate, Oxygen consumption, blood pressure, body temperature and various other such automatic responses which are under the control of automatic nervous system and as such are thought of as beyond any voluntary control.

Modifying cognitive strategies

A powerful way to handle stress more adaptively is to change our evaluation of stressors and our self defeating cognitions about the way we are dealing with them. We need to find a different way -an alternate

way to think about a given situation, our role in it and the causal attributions we make to explain the undesirable outcome.

Reappraising stressors

Learning to think differently about certain stressors to re-label them, or to imagine them in a less threatening (perhaps even funny) context are forms of cognitive reappraisal that can reduce stress.

Restructuring cognition

Another way of managing stress better is intentionally changing what we are telling ourselves about stress and our handling of it. Such messages can lead to both cognitive restructuring and more effective coping.

Supportiveness of the environment

We all cope with stress as individuals but for a lifetime of effective coping and for the continued success of our species. It is necessary for us to band together with our families, friends and neighbours. Isolation can lead to inadequate coping and in itself the cause of much stress.

Social support networks

Social support refers to the resources provided by other person(s). These resources can include material and socio-emotional support (love, caring, esteem, sympathy, sense of group belonging) and informational aid (advice, personal feedback, information). There is now various evidences showing that the presence of social support makes people less vulnerable to stress. When people have other people they can turn to, they are better able

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to handle job stressors, unemployment, marital disruption, serious illness and other catastrophes, as well as their everyday problems of living.

1) While responding to stress on which variables do the physiological response of an individual depend on?

2) ~iCh a~ the f.~rs which influence stress. and make it mo~ severe? .I

3) How do people cope with stress?

3.4.6 *Role afa nurse in stress management*

Being a nurse you must have seen that most of the patients show such emotional reaction as fear, worries, anxieties, anger, annoyance, infeasibility and resentment. When patients are sick for a longer time they need to be replaced by feeling of hope, courage and willing cooperation. This is not difficult for a nurse who is sincere, forthright and dependable person. Friendly cooperative relationships, listening sympathetically to what the patient has to say and so giving him an 'outlet' will surely lesson the intensity of anger, annoyance, resentment and depression of the patient.

A thorough understanding of human stress, age and gender differences and impact of emotions on health candefiriitely help to predict and control patients' behaviour and nurse can examine her own conflicts), emotions objectivity and face realistically and also help the others in the same manner.

~ ~ ,we!l developed sense of humour will help a nurse to forget annoyances and I Irritation.

~.O **Summary**

We have seen that motivation literally means some activator that impels an organism to engage itself in variety of activities that it is capable of. It is cyclical in nature. There are few characteristics of motivated behaviour, like persistence, variability etc. There are different views regarding the basis of motivation. While some explained motivation on biological basis through the concept of homeostasis there are some who believe that learning cannot take place in the absence of motivation. However the most popular theory is Maslow's humanistic theory which portrays total human

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learning cannot take place in the absence of motivation. However the most popular theory is Maslow's humanistic theory which portrays total human behaviour through need hierarchy. Other than this there is the cognitive approach to motivation also. Motives can be classified as Biological, Psychological, Social and Psycho-sexual. They also depend on the social environment which encourages the development of some motives and discourage expression of others.

The course of motivation is not always smooth. When things prevent us from reaching our goals frustration occurs. There are many sources to frustration like environmental, personal, competition. An individual may react to frustration through aggressive beha- viour, feelings of inferiority or by directly approaching the source or may resort to mental mechanism like compensation, projection etc. to escape frustration.

In many situations frustration may result as a consequence of conflict between two needs or valued goals. It may be of Approach-Approach, A voidance-Avoidance or Approach -A voidance type. Some of the common conflicts which occur may be Independence vs. Dependence, Achievement vs. Fear of failure, Hostility vs. Approval etc.

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practical. '

I Answers to Exercises

~rcise 1

1) Motivation literally means to move, energize or to activate. It is an internal state of an organism that impels it to some activity which has

some specific goal and which originates from some physiological or psychological need.
2) The need refers to some want or deficit in the body while drive is a state in the organism which pushes the organism to behave in a certain fashion to satisfy his need. Motive on the other hand means a state within an organism which energizes and directs behaviour towards a particular goal. For example a hungry organism may have the need for food which may drive it to the instrumental activity of seeking food.
ercise 2 1) The biological basis of motivation can be explained through the
concept of homeostasis. The function of all biological drives is to regulate and maintain the physiological equilibrium of the individ- ual. When the internal state is disturbed, that condition propels the organism to seek activity. Such activity continues till the equili-
1 brium is restored and this state is called homeostasis. ~ 2) The relationship between learning and motivation can be ex- l plained on the basis of the machine model. Psychologists believe that
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2) The relationship between learning and motivation can be ex-plained on the basis *of* the machine model. Psychologists believe that a motivated behaviour is likely to exhibit varied activity with a view to satisfying its need, put QnJy that activity which leads to the satisfaction *of* the need is likely to be learned,
3) Maslow's theory is a humanistic theory which portrays a total picture *of* human behaviour. Maslow's theory holds that we all have a need hierarchy in " which our inborn needs are arranged in a sequence *of* stages from most 'Primitive5 to most 'human5 '
Exercise 3
1) The term frustration refers to the blocking *of* behaviour directed towards a good. If motives ate frustrated or blocked, it will result in emotional feeling and behaviour. For example, overly restrictive parents would be a source *of*.. frustration to an adolescent girl who wants to go for a party.
2) Some *of* the sources *of* frustration are Environmental frustration where environmental obstacles can frustrate the satisfaction *of* motives, PersonaL frustration which occurs when goals cannot be achieved because they are beyond a person's abilities. Other than this competition and affiliation are other sources *of* frustration.
3) There are different ways in which a person may react to a frustrating situation. He may use the direct approach to the source *of* frustration or individuals may react by developing feelings *of* inferiority or they may react, aggressively towards the source *of* frustration.
Exercise 4

1) Conflict may occur between two need or valued goals in which the choice *of* either alternative entails frustration with regard to the other.
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2) Conflict is *of* three types. They are: Approach-Approach Conflict - which occurs between two opposite goals that are equally attractive at the same time. Avoidance-Avoidance Conflict 11 involves conflict between two negative' goals. ...
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Exercise 5 ..
1) Stress can be defined as a pattern *of* specific and non-specific responses that-an organism makes to stimulus eventsth,at disturb its equilibrium and tax or exceed its ability to cope. It has been aptly called the 'disease of civilization!
2) The stress *of* life has four basic variations although in their most characteristic nonspecific manifestations they depend on the same central phenomenon. These basic variations are: Hyper stress, Hypo stress, Out stress and distress.
3) The body responds to*a stressor in three stages. They ~re: 1) The a}arm reaction which is essentially the emergency response of the body. '
2) The stage *of* resistance which is seen if the stressor continues to be present if so the body resists the effects *of* the continuous stressor.
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4) The stage of exhaustion which is seen if tJIe exposure to the injurious stressor continues too'long. A point is reached where an organism can no longer maintain resistance.
Exercise 6
1) The three important variables on which the individual's physiological' responses to stress depend during complex interactions are -Individual differences, Vulnerability and Early learning process.
l 2) The factors which influence the severity of stress include some characteristics of stress itself, the situation in which stress occurs, the individual's appraisal and evaluation of the stressful situation and his resources for coping with it.
3) Since stress calls for adjustment individuals usually resort to Direct Coping *or* Defensive Coping techniques. Direct coping includes any action that one takes to change an uncomfortable situation while defensive coping includes certain strategies like withdrawal, Projection, Repression etc. Other coping techniques include -Relaxation, Bio-feed back, transcendental meditation, Social support etc.
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UNIT 8: Psychological Process

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1.0 Introduction

In this Unit, we will see how our perceptual processes find meaning, to the raw data, our senses provide us from the outside world. For example, light waves bouncing off objects i on to our retina create visual images that need to be interpreted, so that we can read a ' road sign or judge the distance of a pedestrian. First we will discuss sensation -that is
the stimulation of the senses -and refer to several sense organ such as sight, smell, I hearing, balance, taste, touch and pain then we will examine how we organize base sensation in order to create a perception of meaningful patterns. We will look at how we perceive patterns, distance and movement and how we are able to identify an object despite changing or even contradictory information. And finally we will look at how characteristics of the observer influence perception. The process of sensing, attending, and interpreting what it means or creating meaningful patterns out of jumbled sensory

impressions is known as perception.

Attention and perception are considered to be twin psychological processes independent of each other yet closely related while functioning. Attention is considered as a process which bridges the gap between sensation and perception.

You will also learn, nature, definition and characteristics and types of emotions, and the various theories of emotions.

2.0 Objectives

After going through this Unit, you should be able to: .enumerate the nature of sensory process,

.list the characteristics and types of sensation.

.understand attention and determinants of attention,

.define Receptio,n and understand laws and abnormalities of perception, and .describe the types, characteristics of emotion.

3.0 Main contents 3.1 Sensation

3.1.1 *Meaning and definition In away, sensations are purely the result of physical stimuli operating on our nervous system.*

The sequence of events that produce a sensation seem quite simple. Some form of energy either from an external source or from within the body stimulates a receptor cell in one of the sense organs, such as the eye or the ear. A receptor cell is specialised to respond to one particular form of energy -light waves for instance, or air pressure. The energy must be sufficiently intense or the receptor cell will not react to it. But given sufficient energy, the receptor responds by sending out a specific electro chemical signal. The signal varies with the characteristics of the stimulus.

Thus the coded signal that brain receives from a flashing red light is very different from the stimulus signaling a soft yellow haze. And both of these signals differ from the code for a loud, piercing noise.

3.1.2 *Characteristics and types*

In spite of qualitative differences mentioned above, sensation in general share certain common characteristics:

a) *Intensity:* Within each modality sensations vary in intensity from low to high in a continuous manner. Thus we experience mild pain or severe pain. faint light or bright light and so on.

b) *Threshold (Absolute threshold):* For any sensation to bf aroused the stimulus, (light, sound, touch etc.) must have a minimum intensity. Stimuli of very low value is not responded to.

c) *Differential threshold or differential limen:* When we are listening to a sound,

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we do not respond to every small change in the sound. Similarly if weight of

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t f 100 grams is placed on your palm and a further one gram is added we do not

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necessarily required to produce a change in the sensory experience is known as the differential threshold.

d) *Adaptation:* Suppose a person enters a dark room and the eye gets adapted to
the dark conditions. This adaptation is a unique characteristic of sensation..
e) *After image or after sensation:* Suppose you look up and stare at the bright af- ternoon sun for a few moments and then look at other objects around you. You will still be seeing a yellow shining ball. This sensory experience continues even after the cessation of the stimulus.
f) *Extensity:* Sensation also vary in size or extensity.
g) *Duration:* Sensation also possess the property of duration. Our sense experi- ences last for different lengths of time. Sensation like vision and sound arise gradually and also disappear gradually while there are other sensation which are sudden both in their appearance and disappearance.
The above characteristics are, thus, genera! characteristics of all sensory experience. These characteristics have their own advantage. Animals vary in their relative dependence on the different sense. Dogs rely heavily on the sense of smell, bats on hearing, but for human vision is probably the most important sense and therefore it has received the most attention from psychologists.
To begin to understand vision we need to look first at the parts of the visual system, beginning with the structure of the eyes.
~i;~g;]
List some of the characteristics of sensation.
" *Types of sensation*
For a long time it was believed that there were only five types of sensation: vision or seeing, audition or hearing, olfaction or smell, gustatory or taste and cutaneous or skin' sensation (cold, heat, pain etc.). Today, the consensus is that there are eight basic sensation involving eight different sense organs and resulting in eight different types of sensory experiences.
Name of the Sense Organ Types of Sensory Sensation Concerned Experience
1) Vision The human eye Light, colour, shape, form, etc. 2) Audition The ear -the basillary membrane Sounds of different types
3) Taste The tongue -the taste buds Sweet, sour, bitter, spicy, etc j4) Olfaction The nose -receptors in the nasal Smells resnous, fragrance,
passage pungent, etc. j 5) Cutaneous The skin receptor, the skin Heat, cold, pain and pressure I
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-Name of the Sense Organ! ;". Types of Sensory --
Sensation Concerned Experience
6) Kinesthetic The muscles receptor in the Senses of pull, push, strain, muscles etc.

7) Organic Receptors and the muscles Bodily sensation like , of the internal organs hunger, nausea etc. 8) Static or posturs sense Ear, semicircular canals Sense of equilibrium
dizziness, reclininl{ etc.
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1) Defining sensation, explain how is it different from perception? 2) What are the different types of sensations?
The visual system
The structure of human eye including the cellular patch to the brain is shown in Fig. I, light enters the eye through cornea, the transparent protective coating over the front part of the eye. Then it passes through the pupil -the opening in the centre of the iris, the coloured part of the eye. In very bright light, the muscles in the iris contract to make the pupil smaller and protect the eye from damage. This also helps us to see better light.
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choroid transparent .
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sensitive layer
pupil
re lens
iris
ciliary muscles
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Fig.1: Human eye .,.",
Inside the pupil, the inner lining of the back of the eye ball that is sensitive to light, the lens changes shape in order to focus on objects, that are closer or farther away.
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l"UIIUiUty lUC lCU1; 11; lU\;U1;CU un a ffil00le Olsrance, a! a POlO! nelmer very near nor very far away. On the retina directly behind the lens, is a depressed spot called the fovea. The fovea occupies the centre of the visual field. The image that passes through the lens is in sharpest focus here.
The receptor *ceU*
The retina of each eye contains the receptor cell responsible for vision. These cells are sensitive to only one small part of the spectrum of electromagnetic energy, which includes light along with other energies.

There are two kinds of receptor cells in the retina -rods and cones, named for their characteristics shapes. The retina of each eye contains about 120 million rods and million cones. Rods respond only to varying degrees of light and dark and not to colours. They are chiefly responsible for night vision. Cones on the other hand, respond both to light and dark and to colours. They operate chiefly in day-light. Cones are less sensitive to light than rods.

The retina is a continuation of a very important nerve, the optic nerve. The optive nerve which opens out as the retina at the rear end of human eye carries the visual stimulations from the retina t~,the occipital lobe which is situated at the hind side of the brain.

At the spot where the optic nerve enters the eye and opens out as the retina there are no rods or cones. This part is known as the "blind spot".

Visual sensations as responses are to a large extent, dependent on the characteristics of the stimulus. Nevertheless actual experience in many instances is not determined by stimulus characteristics above but also by the other factors. In fact, some people see when there are no stimuli. Such experiences are "hallucinations" and are commonly found among psychologically abnormal individuals. Similarly the intake of drugs and alcohol have also been found to cause hallucinatory experiences. Such experiences are explained on the basis of activation of the brain. When the concerned part of the brain are activated, sensory ex~riences occur even without actual stimulation.

Similarly under certain conditions like poor illumination, we mistake for instance a rope for a snake. Here however, there is a stimulus but it is seen as different from its real form. Such experiences are called "illusions", Hallucination and illusions illustrate the COffi-

i plexity of sensory experience. *Auditory system*

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Hearing

Like vision, audition (hearing) provides us with reliable spatial information over ex- tended distances. In fact it may be even more importanythan vision to orient us toward distant events. We often hear things before we see ~m.

Hearing also plays an important role'in the underStanding of spoken language. It is the principal sensory modality for human communication,

The physics of sound

Clap your hands together. Whistle, all these actions create sounds. But why? The reason is that they cause objects to vibrate. The vibrating objects then transmit vibrational energy to the surroundings medium, usually air, by pushing their molecules back and forth.

Air pressures changes -changes in the density of air molecules in space travel in waves, these particular waves are called sine waves, sounds produced by a single sine wave are called pure tones.

Taste

There are at least four primary taste qualities sweet, sour, bitter and saline (salty). The

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receptor cells for the sense of' taste line inside the taste buds, mostof whicharefound on the tip, sides and back of the tongue. An adult has about 10,0()() taste buds. The number of taste buds decreases with age, a fact which Partly explains why older people lose interest in food -they simply cannot taste it as well as they used *'iO:A* similar *effect* OCCurs in younger people who are heavy smokers; their taste sensitivity is impaired.

Smell

Unlike many lower animals that use their noses to detect mates, predators and prey, humans do not depend on their sense of smell for survival. *TIle sense of smell in humans is incredibly pOor.*

The odour-sensitive receptors are located deep in the nasal passages, making them very difficult to study.

The axons from nerve cells in the nose carry the messages directly to the cerebral cortex in the most direct, relatively little is known about the sense of smell because of technical difficulties to reach with measuring instruments like electrodes. Willam. Doty and his research team found females were generally better at this task than males. Moreover elderly people are less sensitive to odour sense than are young adults. Finally OUJ sensitivity to odour undergoes a process of adaptation similar to the adaptation of OUI
eyes to darkness.

The vestibular senses

The vestibular senses monitors, equilibrium and awareness of body position and move- ment. The receptors for these are the vestibules in the semi-circular canal in the inner part of the ear. Normally we are not conscious of our balanced position but when Our balance is disturbed we experience some sensations.

The second vestibular sense is that of gravitation and movement forward and backward, up and down.. The saccule does the Same thing for vertical movement.

Some messages from the vestibular system go to the cerebellum which controls many
of the reflexes involved in Coordinated movement others go to areas that send message to the internal body organs and some go to cerebral Cortex for analysis and response. Kinesthetic Sense

This sense as also referred to as the muscles sense. While muscles are connected to motor nerves they are also connected to sensory nerve. Kinesthetic senses perform the very important function of providing cue.s to Our movements, and also help us to maintain
smooth and continuous action.

The skin sense

Another major sensation operates thfough Our skin. There are four categories of sensation which can be grouped under the skin sensation or cutaneous senses. The four sensations are pain, pressure, cold and warmth.

The application of very intense stimulus to any sensory nerve or sense organ produces

a pain sensation. The intensity of the stimulus is important. Pain sensation show qualities of adaptation.

Organic

In the above paragraphs we have discussed the. basic nature and characteri~tic of sensation.

II.~!~~~~~~ :J I

1) How does information get from our eye to our brain.
2) Structure and function of eye.
3) What are other types of sensation and their functions?

3.1.3 *Sensory disorders and defects*

When the receptors are not functioning properly we have sensory disorders or defects. The result is that we have false or incomplete impressions of our environment.

a) *Visual disorders or defects*

These may be due to deficiencies of the accessory structures of the eye such as the cornea and lens or due to inadequacies within the retina. Myopia (near sightedness) hyperopia (far sightedness) astigmatism, far sightedness of old age and cross eyedness or squint belong to the first type. The most common retinal deficiency is the resulting in colour blindness. Some people can neither recognise nor distinguish colours. A person suffering from it is called colour blind.

Commonly colour blindness is of three types:

1) Red-green colour blindness -this type of colour blindness is innate. 2) Blue-yellow colour blindness comparatively rarer.

3) Total colour blindness insensitive to sensation of any colour. *b) Auditory defects*

: 1) Varying degrees of deafness.

I 2) Deafness to certain specific tones.

3) A subjective ringing or roaring in the ears.

l: He~ng can be impaired by injuries, fixation or disengagement of the ossicles, diseased : tonsIls, measles, mumps etc.

c) Cutaneous disorders

Cutaneous disorders are tactual disorders. They include loss of sensation of pressure, ;'1 warmth, cold, tickle, vibration and pain.

d) Olfactory disorders

Olfactory disorders includes sensitivity to odours or absence of recognition of certain odours.

e) Kinaesthetic disorders

Kinaesthetic disorders refers to a failure to control over movements and control them, inability to walk straight etc.

f) Gustatory or taste disorder

Gustatory or taste disorder consists of loss, of taste for certain substances or everything may taste bitter. '

g) Static disorders

Static disorders are caused by the wrong functioning of the sense of head position and movement. The inability to maintain equilibrium and posture nausea, dizziness.

It will be interesting to note that there are many sensory defects or disorders which have no organic causes they are called functional disorders such as hallucinations, hysterical anesthesias.

3.1.4 *Sensory process*

a) The sick person reacts to colours. There are some colours which are smoothing. The patient who need rest and sedative influence lights can be subdued. For stimulations and encouragements warm bright lights can be used.

b) The sick person is very much averse to loud noises. Loud noises increase the patients irritability. The nurse should do her best in reducing noise.

Wards in a hospital often have disagreeable smells or odours. Doors and windows can be kept open. The nurse should do something so as to control these odours to some extent. To help patient relish their food and have correct taste, food should be fresh and clean. Nurse must have highly developed kinaesthetic sense. In coordinated or jerky movements of the nurse will result in discomforts to the patients.

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1) Name a few visual and auditory defects. 2) Areas of sensitiveness of the patients.

3.2 **Attention**

3.2.1 *Meaning and definition Man lives in an environment. The stimuli from the environment are always affecting him. But these stimuli do not affect him equally. It is a common place observation that some stimuli affect us more than others. This shows that man selects out of environmental stimuli. This tendency of selection shows that there is a motivational processes in him*

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to sort out different stimuli and identify them for further processing.

While a professor is delivering a lecture in the class. There are several other sounds being made in other rooms and the surroundings. The

student who hears the lecture selects professor's voice out of the noise in the surroQndings. Thus in brief attention can be defined as a process which compels the individual to select some particular s~imulus according to his interest and attitude out of the multiplicity of stimuli present in the environment.

Attention does not mean simple awareness or consciousness of the objects, person or idea. Ata certain time we may be conscious of many things in our environment but we may be attending to only one at an instant. Thus shows that attention is a selective mental activity.

What we selectively attend to, depends upon a number of external and internal factors.

II» Exercise 511 ' ; ';1j-'ftaj **II»** Exercise 511 ~ ;:.J

Define explicitly the term "Attention"? 3.2.2 *Determinants*

External detenninant

1) *Nature of the stimulus:* Nature of stimulus means its type i.e. visual tactaal stimulus. It has been found that in comparison with other sensations. Colour and sound attract more attention. Among the pictures of human beings .especially beautiful women attract more attention. All these factors we find 'in advertise- ment.

2) *Intensive of the stimulus:* Intensity of the stimulus is a helpful condition in attention. In comparison with the weak stimulus the intense stimulus attracts more attention. High sound, excessive pressure, acute pain attract more atten- tion.

3) *Size of the stimulus:* In the visual stimuli the size of the stimulus is also determinant of attention. As a general rule bigger size attracts or a small advertisement on a very big background attract attention. Thus the attraction of an object does not depend upon its size alone but on its background.

4) *Location of the stimulus:* It has been found by experiments that advertisement given on the front page or on the upper half of any page attract more attention.

5} *Contrast of the stimulus:* The presence of a woman among men and that of a man among women definitely attracts more attention.

6) *Change of stimulus:* Attention cannot be concentrated for a long time on some particular object. Hence, the change of the stimulus also affects attention. The advertisers change their advertisements from time to time.

, 7) *'Isolation of the stimulus:* A man sitting alone in some comer of the part, hotel ., attracts more attention than others.

I 8) *Duration of the stimulus:* As a general rule the stimulus having more duration

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attracts more attention. But some times the smallest flashing of a movements attracts more attention then the bigger stimuli.

9) *Repetition of the stimulus:* Along with duration repetition of the stimulus is also an important determinant of attention.
10) *Moving stimulus:* In comparison with the static the moving stimuli attract more attention.
Internal detenninants of attenti<;>n
Attention is allo determined by subjective or personal factors. These conditions are related with motives.
1) *Interest:* Innate and acquired interests draw individuals attention to particular object.
2) *Basic drives:* Basic drives and impulses of the individual are also important in drawing his attention. We all know it by experience that when hungry we may attend to even a distasteful food but while our belly is full we may not attend to even th.e most tasty one.
/3) *Mental set:* Mental set means the tendency on a bent of the whole mind. A man will attend to those objects towards which his mind is set. In the days of examination student will be more particular for books etc.
4) *Aim:* Every individual has some immediate and some ultimate aims, e.g. the immediate aim of a student is to pass, the examination while his ultimate aim may be to get job to earn,
5) *Meaning:* In comparison with meaningless things meaningful things and talks attract more attention.
6) *Habit:* Habit is also an important determinant of attention. Thus an individual develop habits of attending to necessary and desirable things and on the other hand they develop habits of not attending to unnecessary and undesirable things.
7) *Di\'position and temperament:* Our innate disposition like religious or spiritual temperament. will attend to religious matter. William James has printed out that
l our innate disposition and mental development determine as to which out of the l crowd of sensations should attract our attention.
t8) *Past experience:* Past experience affect attention.
9) Emotion: It is common experience that we attend to even the smallest fault or a person to whom we hate him and may ignore it, if we love him.
~ 10) *Social Motives:* News about bravery attracts more, the individual attend to things concerning their duties for social motives.
Thus we see attention is a complex process influenced by objective and subjective factors.
1) List the external factors or determinants of attention.

3.2.3 *Phenomena*
Fluctuating attention
Suppose you are listening to a lecture on psychology your awareness of the talk is more intense at certain moments and less at others. This property of fluctuation is integral to the basic process of attention and

occurs even when there is no other sensory stimulus which is competing for your attention, your attention varies from moment to moment.

Shifting of attention

The intensity of attention to a certain stimulus is also affected by the presence of other stimuli competing for your attention. For example, when a biologist sits at a laboratory table dissecting an animal his attention may be focused on the animal but at the same time he may be marginally aware of the odour of chemicals, voices of other people working in the laboratory. Shifting of attention is necessary for perception, it prevents negative adaptation.

Span of attention

Th~re are limit~tions t~ the n~mber of objects or stim.uli than can be attended to ~n one j penod of attention. This maXimum amount of matenal that can be attended to in one period of attention is referred to as "span of attention". This phenomenon can be demonstrated by the number of figures or letters an individual can notice in one flash of i attention. If you are able to note five digits or five letters in a single act of attention your

span of attention is five. When meaningful words are presented you may be capable of .. attending to a word containing more than eight or ten letters in a single act of attention. This is because the mind rapidly supplies certain factors which are not actually noticed.

3.2.4 *Types*

Our attention can be: (a) Involuntary, (b) Voluntary, (c) Habitual 1) *Involuntary:* We attend to an object or a stimulus against our 'will' because of its striking qualities. We give involuntary attention to loud sounds, bright lights, strong generating odours etc. We attend to these stimuli naturally, easily or

I spontaneously without any effort of will. 2) *Voluntary attention:* Sometimes we have to deliberately direct our attention to a stimulus or a situation. We have to make conscious effort to do so. This is voluntary. It is not given whole heartedly or spontaneously. Ordinarily if we give voluntary attention to task over a long period of time we are inclined to be

bored.

3) *Habitual attention:* Certain situation neither demand any conscious effort nor are so striking to attract involuntary attention. We attend to them on the other hand with feelings of interest and curiosity. We attend to them because of our attitudes or habits. The attention that a nurse gives to her patients or 10 books on nursing arts or anatomy in preference to others. It is this type of attention which every nurse should try to develop and this can be done by developing a few outstanding interests.

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1) What do you understand by fluctuation of attention?

' 2) Explain span of attention of a person.
3) What are the different types of attention?
3.3 Perception
3.3.1 *Meaning and definition As we noted in the introduction to this Unit, our senses provide us with raw data about the external world. However, without interpretation this raw information remains what William James (1890) called "a booming, buzzing, confusion" the eye records patterns if light and dark, but it does not 'see' a pedestrian crossing the street. Experiencing various meaningful patterns in the jumble of sensory information is what we mean by 'perception what was meaningless, sensory information takes shape'. For example even when we are listening to the teacher we are conscious of his voice, his movement, his appearance, etc. but at the same lime we respond to him as a*
single person.
3.3.2 *Perceptual organization*
Early in this century, a group of German Psychologists called Gestalt psychologist set out to discover the principles through which we integrate sensory information. The word 'Gestalt' has no exact English equivalent but essentially it means "Whole, form or 'Pattern"'. The Gestalt psychologists believed not only that the brain creates a coherent perceptual experience that is more than simply the sum of available sensory information but also that it does so in regular and predictable ways.
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The basic principle behind perceptual organisation is known as figure - ground organi- sation. Gestalt psychologists claim that even in the simplest form of perception the figure and ground factor operates. For example when you are reading these sentences the black letters are perceived against the white background.
Grouping of stimuli in perceptual organisation
Major principles of perceptual organisation outlines by Gestalt psychologists are closure and program.
Closure
Gestalt psychologists claimed that when we receive sensations that form an incomplete or unfinished visual image on sound we tend to overlook the incompleteness and perceive the image or sound as the complete or finished unit.
The partial outlines off the figure will be filled out and your friend might say that it is a square, though it is not, in fact, one. But even if it is seen as an incomplete square it shows that your friend first saw a square and later registered its incompleteness. This illustrate that the principle of closure was in operation.

Pragnanz

The term Indicate fullness or completeness. Gestalt psychologists are of the view that the process of perception is dynamic and goes on changing until we reach a stage of perceiving with maximum meaning and completeness.

Proximity

When_objects are close to each other, the tendency is to perceive them together rather than separately. Even if the individual item does not have any connections with each other. They will be grouped under a single pattern or perceived as a meaningful picture.

Similarity

Similar elements tend to be perceived as belonging together. Stimuli that have the same size, shape and colour tend to be perceived as parts of the same pattern.

Continuity

Anything which extends itself into space in the same shape, size and colour without a break is perceived as a whole figure.

Inclusiveness

The pattern which includes all the elements present in a given figure will be perceived more readily than the other figure.

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1) What do you understand by Perception? '

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2) What are the major principles of perceptual organisation?

3.3.3 *Perceptual constancies*

Surprisingly we often continue to have the same perceptual experience even as the sensory data change. Perceptual constancy refers to this tendency to perceive objects as relatively stable and unchanging despite changing sensory information. Without this ability, we would find the world very confusing. Once we have formed a stable perception of an object, we can recognise it from almost any position at almost any distance, under almost any illumination. For example a white house is perceived as a white house by day or by night and from any angle. We see it as the same house. The sensory information may change as illumination and perspective change, but the object is perceived as constant.

Memory and experience play important part in perceptual constancy.

Size constancy

Also depends partly on experience -Information about the relative size of objects is stored in memory and partly on distance cues. Familiar objects also tend to be seen as having a constant shape, even though the retinal images that they cast change as they are viewed from different angles. Two other constancies are brightness constancy and colour constancy. The former principle means that although the amount of light available to our eyes varies greatly, the perceived brightness of familiar

objects hardly joint at all. We perceive a sheet of white paper as white whether we see it in candlelight or under a bright bulb.
Similarly we tend to perce~ve familiar objects as keeping their colours, regardle~s of information that reaches the eye. If you own a red automobile, you will see it as red whether it is on a brightly lit street or in a dark garage, where the small amount of light may send your eye a message that the colour is closer to brown or black than red.
Throughout our discussion of these various principles, a common theme has been that our perceptual experiences often go far beyond the sensory information with which we are provided. In tact, our perceptual experience rarely if ever correspond exactly to the information that we receive through our senses.
Observer characteristics
Our perceptual experiences depend greatly on past experience and learning. Several other factors can also affect perception such as our particular motivation and values, expecta- tions. Cognitive style and factors related to growing up in a particular culture. In this section, we will see how these types of variables influence the perceptual organization of sensory information.
Motivation
Our desires and needs may strongly influence our perception. People in need are more

likely to perceive something that they think will satisfy that need. For example several interesting experiments have tested the influence of hunger on perception. Sanford (1937) found that of people were deprived of food for sometimes and were them shown vague or ambiguous pictures, they were apt to perceive the picture as being related to food.
Expectations
Preconceptions about what we are supposed to perceive can also influence perception. For example in well-known children's game a piece of cardboard with a red stop sign is flashed in front of you.
What did the sign say? Nearly every one will say that the sign read "STOP". In fact, however, the sign is misprinted 'STOP'. Because we are accustomed to seeing stop signs reading "STOP". We tend to perceive the familiar symbol rather than the misprint. This phenomenon of perceptual familiarization of perceptual generalisation reflects a strong tendency to see what we expect to see even when the result does not accurately reflect external reality.
Cognitive style
As we mature, we develop a cognitive style -our own general method of dealing with the environment -and this also affects how we see the world.

Some psychologists distinguish between two general approaches that people use in perceiving the world (within et al. 1962). The first is the field-dependent approach. A person taking this approach perceives the environment as a whole and does not clearly differentiate the shape, colour, size or other qualities of individual items. If field-depend- ent people are asked to draw a human figure, they usually do not draw it so that it stands out clearly again the background, people who are field-dependent on the other hand, tend to perceive the elements of environment we separate and distinct from one another and to draw each element as standing out from the background.

Another way of defining cognitive styles into distinguish between revelers' and 'sharpeners' -those who level out the distinction between objects and those who magnify them. In order to investigate the difference between these two styles. Klein (1981) showed people sets of squares of varying sizes and asked them to estimate the size of each of the squares. One group, the "levelers" failed to perceive any differences in their sizes. The "sharpeners" were aware of the differences in the size of the squares and made their size estimates accordingly.

Cultural background

Cultural background can also influence people's perception. The language that people speak can affect they way in which they perceive their surroundings, and cultural differences in people's experiences can also influence how people use perceptual cues.

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List some of the various factors which affect perception.

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Development of perception

Perception of distance and depth. We constantly have to judge the distance between ourselves and other objects. If we reach out to pickup a pencil, we automatically judge how far to extend our anns. We also constantly judge the depth of objects -how much total space they occupy. Some of these cues depend on visual messages that one eye alone can transmit; these are called monocular cues. Others requires the use of both eyes and these are called binocular cues. Having two eyes allow us to make more accurate judgements about distance and depth, particularly when objects are relatively near. But monocular cues by themselves are often sufficient to allow us to judge distance and depth quite accurately.

Perception of movement

The perception of movement is complicated process involving both visual messages from the retina and messages from the muscles around the eyes as they follow the object. At times, our perceptual processes play tricks on us and we think we perceive movement when the objects that we are looking at are, in fact, stationary. We must distinguish therefore between real and apparent movement.

Real movement refers to the physical displacement of an object from one position to another. When we perceive, a car moving along a street, for example, we see the street and buildings and the side-wall as a stationary background and the car as a moving object.

It is possible, under certain conditions to see movement in objects that are actually standing still, one fonn of ' 'apparent movement" in the autokinetic illusion -example to illustrate this phenomenon is an experience that you must often felt while sitting in a stationary train, if another train moves by, you feel that your own train is moving.

Development of perception

As we know that the infant's perceptual world is different from the adult's. Perception develops gradually as the individual grows and develops. Thus qualitative and quantitative changes on perception take place in the course of an individual's development.

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What is 'perception of movement'?

3.3.4 *Errors ofperception*

So far we have seen that perceptual processes enable an individual to perceive things around him accurately and facilities this smooth functioning. However, some errors creep into this process under certain circumstances leading to wrong or impaired perception.

musions

A mistaken perception or distortion in perception is called an illusion. Generally

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perception involves the integration of sensory experiences in the light of past experience and present psychological and organismic conditions. When the interpretation of a particular stimulus goes wrong, it give) rise to a wrong perception. For example a rope in the dark is perceived as a snake or a dry leaf moving the ground along the ground in the dark is perceived as a moving insect.

Some illusions are occur commonly in the perception of geometrical figures e.g. Arrow
heads and Feather heads.

An illusion is a misinterpretation of the correct meaning of a perception. It is not dream
because you are awake and it is not imagination because the perceived object is present. An illusion is a wrong or false perception.

Hallucination

Hallucination is similar to illusion. Some people see a ghost in the dark. Hallucinations are sensory perception in the absence of any corresponding external sensory stimuli.

Like illusion, hallucination sometimes depends on mental state like fear ,anxiety, culture etc. There are the following distinction between hallucination and illusion.

1) In illusion, there is a distinct external stimuli while in the case of hallucination the * external stimulus is often absent.

2) While illusion often happens to very ordinary people, hallucination befall the lot
of mentally affected, tired or intoxicated people.

3) In illusion the stimulation is usually external will the stimulations in hallucina- tions are in the person himself, which makes the latter a kind of subjective perception.

4) The perception of the some situation is same to every person in the case of illusion, while different people have different type of hallucinations.

Types of hallucination: Depending upon the particular sensory modality, per- sons have different types of hallucinations e..g. Visual, Auditory, Kinesthetic, Olfactory etc.

Inaccurate perception

i Sometime our perception are inaccurate. The following may be the reason:

a) Our sense-organs may be functioning defectively. Myopia or deafness or other sensory defects can be the reason.

b) Our receptors may not be stimulated adequately because the stimuli were not strong enough to stimulate them or the stimuli were rather vague and indefinite. c) We may not perceive correctly because we do not known what to perceive. In order that student nurse should perceive, correctly in the ward for proper nursing
care she needs to be guided by her instruCtor.

d) Our span of apprehension and attention is limited. If we try to apprehend more
things than we can at a time, we are liable to have inaccurate perception.

e) Sometimes objects or figures or details are perceived with difficulty because they resemble their surroundings. The figure merges in the ground. For example
a white patch is difficult to detect on a white wall.

£) We are liable to perceive things wrongly if we are not in a good health. Sick! people's perception, at times, are not correct for this reason. Our sense organ!.. cannot function adequately and correctly as a result of illness.

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, 1) Name a few errors ofperception.i" :
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, .., ., " ., / '. 2) State a few reasons for inaccurate perception.
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3) DifferentIate between illusion and a hallucination.
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3.4 Common sensory abnormalities and perceptual disorders

Anaesthesia, hypersthesia, paraesthesia are examples of sensory abnonnalities. Anaes- thesia implies complete inability to respond to sensory stimuli. It means a10ss *or* absence of sensitivity. It may be caused by defective sense-organs, effects of drugs, or aiso by some emotional or functional factors. We sometimes do not notice a pen or a bunch of keys lying before us and make a frantic search for it. Weare either emotionally disturbed or preoccupied with some of the thoughts.

Hypersthesia means excessive response to stimuli. Sick people often show thisiritheii: behaviour. They react violently to noises or bright lights. When we are fatigued, we become hypersensitive to lights, to sounds or to the weight of clothing and to odours.

Paraesthesia are grossly false sensations. A person may have sensations of offensive smells or bitter tastes in the mouth when there is no reason for them. Paraesthesias are often the outcome of poor health or poor physiological balance.

There are two main disorders of perception, illusions and hallucinations. False percep- tions are called illusions. When we perceive something and mis~e it for something that is not really there, it is a case of an illusion. We take a rope for a snake in the dark, a toy apple on the mental piece for a real apple. You hear a sound and you think somebody is calling your name. An anxious mother whose baby is upstairs may interpret the squeaking of a do or hinge as the wailing of her infant. One may close one's eyes and let some other person tickle the nose. He will feel as if there was a fly on the nose. Most of our illusions ate visual and auditory but others are also possible. Illusions are caused by inadequacies of our sense organs, distance of the object from the sense-organ which has to perceive

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Illusions are caused by inadequacies of our sense organs, distance of the object from the sense-organ which has to perceive it, misleading stimuli in the environment, our preconceived notions and expectancy.

Hallucinations are imaginary perceptions. They are an extreme form of inaccurate observations in which one sees or hears something that is not seen or heard by others around him. An alcoholic may see 'pink elephants', a paranoiac may hear 'voices', a hebephrenic schizophrenic may experience foul odours in the absence of any sensory stimulation. A baby whose mother died recently may hear her call him at night when' everyone has retired. Ordinarily, hallucinations appear most frequently in the life of
mentally disordered persons.

3.5 Improving the accuracy of observation

In the beginning of this unit we said that accurate observation is of paramount importance to a nurse or to a doctor. It is a habit that can be cultivated. In order to observe correctly we must guard against personal bias or prejudice. We must not be in a haste because our sense-organs cannot function effectively if we do things too hastily. Hasty observations may result in incomplete knowledge and wrong conclusions. Interest in the situation to be observed, proper motivation and alert attention to it after we have become familiar with it are other helpful factors. When observing, we have to guard against the misleading phenomena or other competing stimuli in the environment. We must remember that our sense organs have certain inadequacies. For this reason, we must observe things intensively rather than casually.

Attention and perception are both selective: hence, we should deckle upon the most important stimuli in the environment and concentrate our attention to these, one at a time. We should not expect ourselves to be able to attend to and perceive with accuracy everything in our environment. We should try to avoid distractions, and that can be done by developing intense interest in the activities to which we want to attend. Another important device is to practise motor and sensory skills necessary for accurate observations in the profession of nursing.

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1) What are the major perceptual disorders?
2) What steps should one take to improve the accuracy of observation? ~

3.6 **Emotion**

3.6.1 *Meaning, definition and nature*

~motion and motivation have the same Latin origin referring to movement or activity. While the motivated person usually moves physically towards Some goal or away from some aversive situation, the emotional person is "moved internally" by Psychologically ~ig~ificant situ~tions.

Nature of'emotion

There *is* a consensus among contemporary psychologists that an emotion is a complex. Pattern of changes including physiological arousal, feelings, cognitive processes, and behaviouralreactions made in resPQnseto a situation perceived by an individual to: be , personally

significant in some way. The Psychological arousal includes renal, hormonal, visceral and muscular changes. The feelings include both a general affective state (good-bad, positive-negative) and a specific feeling tone, such as joy or disgust. The cognitive processes iricludeaperson' s interpretations, memories and expressive (crying, smiling) arid instrumental (screaming for help). So, emotions occupy a place of great importance in human life because they make our life infinitely varied, interesting/thrill-
ing and exciting. Life without emotions will be dull and monotonous as that of a machine or a computer. But this is only one side of the coin. Emotions can be integrating as well as disintegrating. Thus emotions vary in quality, content and intensity. For example; we experience mild joy or anger. At other times emotions can be very intense like when we
j get fUriou~ or beco~e static. S.imilarly, emotio?s also vary in du~ation. Some emotions j. are short-lIved and other emotIons tend to contInue for a longer tIme.

3.7.2 *Characteristics*

Emotional experiences tend to show some characteristics. Some of them are given below:

I) To a considerable extent emotions are accompanied by the activation or an aroused state in the organisms,

2) They are normally accompanied by physiological changes like gestures, mus- cular, movements, changes in facial expressions, changes in physiological reactions like blood pressure, pulse rate, heart beat, respiration etc.

) Whenever an organism is experiencing an emotion, a lot of energy is released. This is true of many emotions. But there are also some emotionJike grief, where the energy and activity level are reduced.

4) In the case of emotional experiences, it is found that other activities"like perception, learning, consciousness, memory etc. are affected. C

5} *Along* with the bodily changes one also finds certain psychological changes9r alterations in the content arid state of consciousness. Very often, there is blurring
r or clOuding of conscio.usness, blocking of memory, a confusiori is perception. l t Thus emotions are ~omplex~xperiences including a variety of bodily reactions
~ and al~opsychologlcat reactIons.

I *Importance of emotion* " "

Emotions, occupy 'a very imPQrtant position in a person's *life* as they motivate many of I job endeavours. Love, affection etc. are riot the *only* emotions by *which* life is made : worthy of living. The same can be said of grief, anger, etc. A person in love makes ; ~sacrifices for the object ~fhisemotion which he would not make in an unemotional ~tate:

The love of their offspring spurs the parents on to great sacrifices.

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Emotions also have stimulating function. For example, a person who is in a happy state
of mind invariably makes others also happy and sees happiness around him. Similarly a person who is angry makes others angry. Thus emotions influence the atmosphere. It is already been said that emotions playa crucial role in creative and artistic activities. Emotions also make one sensitive to the problems of others. Thus, one may see that emotions have a contagious influence.

It has been found that our ability to understand and interpret the emotional states of others is very important in our social life. To a large extent, our culture and social conditions help us to acquire this ability. Facial expressions often tell us about the emotional states of others. This is very helpful in our social adjustment.

Basic *errwtional experience*

As we saw earlier, emotions can be broadly grouped according to the ways in which they affect our behaviour -whether they motivates us to approach or to avoid something. But within these broad groups how many different emotions are there?

One of the most influential attempt to identify and classify emotions was made by Robert Plutchik (1980). He proposed that animal and human beings experience sight basic categories of emotions that motivate. .

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1) Define emotion and explain its nature?

2) What are the characteristics of emotion. Is emotion necessary in one's life?

3.7.3 *The expression*

Almost all of us conceal our emotions to some extent in order to protect our self image or to conform to social conventions. But usually these are some clues to help us determine another person's emotions.

It would be simplest, of course, if we could just ask people what they are feeling. Sometimes we do, with varying results. If your room-mate finishes washing the dishes and says acidly "I hope you are enjoying your moral". Her words are quite clear, but you know very well that she is not saying what she mean. For many reason, we may not be able or willing to report our emotions accurately what they are feeling. Thus, it is sometimes necessary to report to other cues to emotion if we are to understand them fully,

Emotions can be expressed through the medium of voice and through this medium similar

motions can be aroused in others. In expression of emotion the pitch and loudness of ile voice changes -sometimes even language can successfully excite emotions.

Tarious kinds of adaptive behaviour, fear, surprise, sadness, disgust, anger, anticipation :>y and acceptance -each of these emotions helps us to adjust to the demands of our nvironment, although in different ways.

a) *Change in heart beat:* Generally, the heart beats faster or slower as the individual is disturbed. For example the face is flustered or blood shot in anger because the alternate contraction and expansion of the blood vessels send an excess of blood to that part of the body.

b) *Blood pressure changes:* As we know that how the heart beat changes and affects the blood pressure; this change, being very prominent, is very noticeable and generally considered to be a good indicator of emotion.

c) *Change in the blood chemistry:* That is not all" because in an emotional state some changes in the chemical conditions of the blood also take place. Another reaction to emotion in the excretion of adrenaline from the Adrenal-Gland, which puts more sugar in the blood and gives the person an energy to rely on and lace the situations.

d) *Changes in th ,.ate of respiration:* It is matter of common experience that when excited, one's breath comes in short, quick gasps, when a person is feeling or depressed he breathes slowly. Commonly, emotion causes changes in the rate of respiration.

c) *Changes in galvanic skin response:* The response of the skin is present in emotion and is a sign of definite change in the emotional state.

t) *Metabolic change:* Another important factor in the internal changes is the effect upon the process of digestion.

g) *Changes in brain waves:* The frequency of brain waves is affected in emotion, h) h) Pupillary Response: There is a general tendency of the pupil of the eyes to dilate in moments of excitement, anger and pain constrict at the time of quIescence.

i) *Muscular tensions and tremors:* Muscular tension is one of the symptoms of emotion. Tremors are usually produced when opposing muscles are contracted simultaneously. They may also occur when a person is experiencing sever conflicting desires.

j) *Exocrine glandular secretions:* Salivation and sweating are the two most common responses, when we come across certain emotional states. The breaking out of cold sweat and drying of the mouth in severe fright are two such familiar responses.

Non-verbal communication ..Actions speak louder than words," the saying goes and people are often more eloquent with their bodies that they realize or intend. We transmit a good deal of information to others through our facial expressions, body postures, vocal intention and physical distance, in fact, our bodies often send emotional messages that sometimes contradict our words.

Facial expressions are most obvious emotional indicators. We saw earlier that facial expressions can cause some emotional experiences. Facial expressions are also good indicators of the emotions that a person is experiencing from whatever source.
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In turn out however, that some emotions are easier to express facially than others. Most people had no trouble expressing love, fear, determination, happiness. Suffering, disgust and contempt were not difficult to express. These feelings were also more difficult to "read".
Body language is another means by which message can be communicated non-verbally when we are relaxed, we tend to stretch back into a chair, when we are tense we tend to sit more stiffly with our feet together.
Women are consistently hr tier than men at understanding nonverbal cues, although sensitivity to nonverbal cues increases with age. Probably because we accumulate more experience in judging vocal tones and observing body movement as we grow older. Closely related to the empathy the arousal of emotion is an observer that is a vicarious responses to the other person's situation. Empathy depends not only on your ability to identify someone else's emotions but also on the capacity to put yourself in his or her position and to have an appropriate emotional response. Just as sensitivity to nonverbal cues increases with age, so does empathy. The cognitive and perceptual abilities required for empathy develop only as a child natures.
In addition to body language, another kind of communications is distance. The normal distance between people differs from culture to culture, but within every culture there seems to be a distance that is generally appropriate for normal conversation.
A word of caution is needed here. Although overt behaviour can be a clue to emotion, it is not always infallible as a clue to person's feelings, laughing and crying, sound like crying can "mean" sorrow, joy, anger.
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List some of the physical changes due to emotions.
Cultural differences: The same emotions are expressed differently. For example, clapping is considered asa sign of happiness in our culture but a sign of sadness in another culture.
The development of emotions
It was found that in addition to genetic and environmental influences, factors such as maturation and growth play an important role in the appearance or non-appearance of particular patterns of behaviour. Every aspect of human behaviour passes through a pattern of development resulting in changes as the individual grows from childhood to adulthood. Further, it was seen that while the basic developmental process is common in a general way for all individuals, at the same time

this pattern in greatly influenced by social, cultural and experimental factors. This statement holds trueforemotions also. The child has been described as "a big, blooming buzzing confusion" as he reacts to a stimulus with the whole body and reactions cannot be differentiated from others with age differentiation occurs.

Certain noticeable differences exist between adult emotions and child emotions. The

child's emotions are very few, generally of an all or nonetype, being very intense, immediate and short lived. A child wants, what he wants, when he wants, as the saying goes. Adult emotions on the other hand, reveal distinct patterns of varying intensities and to a large extent, brought about by social factors. The earlier part of adolescence appears to be much more susceptible to heightened emotionality. If other factors are unfavourable then the consequences can be serious with the passing of adolesceI1ce the individual enters the period of adulthood and under normal conditions this is a period of stability and emotional balance. The old age brings major physiological and bodily changes. All these put together precipitate an emotional crisis. It is also dependent on factors like socio-economic status, personality type, life style, values, etc.

Gender differences and *emotion Experience tells us that males and females differ considerably in how they express emotion and emotions they choose to express. As noted for example, men are often perceived as being less emotional than women. But does it follow that men feel less emotion or is it that men are less likely to express the emotions that they feel?*

Recent researches shed some light on these questions. In one study, when men and women were shown people in distress, the men showed little emotion whereas the women expressed feelings of concern and distress for the other person (EIsenberg & Lennon, 1983). However, psychological measures of emotional arousal (heart rate, blood pressure) showed that the men in the study were actually just as affected emotionally as were the women, but the men inhibited the expression of their emotion whereas the women were more open about their feelings. O'heary & Smith (1988) have pointed out the emotions such as sympathy, sadness, empathy and distress are often considered to be "unmanly" and boys are trained from an early age to inhibit the expression of those emotions in public setting.

In other circumstances men and women react with very different emotions to the same situation. For being betrayed or criticised by another person, males usually would feel angry whereas females were likely to report that they would feel hurt, sad or disappointed in the same situations.

It was found that when men are ange~ed they tend to interpret the cause of their anger as something or someone in the environment around th~, and they are likely to turn their anger outward and towards the situations in which they find themselves. Women, on the other hand, are likely to see themselves as the source of the problem and to turn their anger inward against themselves. It is perhaps not surprising that men are four times more violent than women, while women have more probability of being depressed than men.

Within each group, however, there are found significant individual differences. Some are emotionally stable (normal) while some others are unstable, (neurotic), who over- react to emotional situations and persist with neurotic symptoms like phobia, anxiety, depression, etc.

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Illustrate through example how emotions differ in males and fe- **f**males.

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3.7.4 *Theories*

James-Lange theory: In the 1880's William James formulated the first modem theory of emotion, at almost the same time a Danish Psychologist Carl Lange reached the same conclusion independently. According to the James-Lange Theory :

Stimuli causes change in our bodies, and emotions are the result of these physical changes, e.g. "we are afraid because we run". "We are angry because we strike". We often experiences an emotion only after we have undergone a physiological arousal.

Cannon-Bard's theory of emotion proposes that emotion and bodily responses occur simultaneously, not one after the other. Thus when you see the bear, you run and are afraid with neither reaction preceding the other. This model makes an important role in determining the emotional experience that you have. This is also known as thalamic theory. This theory has been modi fied to a certain extent by later investigators. According to a new version of it, the sensory input caused by an emotional situation is first interpreted by the cortex as emotional which then sends a message to the lower brain areas (Thulamus). The lower brain acti vity then produces autonomic response, invol ving the viscera. It also mobilizes the motor system (muscles) to give expression to an emotion. The feedback from these lower activities reaching the cerebral cortex, then produces the experience of emotion.

Activation theory: Lindsley put forward the theory known as the activation theory. He agreed with others that the hypothalamus was the locus of organising the expression of emotion. But emphasised that without the active participation of the RAS there was no possibility of any significant expressive behaviour. So far as the physiological aspects of emotion are concerned, the Lindsley theory comes very close to the

fact of brain functioning in emotion which have been discovered up till now.

Schacter Singer theory: Among the latest theories Schacter Singer Theory (1962) evoked considerable interest. The main contention of this theory was that every emo- tional experience depends upon the cognition of the emotion producing situation. The theory assumes that he felt emotion is always an interpretation (cognition) of arousal. Recently, cognitive psychologists have developed and extended this idea by suggesting that our perception of judgement of situation (cognition) is absolutely essential to our emotional experience (Lazarus, 1982). According to the cognitive theory of emotion, the situation that we are in when we are around -the environment -gives us clues as to what we should call this general state of arousal. Thus our conditions tell us how to label our diffuse feelings in a way suitable to our current thoughts and ideas about our surround- ings. It places special emphasis on the interpretation of the situation producing an emotion. Such an interpretation is dependent upon three things. The information recei ved from the emotion situation, the past experience of this and also his tendency to respond in certain ways. The theory views emotion as a complex and patterned physiological response which is characterised by a set of action tendencies that are likely to be released, depending upon the appraisal of the emotional situation by a subject,

According to James-Lange theory, the body first responds physiologically to a stimulus, and then the Cerebral Cortex determines which emotion is being experienced. In the Cannon Bard Theory, impulses are send simultaneously to the Cerebral Cortex and

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)eripheral nervous system; thus the response to the stimulus and the emotion are ~xperienced at the same time, but independently.

)utline the three theories concerned with the relationship between what happens in the)ody and the emotions we feel are attached herewith.

1) What is the basic difference in the James-Lange and Cannon- Bard theory of emotions?

2) What does the Schacter-Singer theory of emotion propose?

Emotion *and healt*\

Our emotional behaviour is very closely bound up to mental and physical health. Many of the psychotic and neurotic reactions are actually deep rooted in the emotional life of a person. How emotions affect a normal person is no doubt an important consideration from the point of view of mental as well as physical health. The role of stress is very much on health. In next section we are going to study stress and coping.

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Giving an example, explain how emotional behaviour is related to ..mental and physical health.

~ *The concept of stress*

Characteristics like Intensity, Threshold, Adaptation, Duration etc. The main function of the visual system is vision which occurs due to the receptor cell in the retina. The auditory provides reliable spatial information, gustatory for taste, olfactory for smell, vestibular sense that monitor equilibrium and awareness of body position, kinesthetic which provide cues, cutaneous which operates through our skin and provides feeling of pain, pressure cold and warmth. There are some sensory disorders and defects that occur when the receptors are not functioning properly.

Man lives in an environment. There are different stimuli present but man does not get : affected by them equally showing that he selects out of environmental stimuli: This i tendency of selection shows that there is a motivational process in him known as

attention. There are internal and external determinants of attention. Attention is basically

of three types -Involuntary, Voluntary and Habitual. These~e also certain phenomena of attention such as fluctuation, shifting and span of attention. "

Perception is a process of sensing, attending and iQterpreting meaningful patterns out of jumbled sensory impressions. There are major principles of perceptual organisation like -closure, proximity, similarity etc. Some of the phenomena of perception are perceptual and size constancy. Some of the major factors that affect perception ar~moti.vation, expectations, cognitive style etc. Perception grows and develops gradually in an inQivid- Ii ual. Sometimes perception can be inaccurate. This can be attributed to reasons such * as J myopia or deafness, receptors may not be stimulated adequately or our span of apprehen- sion may be limited. Some of the commonly occurring sensory abnormalities are - Anaesthesia, Hyperthesia and Paraesthesia while the two major perceptual disorders are illusion and hallucination. Perception can be accurate only when we improve observation by guarding against personal bias, prejudice and hastiness. Instead showing interest, alertness and making intense observations rather than casual keeping in mind that our sense organs too have certain inadequacies.

4.0 Summary

We have seen that emotions are internal state of feeling that energize and direct behaviour. They vary in quality, content and intensity. Emotional experience show some characteristics like aroused state in the organism accompanied by physiological change(s). They occ~py an important position in a person's life as they motivate "mainly: job endeavours. They can be expressed through verbal and non-verbal

comIl1unications. Studies show that male and female differ considerably in how theyex,press emotion and also the emotions they choose to express. While the James ~ange theory advocates that the body first responds physiologically to a stimulus and then emotions are expressed, the Cannon Bard theory is in contrast, which claims that emotions are expressed in the, presence of a stimulus which is accompanied by physiological changes, While according!; to the Cognitive theory every emotional experience depends upon the cognition of the/. emotion producing situation. Emotional behaviour is closely bound to our physical and mental health. A clear understanding of these and *other* stress related factors in the patients can help the nurse to better cops with it in herj6b.

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5.0 Key words

Attention: A state of focused awareness accompanied by sensory clearness and a central nervous ~ystem readiness to respon~e.

Ambiguous' Having mor~ than one possible m~aning, something that can be inter, ;,. preted is more than one way:

Adaptation: .j.. The process by which an individual changes its state in order to ad. ,. ,. .just himself to the new conditions of the environment.

Anxiety: A stressful state with or witho~t an ideQtifiabl!! cause, accompanied , " by several autonomic systems.

Mons: ..*i!.;* The main extended trunk ora neuron or nerve cell, through which :- the impulse flow. '

Audition: The sense ofhearin,g, ., Asti~atism: A disorder of vision where a line at certain angle is not. perceivedasl

clearly as lines of different. orientation. , ; Autokinetic: A compelling phenomena in which a small spot ofli~ht in a com.

pletely dark room appears to wonder and drift of its own accord.. Absolute Threshold: The minimum amount of physical energy needed to reliably produce

a sensory experience.

Accommodation: A process of restructuring or modifying cognitive structure so that

the new information can fit more easily into them; also, the process by which the ciliar muscles changes the thickness of the lens to per- mit variable focusing for near distant objects.

Blind spot: Region of the retina which contains no photoreceptor cells because it is the place where the optic nerve leaves the eye.

Brightness: The dimension of colour space that captures the intensity of light. Cerebellum: A large cauliflower -like structure at the back of the brain; which is

responsible for the mediation of voluntary movement and balance. Cerebral Cortex: The upper-outer part of the brain -which is responsible for almost
all higher mental processes -learning perception, thinking etc. Closure: A perceptual organizing process as a result of which are tends to see incomplete figures as complete. Cutaneous: Relating to the skin.
Cognition: The process of knowing, including attending, remembering and rea- soning, also the content of these processes, such as concepts and memories.
Colour Blindness: An inability to distinguish between some or all of the colours in the colour solid.
Cones: Photoreceptors concentrated in the center of the retina which are re- sponsible for visual experience under normal viewing conditions for all experiences of colour.
Consciousness: The state of awareness of internal.
Hysterical Anaesthesia: Hysteria is a type of neurosis where a physical symptom caused with no apparent physical caus~, but are due to psychological function, loss of sensation or anaesthesia may be one of the symptoms ofhyste- ria.
Hypermyopia: The person with this visual defect can see distant thing clearly, while he is unable to see the nearer object clearly.
Hebephrenic Schizophrenia: A type of severe mental disorder characterized by thinking disorder, emotional disturbance and silly and nnprediCtable behaviour.
Hallucination: A vivid and convincing sensory experience in the absence of an ac- tual sensory stimulus e.g. to hear voiCes in the absence of any voiCes.
Involuntary: Relating to anything not wished or consciously felt.
lliusions: Trucking the senses "r a false interpretation of a stimulus in illusion, e.g. a rope may be perceived as a snake in the dark.
Intoxication: Any detectable personality change induced by a drug or person. Motivation: Is an inferred underlying state which energizes behaviour causing it
to take place.
Myopia: Visual defects where the person can see the nearer objects clearly and has a poor distance vision.
Perspective: Refers to the perception of the relationship between things most com- monly their relative position in the visual field.
Pragnanz: One of the low of Gestalt Psychology which hold that all mental events; esp. perceptual ones will tend towards the simplest and best possible under the circumstances.
Proximity: Nearness or closeness to the central object.
Paranoic: A mental disorder which typically features unshakeable false beliefs of suspicion and persecution.
Perception: The translation of the raw data from the senses into 'meaning* by the brain, in the process known as perception.

Prejudice: A belief strongly held in the absence or in the face of evidence and in particular in which has been arrived at an advance of the evidence.
Receptor Cell: A specialized cell which picks up sensory information from urthen or outside the body and converts it into electrical impulses for trans- mission to the central nervous system.
~ Sedative: A drug which has a calming effect on the individual, usually produc- I ing drowsiness and sleep.
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I Sensation: Anything which is experienced through the senses in sensation.
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Spatial: Dealing with 3 dimensional space.
Threshold: The lowest amount or intensity of a stimulus which can be detected. Vestibular: Dealing with vestibule, the part of the inner ear, which contains the
.'Utricle' and 'Saccule' and concerns themselves with maintaining balance and detecting head position.
Voluntary: Relates to anything performed at will.

6.0 Answers to Exercises

Exercise 1
Intensity, threshold, adaptation, sensation, extensity, duration.
Exercise 2
1) Sensations refer to stimulations of the senses and are purely the result of physical stimuli operating on our nervous system where as perception is a process of sensing, attending and interpreting what it means or cheating meaningful patterns out of jumbled sensory impressions.
2) Some of the different types of sensation are -Visual, Auditory, Gustatory, Olfactory, Cutaneous, Kinesthetic, Organic and Static.
Exercise 3
1) The retina constitutes a very important nerve called the optic nerve which opens at the retina at the rear end of the human eye and carries the visual stimulations from the retina to the occipital lobe which is situated at the hind side of the brain.
2) The structure of the eye including a cellular patch to the brain where light enters the eye through the corner, passes through the pupil which is the coloured part of the eye. Inside the pupil the len? shape in order for us to focus on objects. On the retina directly behind the lens is a depressed spot called the forea which is the center of visual field. The image that passes through lens is focused most sharply at this spot. The retina contains the receptor cell which is responsible for vision. There are two kinds of receptor cells in the retina -Rods and Cones which are chiefly responsible for sight
vision.
3) The other types of sensations are:

a) Auditory system which provides us with reliable spatial in- formation over extended distances.
b) Gustatory system which is responsible for taste. There are i four primary taste qualities -sweet, sour, bitter and saline.
c) Olfactory system which is responsible for smell. The odour - sensitive receptors are located deep in the nasal passage of the
human.
d) The vestibular senses that monitors, equilibrium and aware- ness of body position and movement.
e) Kinesthetic sense which perform the important function of
providing cues to our movements, and also help us to maintain smooth continuous action.
£) The cutaneous sense which operates through our skin and can be categorised into sensations of pain, pressure, cold and warmth.
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g) There are different stimuli that are present in the environ- i; ment but man does not get affected by them equally showing ~1X; that man selects out of environmental stimuli. This tendency - of selection shows that there is a motivational process in him known as attention.
h) The term fluctuation of attention refers to the number of
times the attention of a person is distracted from the stimulus , he is concentrating upon.
i) The maximum amount of material that can be attended to in
one period of attention is referred to as span of attention. ",..' j) There are three basic types of attention -Involuntary -
When a stimulus is attended upon against our will because of t . its striking qualities.
Voluntary -When we deliberately direct our attention to a stimulus or a situation.
Habitual- When attention is directed towards a stimulus
which neither demand conscious effort nor is it striking to at- *',Ii* tract involuntary attention. ' , k) The process of sensing, attending and interpreting what it
means or cheating meaningful patterns out of jumbles sensory impressions is' known as perception.
1) Some of the major principles of perceptual organisation are as following:
Closure -When we receive sensations that form an incomplete- ness image we tend to overlook the incompleteness and per- ceive the image as complete.
Pragnanz -Indicates fullness or*completeness.
Proximity -The tendency to perceive objects as one when they are close to each other rather than as separately.
Similarity -Similar elements tend to be perceived as belonging together.

Continuity -Anything which extends itself into space in same shape, size and colour without a break is perceived as whole figure.
Inclusiveness -The pattern which includes all elements pres-
ent in a given figures will be perceived more readily than other figures.
m) The perception of movement is a complicated process involv- ing both visual messages from the retina and messages from the muscles around the eye as they follow the object.
n) Some of the common sensory abnormalities that occur are
as following -Anaesthesia which implies complete inability to respond to sensory stimuli. Hypersthesia which means ex- cessive response to stimuli and Paraesthesia which implies grossly false sensations.
0) There are two main disorders of perceptions called illusions and hallucinations. False perceptions are called illusions
where as imaginary perceptions are called hallucinations.
») In order to improve our accuracy in observation one must guide Lgainst personal bias, prejudice and hasty judgements which may 'esult in incomplete knowledge and wrong conclusions. Instead we
should show interest, alertness and observe intensely rather ca- sually keeping in mind that our sense organs too have certain inadequacies.
Exercise 4
Myopia, presbyopia, colour blindness, deafness, ringing or roaring in the ears.
Exercise 5
A process by which an individual select some particular stimulus based on his interest and attitude out of the multiplicity of stimulus present in the environment.
Exercise 6
Nature of stimulus, intensity of stimulus, size of stimulus, location of stimulus, contrast of stimulus, change of stimulus isolation of stimulus and duration of stimulus.
Exercise 7
Involuntary, voluntary, habitual
Exercise 8 .
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1) Refer sub-section 3.3.1 .". 2) Refer sub-section 3.3.2 Exercise 10
Size constancy, observer characteristics, motivation, expectations,
cultural background. Exercise 11
Refer sub-section 4.4.3 Exercise 12
A. Illusions, hallucination, inaccurate perception.
B. Defective sense organs, limited span of apprehension C. Illusion - mistaken sensory perception. Exercise 13
1) Refer section 3.4
2) Refer section 3.5 *i;":*
,~ f'.":
Exercise 14 i :""." .;,.; I iJ

1) Refer sub-section 3.6.1 :r:J c! :;::r 2) Refer sub-section 3.6.2 :5!j~:[jtrtgd;
, '1 .-c.-'
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xerclse .-" ~
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Fear, surprise, sadness, disgust, anger c, ;-. ;. '.q~9 Exercise 16 ..,~~
.'.,
1) Refer sub-section 3.6.4 ,.,,: *-t~';f*
.-_*:I..* .
2) Refer sub-section 3.6.4 ;:.,c;"i..,t;~;m Exercise 17 ".1; *:,:;l!* ",'lM
Bereavement, failure, disappointments. ;",i"tt~,
: ;('~';;~,f*
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rnit **9: Personality**
Ible *of* contents

.0 Introduction
1 this Unit, you are going to learn about what is personality, its characteristics, traits, iCtors, theories and assessment.
II the Unit 1, we have said that the main objective of the study of psychology is to nderstand man and the various psychological forces that shape him. After discussing ~e major concepts in psychology we are now in a better position to understand the oncept of personality to understand what psychologists think of man.

n popular usage, the word personality is something akin to attractiveness, charm of :harisma. "She may not be pretty, but she has a nice personality." Many of us must
~ave used this term quite often. When somebody is described as having a pleasant personality, this means that on most occasions this person is very pleasant to meet and get along with.
It is obvious, therefore that the term personality is used to,refer 'to the general and consistent characteristics of a person's behaviour. It is the total and overall description *of* a person. It includes the way one perceives things, one's feelings, inter-personal behaviour and also one's effect on others.

2.0 Objectives

After going through this Unit, you should be able to:
.define personality, its strategies, characteristics and traits, .list the factors influencing the developing of personality, .understand the different theories of personality,
.learn to assess personality through different techniques.

3.0 Main contents 3.1 Personality

3.1.1 *Definition, meaning and nature*

Personality refers to the organised, consistent and general pattern of behaviour of a person which helps, us to understand his or her behaviour as an individual.
So far, we have studied individual behavioural processes like perception, motivation, emotion etc., but in actual life these processes do not occur independently and individ- ually. There is an integration and organisation of these various processes which give a total meaning of the behaviour of a person. Further, this pattern or organisation extends across situations with the result that every person behaves with a certain degree of consistency and at the same time behaves in a manner different from others.
Psychologists give a variety of definitions for personality, but common to all of them are concepts of uniqueness, relative stability over time and characteristic behaviour. Simply, put, personality is what characterizes an individual. It includes the unique psychological qualities of an individual' that influence a variety of characteristic behaviour patterns (both overt and covert) across different situations over time.

3.14 *Strategies for studying personality*

psychologists who use the ease study method to identify a person's unique characteristics follow all idiographic approach. In this approach, each trait is viewed us unique in each personality because it functions differently, depending on the overall pattern of traits. The contrasting nomothetic personality approach assumes that there is an underlying basic structure to personality provided by universal trait dimensions common to every- one. In this view, individuals differ only in the degree to which they possess personality traits: Researches using a nomothetic

approach try to establish universal lawful relation- ship among different aspects of personality functioning such as traits.

3.1.3 *Characteristics of personality*

The chief characteristic is *self consciousness.* A personality is through and through. social. It is only in *relation to others* that we are usually judged, and our consciousness of ourselves arises only in our interaction with other members of society. A personality i' continually making *adjustments* to environment and to inner life, lack; of adjustment means strain and tension and the individual is for ever acquiring new patterns of adjustment. Personality .always strive for goals. Our life and behaviour is purposive and we are for ever seeking new ends and goals to meet our goals. The important role of the personality functions as whole.

3.1.4 *Traits ofpersonality*

Traits are integrated into the unity called personality. We see individuals in different ways; in different aspects or from different angles. In psychology these dimensions are spoken as "traits." These are the constituents of personality. They are as follows:

a) Personal Appearance While some people place too much emphasis on "looks" and judge mental alertness from personal appearances it cannot be denied that to some extent success and failure is determined by personal appearance which include not only weight, height, complexion but also voice, dress, other characteristics of personal nature. But often the lack of good looks is made up by good nature, by qualities like friendliness, goodwill, helpfulness. Not only do -these traits bring success but they also contribute to personal and social happiness.

b) *Intelligence*

It is the ability to solve problems and meet new situations. It is mental alertness, the ability to learn. There are individual differences but it is desired

from well-balanced personality in which intelligence is supplemented by healthy social feeling.

c) *Emotionality*

Emotionality has a powerful role to play in personality. The emotional stability and

maturity is required for healthy personality. d) *Sociability*

The young child is inclined to be extremely selfish and self centered. But gradually he learns to share his things and experiences with others. He plays with other children. Let them play with his toys and such give and take cooperation in childhood lays the foundation of social solidarity at the adult level. This trait is present in varying degree indifferent people.

e) *Ascendance -.submission*

This trait is essentially indicative of forcefulness of approach among individual. Most of us try to dominate and lead people who are inferior

and subordinate to us in social positions and submit to those who are superior to us.

j) Moral character This trait of personality refers to social approval as to whether we have a balanced personality pursuing well-defined goals that benefit to the individual society,

The list of traits given above and elements of personality. There must be and are many more traits in personality but if these traits are developed integrated in a balanced manner they will make for a healthy and wholesome personality. Normal growth and develop- ment demands that the several traits of personality should be given proper and harmon- ious development

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1) Defining the term personality briefly explain the different

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2) What are the different traits that is integrated into one's person- ality?

3.2 Factors influencing the development of personality

The personality of an individual develops as the person grows and develops into an adult. The individual elements in a person's behaviour become increasingly prominent with age and development. This process of development of personality is influenced by a number of factors, some of which are given below:

Genetic and *constitutional factors*

The genetic and constitutional factors influence the personality of an individual. The body type nervous system and the functioning of the endocrine glands have impact on the personality.

Family, society and *culture*

The family and social influence playa very impressive role in moulding the personality of an individual because rewards and punishment flow from them. They also provide models to an inqividual to shape his behaviour.

In a family setting, parents provide the closest social environment for the child. Some of the basic personality tendencies are thus built up in a person right from childhood. Because of their great capacity to influence their offspring parents often create problems for their own children, if they themselves have not successfully adjusted themselves in their lines. It is in this sense that some psychologists have gone to the extent of saying that there are no problem children but only problem parents.

Each society has its own ethical and other values, accepted and unaccepted ways of behaving. Ideas of prestige, status, achievement, and even normative models of hero and heroines which are particular to itself, are transmitted to the child first through family and later through contacts with other people on his social milieu.

These cultural values and norms govern an individual's behaviour and shape his personality through the process known as specialization. Society lays down the basic modes of behaviour which are taught in the family. At later stage, social institutions like schools, transmit some of the culture's dominant values -and practices whether these consist of competition or co-operation, achievement or traditionalism. Conformity with social norms of behaviour is rewarded. Society is not a concrete entity like the parents, but its invisible influence perform basically the same functions for the adult which the parents perform for their children. Apart from actual persons, the individual also

responds and reacts to the values, norms, expectations and controls and socio-cultural system to a great extent. Each culture directs individual personalities to develop a common minimum. In addition to variations between cultures one also finds variations within cultures. Socio-economic class differences have their own influence.

Sign~ant personal experiences

In addition to general factors such as constitutional and socio-cultural factors, unique personal experiences also influence the development of personality. In fact, these unique experiences proved the basis for the unique and individual aspects of personality. For example, prolonged and severe illness, accidents, traumatic experiences like loss of parents etc., are negative experience which can adversely affect the development of personality preventing it from developing freely and fully. In extreme cases, they can also result in behavioural abnormalities. On the other hand, success, achievement, thrilling experiences like unexpected meetings with a great person etc., are positive factors which contribute to a better development of personality.

, It may be seen that personality is influenced and its development is determined by a number of factors. The personality of an individual is a product of continuous and cumulative interaction between these various factors.

Exercise 2 List the different factors that influence the development of person- ality

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3.3 Theories **of personality**

The current theoretical approaches to understanding personality can be grouped into five categories:

i) Type and trait theories

ii) Psychodynarnie theories iii) Humanistic theories iv) Learning theories v) Cognitive theories

3.3.1 *Type and trait theories*

Labelling and classifying the many personality characteristics into limited number of type or possessing particular traits that all people are

assumed to have in varying degrees. One of the earliest type theories was proposed in the fifth century B.C. by Hippocrates. 'Hippocrates' pairing of body humours or characteristics with personality temperaments was the following:
Blood: *Sanguine temperament* cheerful and active.
Phelgm : *Phlegmatic temperament* apathetic and sluggish. Black bile: *Melancholy temperament,* sad and brooding.
Yellow bile: *Chloeric temperament,* irritable and. excitable.
An interesting popular type theory of personality was one advanced by American

physician William Sheldom (1942) who related Physique to temperament. He assigned people to categories based on their some to type or body builds: -Endomorphic (fat, soft, round) temperament-relaxed sociable and fond of eating -Mesomorphic (muscular, rectangular strong) Energetic courageous and assertive, -Ectomorphic (thin long, fragile) -brainy, artistic and introvert. The typology-
specified relationship between the physique or bodily constitutional types and particular personality traits, activities and preferences.
A better supported type approach attempt to reduce the complexity of personality to a few major categories, Eysdnck (1970, 1975) suggested that the two major dimension of personality are introversion-extroversion and stability-instability (or neuroticism). Ex- troverts are sociable outgoing, active impulsive, 'tough minded people. Introverts are their psychological opposites tender minded, withdrawn, passive, cautious and reflec- tive. Gorden Allport (J937,91961, 1966) viewed traits -as the building blocks of personality and the source of individual uniqueness. They produced consistencies in behaviour because they were enduring attributes, of the person and were general or broad in their scope.
Allport identified three kinds of traits: *Cardinal traits* were traits around which a person organised his or her life. It
might involve power or achievement for others self-sacrifice for the good of there. Not all people developed cardinal traits.
Central traits were, traits we think of as major characteristics of a person, such as honesty or conscientiousness.
Secondary traits were less important characteristics that were not central to our understanding of an individual's personality such as particular attitudes, pref- erences and style of behaviour.
Scientific way to select a small number of distinctive traits to d6scribe personality by statistical procedure known as factor-analysis as done by Cattell. He reduced 171 traits names into 12 clusters or factors, by using the factorial analysis. His analysis led him to suggest that there are two kinds of traits.

Surface traits or those traits which are at the level of behaviour and are fairly large in number.
Source traits are really basic and are the roots of the former.
Allport, Cattell and all the other trait psychologists agree that even though traits may be independent of each other, in actual behaviour there is a lot of interaction among them. Very rarely do you find that any behaviour expresses a single trait exclusively.
The concept of trait and the type approach to personality have been very influential in research and the study of personality. Even today, most psychological measures of personality use the trait model.
3.3.2 *Psychodynamic theories*
Ii Freud's theory of personality boldly attempts to explain the origins and course of personality development, the nature of mind, the abnormal aspects of personality and
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the way personality can be changed by therapy.
At the base *of* personality according *to* psychoanalytic theory, are events within a person's personality, intra-psychic events that motivate behaviour or are intentions *to act. Often we are aware of* the motivations. However, some motivations also operate at an unconscious level.
All human actions have a purpose and a cause that could be discovered by psychoana- lysing a persons thoughts" associations, dreams, errors, and other behavioural clues.
~ Prominent among our drives according *to* Freud, are sexual and aggressive wishes. Through both conscious and unconscious processes, these wishes affect our thoughts and behaviours.
Fundamental concepts
Four concepts form the core *of* the psycho-dynamics approach: 1) Psychic determinants 2) Early experience
3) Drive and instincts
4) Unconscious process
Psychic *detenninants*
Freud believed that symptoms, rather than being arbitrary were related in a meaningful way *to* significant life events. He saw clinical observation and rational analysis as the keys that could unlock the secrets *of* both pathological and normal personality.
Early experience
Freud assumed a continuity *of* personality development from "Womb *to* tomb" with all a persons past experiences contributing *to* the personality he or she showed presently. But Freud believed that it was in infancy and early childhood that experience had it most profound impact on personality formation.

Drive and Instincts The source *of* motivation *for* human action were ascribed *to* psychic energy found within each individual. How this energy was exchanged, transformed and expressed was a central concern *of* psycho-analysis.

Freud originally postulated two basic derives. One is ego, or self preservation (hunger, thirst or self preservation), the other called Eros, it is related* *to* sexual urges and involves preservation *of* the species.

Freud was more interested in the sexual urges although some *of* the followers have given the ego drive an important place in personality. He used the term 'libido' *to* describe the source *of* energy *for* sexual urges, he saw it as a psychic energy that drives us towards sensual pleasures *of* all types. Sexual urges demand immediate satisfaction, whether through direct actions or through such indirect means as fantasies and dreams. According to Freud, this broadly defined sexual drives, does not arrive at puberty, but it operates in infants *too.*

In this dual theory *of* drive, Freud believed that both the sexual and aggressive drives were sources *of* motivation for virtually all behaviour.

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Unconscious processes ~~~ ...;~"

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Freud put the concept *of* unconscious detenninants *of* human thought, feeling action on !--:

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a very special pedestal. He says that behaviour can be motivated by drives of which we are not aware. We may act without knowing why, or without direct access to the true cause of our actions. There is a manifest content to our behaviour. What we say, do, and perceive -of that we are fully aware, but there is also a latent content that is concealed from us by unconscious processes. The meaning of neurotic (anxiety based) symptoms, as well as of dreams like slip of the pen and tongue, are to be found at the unconscious level of thinkin,.g and information processing. According to Freud, such 'er.ors' are meaningful and the meaning being in the unconscious intention,

The structure *of personality*

Freud accounted for personality differences attribut.ing them to the different ways in which people dealt with their fundamental drives. To explain these differences, he pictured a continuing battle between two parts of the personality, the Id and the super ego, moderated by a third aspect of the self -the ego.

The Id is concerned as the primitive unconscious pact of (he personality, the stone house of the fundamental drives. It operates irrationally, acting on impulse and pushing for expression and immediate gratification. The Id is governed by the pleasure principle, the unregulated search for gratification especially sexual, physical and emotional pleasure. The

super ego is the store house of an individual's values, include moral attitudes learned from society. The super ego corresponds roughly to the conscience and develops as a , child internalizes the prohibitions of parents and other significant adults against socially j undesirable actions. It is the inner vQice of "oughts" and "should nots". The super ego 'also includes the ego ideal and individual's view of the kind of person he or she should j strive to become.

Thus, the super ego, society representative in an individual, is often in conflict with the *id*, survival representative. The Id wants to do what feels good, while the super ego operating on the morality principle, insists on doing what is 'right'

The ego is the reality based aspect of the self that arbitrates the conflict between Id impulses and super ego demands. When the Id and the super ego are in conflict, the ego arranges a compromise that at least partially satisfied both. As Id and super ego pressures intensify, it becomes more difficult for the ego to work out optimal compromises.

Repression and ego defence

Repression is an important unique Freudian concept that provides a psychological means through which strong conflicts created by Id impulses are taken out of conscious awareness -pushed into privacy of the unconscious -and their public expression controlled. Repression is the most basic of the ego defense mechanisms, which are mental strategies the ego uses to defend itself against the conflict experienced in the nonnal, course of life.

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We have devoted so much space to Freudian theory and criticism because Freud's ide have had a greater impact on psychology and on society than those of any oth psychologists. Despite the criticisms levelled against them a recent critical evaluation 0 ' Freud's view has validated many of his theories about the developmental aspects of personality and psychopathology. i

j*Pqst-Freudian theories* In general, these post-Freudians have -

a) Put greater emphasis on ego functions (such as ego defense mechanisms,

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development of self-thinking and mastery).

b) Seen social variables (culture, family and peers) playing a greater role in shaping personality .

c) Put less emphasis on the importance of general sexual urges or libidinal energy; and

d) Viewed personality. development extending beyond childhood to the entire life

span.

Enrich Fromm and Karen Horney were other followers who attempted to balance Fraud's biological emphasis with more attention to social influence. Adler accepted the notion that personality was directed by unrecognized wishes; "Man Knows more than he understands" but he rejected the significance of Eros and the pleasure principle,s. We all I experience feelings of inferiority, helplessness and dependency like small children and ~~ that our lives become dominated by the search for ways to overcome those feelings. Personality is structured around this underlying striving. The life styles that people **I**develop are based On particular ways of overcoming their basic, pervasive feelings of inferiority. Carl Jung expanded the conception of the unconscious. For him unconscious was not limited to an individual's unique life experiences but also- filled with fundamen- tal psychological truths shared by the whole human race. The concept of "collective unconscious" predisposes us all to react to certain stimuli in the same way. The healthy integrated personality was seen by Jung as balancing opposite forces, such as masculine I aggressiveness, and feminine sensitivity, within the individual. To the basic urges of sex and aggression Jung added two equally powerful unconscious instinct, the need to create and the need to self actualize.

3.3.3 *Humanistic theories*

Humanistic approaches to understanding personality are characterised by a concern for the integrity of an individual. Humanistic personality theorists such as Carl Rogers and Abraham Maslow have stressed a basic drive toward self actualization as the organiser of all the forces whose interplay continually creates what a person is.

In this view, the motivation for behaviour comes from a person's unique biological and learned tendencies to develop and change in positive directions toward the goal of self actualization.

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Humanistic tbeories explain that people are seen hot as collection of discrete traits but ~*ff!*

as a holistic because they explain people's separate acts always in terms of their ~; personalities. ~

Humanistic theories are dispositional because they focus on the innate qualities within , a person that exert a major influence over the behaviour. Situational inputs are more ~ often seen as constraints and barriers; like the strings that tie down the balloons. Once

freed from negative situational conditions, the actualizing tendency should actively guide people to choose life enhancing situations.

! These theories are Phenomenological because they emphasize an individual's frame of reference, the person's subjective view of reality - not the objective perspective of an observer. Past influences are important only to the extent that they have brought the person to the present situation.

Finally, these theories are existential, they focus on a person's conscious, higher mental processes mat interpret current experience and enable the person to meet to be over- whelmed by the everyday challenges of existence. These theories are unique in their

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emphasis on freedom, which separates them from other approaches to personality.

The core of this theoretical approach is the concept of self-actualization, a constant striving to realise one's inherent potential; to fully develop one's capacities and talents. Experiences are evaluated positively and sought after when they are perceived to maintain or enhance the self. Those experiences which oppose the positive growth of the person are evaluated negatively and avoided. Maslow's view of man is very optimistic but concepts are criticised because they lack preciseness.

3.3.4 *Learning theories*

Behaviourists are interested not in the consistencies in behaviour -which led other theorists to propose enduring traits, instincts, or self concepts - but in the changes in behaviour as environmental conditions changes, their aim is to identify the external variables that change responding. No mental states and no inferred dispositions are allowed -or need in their explanations of behaviour. According to this theory an individual's action in a given situation depends upon the specific characteristics of the situation, his assessment of the situation and his past reinforcement history. Most of these theorists therefore look upon human personality as the result of a person situation interaction. The social learning theories assures that different kinds of behaviour do not reflect different motives but rather different responses to different situations, and also the role of reward and punishment on human behaviour and personality.

They view man as a creature of habit or response tendencies which are formed by the mechanism of reinforcement.

According to the learning theory, people learn alt kinds of behaviour, much in the same way as animals learn in the classical and operant conditioning experiments. If there is any differences it is only that of complexity of situations in which human learning takes place. The social context in which human learning takes place is also important because it is in this context that man learns new ways of responding to various situations.

The basic feature of the theory assumes that the personality of an individual is shaped by the operation of classical and instrumental conditioning. It also recognize a special type of learning mechanism and variously known as observational learning, modelling or imitation. In this type of learning a person acquires a response by observing other people making that response.

The central focus in Dollard and Miller theory formulation is on the process of learning or habit formation. They discuss four significant features of this process viz. Drive, Cue, : Response and Reinforcement (reward). Drive gets an organism into action, cues suggest
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what behaviour is appropriate (will lead to drive reduction), response is the behaviour itself and reinforcement strengthens the connection between cues and response by reducing the tension of drives.
I Personality, according to this approach is descriptive rather than explanatory, static rather I than dynamic. More recently, there has been a clear trend towards a more dynamic view
of personality,

3.3.5 *Cognitive theories*

Those who have proposed cognitive theories of personality point out that there are 1 important individual differences in the way people mink about any external situation. ; Cognitive theories stress the process through which people turn their sensation and
perceptions into organized impressions of reality. Like humanistic theories they emphas- ize that individuals participate in creating their own personalities. People actively choose their own environments to a great extent, so even if the environment has an important
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pact on us, we are not just passive reactors. We weight alternatives and select the ttings in which we act and are acted upon.
Ie relationship between situational variables (social and environmental stimuli) and gnitive variables in regulating behaviour is found in a number of personality theories, ~orge Kelly developed a theory of personality called Personal Construct Theory -that ices primary emphasis on each person's active, cognitive construction of his or her)rld. He argued that people can always reconstruct their past or define their present rficulties in different ways.
~lly argued that all people function like scientists. We want to be able to predict
d explain the world around us, especially our interpersonal world. Kelly defined a rsonal construct as a person's belief about the way two things are same and the iy they are different from a third. It places so much emphasis on the uniqueness
each person's personality. This approach has had more impact on clinic who can proach each case as an individual.

1) What are the theoretical approaches to understand personality?
2) What are the fundamental concepts of the psychodynamic approach?
i j 3) What are the basic difference in the approaches proposed by \ ~ hum~n~s~i~ l~~i~~ ~~ ~O.~j~i~e:~e.o~~s~ ~~"

,{) 1.4 Assessment **of personality**

n the final section of this unit we are concerned with a very important aspect of lersonality. Its assessment or measurement. There are many different ways of assessing
lersonality. ;
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J.4.1 *Observation and rating*
A. very common method of assessing personality is to observe it in action and then rate it. For example, in an interview situation the interviewers observe the behaviour of a person and rate his personality on a scale ranging from a low to a high value. This method is called the rating method. Such rating can be done in two ways:
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1) *Global approach:* Personality is created ona scale rangingjrom low effectiveness to high effectiveness. It is useful when time is limited and large number of people have to be assessed or when the personality score is only one of the many criteria to be taken into account.
2) *Analytic approach:* Here instead of the total personality, number of attributes or qualities are individually rated and these individual rating are summed up. For example, cheerfulness, alertness, humour, and other individual attributes can be separately rated
and summed up.
3.4.2 *Objective tests*
Objective tests of personality are those in which the scoring like the administration is relatively simple and follows objective rules. Some tests may be scored and even interpreted by computer programme. This means that the objective tests do no require a skilled expert to interpret the results.
The most widely used objective tests are Minnesota Multiphasic Personality Inventory -known as MMPI. It is used in many clinical settings to aid in the diagnosis of patients and as a guide in their treatment. These tests are self reporting inventories. In this test the individual answer a series of questions about. their thoughts, feelings and actions. The other famous tests are Sixteen Personality Factor questionnaire (16 P.P.) developed by
Cattell and the Eysenck Personality Inventory. These tests have been adapted in India, to suit our population. In addition, there are other personality tests/inventories/question- naires developed inNigeria also.
A variation of questionnaire is what is known as a "situational tests". Here instead of giving questions or statements, certain situations are described and different alternatives I responses are given. The individual has to choose whichever he feels would be the best and true response. An example of such a test is the Ascendance-Submission test developed by Allport. 5.5.3 Projective Tests

Have you ever looked at a cloud and "seen" a face or the shape of an animal? If you asked your friends to look to, you may have discovered that they saw a dragon or sol;nething else quite different. Psychologists rely on a similar phenomenon in their use i
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of projective tests for personality assessment.
We tend to perceive things "not as they are but as we are", particularly if they are vague or ambiguous. We tend to project our personality while giving meaning to it.
In a projective test a person is given a series of stimuli that are purposely ambiguous such as abstract patterns, incomplete picture, and drawing that can be interpreted in several ways and the aim of test is disguised. The person may be asked to describe the ' pattern, finish the pictures or stories about the drawings. Because the stimuli are vague,L. responses to them are determined partly by what the person brings to the situation namely, inner feelings, personal motives and conflicts from prior little experiences. These idiosyncratic aspects are projected or "Thrown Outward" on to stimuli that permit various interpretations. The subjects rarely know what is the purpose of the test and how: his responses are going to be interpreted. Hence they are less likely to be deliberately i~j distorted. Projective tests were first used by psycho-analysts who hoped that such tests would reveal their patients unconscious personality dynamics. For example, to uncover emo- tionally charged thoughts and fears. Carl Jung used Word Association to a list of common
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words (what is the first thing brought to mind by the word house?) In addition to this technique of association a verbal, auditory, or visual stimulus to its personal meaning, many other projective techniques have been used to assess personality. Two of the more common projective tests are the Rorschach test and the Thematic Apperception Test
(TAT).
The *Rorschach* .
In the Rorschach test, developed by Swiss Psychiatrist Harmann Rorschach in 1921, the ambiguous systematical stimuli are ***** inkblets. Some are black and white, some are coloured. A respondent is shown an inkblet and asked, 'Tell me what you see, what it might be to you, there are no right or wrong answers".
The tester records verbatim what is said, the time to the first response, total'time tak~n per card, and how the card is handled. Then in a second phase of inquiry, the respondent is reminded of the previous responses and asked to elaborate on them; what prompted them, what location on the card they refer to and so forth.
The responses are scored on three major dimension:" (a) the location of the responses on a card, whole stimulers, or part response, size of details; (b) the content of the response in terms of the nature of the

object and activities see, (c) the determinants, which aspects of a card (such as its colour or shading) prompted the response. Some scorers also note whether responses are original and unique or popular, as well as score the quality of these responses. All these reflect upon different aspects of our personality.

In addition, number of other criteria are also used. Based on the above indicators, psychologists who are well trained in the interpretation of the Rorschach test are able to assess personalities. The Rorschach test till today remains one of the best developed projective tests and is very widely used. The test, however, requires that only a well trained person with considerable experience should use it. Local Indian norms are available for it.

The TAT In the Thematic. Apperception Test developed by American Psychologist Henry Murray 1938, respondents are shown pictures of ambiguous scenes and, asked to generate stories about them, describing what the people in the scenes are doing and thinking, what led up to each event, and how each situation will end.

The person administering the TAT evaluates the structure and content of the stories, as well as the behaviour of the individual in telling them, in an attempt to discover some of the respondent's major concerns and personality characteristics.

On the basis of the stories, the needs of the person, the environmental pressures operating on him, the integration of these two are analysed. Another version of the TAT primarily for use with children has been developed by Bellak.

The Rorschach, TAT and other projective tests have been widely used, especially in clinical settings. In fact research articles have been published about the Rorschach than about any other psychological tests. However, Projective tests have been subject to a number of criticisms. A basic problem with these tests is that the interpretation of response is very subjective and depends largely upon the skill and experience of the examiner. These tests are best used in conjunction with other assessment techniques, since decision based solely on projective test lack of authority that comes with reliable, valid and objective tests.

Rosenzweiq's picture *frustration* test

This test was developed by Soul Rosenzweig, not as a test of personality but as a toot to study people's reaction to frustration. Different people react differently to frustrating situations. Rosenzweig was interested in studying the differences on people's reaction to frustration and measuring the same. It has two forms, one is for the adults and the other for children.

This test consists of 24 cartoons. Each picture depicts two or more persons, one of them facing a frustrating situation. In some situations one person is directly associated with the frustration. For example, when

a maid-servant breaks a beautiful and valuable antique lamp the house wife feels frustrated.

Sentence *completion* test

Another projective test widely employed is the Sentence Completion test. Here the material used is verbal. A number of incomplete sentences are given and the individual is required to complete them. For example,

Often I feel I am ...

The person is required to complete the sentence as he or she feels. The responses are analysed for indications of one's personality.

Projective tests have been found to be extremely useful, especially in clinical situations and even in situations in personal selection.

Other projective tests: There are other simpler projective tests also that are in use e.g. (a) Draw-a-Person Test, (b) 3 Wishes Test, (c) Projective Question (if you are to born again, what animal you would like to be, ...and why 1), etc.

Implication of the psychology *of* personality

Here an attempt has been made to present some of the practical implication of the personality development. The nurse is not only to acquire skills and correct knowledge, but she should have and develop a pleasing and strong personality if she wants to be a successful nurse. Besides possessing such professional qualities as integrity, dignity, mental alertness, poise, self-confidence and dependability, she ought to have such personal qualities as sympathy, understanding, friendliness of spirit, gracious manners, kindliness and adaptability.

Patients appreciate a nurse who brings physical comfort to with her skills, and who is prepared to understand their emotional reactions and difficulties which have been caused by illness. She can acquire sympathetic understanding, a strong desire to help, a high standard of values and the ability to develop healthy interpersonal relationship are generally associated with the personality of a successful nurse.

The nurse deals with different age groups. A good, sensitive nurse can be aware of their personality. A sick person is very emotional, sensitive, dependent and demanding. A warm, sincere outlook can help them out.

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1) Name the different techniques that one uses to assess personality. 2) Explain briefly the two approaches of the rating method.

3) Define projective tests and classify the various types of projective tests.

4.0 Summary,! .

Personality refers to the organised, consistent and general pattern of behaviour of a person which helps us to understand his or her behaviour as an individual. Psychologists give a variety of definitions but common

features are uniqueness, relative stability over time, and characteristic behaviour. Chief characteristics are self-consciousness, social interaction, continuous adjustments, motivated behaviour and functioning as a whole. Traits of personality are intelligence, personal appearance, emotionality, sociability, ascendance -submission, moral character, etc. Factors influencing personality develop- ment can be classified as genetic! constitutional, family, society, culture and significant personal experiences. Theories of personality can be grouped as type and Trait Theories;

.Psychodynamic theories, Humanistic Theories; Learning Theories and Cognitive The- ories. Personality can be assessed using observation and rating methods, objective1tests and projective tests. Each method has its own advantages and limitations.

5.0 Key words

Cognition: The process of thinking.

Case of Study: Assessment information on a specific individual.

Cardinal Trait: A trait around which a person organises his life.

Central Trait: A major characteristic of a person assumed to be basic in under- standing him.

Drive Reduction Theory The theory that motivated behaviour moves the organism toward a reduction of arousal.

Ego That part of personality that mediates behaviour reality, conscience and instinctual needs.

Emotion Feeling that energize and direct behaviour.

Eros A concept of Freud referring to life instinct which provides energy for

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growth and survival.

Ectomorph A Somato type characterized by body build that in the long and fragile in appearance.

Extrovert According to June, a person who focuses on social life and external world instead of his internal experience.

Humanistic Theory Any theory that assets the fundamental goodness of people and their striving toward higher levels of functioning.

Id The collection of unconscious wages and desire that continually seek enprevension.

Idiographic A methodology where emphasis is on understanding unique aspects of a individuals personality rather than common dimension.

Introversion Direction of interest toward over number world of experiences. Libido The drive for sexual gratification.

Masomorph A somato type characterized by a build -that in mascular, rectangu- lar and strongs.

Modelling Form of learning in which individual learns by watching some one else perform the desired response.

Neurosis Non-psychotic emotional disturbance characterized by exaggeragated use of avoidance behaviour and defense mechanism against anxiety.
Protective Tests Technique using ambiguous stimuli that subject is encouraged to in- terpret and from which her personality, characteristics are analysed.
Personality A person unique pattern of thoughts, feelings and behaviour that per- sist over time and situation.
Super Ego Ethical or moral dimension of personality.
Secondary Trait A characteristic that provides some information about enduring qualities of a person.
Thanatos In Freydian theory, the death instinct assumed to derive people to- ",
ward aggressive and destructive behaviour. .
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6.0 Answers to exercises

Exercise 1

1) The term personality includes the unique psychological qualities of an individual that influence a variety of characteristic behaviour patterns across different situations. While studying personality some psychologists use the case study method while some follow the ideographic approach and same the nomothetic approach to identify a person's unique characteristics.

2) The various dimensions of personality may be referred to as traits in psychology. They are as follows:

Personal appearance, Intelligence, Emotionally sociability, Ascend- ance -submission and moral character.

Exercise 2

Genetic, family, society, culture, personal experiences. Exercise 3

1) The different theoretical approaches to understand personality

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can be grouped into five categories. They are: Type and Trait Theories, Psycho-dynamic theories, Humanistic theories, Learning theories and Cognitive theories.

2) The four concept from the core of psycho-dynamics approach are. : Psychic determinanats, Early experience, Drive and Instinets and Unconscious processes. .

3) There has been some basic differences in the theories which study personality. The humanistic approach is characterized by a concern for the integrity, of an individuals personal conscious experience and growth potential while according to the learning theory an individ- uals action in a given situation depends upon the specific charac- teristics of the situation, his assessment of the situation and his past reinforcement history. While those who have proposed the cognitive theories point out

that there are important individual differences in the way people think about any external situation.
Exercise 4
Type and trait, psychodynamic, humanistic, learning, cognitive.

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Unit 10: Introduction to Educational Psychology
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Table of contents j

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In this unit you will learn about education and its relations with psychology. You will also study about significance of educational psychology to nursing.
A mother helping her child to write is "teaching" that child. A boy helping his friend to ! operate a computer is "teaching". Stimulating and directing the learning of others, is teaching. Educational psychology is that branch of psychology which deals with teaching and learning. Education is a way of developing skills, attitudes, knowledge and also desirable habits. In the process of education, we try to shape the behaviour of young children for adequate adjustment To achieve the goals of ' education, learner's capacity j
and needs should be kept in mind.
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~~~~!~~!:!~~ ~ --
After going through this unit, you should be able to: .define educational psychology,
.list the scope of educational psychology,
.describe methods of studying educational psychology, .explain nature and goals' of special education, and
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.explain significance of study of educational psychology to nursing.
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k' *Definition*
The most simple definition of educational psychology is the application of psychological finding in the field of education. Educational psychology is the systematic study of the development of the individual without the educational setting. It helps the teacher to foster harmonious overall development of the student.
Relationship of Psychology and Education
Psychology as a behavioural science aims to study the behaviour. Behaviour is an action which can be seen and observed in an objective way. The basic aim of education is to modify behaviour. Any modification of behaviour presupposes a knowledge of the development of behaviour. Psychology as a science helps to understand, control and predict behaviour. Psychologists, through scientific descriptions of human behaviour and the organic and emotional requirements of the human organism, have had a profound influence upon the objectives of educations.
The goal of education is to help the individual become increasingly self directive. The teachers have a unique responsibility for teaching certain types of knowledge, skills and developing certain attitudes.
Educational psychology must also include study of problems of teaching and learning, , besides the learning process. Therefore the science most basic to education is psycho-
logy. The teacher needs psychology to bridge the lives of the young and aims of education. To be a successful teacher one also need to understand the learners, just as to be a successful nurse you are required to have professional knowledge and skill as well as the knowledge about the nature of the patient.
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Defme educational psychology.
3.0 Main contents
3.1 Scope of educational psychology
Educational psychology has a vast scope because it is concerned with the education process. It deals with transmission of knowledge, nurturance of social and personal development al!d enhancement of motor and artistic skills. These educative process in a broad sense is a life long process. We shall now focus on the specific areas where educational psychology has very important applications, namely,
i) Learner,
ii) Learning Process, and
iii) Evaluation of learning performance.

3.1.1 *Learner*

The success of education depends on adapting teaching to individual differences among learners. Educational psychology helps in understanding the developmental charac- teristics of the students, their individual differences related to intelligence and-person- ality, their adjustment abilities and their attitudes towards learning. Each learner is an unique individual with different abilities, interests, ways of thinking and responding, thus these characteristics have a significant influence on ones learning styles.

It is being realised that students use different learning strategies. They have different methods of reading, interpreting and coding the information. Sometimes these strategies are useful but some students also develop pathological learning strategies. The teachers should help their students to learn to successfully control their cognitive processes including learning to learn, to remember and to think. In order to successfully pursue the goal of teaching students how to learn, it is useful to understand the learning process i.e. what goes on in the learner's head during learning. To instruct effectively in the class. The teacher must understand her students, their problems and methods to modify the problem.

With the help of educational psychology teachers is able to understand individual differences and may adjust teaching to the needs and requirements of the class. He may also study the factors which are responsible for indi vidual differences. He may be helpful in creating conducive environments in the schools where the students can develop their inherent potentialities to the maximum.

Good mental health is very important for efficient learning. The teacher from the study of psychology can know the various factors which are responsible for the mental ill-health and maladjustments. As a teacher one may understand the causes of the problems of children which occur at different age levels and can successfully solve them. There is a great difference in the method of solving problems of children by a trained teacher. The teacher who is familiar with the fundamental principles of human behaviour applies his knowledge of educational psychology to solve and prevent problems.

You will see in Unit 11 that development of positive attitudes is also very important for effective learning and teaching process. Thus the knowledge gained here would help to develop positiye attitudes towards nursing profession and as a prospective, teacher this would provide you with the necessary competencies to meet the classroom challenges. With this knowledge you can increase your student's motivation and change negative attitudes which interfere with the learning process.

It has been recognized that personality factors contribute something beyond intellectual abilities to perform an academic task. Personality

needs of the individual are of major importance to learning readiness. Studies have consistently shown the ~
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importance of the individual's value system and the controlling influence of intrinsic motivation on learning. Although it is now been shown that student does not receive stimulus from teacher alone, but selects information which best meets with his need and accord with his values.
Although there have been numerous personality factors related to academic achievement but main focus has been on academic motivation and its constituents achievements motivation, anxiety, self-concepts and locus of control. Among the most replicated results are findings concerning school-related anxiety, which show a curvilinear rela. tionship between anxiety and performance (with poor performance when anxiety is too little or absent and when it is to high), particularly when short-tertn memory demands

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are high (Sarason, 1980). Lens (1983) has demonstrated the same inverted U-shaped related for both test anxiety and need for achievement. Weiner (1979) has shown in several experiments that the manner in which academic performances are interpreted by individuals has a strong influence on subjective statements of affect, motivated behaviour towards tasks, and actual task performance. Internal attributions for success generate positive affect, increased effort towards tasks, and greater higher performance expecta-
tions.
Some investigations have been in actual classroom contexts with teachers .and students. The results have shown that poor performance patterns are often the results of interac- tions among classroom performance demands, lowered coping capabilities. (including factors like increased anxiety and lowered efficacy expectations that reflect unfavorable self-assessments of ability), and lower levels of intellectual ability (Clifford, 1979; Schunk, 1994).
Knowledge of educational psychology would help to reduce performance demands for lower ability students who appear less able to cope with traditional instruction.
Some of the aspects of individual differences, intelligence and learning would be discussed in later units of this block. Details of motivation and personality have been discussed in General Psychology,
3.1.2 *Learning process*
Learning process is how the student learns. The knowledge of educational psychology provides the knowledge of learning process in general and problems of classroom learning in particular. Our daily experiences indicate that some teacher are successful in the classroom than others. Some communicate very effectively subject -matter in the

class to students and some fail irrespective of their knowledge of the subject matter. Success depends on something other than the subject. The knowledge of principles of behaviour helps to understand the behaviour of students one teaches, the developmental charac- teristics, their abilities, an influence and contribution of heredity and environment in the process of an individual's personality. To instruct effectively in the class, the teacher must understand .the principals of learning and various approaches to the learning process, problems of learning and their remedial measures. It also gives the knowledge of various approaches to understand the learning process, factors affecting and guidance for effective learning. The details of how we learn and remember are discussed in Units 4 and 5.

For effective outcome and performance with knowledge of learning process, one can modify the method of teaching and learning. Lack of proper methods of teaching sometimes results in failure of communications in the classroom. Educational psycho- logy gives us the knowledge of appropriate methoas of teaching. It helps in developing new strategies of teaching. It is related and uses several theories of teaching-learning. The teacher must be acquainted with the knowledge of various theories in order to organise his classroom teaching. Educational psychology provides us with the knowl- edge of different approaches evolved to tackle the problems of teaching at different age levels. The learning environment should be such that distractions are minimized, attention of the learners could be sustained for optimum period of time.

Psychological principles are also used in formulating curriculum for different stages. Needs of the students, their developmental characteristics, learning patterns and needs

~ of the ~ociety, all these are to be i~co.~rated in the ~urriculum. The ~urriculum in recent

~ years Includes the needs of the mdIvIdual and socIety so that maxImum transfer may (occur from school to social situations.

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transfer may occur from school to social situations.

Another important contribution of educational psychology is the provision and organisation of the special education for the exceptional children (handicapped). The details about this shall be discussed in Section 3.3.

3.1.3 *Evaluation of learning process*

With the help of psychological tests learning outcomes or evaluation of the curriculum, course content can be evaluated. Measurement of aptitudes and any innovations introduced in teaching by the teacher should also be evaluated, as an immediate feedback and knowledge of

results enhances learner's motivation. Evaluation is also important for research studies.

To summarize the scope of educational psychology, we can say that the important task of education is to make the learner self directed in the pursuit of achievement of knowledge and'skills. To provide teachers with some basic skills related to teaching and to give guideline to solve problems of teaching-learning process. It helps teachers to understand the scientific knowledge.

List the specific areas for application of educational psychology.

3.2 Methods of educational psychology

Educational psychology is an applied branch of general psychology, therefore, it uses the research findings and principles developed by psychologist to improve teaching learning process. The main aim of educational psychology is to develop necessary skiijs and competencies in the prospective teacher to enable him to understand, control and predict the behaviour of learners in educative process at different levels. To accomplish this, various methods are employed to collect data on problems of behaviour of the learners. Generally educational psychology uses similar methods as that of general psychology, like introspection, observation, experiment, case history and clinical methods, which you have already studied in General Psychology. Here we shall concentrate on some specific methods used by the educational psychologist to collect data.

3.2.7 *Observation*

This is one of the important and basic methods for collecting data in almost all the research studies. Observation of behaviour can give useful information about learner's interest, motivation and personality variables. Observation should be systematic, natural. j

In natural observation we observe the specific behavioural characteristics of childre

or adults in natural setting. The subjects do not know that they are being observed. For;, example, observation in the ward or in the playground.

In participant observation, the observer becomes the part of the group, which he wants;,

to observe. For example you may become part of patient's group to observe their attitudes towards patient care given at your hospital.

Observational studies are important in studying certain developmental characteristics and to identify behavioural problems. But this method has some limitations as we can only observe behaviour, which may not always be the true behaviour in adults.

Secondly interpretation in observation is subjective thus possibility of observer's bias cannot be ruled out. With proper planning and precise recording some of the limitation can .be overcome.

3.2.2 *Clinical case history method Some students are not able to perform satisfactorily in their course. With clinical methods their problems can be studied. It could be due to emotional problems, like conflict at home, over-anxiety over certain issues or poor coping skills. In some cases the under achievement could be due to less intelligence. With case history interview and -psychological tests, problem can be identified and modified to help the students.*

3.2.3 *Experimental method*

The experimental method is considered to be most useful in a certain areas of educational psychology. It is a precise planned, systematic and controlled observation as you have studied earlier in General Psychology section of this course, in experimental method on there is independent variable and dependent variable and the experiment tries to study their interrelationship under controlled conditions.

If you want to study the role of motivation in learning, then you would need to have two groups A and B comparable in age, intellectual level, socio-economic status and educational background. Both the groups would be given similar learning task but incentive on learning would be given to the experimental group (A), while the control group (B) gets no inc~ntive. Learning outcome of the two groups is compared to see which group has done better. . The merits of experimental method arc as following:

i) It is most systematic, provides objective and reliable information;

ii) Findings are verifiable by other investigations under identical conditions in which original experiment was conducted. .

iii) Cause effect relationship can be studied and provides guidelines to solve teaching 'J and learning problems.

i, The limitations of the experimental method are mainly centered around controlled conditions in' which it is conducted, as some natural behaviours or total insight into the behaviour cannot be understood by experiment alone. Another problems are related to cost effectiveness in terms of time and money.

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List the methods of studying educational psychology.

3.3 Special education You have earlier seen that individual differences of the learner affect the learning process and outcome of learning performance. There are numbers of children who may have any one of the handicaps like hearing, speech and language, vision, mental retardation, learning disability or emotional handicaps. Special Education is required for these children, with special needs. It provides education in different setting in different

amounts, with objectives related to individuals needs and specific age and developmental

levels. Special education offers a continuous form of special teaching for children who need either special environment, special medical

treatment, special methods of teaching or a special curriculum. For some handicapped children, it is needed over most of their school life; for others still ~such as some ill or physically handicapped children) special education may be required during the period of months or years when their illness is
being treated. Remedial education trends to be part-time, relatively short-term and limited to specific objectives such as remedying failures or difficulty in learning certain school subjects, especially in basic educational skills. -It is teaching which is additional to normal schooling gather than an alternative form of education.
Compensatory education embraces a great variety of modifications of curriculum, methods of teaching, educational-social work required by pupils whose development has
been retarded by cultural and social limitations. Goal of special education is to provide appropriate educational assistance for all handicaps students. Children whose learning and adjustment are hampered by personal disabilities or environment handicaps, often are seen to be having effects which spread to other aspects of their development and progress. It is part of the normal experience of teachings to meet and have to provide for such children since the majority of children with some degree of disability are catered for .in ordinary classes in ordinary schools. Some require and receive special help by placement in a special class. By remedial teaching, or by the work of speech therapists, child guidance, and medical or social services. It is increasingly recognized that many of the special needs of children with ?ne kind of major handicap are very similar to those of children with other handicaps. Thus the need for special teaching for children with mentallimi1ations, specific learning
difficulties, language and speech retardation, social and emotional handicaps occur in varying degrees in all handicapped groups and provide common elements in all forms of special teaching.
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Explain the nature and goals of special education.

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.4 Significance of educational psychology to nursing-

.s you have read that educational psychology has application from the time an individual : born till he dies, so it also has significance for nursing students. The study of ducational psychology would help you as a student to study more effectively, improve our memory and understand your differences from your other colleagues. With the now ledge of your capacity and ability, you can plan your academic achievements ccordingly. If aspiration are set too high without matching capabilities then the result ; prevent of frustration due to failure. Similarly if aspirations or goals are lower than Ie capability then your motivation would also be lowered, as there would be no hallenges to meet.

,imilarly it is also important to develop positive attitudes towards patients nursing care, roblems of other people and in accepting newer technology.
:imilarly later where you become a teacher, this knowledge would help you to under- tand your students, their problems. You would be able to teach more effectively and lnderstand advancement in educational technology.

Explain significance of study of educational psychology to nursing.

~.o Summary

Educational psychology is that branch of psychology which deals with teaching and learning. Educational psychology is growing as an important area because of advance- ment in educational technology. and realization that all learners cannot be taught by the same methods. Learning principles can be applied to improve learning and teaching methods. Hence the scope of educational psychology extends from the learner to learning process and evaluation of the learning outcome. The specific methods used in the study of educational psychology are observation, clinical and case study method and ex- perimental method. The study of educational psychology important for nurses as it would help them as a learner to improve their learning and studying skills and also would prepare them to be future teachers.

5.0 Glossary

Curriculum An organized set of formal education and/or training intentions. Developmental disabilities Identifiable delay in normal development.

Developmental period In reference to mental retardation, the ages between birth and 18 years.

Education Development of an individual that includes exposure to significant experiences.

Emotionally disturbed A broad term used to describe individuals whose major difficulty is

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Evaluation A process of judgment based on comparison of a certain measurement against criteria.

Impairment A general term that describes a less than ~ormal functioning; im- plies injury or deficiency.

Learning disabled A general term used to describe individuals who demonstrate a discrepancy between the expected level of achievement and their actual achievement. Usually implied is lower-than-average abil- ity to understand or use spoken and written language.

Observational Method Studying events as they occur in nature, without experimental control of variables.

Personality The individual characteristic and ways of behaving that in their organisation or patterning account for an individual's unique adjustment to his total environment.
Physically handicapped Refers to individuals with defects of the limbs or other health problems. As generally used in special education, does not include conditions such as mental retardation, emotional disturbance, blindness, deafness, or learning disabilities.
Rehabilitation A general term referring to the assistance provided for handi- capped persons. It may refer to providing hearing aids, and pros- thetic devices, counselling, job placement, psychological, social, and/or educational evaluations, and other related services.
Speech The mechanical" (vocal) operations that produce audible, identifiable sounds and words.
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.nswers 0 exercises co. ".,~t""'!r,C"1 .", '" "~- ~';;; ;;';::0./ ;'
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Exercise 1
Educational psychology is the systematic study of the development of the individual without the educational setting. It helps the teacher to foster harmonious overall development of the student.
Exercise 2
i) Learner
ii) Learning process
iii) Evaluation of learning performance ~ : Also refer to Section 3.1.
Exercise 3
i) Observation
ii) Clinical Case History Method iii) Experimental Method Also refer to Section 3.2
Exercise 4
Refer to Section 3.3.
Exercise 5
i) You can plan your academic achievements carefully, ii) Develop positive attitudes towards patients.
iii) Understand your students and their problems, iv) Teach more effectively. Also refer to Section 3.4.

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J Table of contents '-'(,.

4.0 Summary 5.0 Glossary 6.0 Answers to Exercises

1.0 Introduction -What are individual differences?

In Unit 10, you learnt about differences in the leamer, learning process and the perfomlance. The present unit will help you to understand the b~sis of individual differences in various psychological functions.

l No two individuals are exactly the same. We all differ from one another not only in height, weight, colour, appearance, speed of reaction but also in behaviour. Individual

: differences are characteristic of all living organisms. Differences run. crisscross in all [directions. The most easily observed differences are physical and developmental.

You observe variations in individuals of same age in height, weight, and body build; some grow faster while some are slow in growth. Some are tall, others are shorts, some are black, some are white, some are fat, some others are thin; some like music, others do not; some are make and submissive, others are aggressive etc., etc. The list is endless. Other important area for individual differences is behaviour. There could be infinite differences in behaviour of individuals, but the study of personality, intelli- gence and attitudes have been the main focus of scientific study by psychologists. Individual differences in personality temperament can be observed from the day the child is born. Besides the differences in physical characteristics there are differences in their emotional reactivity. Thomas and Chess (1970) found in their extensive study that reliable individual differences could be observed shortly after birth in such characteristics as activity level, attention span, adaptability to changes in the environment, and general mood. One infant might be characteristically active, easily distracted, and willing to accept new objects and people, another might be predominantly quiet, persistent in concentrating on an activity.

Later these children show differences in the development of certain potentialities and special abilities, such as musical talent, mechanical skills, percepto-motor skills and so on. Recent researches have found sizeable individual differences in the learning, retention, and transfer of infomlation. In the domain of remembering, large individual differences are obtained whenever some foml of strategies are required to be used in remembering the infomlation. In tasks requiring simple recognition and judgements of recency or frequency, there is little evidence for person to person variation. If those ~sks are modified and require some specific strategies like mnemonic procedures,

I Table of contents C" 1.0 Introduction: What are Individual Differences? (" ,I'

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recency or frequency, there is little evidence for person to person variation. If those tasks are modified and require some specific strategies like mnemonic procedures, then the differences begin to show. Also differences are seen between younger and older, or mildly retarded and non-retarded children.

In research on learning, several factors that make individual differences are found. Firstly, there is a wide range of subject abilities. We observe individual preferences for these in our day to day life. Some get attracted to one subject, others to another subject. Secondly, individual differences are likely to appear if tasks involve some degree of cognitive complexity. Finally, the type of learning environment, both at school and at home cause individual differences in learning.

Individual differences in ability to transfer training are also documented. Even when children of different ability learn rules, principles, or information to the same criterion, the high ability students appear much better able to use that information flexibly and to apply it to novel situation. Since learning is also related to intelligence, it has been found that high ability students are able to transfer more readily and broadly than those of lower ability students.

Individuals differ in the extent to which their behaviour is disrupted by emotional arousal. Observations of people during crises, such as fires or sudden floods, suggests that about 15 per cent show organised behaviour, effective behaviour. The range of reactions and behaviour ranges between organised to unorganised, disrupted behaviour.

We shall see individual differences related to intelligence and attitudes in Unit 15. : Individual differences related to personality are like traits introversion, extroversion of types of personality. You have also read about personality in details in your previous Units in General Psychology.

Group differences are formed by social tribes, race, sex, age, culture; like we Nigerians are different from Americans. Similarly in Nigeria people of different regions or tribes are different as a group. Individual differences can be seen amongst members of the same groups, even within -one family. Here in this unit we shall study individual differences in general.

2.0 Objectives

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By the end of this unit, you should be able to:

.explain what is meant by individual differences,

.describe role of heredity and environment in determining individual differences .list methods of measuring individual differences, and

.outline significance of the study of individual differences in health and sickness. J

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Explain what is meant by individual differences.

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3.0 Main contents
3.1 How individual differences originate
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At the time of conception and ,in early embryonic stages, all foetus look more or less i identical. As growth continues, differences become increasingly apparent. Even new born babies show significant differences in their behaviour. Some cry more, some are ~ more active and some. have better appetite. As they grow by the individual differences ! I~' become enormous that it is difficult to classify them.
How do these differences originate, when every one has a similar beginning? Heredity and environment are two major sources to cause individual differences. Their constant interplay manifests in differences,'*even in members of the same family. Now we shall examine these factors individually in more details. ~
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3.1.1 *Heredity* ,,~,
c'":' Biological inheritance is determined by the chromosomes and genes. You all have Co
studied ~at females have twenty-three pairs of chromosomes. Males, have twenty-two pairs plus two singles represented as X Y, the X and Y are called sex clIromosomes because our sex depends upon XX or XY combinations. Sets of chromosomes from different persons, of the same sex look very much alike but actually they differ a lot internally. These differences are most pronounced in unrelated individuals.
The heredity factors hidden within the chromosomes are called genes. They are assumed to be "packets of chemicals" strung along the chromosome like small beads on a thread. Action of the genes on cytoplasm changes the shape and other characteristics of cells. The heredity basis of individual differences lies in almost unlimited variety of possible gene combinations which may occur. No two siblings gets an identical heredity, as they do not get same genes from parents. Paternal twins or dizygotic, born to the same parents, at the same time, are different from each other because of different pairs of germ cells. On the other hand, identical or monozygotic twins develop from same sperms and ovum, have exactly the same set of genes, hence they resemble with each other in characteristics discussed above.
3.1.2 *Environment*
The environmental influences are those which act upon the organism, at the earlier stages of development within mother's womb and later external environment which operates from the time of birth.
The nucleus, chromosomes and genes are surrounded by ajelly like substance known as cytoplasm. The cytoplasm, is an intraqellular environment, because the genes surrounded by it are influenced by and

in turn influence its cha'iacteristics. The outcome of the organism is determined by cytoplasm as well as its heredity. A new internal environment comes into existence, after the interaction of genes and cytoplasm' has produced several cells. The actual structure of a cell depends upon its relation to other cells. Development in specific location determines the part of the body.

Later endocrine gland and hormones produce another intercellular influence. Many., congenital deformities are the result of overactive or underactive endocrine functioning. The growing organism is surrounded by amniotic fluid and attached to the mother

by umbilical cord. Hereby the growth of the embryo depends on nourishment

provided by the mother.

The social psychological environment in which the child in born provides social "heritage. The customs, socio-economic status, family environment, interaction amongst the family members and later peers and school environment cause variety of conditions to determine individual differences.

The social environment is extremely variable and unrelated to the sort of genes which the individual has. No two human beings even belonging to the same family, having similar schooling, will have the same environment. It is rightly said that no two individuals have the same environmentas the same fire that melts the butter, hardens the

parent child and other members of the family. Different members of family have difft.:rent friends, develop different interests and attitudes. Each sibling also differs in respect of personality and intelligence. Some of the effects of environment on intelligence are discussed in the next unit.

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Describe role of heredity and environment in determining individual differences.

3.2 Measurement of individual differences

Besides knowing the ways in which a single person differs from others, it is also important that we should be able to measuring these individual differences. After knowing the capability, aptitudes and interest, the person can make suitable goals in learning and vocation, which in turn would help him to adjust better in the society.

One of the methods used in educational psychology to measure individual differences is the psychological tests. A psychological test is an objective and standardized measure of a sample of behaviour to compare the behaviour of two or more persons. Observations are made on a small, carefully, chosen sample of an individual's behaviour, just like any other scientist would test a patient's blood by analyzing one or

more samples of it. Psychological tests cover the behaviour under consideration, for example leadership qualities in personality.

The psychological testing procedures are standardized. It means Jhey have uniformity of procedure in administering and scoring the test, so that different persons can be compared. For a good test it is important that it should be reliable and valid. Reliability means consistency of scores obtained by the same persons when retested with the identical test or with an equivalent form of the test. The degree to which the test actually succeeds in measuring what it sets out to measure is called its validity.

You have already read some of the personality tests in Unit 9. Intelligence test would be described in detail in Unit 12.

Individual differences whether qualitative or quantitative are also subjected to certain

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statistical treatments. 3.2.1 *Distribution of individual differences*

Various degrees of psychological traits are normally distributed in the population. The normal distribution resembles a bell shape curve. Sixty-eight per cent individuals have average intelligence hence these cases are chosen around a mid-value, tapering' off to a few per cent at both extremes, the left representing mental subnormality and the right end as gifted, very superior intelligence. These are symmetrical distributions.

Another type of distribution known as bimodal distribution is represented into two humps in a curve, they try to analyze the characteristic being measured into two factors, each one having unimodal distribu~ion. This type of distribution is usually found in classifying personality types or sex differences. In this type of distribution we also have continuity as all or none phenomena is rare.

List methods of measuring individual differences. :1":

i. 3.3 **Role of individual differences**

Different objectives are emphasized while studying individual differences in clinical and educational set up. In the clinical area, we are interested in a case; to get a global picture of the patients and insight into the condition, so that this information could be utilised for the treatment.

In your clinical practice and otherwise when you meet people, you find people behaving differently. One individual is able to cope well with his stresses, can adjust to his environment while another under similar circumstances breaks down. Some of your patients when admitted' in cardiology ward would become depressed and feel helpless, may feel anxious about their illness and prognosis, whereas other patients may make an active attempt to get well and make necessary changes in their daily routine. The knowledge of individual differences helps us to understand the varied reactions of patients towards illness. Majority of

reactions of the people in health and sickness are determined by their personality' and intellectual ability.

In educational set up, understanding of individual differences helps in planning course material and training programme. It is being recognised that all students do not learn in a similar way. Some are fast learners, others are slow; some are interested in science

~ subjects, others not; some can work in concentrate for long hours, other-require more frequent rest pauses; etc. There are some students who are surface readers compared to the others who go in depth of every thing they study. Some are mixed types. Similarly all teachers are not alike; some have good expression and ability to explain. Under- standing of individual differences of the teachers and the taughts can help in matching teaching and learning styles for better academic results.

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Outline significance of the study of individual differences in health r and sickness. ;

4.0 Summary

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By individual differences we mean physical and behavioural variations, seen in all species including human beings. Some of us are tall, some short, some bright and some are dull. These differences are causes by heredity and environment. Heredity is deter- mined by genes, chromosomes and cytoplasm. Environment is determined by family, school, neighborhood and place of work. Individual differences are generally measured through psychological tests such as intelligence or personality. The differences are generally presumed to be normally distributed in the population. Knowledge of individ- ual difference is helpful in clinical work as well as in educational set up.

5.0 Glossary

Chromosome Small particles found in pairs in all the cells of the body, carrying

the genetic determiners (genes) that are transmitted from parent to offspring.

Dizygotic or Twins developed from separate eggs. fraternal twins

Gene The unit of heredity transmission localized within the chromosomes. Mnemonic Designed to aid the memory by mnemonic device. Monozygotic or Twins developed from one egg. identical twins

Norm An average, common performance under specified conditions. Reliability Consistency of scores on a test over a period of time.

Standard A standard is that in terms of which we measure other things.

Test A collection of items (questions, tasks) so arranged that responses can be scored to use in appraising individual differences. Validity Ability of a test to measure what is purposes to measure.

6.0 Answers to exercises

Exercise 1

Individual differences are characteristic of all living organisms, variations in individuals of same age h height, weight, body build and behaviour. Personality, intelligence and attitudes are also the main focus of individual difference. Also see Section 2.0.

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Exercise 2

i) Role of Heredity:

The heredity basis of individual differences lies in almost unlimited variety possible gene combinations which may occur. Also refer to sub-section 3.1.1

ii) Role of Environment:

Environmental influences start from mother's womb and later ex- ternal environment. Also refer to sub-section 3.1.2.

Exercise 3

i) Psychological Tests ii) Personality Tests

iii) Intelligence Tests

Also refer to Section 3.2. Exercise 4

Refer to Section 3.3

Unit 12: Intelligence and Abilities

Table of contents

1.0 Introduction and definitions

In Unit 11, you have already seen that *individual differences* are important in under- standing human behaviour. In this unit, you will study about intelligence.

Intelli~ence as a concept is used very commonly in our day to day life. We often make' comments that this person seems to be very intelligent

or seems to be dull. Because of this intelligence, we human beings are considered superior to animals. But what is this intelligence? Different people would give different meaning of Intelligence. Similarly psychologists have attributed a variety of factors to the concept of intelligence.

Most commonly accepted view is that intelligence is a general capacity for comprehen- sion and reasoning that manifests itself in various ways. The most widely accepted definition is "Intelligence is the global capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment". It includes the power of adaptation of an individual to his milieu and his ability to learn and. abstract thinking.

A distinction has to be made between intelligence and the aptitude tests. Intelligence test is the assessment of the capacity or the potentiality that a person has, whereas the aptitude tests measure capacity that predicts what one can accomplish with training. An aptitude is a combination of characteristics indicative of an individual's capacity to acquire some specific knowledge, or .skill. Aptitude means an individual's aptitude for a given type of activity, the capacity to acquire proficiency under appropriate conditions, that is his

potentialities at present as revealed by his performance on selected tests have predictiV' value. It reveals an individual's promise or essential teachability in a given area.

2.0 Objectives

After completing this unit, you should be able to: .define intelligence, ability and aptitude, .list factors of intelligence,

.describe the growth of intelligence, .explain stability of IQ scores,

.compare the role of heredity and environment on intelligence, .state methods of assessment of intelligence,

.explain clinical features of Mental Retardation, and .describe problems of gifted children.

Define Intelligence and differentiate it from aptitude.

3.0 Main contents , ,", .,

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3.1 Nature of intelligence

Nature of intelligence, can be understood by the different theories presented in the following sub-sections.

3.1.1 *Two factor theory*

l Charles Spearman proposed that individuals possess general intelligence factor (G) in f varying (degree) amount. This determines the individual's overall ability. In addition to l G, individuals also possess specific abilities *(S)* G is universal inborn ability, it is general

mental energy. The amount of 'G' differs from individual to individual. The higher the 'G' in an individual, the greater is the success in life. S is learned and acquired in the environment, it varies from activity to activity even in the same individual; the individ- uals themselves differ in the amount of'S' ability.

Two individuals in a class may be comparable on their G factor, yet one may be very good with numbers while the other possesses higher musical ability.

3.1.2 *Multifactor theories (Thurstone and Guilford)*

a) Thurstone (1936) felt that intelligence could be broken down into a number of '- primary abilities. He had derived 7 primary abilities on the basis of factor analyses. These abilities, as shown in the following table are represented in items

in test construction.

Ability Description

Verbal comprehension Understanding of meaning of words Word fluency Ability to think rapidly Number Perform calculations

Space Visualize space form relationship Memory Recall verbal stimuli

Perceptual speed Grasp of visual details

Reasoning Ability to find a general rule, logical thinking

b) Guilford has broadened the concept of intelligence. According to him there are two types of thinking: i) convergent thinking solving a problem that has a defined correct answer; and ii) divergent thinking arriving at many possible solutions to a problem. This is predominantly creative thinking. He had proposed a three dimensional theory represented in a cubical model Guilford maintained that intelligence test items 'should distinguish interims of the Operations per- formed upon the Content and the Product mat results. This model provides for 120 factors of intelligence which is a combination yield of 4 contents, 5 operations and 6 products. Assume that a subject is asked to rearrange jumble of words e.g. CEIV, NERTE, to form familiar words (VICE, ENTER). The content is symbolic; since the test involves a set of letter symbols; the operation is 'cognition because it requires recognition of information and the product unit is a word.

Hebb (1966) has distinguished two meanings of intelligence on neurological basis. Intelligence A is the innate potential based on the development process. This type of intelligence is dependent upon "the possession of a good brain and a good neutral metabolism". Intelligence B involves the functioning of the brain, and is observable indirectly from the individual's behaviour. Intelligence A is riot observable and cannot' be measured, whereas intelligence B is measured through tests.

3.1.3 *Process-oriented theories*

These theories have focused on intellectual processesthe pattern of thinking that people use when they reason and solve problems. These

theorists prefer to use the term cognitive processes, in place of intelligence. They are often more interested in how people solve problems and how many get the right solution. They have focused on the development of cognitive abilities. Piaget's work is a significant contribution in this area. He viewed intelligence as an adaptive process that involves an interplay of biological maturation and interaction with the environment.

3.1.41njormation processing theories

These theories break intelligence down into various basic skills that people employ to take in information, process it, and then use it to reason and solve problems. These basic skills may be simple or complex. Robert Sternberg (1984) distinguishes between infor- mation processing "components" and "meta-components". Components are the steps to solve a problem and meta-components are the basics of knowledge that one has to know j to solve the problem. The information processing theory has often been compared with computers in which attention and memory have been designated as the intellectual hardware whereas the action schemes (Piaget's notion) are similar to specific, repeatable intellectual sequences, and executive schemes, similar to plans and strategies. The neo ' Piagetians are of the opinion that people's software grows more SOPhiSticate

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lature, with their schemes expanding in complexity and their amount of available mental nergy increasing. Such changes in, their view, promote the growth of intelligence. Other pproaches focus on the rules-involves in intelligent behaviour or the skills required for arious tasks.

.1.5 *Other theories*

:attell (1971) on the basis of factor analysis, has divided general factor of intelligence G) into two parts fluid intelligence (GF) and crystaliszed intelligence (GC) The former ,eing innate, biologically or genetically determined and the latter acquired based on ultural and education experience.

~ysenek (1973) distinguishes between speed and power components of intelligence.

:peed is measured by the time required to complete the task and power is measured ilrough untimed ~est of reasoning. , .

ensen splits intelligence into two levels; associative ability being the capacity to

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~arn, remember and recall information. It represents the lower level of continuum shown t1 the figure. Cognitive ability is concerned with reasoning and is located at the higher evel. Cognitive ability depends upon associated ability but not the vice versa.

List theories of intelligence.

3.2 **Growth of intelligences**

[ntelligence test scores provide mental age level.. If the child has an average mental age, then a correlation of his mental age (MA) and the chronological age (CA) will form a)traight line. In case the individual's mental age (MA) is higher than the chronological age (CA) then. the curve will be different.

Generally the growth of intelligence is rapid during early childhood and then slows down *' in teens. Longitudinal studies using Wechsler's tests have shown that mental ability .

increases up to the age of twenty-six, after which it leveled off and remains unchanged till late thirties.

There is a gradual decrease in the intellectual ability after forty with a sharp decline after sixty. But it must be noted that decline in ability depends both on the person and the type of ability tested. Individuals engaged in active stimulating working eniv- ronments with good physical health show little decrease in intellectual ability up to age seventy. Physical disabilities, particularly those resulting from strokes or progressive reduction of blood circulation to the brain usually result in a significant decrease in intellectual ability.

Mental abilities that require speed and short term memory decline earlier than general knowledge. The rate of decline of specific abilities is related to one's occupation like people in literary work or professionals do not decline in mental ability as early as others.

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Experience and accumulated knowledge compensates for diminished speed in old age.

3.2.1 *Stability of IQ The stability of IQ has received a great deal of attention from the educational psycho- logists because of its usefulness in education. There are two opinions, one holds that the IQ remains relatively stable over the years changing only very slowly. Another opinion holds that if determined effort is made, a change in IQ can be obtained. There is a considerable evidence to indicate that a stability in IQ is not absolute but only a small range of scores would change.*

An extensive body of data accumulated, shows that intelligence test performance is quite stable. Studies have reported high correlations ranging from 0.72 to 0.83 on retest of intelligence scales. Bradway, Thompon and Cravens (1958) conducted a follow up on children originally tested between the age of2 and 5.5 years as part of the 1937 Stanford Bonet standardization sample. Initial IQs correlated .65 with 10 years retests and 0.59- with 25 years retests. The correlation between 10 year retest .mean age 14 years and mean age 29 years (25 year retests)

was 0.85. If the initial assessment is done in late childhood or after that then the co-relations are found to be very high. The instability of IQ may occur as a result of drastic environmental changes. It can increase with stimulation and training but can decrease due to prolonged or severe illness, head indjury, brain damage, high fevers, epilepsy, meningitis and adverse environmental factors like conflict at home, death of parent, malnutrition. Instability of scores could also be due to fast or slow development of the child than that of the normative sample population. Generally children in continually disadvantaged environments tend to lose and those in stimulating environments gain in IQ with age. The relationship between IQ, educational attainment, and later occupational achievement is positive. Many highly intelligent people perform disappointingly, while many with average IQ may do remarkably well. This is because factors other than intelligence, such as drive, persistence, attention, useful social contacts, and highly developed social skills, are of major importance in the achievement in later life.

i) Describe the growth of intelligence.
,~
ii) Explain the stability ofIQ scores. '
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3.3 Determinants of intelligence
The question of relative importance of 'nature' and 'nurture as a de 226

intelligence has been controversial. The role, of genetics of heritability and environment has been extensively studied. Their comparative roles in determining intelligence are as follows:
3.1.1 *Heredity*
Evidence pointing to the influence of heredity on intelligence comes mainly from family and the twin studies. A heritability index shows the proportional contribution of genetic or heredity factors of a particular trait in a given population under existing conditions. A frequent procedure to compute heritability index is to utilize intelligence test correla- tions of monozygotic (identical) and dizygotic (fraternal) twins. Correlations between monozygotic twins reared together and between monozygotic/'twins reared apart in the foster homes have also been used. The following table summarises the results of a large number of studies indicating that closer the genetic relationship, the more similar is the tested intelligence.
Correlation of Intelligence with Heredity
Relationship Correlation

L Parents & natural child 0.50 Parents & adopted children 0.25 Dizygotic twin 0.55 " , Monozygotic twin
Reared together 0.90, '.
Reared apartO. 75'"
Heritability estimates for intelligence have ranged from 0.45 to 0.87 (Jennsen, 1973). The lower estimate is based on the assumption that a sizeable portion of variation in IQ scores can be attributed to a genetic environmental covariation. Parents can influence their offspring both by direct genetic transmission and by the kind of environment they provide.

3.3.2 *Environment*

Even though intelligence has a significant genetic component, environmental conditions can also be crucially important. The influence of the environment begins from the moment of conception. The development of the foetus, especially at critical times, may be affected by various physical factors including mother's diet, smoking, disease such as rubella and certain drugs. Subsequent environment especially during childhood, socio-economic status, nutrition, health, and educational influences of the family are very important determinants of IQ.

It has been recognised that children from lower social class families generally perform less well on intelligence tests than those from higher social classes. Studies of family influences suggest that greater parental attention received by children of smaller families and the first borns may result in higher IQ scores. The use of media and the educational toys provide the right environment for an intellectual stimulation. Similarly urban and rural set up, type of school attended lead to differential stimulation and type of experience which in turn affects the intelligence scores. Effect of education not only influences the test scores, but teacher's expectation may speed up or slow down the development of individual child.

One of the most convincing evidence for the influence of the environment comes from successful attempts, through intensive stimulation and educationl, to improve the IQs in high risk children and mentally handicapped. Similarly IQ scores have been found to

increase when children are transferred from poor institutions to good foster homes. To sum up, both heredity and environment play an important role in determining intelligence. These can be compared to land and seeds used to grow crop. Seed is like heredity and the hind is like environment. If the land is not fertile, then even with good seed, one 'cannot have a good crop. Similarly with a fertile land if poor quality seeds are used, the crop will not achieve good results. Thus like fertile land and good quality seeds are required for good crop, similarly both

heredity and stimulating environments are required for higher intelligence.

3.4 Assessment **of** intelligence

It was through psychological test of intelligence, that psychology has come to attention of the mases. Alfred Binet (1875-1911) was the first psychologist to devise an intel- ligence that (1904) aimed at measuring the ability to judge well, to comprehend well, to reason well. Subsequently it was revised several times. Binet in collaboration with Simon devised the test by age levels with items of increasing difficulty, with which he could measure a child's intellectual level. He tested a large group of children of different ages with tests of varying difficulty. This helped in finding which items could be completed by majority of the children.

For testing, each child's based age is derived, i.e. highest level at which all items are passed. Termipal age specific that lowest level where' all the items are failed. Between based age and terminal age all the items are given additional scores. The sum of this total score is converted into mental age. The ratio between chronological age and mental age is intelligence quotient (IQ). The formula of calculating IQ is MA x 100. It is multiplied by 100 to eliminate decimals. For example if the child is 8 years old, his mental age also falls at 8 years then he will have IQ of 100-8 x 100. Supposing this 8 year old child scores mental age of 10 years then his IQ would be 10 x 100 = 125.

The concept of IQ has become very popular, but it has a number of problems. One that it has nothing to do for adults say a mental age of 2 or 45 is meaningless. Secondly it tends to suggest that intelligence is fixed in childhood, whereas several studies have shown that intelligence scores quite unduly. The new tests are based on deviation from
IQ.

The other type of tests have been devised by David W eewrler. These are, wechsler adult intelligence scale, wechsler intelligence scale for children, and the wechsler preschool and primary scale for intelligence. These are "very popular tests and each has two sub scales verbal and performance. Verbal scale is further divided into sub scales details are given in the following table.

Wechsler Adult Intelligence Scale

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Verbal Performance

1. Information Picture arrangement 2. Comprehension Picture completion 3. Memory span Course design

4. Attitude Object assembly

5. Similarities Digit symbol ;" 6. Vocabulary

Some Intelligence' tests can be administered individually. There are other test to measure intelligence in groups. These are specially used in selection tests by various organisa- lions.

Intelligence scores we presumed to be distributed in normal distribution curve like other lbiological variables. The IQS are classified as follQws:.
Genius 140 & above
Very superior 130-140 Superior 120-130
Above average 110-120
Average 90-110 "
Dull average 80-90 ; Borderline 70-80 Mild M.R. 50-70
Moderate 35-50
Severe 20-35
Profound 0-20
E~;;]
Compare the role of Heredity and Environment on Intelligence.

3.5 Extremes of intelligence

3.5.1 *Mental subnormality*

Mental Subnormality refers to sub average general intellectual functioning which originates in the developmental period and is associated with impairment in adaptive behaviour. A person is regarded as a mentally subnormal if (i) the IQ attained is below 70 on standard psychological tests of intelligence; (ii) their adaptive skills are inadequate to cope up with the daily routines. Adaptation skills are those behaviours by which an individual makes adjustments and independent living in the society. In childhood these are the self help activities such as eating and dressing independently. Later on the adaptive behaviours are concerned with basic academic skills an coping skills such as telling time, using money and assuming social responsibilities. Slowness in intellectual development may be widespread and affect all aspects of cognition. Only rarely will a child's functioning be retarded to the same degree over the entire range of skills, but where such skills are almost all significantly impaired, it is reasonable to think of the child as showing general mental retardation.

In our country the problem of mental Subnormality is quite significant. The studies have shown an incidence of 4-5 per 1000 individuals. Mental Subnormality is categorised in four levels mild, moderate, severe and profound. The following chart gives the charac- teristics of each of these levels:

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ry.

Characteristics of Persons with Various Degrees of Mental Retardation

Description	Severity level	Mild	Moderate	Severe
Preschool	0.5	Can develop social and	Can talk or learn to	Poor motor
yrs.		communication skills,	communicate; poor	development, speech
minimal	retardation	in social awareness; fair	minimal; general	senson-

motor areas, motor development, unable to profit from often not distinguished profits from training in training in self-help; from normal1untillate self help; can be little or no
age. managed with communication skills. moderate supervision.
School age 6 -Can learn academic Can profit from Can talk or learn to
20 yrs. skills up to training in social and communicate; can be Training & approximately 6th occupational skills; trained in elemental Education grade level by late unlikely to progress health habits profits
teens; can be guided beyond 2nd grade level from .systematic habit toward social in academic subjects; training. conformity may "learn to travel alone in familiar.
Adult 21 and Can usually achieve May achieve self May contribute over Social and social and vocational maintenance in partially to self vocational skills adequate to unskilled or semi maintenance under adequacy minimum self support skilled work Under complete supervision;
but may need guidance sheltered conditions can develop self
and assistance when needs supervision & protection skills to a under unusual social or guidance when under minimal useful level in economic stress. mild social or economic controlled environment.
stress.
t' '-'
Clinical features -',).;' , .'.' ,
Mental subnonnality may first be identified by delay in their motor milestones in the first few months of life. The child will be slow to obtain head control, sit unsupported. Large number of moderately retarded children however, show nonnal motor develop- ment and present for the first time with language delay. The child may be thought to be deaf because he fails to take notice of sounds or shows lack of single words or word combil;lations at the appropriate age. Mildly retarded children may not be detected until they enter school when failure of educational progress may be found to be due to a general slowness of development rather than to a specific learning disability. Usually, however, it will be found that the early development of the mildly retarded especially their early language development has been slow. Occasionally mental retardation arises as a results of some postnatal event, such as a head injury or cerebral infection. In these cases the time course of the condition will, of course be different.
Once diagnosed, the clinical features of children with mental retardation will depend more especially on:
1. The severity of the .condition,
2. The presence of associated physical and psychiatric conditions; 3. The quality of care and education the child receives.
Causes of mental subnormality Mild retardation (1050-70).
Polygenic influences and multiple deprivation: Most children with mild retardation come from deprived family backgrounds in which the quality

of parental care provided has been poor. There is a strong link between mild retardation and low socio-economic

status, large family size, and overcrowded housing. ~ Parental intelligence is usually below average, though only a minority of parents of mildly retarded children are retarded themselves; Family and twin studies suggest that. polygenic influences are also of importance in etiology.

Nutrition: The nutritional state of .the mother during pregnancy affects fetal develop- ment, including development of the fetal brain. After birth, malnutrition is probably a very unusual cause of psychological deficit or abnormal behaviour in developed coun- tries. Malnutrition usually co-exists with severe environmental deprivation. It probably affects mental functioning both directly and in an indirect way. The malnourished infant and young child is often lethargic and slow to respond to stimulation. He is prone to infection and therefore more likely to suffer cerebral damage with effects on psycho- logical functioning. Early malnutrition probably affects later performance as a result of interaction between physical and environmental factors. These are children with normal intellectual potential who have suffered a specific trauma to brain, function sufficient to impair intelligence to some degree, but not to such severity to cause moderate or even more serious retardation. Thus some children with cerebral palsy, post encephalitic states, or trauma to the head, fall into this category. Here the question arises whether there has been hidden deprivation perhaps with the child being neglected for long periods in an affluent household by the ayahs or servants or whether there is a physical cause of unknown aetiology. Sensitive history taking is necessary in these situations as the distinction is important for future management, but sometimes uncertainty remains even after a careful assessment.

Moderate to profound retardation (10 less than 50)

Although this level of retardation may be produced by gross deprivation the great majority of children functioning at this level of intelligence have organic brain pathology accounting for their retardation. Sometimes the effects of an organic lesion are com- pounded by coexisting neglect.

Chromosomal defects account for about 40 per cent of the moderately or more severely mentally retarded.

1. *Down's syndrome (trisomy* 21): This syndrome accounts for about three quarters. of this 40 per cent i.e. nearly one-third of all cases of moderate to profound retardation.

2. *Fragile* X *syndrome:* This syndrome accounts for about 10 per cent of moderate or more severe retardation in boys,

3. *Sex chromosome abnormalities:* Children with Turner's syndrome (XQ) Klinefelters (XXY) and other abnormalities of the sex

chromosomes although usually of intelligence in the normal range, sometimes show general mild or moderate mental retardation, or more commonly specific cognitive deficits.

4. *Other aittosomat abnormalities:* These include disorders in which there is a chromosomal deficit or excess.

Genetic defects: Single gene defects accounts for about 15 per cent of moderate to profound retardation. These are mainly metabolic disorder such as galactosaemia and Phenylketonuria exerting their effects by altering the metabolism of amino acids, lipids, carbohydrates, and rarely, other bodily constituents. Some endocrine disorders as well as a range of other rare genetic disorders are included in this category.

Abnormalities of pregnancy and the perinatal period account for approximately 10 per

cent of cases.

1. Infection in pregnancy e.g. rubella, toxoplasmosis, cytomegalo virus, Acquired Immune Deficiency Syndrome (AIDS).
2. Alcohol or drug abuse in pregnancy. 3. Maternal phenylketonuria.
4. Perinatal abnormalities, including birth trauma and postnatal anoxia.
5. Neonatal disorders including infective and metabolic condition such as hypo- glycaemia.

Postnatal causes: These include head injury (accidental or non-accidental), infantile spasms, and cerebral or meningeal infections and exposure to toxins, such as large quantities of ingested lead producing encephalopathy. Mental retardation also very occasionally follows prolonged anoxia of the brain caused by cardiac arrest or obstruc- tion to. the respiratory tract.

Other causes: In about 25 per cent of cases of moderate to profound retardation no cause is identifiable. In a proportion of such children the presence of other signs of develop- mental abnormality such as deformities or organ malformations make it likely that the mental retardation has arisen as a result either of a single gene or chromosomal disorder, or as a failure of early fetal development. Some children do not show such stigmata and indeed look perfectly normal. In the absence of a history of gross deprivation or non-accidental injury it seems reasonable to assume that such children are suffering from an unidentified organic disorder. Any unjustified assumption that such cases might be caused by coven parental neglect is likely to increase the already serious emotional burden in the family.

Management

Retarded individuals take longer to learn new material and once they have learned something new, they usually forget more easily than do the normal. Consequently they need more help, and more systematic help from parents, teachers, and other in the acquisition of skills. In particular, they often fail to learn by observation, and therefore need

more structured teaching. The help needs to be provided at an appropriate level for the child. It is useless to try and teach skills too far ahead of the child's present mental age. Parents play an important role in training these children.

In the preschool period the main role for professionals such as professional teachers, speech therapists" etc. is in helping parents to find ways to stimulate their child's development.

3.5.2 *The mentally gifted children As you would recall from Unit 11, in distribution of intelligence, the right extreme of the bell shaped curve represents the gifted or the genius. These are the individuals with IQs of 140 or higher. About one out of every 100 children has an IQ of 140-160. Less than one out of every 1000 has an IQ-above 160.*

In the early childhood a gifted child is generally found to be a misfit in his class because the level of teaching in normal class room is for an average child whereas the gifted child is able to comprehend much faster. As a consequence they often indulge in behavioural irregularities. They have been found to be gross under achievers and extremely unhappy. One problem seems to be that such extremely. bright children find themselves intellec- tually misfit with children their own age, and physically misfit with the older people who

'e their intellectual equals. But things improve by adulthood and they appear to be lppier and better adjusted than most others of their age.

hese days there are separate schools for the gifted children. With the right type of aining their superior potential is channelised in constructive tasks.

.6 Applications of intelligence

ssessment and understanding of intellectual functions is helpful in your clinical work ; with this knowledge, you can diagnose a patient with mental subnormality or with ~ry superior intelligence. Your explanations or guidance to the patient would be ~cording to his intellectual level. In some diseases like neuro-psychiatric disorders, ~ilepsy, psychiatric disorders and in some of the endocrinological disorders, assessment f intelligence is of great assistance in their management.

:Oowledge of intellectual functioning is also useful for yourself as a student and later s a teacher. Teaching method, content of the subject matter and expectations from ,udents should be based on pupil's intellectual functioning.

~.o **Summary**

rltelligence is not a unitary concept, it is a global capacity of an individual to act urposefully, comprehend and think rationally. Various theories have been put forth to nderstand the nature of intelligence. Some theories define intelligence in terms of its Irganisation like the factor theory 'G' factor and'S' factor, and the multifactor theories If

Guildford. Other theories have defined intelligence in terms of cognitive processes. ntelligence scores are more or less stable as the test scores of the early years have been ound to correlate highly with the scores Obtained in late adolescence. Heredity and :nvironment both play an important role in determining the intelligence. Intelligence can Ie assessed through verbal or performance test. Average IQ scores range-from 90 to 110 obtained on standard' tests of intelligence). Those having an IQ below 70 are considered IS mentally subnormal, while those with an IQ above 160 are considered as mentally ~ifted. Knowledge of intellectual functioning and its assessment is of a great importance n clinical practice.

5.0 Glossary

~bility Demonstrable knowledge or skill.

~chievement tests Tests used to measure present knowledge or skills.

~daptation Refers to meeting the performance requirements or the demands of one's situation.

Aptitude Ability to profit by certain type of training, and to do the work re- quired in a particular situation.

Chronological Age Age from birth, calendar age.

Convergent thinking Thinking in which the thinker gathers information relevant to a problem and them proceeds by reasoning to arrive at the one best sol- ution; involved in solving problems with a single correct answer.

Crystallized intelligence The type of intelligence involved in applying what has been learned; reflects one's cultural exposure and is composed largely of~owledge and skills.

Divergent thinking A type of thinking in which a wide variety of ideas or solutions come to mind.

Fluid intelligence A general relation -perceiving capacity which represents one's poten-

tial intelligence somewhat independent of socialisation and educa- tion.

Genes The essential elements in the transmission of heredity , charac-teristics.

Heretability The proportion of the total veriability of a triat in a given population , that is attributable to genetic differences among individuals within
that population.

Intelligence Quotient The score obtained on an intelligence test. IQ is a number obtained by dividing mental age by chronological age and multiplied by 100.

Mental age A type of score expressing mental development in terms of age level at which a child is performing.

Mentally gifted An individual with an unusually high level of intelligence commonly an IQ of 160 and above.

Mentally retarded A mentally subnormal individual whose problems lie in a learning disability with no evident organic damage

6.0 Answers to~~el'Ctse -; .

1. Refer to 2.0
2. Read carefully the theories of intelligence 3.1 3. Refer to 3.2 4. Refer to 3.1
5. Describe about heredity and environment from 3.3 6. Refer to 3.4
7. Read carefully from 3.5.1 -Clinical features of mental retarda- tion
8. Refer to 3.5.2

Unit 13: Learning

Table of contents

1.0 Introduction and definitions

In Unit 10, you studied about dIe role of psychology in education. This unit will help you to understand about learning process in detail.

Learning is central to all our behaviour. It is the key process in human behaviours. as we learn to do various activities like speak, write, think and perceive. Our attitudes and emotional expressions are also learned behaviours. All our adaptive as well as unadap- tive, our cognitive as well as affective behaviour are formed by learning processes. These are of vital importance in helping the organism to adapt to its changing environment. speak, write, think and perceive. Our attitudes and emotional expressions are also learned behaviours. There are three important factors in this definition:

i) Learning brings change in behaviour.

~ ii) Change takes place through practice differing here from changes due to r growth/masturbation or experience.

iii) The change in behaviour should be permanent to be called as learning.

There are a variety of ways by which we learn, these are given in the next sub-unit.

2.0 Objectives

IBy the end of this Unit, you would be able to: - .define learning,

.differentiate classical conditioning and operant conditioning, .describe cognitive learning,

.state importance of social learning,

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-lISt m~lnuus UI ~11~~UV~ l~ammg,
.state role of transfer of learning, and
.demonstrate significance of learning method for nursing.
a) Define learning.
b) Write important factors of learning.

3.0 Main contents " .., "
"' ,... ,

3.1 Types of learning

There are a number of theoretical explanations about the process of learning. These are classical conditioning of operant conditioning which emphasize stimulus-response (S-R) relationships and explain learning as an associative process. Other psychologists argue that all types of learning cannot be explained by simple forms of S-R relationships. Cognitive theories give importance to perception and understanding. However, we are social beings and we learn a number of tasks in social context so another group of theorists give social learning model. We now examine these four methods of learning.

3.1.1 *Classical conditioning*

This is the simplest form of conditioning, described Pavlov, a Russian Psychologist. Conditioning is a term used to describe the process by which neutral stimulus gains the power to elicit a specific conditioned response. This is explained through the experiments done by Pavlov, He associated the presentation of food to the dog with another stimulus as sound of the bell. After giving some trials in which bell preceded the presentation of food, the dog started salivating at the sound of the bell. To explain this phenomenon, some technical terms are used.

Food -Unconditioned stimulus (UCS) Salivation elicited for food -Unconditioned response (UR) Sound of bell -Conditioned stimulus (CS) Salivation to bell -Response (CR) The diagram below explains the conditioning procedure:

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Innate Stimulus-Response Connection ,
[US] [UR] " Food Salivation
Learned Stimulus-Response Connection
[CS] [CR]
Bell Salivation

The acquisition of a conditioned response is gradual and becomes stronger with repeated
trials. There are some aspects of classical conditioning which require, consideration.

i) Acquisition: For acquisition each paired presentation of the CS (Sound of bell) and the US (Food) should be presented a number of times and the interval between CS and US should be short.

ii) Stimulus substitution: With conditioning a link/bond is formed between the CS and US and as a result of this CS (bell) becomes equivalent to US (food) in eliciting a response. We mean thereby that an association between CS and US enables one to substitute CS for US in evoking a response.

iii) Stimulus generalization and discrimination

Stimulus generalization: When conditioning has occurred or when the conditioned response to a stimulus has been acquired, then other similar stimuli can also elicit the same response. This is known as stimulus generalization. In Pavlov's experience the dog gave CR (salivation) to a slightly different bell also.

Stimulus discrimination: Stimulus Discrimination is to make one response to one stimulus and different response or no response to another. In experiments it is demon- strated by using two different tones (SCI) (bell). On one trial CS (1) is paired with US (food) and on the other trial CS (2) given without US (food). The s learns to respond only to CS (1).

iv) Extinction and spontaneous recovery: Repetition of the conditioned stimulus (Bell) without unconditioned stimulus repeatedly gradually diminishes the response. This is called Extinction. A response that has been extinguished, does come-up later on its own, this is called spontaneous recovery. At this stage, if reinforcement (US) is not presented with CS, the response extinguishes permanently.

3.1.2 *Operant conditioning Operant conditioning is another approach to the study of associative learning. The term coined by B.F. Skinner means that the, likelihood of a behaviour depends on the significance of the event immediately following it to person showing the behaviour. If the event following the behaviour is positively reinforcing or rewarding, then it will recur. If it is not reinforced or is punished, then it is less likely-to recur and eventually stops completely a process known as ' extinction". An altemati ve related approach is ' stimulus control' changing the event preceding. When a response operates on the environment, it may have consequences that can affect the likelihood of the response occurring again. This form of learning is also known as instrumental conditioning* because some action or behaviour of the learner is instrumental in bringing about a change in the environment that makes the action more or less likely to occur again in the future. For example putting

I food in your mouth (an operant) is likely to be repeated because of its pleasant

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consequences.

Behaviour Positive Consequences Recurrence of behaviour (Positive reinforcement)

Behaviour No reward of punishment Behaviour disappears (extinction)

It is a powerful method for teaching new behaviour patterns both to humans and animals.

The basics of operant conditioning are reinforcement and punishment. In children the most common form of positive reinforcement is social, children are likely to repeat behaviour which gives pleasure to those whom they are fond of.

Usually, but not necessarily, their parents, teachers are the most important positively reinforcing figures, but as they get older, other children increasingly take on this role. If a teacher pays gratifying attention to bad behaviour (even if the attention takes form of shouting at the child), then bad behaviour will recur. Material rewards, such as money,. sweets, chocolates, other favourite foods, watching television ar~ also used. "

i) Reinforcement

The basic principles of operant conditioning is that when a behaviour occurs and is followed by a reinforcement, it is more likely to occur again in the future. A great deal of our behaviour has been learned because it has been rewarded. For example *you* study because *you* may find it reinforcing in terms of marks attained, praise from your colleagues. Many responses can be made to occur more frequent!) by following it with reinforcement. The behaviour can be shaped and moulded by appropriate arrangements of responses and reinforcers.

Nature of reinforcers: Whether something is positively reinforcing or punishing depends' on the effect it has on behaviour. What may be positively reinforcing to one child may i not be so for another. For example, usually food will be positively reinforcing, but to an *',,.l* anorexic girl who hates the sight of food it may be punishing. Pain is usually punishing, but to a child preoccupied guilt with masochistic tendencies, it will be positively reinforcing orrewarding. Further, the strength and direction of reinforcement will depend to some degree on the child's relationship with the person administering or involved in it. A game of football is likely to be more positively reinforcing for a boy if it involves his father than his mother, A star chart for bed wetting worked out in co-operation with . a mother with whom a 6 year old has a good relationship is likely to be more effective' than if the mother and child are in serious conflict.

Reinforcements are broadly into two types: (1) *primary* or material rewards, snacks ' sweets, food (2) *secondary* or social rewards -such as praise, smile. Events or conse- r quences which strengths behaviour when they are presented are called positive *rein*- I *forcers.* In *negative reinforcement* the response cause the termination of painful event. , Removal of painful or unpleasant consequences can also strengthen or reinforce beha- ,) viour.1 For instance, offering a screaming child an ice cream may result in a child stopping screaming. The adult is likely to continue to give ice cream (operant) to stop i child screaming (negative reinforcement for the adult). I

Schedule of reinforcement: According to Skinner, at the beginning of training you should reward each and every move the child makes toward the goal. However, once the child has mastered a gi ven ' response in the chain, you may begin slowly fading out the reward by reinforcing the response intermittently. Continuous reinforcement is necessary at first, .'" both to keep the individual eager to perform and to let him know that ~he is doing'

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;omething right. However, once the child learns what that "something" is, you may begin 'einforcing the response every second time, then every third or fourth time, then perhapS' ~very tenth time. If you fade out the reward very gradually, you can get a child to make i simple response several times for each reinforcement.

)bring the fading process, the exact scheduling of the reward is crucial. If you reinforce ~xactly every tenth response, the child will soon learn to anticipate which response will ~ain him reward. Skinner calls this fixed ratio reinforcement, because the ratio between he number of responses required and the rewards given is fixed and never varies. Instead)f reinforcing exactly the tenth response, we can vary the schedule so that sometimes he third response yields reward, sometimes the twentieth or any response in between. ~ hundred responses will yield about 10 rewards, but the child will never know when he next reward is coming. When trained on variable ratio schedules, individuals response it a fairly constant pace.

~xtinction generally occurs most rapidly following withdrawal of things that are positive 'einforcers. Thus the withdrawal of love from people of whom the child is fond is often he most effective way of achieving extinction of the undesirable behaviour. In other :hildren, the withdrawal of material goods, such pocket money, special food or think, md opportunity to watch television is more important.

>*haping* refers to the gradual forming of the behaviour. It is a step by step method to each complex behaviour. It is commonly used in teaching skills to mentally retardates.

~i) Punishment

When we wish to eliminate an unadaptive behaviour, punishment tends to decreases the ikelihood of occurrence of the responses. Any unpleasant consequence of behaviour Nhich makes that behaviour less likely to occur can be seen as punishing. Physical)unishment by parents is the most frequently used, but many children do not respond to t by a reduction in their undesirable behaviour. Probably the attention they get when hey are punished has a positive reinforcing rewarding effect, and this result overrides legative experiences of physical pain. The experience of negative emotional states- mxiety, expression and a sense of failure is, by contrast strongly punishing. In other words punishment decrease the frequency of a response, stops the behaviour leading to It, Some of the common methods based on principle of punishment are

time out from reinforcement, over-correction and response cost These methods if used consistently and ;ystematically, have been found to be very effective in modifying problem behaviour in :hildren.

Comparison Between Classical and Operant Conditioning

Classical Conditioning Operant Conditioning

UCS is given irrespective of the Organism's own behaviour determines organism's behaviour whether *or* not the UCS will be presented.

Time interval between the CS and the Time interval depends on the organism's

UCS is rigidly fixed. own behaviour ..: Responses involuntarily mediated by Responses under voluntary control,

autonomic nervous system like eye blink mediated by the central nervous system The unconditioned stimulus (UCS) The reward is contingent upon the occurs without regard to the subject occurrence of response. behaviour.

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Classical Conditioning Operant Conditioning

Association between stimulus-response Association between stimulus responses (S-R) is on the basis of law of contiguity (S-R) is on the basis of law of effect (effect (things occurring closer in time and of reward and punishing) space get associated)

There is pairing ofUCS and CS No pairing ofUCS and CS but pairing of a response and the reinforcing stimulus which follows.

Reinforcement comes first as food is Reinforcement is provided after the presented first to elicit the response response is made by the organism. We present the (UCS) unconditioned We present the stimulus only if the stimulus regardless of whether the (CR) organism makes the desired response. conditioned response occurs

Stress is laid on time control Place of motivation and reward is stressed.

The essence of learning is stimulus The essence of learning is response substitution modification.

Stimulus oriented Is response oriented.

Response is correlated with and There is no antecedent behaviour and is controlled by an antecedent event, an controlled by its consequences. . eliciting stimulus which is initially the UCS and subsequently the CS

Differentiate classical conditioning and operant conditioning.

3.1.3 *Cognitive learning*

In learning more complex forms of learning, perception and knowledge or cognitive processes play an important role. Cognitive theorist state that learning cannot be satisfactorily explained in term of stimulus response association. They propose that a learner forms a cognitive structure in memory which organizes information into rela- tionships

and meaning. Without any known reinforcement, new associations are formed and new relationships are perceived among events, simply as a result of having experi- enced these events. Links are made stimuli so that stimulus-stimulus (5-5) associations are learned.

i) Insight learning

Kohler, a German psychologist, on the basis of his experiments on chimpanzees, emphasized that while working on a problem one grasp the inner relationships through insight, not through mere trial and error, but by perceiving the relationships essential to solution. In his typical experiment, a chimpanzee in the bars was given 2 unequal size of sticks and the fruit was kept outside the bars, which could not be reached by one stick alone. After several trials the animal all of a sudden joined the 2 sticks together to make it a single long stick and with that could reach the fruit.

Insight is often used in problem showing, puzzles and riddles. To emphasize the suddenness of the solution~ it is also called by some as "Aha experience".

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:i) Sign learning -':'. .

;ign learning is an acquire'd expectation that one stimulus will be followed by another

n a particular context. What we learn, is a set of expectations or a cognitive map of the

~nvironment rather than specific responses.

rolman believed that some le~ing is sign learning. We develop a sort Of cognitive map

)r structure instead of ..learning a sequence of the task. On ' the basis of understanding,

we tend to make spatial relationship. v

~atent learning refers to any learning that is not evidenced by behaviour at the time of

he learning. It occurs without any reinforcement for particular responses and seems -to

nvolve changes in the way in which information is processed. You can get ample

~xamples of latent learning from your own experiences, when you have not consciously

)ut an effort to learn, hut later you can perform that particular skill or responses.

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Describe cognitive learning.

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, '. , , J.1.4 Social learning ,
rhere are many forms of learnin,g which cannot be explained through conditioning.
We also learn through observation. Social learning theorist stress upon observational
earning or modeling in which a person acquires a response to a specific situation by
watching others make a response (Bandura, 1969). Imitation is one of the important
nethod based on this theory, which could be applied in learning of many skills. For
~xample many of your skills like giving an injection, making bed or dressing of a wound
ire learned by you simply by observing ybur seniors perform those skills. Even
naladaptive behaviours like aggression are learnt through imitation. The learner acquires
md stores internal (representations) response through images and verbal coding, which
nay be expressed later.
~~~~ ' -c.. ., ~ ,;:.
"
State imp()rtance of sociallearni~g. , '
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,~ ',i, ,"""""", " " ,,' "j :_1,:" .., , ., .
" """"~~""":,~,,,,;,,,.'j., :.,., , ..., , , , J.2 Making learning effective
--earning effectively is a skill in itself; There seems tittle doubt that good study skills
241
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contribute to academic success. Some of the students have difficulties with their studies
vanishing not just from lack of application/psychological problems but from specific
problems with the way they study "and leafa; Here are' some tipsi-by;' which you can
learn more effectively.
Definite goal
In any learning student should have clear goal in view, as with a goal in mind one works
towards a definite and sure purpose. It also enhances your motivations. Intention to learn
ensures better learning.
Knowledge of results or psychological feedback
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One must also have conscious assurance that he is making progress towards his
achievement. Frequent and regular review of the amount of progress being made toward
the goal act as a strong motive to promote continuing effort on the part of the learner.
One can build small rewards, as reinforcers into a work schedule, like a 5 minute break
after every hour of solid work. In this way we can work more effectively getting away
with mental fatigue.
Distribution of practice periods
A number of experiments have demonstrated that a shorter practice periods are more
economical than longer periods and when distrib.uted over several days yield better
returns than when they are concentrated into a single sitting.
Whole versus part method
Whether the entire topic should be learned all the way through in each trial or by breaking
it into small portions and learning in turns? The former is known as whole method and
tatter as part method With easy units, whole method should be adopted. If material is
difficult in relation to the learner's ability, smaller units should be learnt; but they should
still be as large wholes as a learner can manage efficiently. Try to learn in natural units.
Logicalleaming
This means that instead of learning by heart, rote memorization, you should try to grasp
meaning and idea of the text. Logical learning calls for an arrangement and assimilation
with ideas in mind.
Take rest in between your studies as mental fatigue prolongs the study process. The
learner's level of anxiety interfere's with good performance. Mild degree of anxiety can
be useful aid to learning but undue worry, anxiety and nervousness may have an
inhibiting and interfering effect. The degree of anxiety varies from one individual to
another. Some may be afraid to just answer in class others may only be in this state during
exams meaning thereby that some are temperamentally more anxious than others while

others are made anxious by undue pressures; such as parental expectations.
Rhyming also helps, as it is well known that certain kind of material (poems vs. Prose)
lends itself to better learning.
Overlearning/continuous repetitions of stimulus response learning help to retain the
material occur a longer period of time provided it is again not rote learning. E:;;;]
List methods to make learning effectives.
3.3 Transfer of learning
If everything we learned was specific to the situation in which it was learned, the amount
of learning that would have to be crammed in a lifetime would he phenomenal. But most
learning is readily transferable, to other situations with some modification. The influence
that learning one task may have on the subsequent learning of another is called transfer
of learning. Sometimes transfer of learning could be positive or negative. Positive
transfer of learning is when learning on task does facilitate learning another. When one
learning interferes with others, it is called negative transfer of training. There are
numerous examples of negative transfer in everyday life.
One special kind of transfer is called bilateral transfer for example learning to do a thing
with one hand facilitates (transferred) learning with the other hand.
The problem of transfer of learning has been of great concern to educators. For them it
constitutes the very important practical question of how the schooVcollege curriculum
should he arranged to ensure maximum positive transfer. Iflearning of psychology would
help in the learning of mental health which subject should be taught first to ensure
maximum transfer to other subjects. Doctrine of formal discipline, maintained that the
mind was composed of faculties that could, be strengthened through exercises, much as
individual muscles can be strengthened. But this doctrine has been, discredited by
experiments.
Positive transfer of training has been demonstrated through learning to learn, that is when

a student is given successive lists of verbal material over a period of days, he can learn
with greater speed even if the material is not similar. The students presumably learns a
techniques or an approach to the task that facilitates their performance on later tasks of
the same sort.
Learning to learn has been extensively investigated with small children. The finding
indicate that learning depends on different factors like ignoring distracting noises and
other irrelevant stimuli, learning to identify the relevant cues in the situation. It involves
learning a principle, this is the chief method by which learning is transferred. Transfer
is also possible if principles learned in old situations are appropriately applied to the new
situations, like principles of reasoning learned in logic are applicable in mathematics.

3.3.1 Applications to education

The extent of transfer of an academic subject clearly depends on the teaching methods.
Teaching for transfer requires emphasizing the similarities between the current subject
and the situations to which the new learning will transfer. If the two subject areas are
similar in general principles or concepts, then transfer depends upon the extent to which
the principles and their broad applications are stressed. Transfer of learning is also
dependent on high degree of mastery on basic problem and experience with a variety of
similar problems to ensure generalization of the principle. If a student is presented with
a vide variety of problems without ti.ne to learn any on to a moderate decree of mastery,

there will be little transfer.
Improvement in learning, how to learn on study skills also helps in transfer: It hasbeeit
demonstrated that when one learns certain principles of performing or s~Jvin~ piobl~Iil
then there is marked improvement in one's ability to learn and remember.. ..,'
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State role of transfer of learning..

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3.4 Significance of learning for nursing
Learning is fundamental to the development and modification of behaviour, thus knowl-
edge of the learning process may be usefully applied to many clinical situations you may
encounter and also in your academic work.
Many of our subjective feelings, emotions and attitudes are probably conditioned
responses. Through generalization it becomes difficult to identify the origin of our
emotional responses. Both our adaptive emotional responses as well as unadaptive
responses are learned and can be unlearned through principle of.1earning.
Behaviour modification or behaviour therapy is a group of techniques commonly used
in the treatment of various psychiatric disorders and in the training of mentally retarded
children. Cognitive learning methods are also applied in clinical setting.
Learning methods have wide applications in educational setting. In programmed learning
the I1)aterial to be learned is broken up into small easy steps, so that the learner can
accomplish without frustrations. Also with programmed learning, learner can master the
task at his own pace. With versatile and flexible learning you can improve your learning
~tyle.
Applications of reinforcement principles can often increase productivity both in studies
as well as in vocation.
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Demonstrate significance of learning methods for nursing.
" .. :.0 Summary ; ,,'.: ,. .,..
earning is defined as "any relatively permanent" change in behaviour that occurs as a
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:sult of practice or experience. Methods of learning are broadly classified classical
Jnditioning, operant conditioning cognitive learning and social learning. In cl.assical
Jnditioning a neutral stimulus CS is presented before the unconditioned stimulus (US)

tat evokes an unconditioned response (UR). As a result of association the previously
eutral stimulus "begins to elicit a conditioned response (CR). In operant conditioning
n action of the learner is instrumental in bringing about a change in the environment
tat makes the action more or less likely to occur again in the future. Reinforcement is
asic in this form of learning. Cognitive learning refers to changes in the way information
.processed as a result of experience a person has had. Insight learning and sign learning
re examples of cognitive learning. Social learning emphasizes the role of observation,
nitation and modelling in learning.
)ne can learn effectively by defining a definite goal, giving feedback, spacing your study
me, learning unit size that is easily grasped, understanding the material rather train rote
:arning and by avoiding anxiety.

~.O Glossary

ssimilation The modification of one's environment so that it fits into already de-
veloped ways of thinking and behaving
:ehaviour Anything a person does mat can be observed in some way.
:ehaviour therapy Methods developed to alleviate psychological disorders.
:onditioning Process by which conditioned responses are learned.
:ognitive learning A change in the way information is processed as a result of experi-
ence that a person has had.
:ognitive map The learned mental representation of the environment
:xtinction The procedure of presenting the conditioned stimulus to an organism
previously conditioned.
mitation Copying the behaviour of another.
.atent learning Learning that becomes evident only when the occasion for using it
arises.
iodelling Learning to copy behaviour. a technique used in behaviour therapy.
'erformance Observed behaviour.
'ransfer of training More rapid learning in a new situation because of previous learning
in another situation..

).0 Answers to exercises

1. Refer to 2.0
2. Refer to 3.1.1 and 3.1.2, read carefully.
3. Read from 3.1.3 , .:'i~~~
"' f' c' ~
4. Read from 3.1.4 , '
/
5. Refer to 3.2
-'I
6. Refer to 3.3
7. Refer to 3.4

~Unit 14: Memory and Forgetting

Table of contents

1.0 Introduction

In the previous unit you have learnt about how we learn. Any learning is effective when we can remember it for a long duration. In this unit you would learn about how we remember things and what makes us, forget.

¥ou would have realized learning emphasizes that one must also remember the infor- mation learning or skill learned. Imagine if you were unable to retain or remember all that you have earlier learned. Even animals have some system by which they remember. Memory plays a very important role in our learning and psychological growth. Through memory of our past experiences, we handle new situation, it helps us in our relearning, problem solving and thinking. In clinical work also memory functions are of great importance, which shall be discussed in the later section of the unit.

2.0 Objectives

After you have completed this Unit, you should be able to: .stat~ memory process,
.describe short term memory and differentiate with long term memory, .list causes of forgetting, and
.illustrate methods of improving memory.

3.0 Main contents

3.1 Memory process

Memory process can he divided into stages for the purpose of understanding. Memory starts with the sensory input or stimulus from the environments. The input is through sensory channels vision, hearing or touch and is held briefly (seconds) in a sensory register. Information is passed through sensory register to short term memory store where it is held for 20-30 seconds. Some part of the information from STM is further processed as rehearsal buffer, that is information is repeated, and ;n some way linked with other information already stored in memory. From the rehearsal buffer processed information is passed on to long term

memory store (L TM) where it is organised in categories and stored for years. Information not so processed is forgotten. That process can be compared with your day to day experiences To learn new technical words, or names, you have to rehearse several times.
Memory is viewed by cognitive theorist as an attempt to isolate some of the processes that act betw~en the input of the stimulus and the response output. Memo.ry is divided into three stages encoding, storage, and retrieval. Encoding means transforming the pensory input into a form that can be processed by the memory system. The encoded information is transferred to storage. Retrieval involves in locating the memorized information when needed.
This could be compared with your experience of attending as particular class. Your hear lecture and make notes that is you encode the lecture, then the notes are stored in some file using date or topic name. When later this information is required you retrieve by searching that particular file by its topic name.

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State process of memory. '
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3.2 Types of memory

Recall of information is most often required in daily activities and especially in educa- tional performances. We also recognize the material, or persons or places by acknow- ledging that. Familiar material can be learned more rapidly than the unfamiliar material. Short term memory and long term memory can be differentiated by their levels of processing. Some detail of these memories are as following:

3.2.1 *Short term memory*

You have just seen that information from sensory register is passed on to short term memory. In this sub-section we shall deal with short term memory in more detail. Information is held, in STM store up to about 30 seconds, but the length can very depending upon many factors. Short term memory has very limited storage capacity, six to seven items can be stol;ed at one time. With new stimulus input, the original items get
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erased or fade away. The storage capacity can be increased by chunking i.e, combining several items. Unfamiliar items fade out faster than familiar items. Items can be recalled at will, while the information is in short term memory store.
Coding for short term memory involves speech sounds, visual images and words.
Generally visual stimuli is translated into sounds, for example it it card of unfamiliar letters ifflashed for half a second and after 15 seconds you are asked to rep~at it, chances are that you would reproduce the sound resembling that 1etter.
Some experiments have also demonstrated thatth~material presented in the begi~ning of the text and at the end are recalled relatively well than those appearing in the middle. This is called serial position effect. When recall is better in the beginning of the text which contributes to serial position effect ;thenit is known aspnmary effect. While if the recall is better at the last part of the text then it is called recency effect.
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Rehearsal
Rehearsal means repeating items of information, silently or aloud and it helps to keep these items of information in the centre of attention. Experiments have shown that rehearsal could be maintenance rehearsal where in information in just repeated as it is. This is not very helpful in remembering for a longer duration. Elaborative rehearsal organizes the material and gives meaning while rehearsing. 'This is an active process of transferring material from short term memory to long term
The amount of rehearsal given to items is important in the transfer of information from 1 short term to long term memory: the more an item is rehearsed, the more likely it is to become part of long term memory. In elaborative rehearsal, people use strategies that give meaning and organization to the material so mat it can be fitted in with existing 1 organized long term, memories: ,
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3.2.2 Long *term* memory ,

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Long term memory seems to be very complex as it stores many different aspects of our experiences. The storage capacity has no known limits and one can remember informa- tion for days, months, years. It records the salient f~afures of sensory inputs and files' these according to various memory categories. It also creates an auditory representation of the input and it also records how to reproduce the information when required.

Long term memory contains two different categories of information:

long term memory. .

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j. :,-
Semantic memory'. ,c 1

Semantic memory contains meaning of words and concepts, rules of using these in language. Semantic memory is not easily forgotten as the information is ,stored in highly organized way in logical hierarchies, from general to specific ones. Such organization makes it possible for us to make ..logical inferencesirom the information stored in , semantic memory,

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't',:

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. *Episodic merrwry*

Contains personal experiences of long term memories. It is a record of what has happened to us, our remembrances of past things. Episodic memory seems to be organized with respect to when certain events happened in our lives. The episodes do not have to have a logical organization. It is less organized, episodic memory seems more susceptible to being forgotten than does semantic memory.

Long term memory is highly organized. Information is categorized in number of ways. One of the evidence of org3:l)ization is seen in Up of the Tongue phenomenon. You all would have experienced while trying to retrieve a person's name you cannot quite remember it but the name is at your tongue. If we look at this tip-of-the-tongue (TOT) phenomenon in greater detail, we find evidence for the organization of long-term

memory.

In an important experiment, Brown & McNeill (1966) found that the search through the memory store in the TOT state is not random. If the name we are looking for is Shalu, we may come up with Shalini or Shobha, but not Meena. In this experiment, when the subjects were in the TOT state, on hearing the definition but not able to hit the "target" word, they tended to retrieve words from their long term memories that (i) sounded like the target word, (ii) started with the same letter as the target word, (iii) contained the same number 0# syllables as the target word, and/or (iv) had a meaning similar to that of the target word. The TOT phenomenon indicates that information is organized in long-term memory.

Describe short tenn memory and differentiate with long tenn mem- ory.

3.3 Causes of forgetting

Forgetting is failure to retrieve information from long term memory store. Much of the information is lost but enough remains, so that we have sketchy record of our lives. Sometimes what we think is forgotten in real sense is not forgotten because it was never encoded and stored in the first place. Many students complain that they do not remember the contents after attending the class or forget after reading 'the text. This happens due 10 lack of attention, some information does not reach short term memory from the sensory register or due to inadequate encoding and rehearsal, the information may not have been transferred from short term to long term memory. Information w.as not stored in long term memory because rehearsal was npt sufficiently elaborate.

Many times we forget as memory does not match events which had occurred. This happens due to the constructive processes i.e. during encoding, the to-be-remembered information, especially if it is a complex life event or something you have read, is modified. Certain details are accentuated, the material may be simplified, or it may be changed in many other ways so

that what is encoded and stored is far from a literal copy of the input. Constructive processes of encoding distorts which stored in the memory

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'and distortions are remembered. We remember the gist, or meaning of what we have read or heard, but not the actual words themselves. Inferences constructed at the time the information was encoded for storage is remembered, or portions of encoded infor- mation are remembered. Besides the faulty memory processes, some of the other common factors of forgetting are as following:

3.3.1 Interference

According to this explanation, what we do in the interval between learning and recall, determines the .course of forgetting. Experimental studies have shown that learning new things interferes with memory of what is learned earlier and prior learning interferes with memory of things learned later.

i) Retroactive inhibition 11 This is a technical name for new learning that may interfere with material previously
learned. This has been demonstrated in experiments as following:

Groups Activity *N*

I II III .;jfb~ Experimental Learn A Learn B Recall A Y- 'i'« Control Learn A Unrelated activity Recall A .~

As an example you may learn one chapter of physiology in activity I, then learn one chapter of Anatomy in activity II, then try to recall what you had learned in physiology. The amount of information you forget would be due to interference caused by learning anatomy. Campared to this, if you learn a chapter from physiology, rest for sometimes, then recall physiology you would find that your recall is better than that of the previous chapter.

ii) Proactive inhibition

When prior learning interferes with the learning and recall of new material, it is called proactive inhibition. To demonstrate this type of interference experiment is designed as following:

Groups Activity

I II III

Experimental Learn A Learn B Recall B Control Rest or Learn B Recall B
unrelated
activity

Supposing you learn English, then French and recall French, you would find that study of English interferes with your recall of French. Here what you that learned earlier, interferes with the subsequent memory.

Even though lots of experiments have been conducted, yet the process of interference is not very clear, one idea is that the interferences disrupts the various kinds of associations between stimuli and responses formed during. Another idea is that interference has its greatest effect on the memory of retrieval cues. You have seen in the earlier section that memory depends on retrieval cues, so if interference results in problems with the use of these cues, forgetting will result.

In both types of interference it has been found that the effect of interference is less with meaningful material and after attaining some mastery in the subject. In initial period of

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course you should try to allot different study times to similar subject.

Encoding, organization and retrieval problems ~ stored information'is not encoded well or organized at the time it was learned, it 'gotten. Retrieval cues are also important in memory, as we may not be able to recall Iformation in one situation but may spontaneously remember in the other situation. eval is facilitated by organisation of the stored material and the presence of retrieval that can guide our search through long term memory for stored information. In nce of proper retrieval cues, the sought for items stored in long-term memory

are Ie found. Many times you would have experienced that you cannot recall something e actively searching for it, but after giving up that search while doing something you recall that object. The new activity in which you engaged, or the new context l) another set of reminders, which helps to retrieve that information. It is a good idea
ve up and do something else in order to generate new retrieval cues.
r *Motivatedforgetting ltional factors also play an important role in forgetting. If we encode information e in one emotional state and try to recall it while in another, our recall suffers. Many ~s of memory in daily life illustrate motivated forgetting. We may forget the names ~ople we do not like. Repression theory holds that we forget because the retrieval of lories would be painful or unacceptable in some way to the person. Freud, in his c 'The Psychopathology of Everyday Life" had illustrated many examples of ~ssion in forgetting. Repression includes retrieval failure for the associations of the ltening, anxiety-provoking information.*
iety or guilt producing material are more often forgotten than pleasant experiences. posing in a particular class you were scolded by the teacher, chances of forgetting t happened in that class would be higher. Psychologist have also found that some ons can not forget unpleasant experiences easily, they have related this phenomenon l personality. Some stored information is so threatening and anxiety arousing that its eval is possible only under special circumstances like hypnosis, free associations.
~arnik, a Russian psychologist demonstrated through experiments that uncompleted . s are remembered longer than the completed tasks. This is sometimes called 19arnik effect", "ego-oriented" persons remember more of completed tasks as Jmpleted tasks generate more anxiety. On the other hand "task-oriented" persons ember more the uncompleted tasks, as for them the incomplete task is more painful Ie completed tasks are not so. All these findings are related to the "tension theory" ~urt Levin.
" *Amnesia-forgetting during sickness nesia refers to loss of memory due to disease. Amnesia is a general "disease of nory". The person may forget his past experiences or may have impaired ability to Jde, store and to retrieve, thus forming of new memory is difficult. Amnesia is a :ound memory deficit due to either the loss of what has been stored or to the inability Jrm new memories. Amnesias are classified as two types:*
iiological Amnesias
getting could be due to any of following reasonsdiseases of the brain like senile lentia, Korsakoff syndrome, concussion from blows on head, brain damage, brain :ctions, tumor, stroke, temporary disturbances in the blood supply or effect of high e of alcohol and drug abuse. , **.1_-** ~ I
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Senile dementia is characterized by deficits in many intellectual abilities like memory, attention, judgment, and abstract thought, that can occur in aged people. Personality changes like excessive dependence and irritability, are common. Delusional thoughts which have no basis in reality and general disorientation not knowing where .one is in lime or place can also occur. The person has trouble remembering events that happened after the onset of the disease. Thus the person with this disorder has trouble learning and cannot recall well what happened last month, yesterday, or even a few hours ago, Senile dementia is usually the result of a reduction in blood flow to the brain. Most of the patients with this disorder have brain arteriosclerosis, narrowing of the small arteries of the brain
of oxygen and nutrients so that some cells die and others malfunction. Transient Global Amnesia are profound memory problem with no loss of consciousness. It comes on suddenly without any obvious cause, and it typically lasts for only a few hours or days before memory becomes normal again. Fortunately, most people who experience such amnesia have it only once. This type of amnesia is called global because much of what has already been stored in memory is forgotten and because even though the person is conscious and can go about the routine business of daily life, no new memories are formed while the attack is in progress.
Alcohol and drug abuse also cause amnesia, a person may have amnesia for the events occurring while under the influence of alcohol because encoding and storage processes have been disrupted by the effects of the alcohol on the brain. Heavy drinking over a period of years however, can result through vitamin-B deficits and other chemical imbalances, in irreversible brain damage and a pattern of symptoms known as the Korsakoff syndrome. Anterograde amnesia the inability to form new memories is one of the prominent symptoms of this syndrome.

ii) Psychological amnesias

These types of amnesias occur due to psychiatric diseases where the person forgets his identity also. These may not be permanent loss.

Childhood amnesia is due to the differences in the ways young children and older people encode and store information. As adults, much of our memory is encoded, verbally and tied into networks, or schemata, that are based on language. But the young child without language encodes memories in a non-verbal form, perhaps storing information as images or feelings. Early childhood memories are thus said to be stored in forms no longer available to us as verbal adults, our language-dominated memories, do not have retrieval .I cues appropriate for gaining access to the image and feeling memories of early childhood. Perhaps the memory machine is just not able to store long term memories until its maturation is essentially finished. Language ability and memory develop together because both depend on brain maturation.

You all experience that dreams are forgotten on waking up. Dream amnesia may actually have a biological basis. The dreaming brain seems to be in a special state different from that of the waking brain.

People with *defensive amnesia* may forget their names, where they have come from, who their spouses are, and many other important details of their past lives. It is called defensive because this type of amnesia is usually considered to be a way of protecting oneself from the guilt or anxiety that can result from intense, intolerable life situations and conflicts. pefensive amnesia is thus an extreme form of *repression.*

Normal aging has its problems too, but the typical forgetfulness of old age is hardly

severe enough to be called amnesia. In nonnal aging, the memory problem, centers largely on the storage of relatively recent events; it is anterograde in nature. But, in marked contrast to senile demantias patients, nonnal old people are able to compensate for their mile memory problems. They try to do less and thus put a smaller burden on their infonnation-processing systems, they provide themselves with reminder cues, perhaps by writing down what is to remembered, and they organize their lives into routines so that fewer new things need to be remembered. In other words, nonnal old people adopt adaptive memory strategies.

List causes of forgetting.

3.4 Methods to improve memory

With training, practice and motivation memory can be improved. There are variety of mnemonics or memory tricks to remember things better. People with super memories sometimes use mnemonics, and we can also learn to do so. One of it is to associate link whatever you want to recall with something already established in your memory bank e.g. colours of rainbow are associated with name "Roy G. BIV," i.e. Red, Orange, Yellow, Green, Blue, Indigo and Violet.

The method of Loci says that you visualize a scene and fit the items to be remembered in that scene. The scene can be a street, a building with rooms, the layout of a college campus, a kitchen, or just about anything that can be visualized clearly and contains a number of discrete items in specific locations to serve as memory pegs. Supposing you want to remember for examination classical conditioning, which you have read in the previous unit. Then start by imagining a dog, experimental room, food, bell and any person as an experimenter. Rehearse this image over and over until it is well established in your mind. After you have, fonned your image, associate the events like stimulus substitution, extinction with this. The trick is to make associations with as many concepts as needed.

Like the method of loci, number and letterpeg systems is to establish, main idea in your long tenn memory, a well organized set of images to which the to-be-rem'embered items can be linked. In number systems, you fonn an image with each number. For instance a rhyming system can be used for the numbers I through 10. For letter systems you can establish mnemonic pegs by fonning strong distinctive images of words that start with the sounds of the letter of the alphabet.

You can make a story and in that you can fit the facts, like you read in elaborative rehearsal. The important thing for good memory is your motivation and ability to organize the material.

One strategy in remembering things well is to organize, or arrange, the input so that it fits into existing long tenn memory categories, is grouped in some logical manner, or is arranged in some other way that makes sense. The organizational encoding may be inherent in the input itself or it may be supplied by individuals as they learn and remember new things.

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Chunking

This mnemonic technique illustrates systematic ways of encoding infonnation. If you want to remember a long list of digits, e.g. 19891609065 you can break the numbers into chunks, the first four digits could remembered as the year you passed your school or associate with any significant thing that happened in that year. Next four digits could also be taken as date e.g. for some one's birthday. The task 3 digits are the last digits of IGNOU address codes. Like this chunks can be associated with some important thing for lasting memory.

Here are some tips to help you to improve your memory. 1. Plan your study content and make a time schedule to cover that content. Stick to this schedule finnly.

2. As you have seen rehearsal is important to transfer infonnation into lorfg tenD memory, and elaborative rehearsal is more effective than maintenance rehearsal. So make notes of important points as all the details of infonnation cannot be remembered. Revise these notes. You can use imagery to visualize the material you are learning and give auditory stimulation by reading aloud. For example while studying nervous system, visualize the structure of nervous system with minutes details and also read loudly. Multi channel stimulation would improve your memory.

3. Try to organize your material with retrieval cues or reminders make a map of contents in your mind.

4. Give a feedback to yourself by testing your memory. Revise areas where you could not remember.

5. Review before examination. Try t~ overlearn but do not get anxious as you have seen high anxiety level would intetfere with your remembering.

6. Give some short rest pauses between your study time. It would help to consoli- date the material you are learning.

II» Exercise 311

II» Exercise 311 \ I

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Illustrate methods of improving memory.

4.0 Summary

Memory as ability to remember is a very important process for our learning. The memory process is divided into three main stages encoding, storage and retrieval. There are two types of memory short tenD memory, wherein infonnation is stored for maximum 30 seconds and has limited capacity. In long tenD memory store, infonnation is organized in semantic memory or in episodic memory. There are four main causes of forgetting: (i) interference due to similar material (ii) faulty encoding, storage and retrieval. If the sensory registration or input of infonn is faulty then memory will not be established. Similarly each of these stages are important for good memory, (in) motivated forgetting

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nd (iv) amnesias which could be due to diseases of the brain or psychological. Memory auld be improved with good planning, organisation, review and feedback.

..0 Glossary

mnesia Any loss of memory

nterograde amnesia The inability to encode and store new information in memory

,ttention Processes that select certain inputs for inclusion in the focus of ex-
perience

:hunking An encoding process in which items of informations regrouped
together in short term memory increases the capacity of short term memory

:oncept A symbolic construction that represents some common and general feature or features of objects or events

lefence mechanism Unconscious strategies used to avoid anxiety

le¥!nsive amnesia Forgetting which protects onself from the guilt and anxiety.

:laborative rehearsal Process of giving material organisation and meaning as it is being re- hearsed; an active rehearsal process.

:pisodic memory Reminscences memory of specific things that happened to a person. 'orgetting Apparent loss of information that has been stored in long term mem-
ory.
Mages Partial or altered representations of sensory experience.
oOng term memory The relatively permanent memory store of information which is cate- gorized in various ways and can be drawn upon as needed.
Inemonics (Pronounced "nemoniks") Techniques for improving memory. 'rojection A defence mechanism in which conflict is dealt with by ascribing
one's own anxiety provoking motives to someone else, blaming others. tecall A way of measuring retention.
tecognition A method of measuring retention whereby a person is required to identify a correct response.
tehearsal buffer Information that is undergoing rehearsal and consequently being continuously regerated in short term memory. The process facilitates the short term recall of information and its transfer to long term memory.
tepression An unconscious process characterised by the selective forgetting of the material that is anxiety provoking or threatening.
tetrieval The process of withdrawing information for long term or the short term memory.
tetroactive inhibition The interfering effect that new learning may have on something al- ready learnt.
lemantic Aspect of language related to meaning.
lensory register The storage of information for a brief time in a sensory channel.

).0 Answers to exercises

1. Refer to 3.2
2. Read 3.3 carefully
3. Refer to 3.4
4. Refer to 4.0 *i;-.;:* '

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Unit 15: Attitudes

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1.0 Introduction-Nature of Attitudes

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As you have seen in Unit 4 not only do we learn the skills but also emotional expressions ?! and attitudes. In this unit you will study about development measurement and methods' \to change attitudes. ; Attitudes playa very important role in our life as they determine our reaction to people .., and the objects in our environment. Attitudes are our expressions of the likes and the *oj* dislikes towards the people and the objects. They determine or guide our behaviour in i, social situations. You would have noticed that your behaviour is different while nursing., 1 an elderly man than that of nursing a child, or if your are nursing a critically ill patient as compared to one with a minor illness. These differences in behaviour are because of your attitudes towards old people and the children. Your attitude t~wards a critical, terminally ill patient determines how you interact with a patient suffering from these

diseases.
Attitudes have been defined as the intensity of positive or negative affect for or against a psychological object. A psychological object (may be) is any symbol, person, phrase, slogan or idea toward which people can differ as regards positive or negative affect. .
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An attitude has three components:
i) Cognitive: What a person knows of it and his belief about it. ii) Affective: How he feels about it.
iii) Conative: Behavioural tendency both verbal and nonverbal towards the object.
Attitudes are predisposed tendency to respond in a particular way and not a fixed response. Attitudes are influenced by a number of factors. Attitudes are evaluationspre- ferences towards wide variety of attitudinal items such as likes/ dislikes, anti-pro, positive or nega,tive. Anything that arouses evaluative feelings can be called as an object
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of attitude. A distinction is commonly made between attitude and opinion. An opinion is a belief, that one holds about some object in his environment. It differs from attitude, being relatively free of emotion, it lacks the affective component central to attitude. Attitude are different from value systems because attitudes are thought of as pertaining to a single object, even though that object may be an abstract one. Value systems, on the other hand, are orientations towards whole classes of object. Individuals attitudes are frequently organised into a value system. Attitudes are often functional, in the sense that they may be emotionally satisfying for the individual. An individual's entire personality structure and hence his behaviour may be thought of as organised around a central value system comprised of many related attitudes.
Attribution To characterize other prople in terms of certain traits, intentions, or abilities requires us to make attributions, or inferences, about them. Because we do not have access to the personal thoughts, motives, or feelings of other, we make inferences about these traits based on the behaviour we can observe. By making such attributions from certain behaviours we are able to increase our ability to predict how a person will behave in the
future.

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Define attitudes and the nature of attitudes.

2.0 Objectives

~en you have completed this unit, you should be able to: .~~ define attitudes, 1\ .discuss development of attitudes, A .list methods of measuring attitudes, .discuss methods to change attitudes,
.state the importance of attitudes to nursing.

3.0 Main contents

3.1 Development of attitudes

Attitudes can develop through different modes. Heredity may play only a very small pan through differences in the physical characteristics and intelligence. It is mainly the environmental factors that are responsible for development of attitudes. These are as follows:
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Attitude Development

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Porents Peers Conditioning Balance

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Operant Classical

3.1.1 *Parents*

Family is the first place for formation of attitudes. Parents begin the information flow that forms beliefs and attitudes about things. Categories are formed in our head on the basis of early information.

Sullivan has observed that the information provided by the parents in the earliest stages of life arc very difficult to undo. Erroneous and nonadaptive attitudes moulded from parental feedback and tremendous implications for further personality development.

3.1.2 *Peers*

As we grow, we tend to be influenced by other' sources such as friends and group .- members. They serve as reference group in the development of attitudes. One identifies oneself with friends and moulds one's attitudes in relation to the prevailing norms of the group concerned. , I.

3.1.3 *Conditioning*

i) Classical conditioning

You have learnt in Unit IV that classical conditioning refers to the association of a conditioned stimulus with an unconditioned stimulus. Staats and Staats (1958) found that words which have acquired affective meaning can creat positive or negative attitudes. Zanna, Kiesler and Pilkoris (1970) demonstrated the general implications of classically conditioned attitudes. Many attitudes developed on rhe basis of classical conditioning are found to be irrational, as they have been paired with an emotion producing uncondi- tioned stimulus either accidentally or in a quite extraneous situation. Similarly the appropriate attitudes can be developed through classical conditioning.

ii) I~trumental *Conditioning*

An attidudinal response can be learnt through instrumental conditioning by reinforcing a response that occurred in the presence of a discriminated stimulus. Insko (1965) demonstrated the persistence of conditioned attitude over time.

3.1.4 *Forming attitudes by balance*

Balance theory (Heider 1946,50 Newcomb 1953) holds that people pr~fer consistency or harmony in the relationship among their cognitions. Since balance is preferred by everyone, thus people develop attitudes that are harmonious with other existing entimen- tal relationship.

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Discuss development of attitudes.

3.2 Measurement of attitudes

Attitudes are evaluations. There are different methods to measure attitudes. Some of them are very simple while others arc complex. Broadly attitudes can be measured by: i) Self report methods ii) Altitude scales

iii) Involuntary behaviour methods

i) Self Report Methods

In the \self reporting method a questionnaire or a list of statements 'related to the altitudinal ..object are given to the respondent. The response format is either fixed i.e. categories for the response are named such as agree-disagree, like dislike, favourable unfavourable; or left open ended where respondents can use their own words. The problems of this type of measurement is that a question may mean different thing to different respondents and hence may not measure accurately. Another drawback of this method is related to social conformity, people may respond differently than what they actually believe.

ii) Attitude scales

These are most commonly used for measurement of attitudes as with these scales, a **I**precise measurement is possible. They provide degree 01 affect that individuals may associate with the attitudinal object. There are four methods of constructive attitude scales viz. (a) Thurstone type scale, (b) Likert type scale, (c) Guttman's scalogram, and (d) Osgood's semantic differential type.

a) In *Thurstone type scale* respondent is given a set of a fixed responses from which he must choose. These statements are assigned scale values so that a quantitative index of the attitude may be obtained. Scale values are assigned to equal appearing interval. ABC D E F G H I
Agree Neutral Disagree
A *scale value* is assigned to each statement at the time of scale construction. It is
standardised by giving to large number of judges who decide the degree to which it is favourable, unfavourable or neutral. The median of all the judgements becomes the value assigned for the statement. Respondent selects those items with which he agrees. His attitude score is the average of all the scale values of the items with which he agrees.
b) In *Likert type scale* the respondent chooses one of the five possible responses to each item. These are strongly agree, agree, undecided, disagree and strongly disagree. These are given weights of 1, 2, 3, 4 and 5 respectively. The total score of an individual is the sum total of the weights for each response he makes to the statements.

c) *Guttaman's scalogram* is considered unidimensional. Responses to every item are cQnstant with his overall position on the attitude dimension. For example an attitude scale consists of three items. Individuals could make four possible scores on this scale 3, 2, I and 0 representing the agreement with all three items at one extreme and disagreement with all three at the other. Everyone who agrees with item 3 also agrees with items 2 and I and everyone who agrees with item 2 agrees with item 1.
The following table will clarify this scoring:
Person Score Agrees with Items
1 2 3 1 3 x x x
2 1 x ..8 3 2 x x 4 0
d) In *Osgood's semantic differential scale* each statement is provided with two opposite responses like good-bad, fair-unfair. This is relatively simple to construct. This method has appeared to be useful for certain kinds of scaling problems.
iii} *Voluntary behaviour methods*
In these the physiological measures are used. Earlier galvanic skin response and size of the pupil of the eye have been used as the indicator of arousal to measure attitudes. These have not been very successful as only extremity of attitudes can be measured and that too the direction of attitude cannot be specified. Recently electromyographic recordings from the major facial muscles have been used to measure attitudes, but this has not been successfully established.

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List methods of measuring attitudes.

3.3 Methods to change attitudes

Attitudes are consistent ways of reacting towards object, yet they are not static; they can be changed under different conditions. It is necessary to modify unhealthy or irrational attitudes for learning new things.
Attitude change is influenced by both factors that are external as well as internal to the person. One should pay attention to the communicator, communication and the audience to bring about a change in attitude.
i) *Communicator* should be very effective and highly credible. He should be trustworthy and an expert to produce the change. Communicators, if are similar to the target audience, their message is well taken.
ii) *Communication* has also been subjected to research. The findings are that communications which discuss both the pros and cons to the point, are more effective in situations

where there is initial resistance to accept. Communications associated with pleasant emotions can also enhance effectiveness.
iii) *Audience:* Personality characteristics of the audience have been linked with attitude change. However self esteem and intelligence do not playa very important rote in changing attitudes. Increased discrepancy between the audience's attitude from the target's position can

help in change of attitudes. Committing the audience to take challenges or do something has proven to be an effective technique for attitude change. Similarly role playing, bringing change through smaller steps, distracting the audience are some other methods which have been used to change attitudes.

Attitude change

I II I

Communicator Communication Audience

I I I

Credible trustworthy expert Both sides of the Personality discrepancy I point dislcussed from Itarget Similar Pleasurable emotions Committing

I Role playing

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; Distracting

Methods to *change attitude*

1) Ask the person to elaborate his attitude towards the object/person. Find/point out inconsistencies/contractions/faults in the logic given in the justifications for those attitudes. Find/explore/point out the alternative view points. Have cogni- tive appraisal. Discuss the advantages/disadvantages of differing viewpoints/al- ternatives. This may lead to an attitudinal change.

2) Provide information to the person concerned, having negative attitudes towards 'the object/person, information that contradicts the attitudewithout any com- ments, suggestions, persuasion, etc. It allows the person to take decision himself, without pressure, on his own and this may lead to more favourable attitude towards the object/person concerned.

3) Provide an opportunity for the much more closer contact with the object/person concerned. Let the person learn through' it and modify his own attitude.

Example: Unfavourable attitude towards mentally handicapped subjects can be modified by:

a) Arguing against those attitudes, logically, systematically, countering ones view points.

b) Providing information about their rehabilitative status with facts and figuresbut no arguments and no personal contacts.

c) Through personal contacts, educational towns to such sheltered workshops employing mentally handicapped, showing what they could doif given proper training and opportunities.

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3.4 Importance of attitudes for nursing

Attitudes influence the behavioural responses of the individuals. The professional attitude of the nurse is not only concerned with her feelings, beliefs and her behaviour towards the patients but also towards other elements of professional functioning like healthcare delivery, scientific interest and collaboration with other professionals. Im- portance of study of attitudes for nurses can be related to the following factors:

i) Patient care Any negative attitude towards race, community or a disease results in a prejudiced behaviour that affects the patients. Many a times stereotypic beliefs, which you might have developed in earlier socio-cultural milieu, are not based on rational scientific reasoning. Due to these attitudes you can behave inappropriately. This can interfere with your professional competence.

ii) Fonnation of attitudes of peers or *juniors*

Senior nurses have a significant impact on the formation of opinion concerning health related issues. These attitudes could be learned by other peer nurses, student nurses and other hospital staff associated in the health care. One has to be careful that the negative attitudes of one person do not generate similar attitudes in the group.

iii) Acceptance of new technology

In the present times, many a new innovations in techniques, equipment and methods of health care delivery are taking place. Our attitudes can bias our acceptance towards new technology and high profile specialities.

iv) Interpersonal skills

Studies have shown that during the training, there is as gradual decline in the interper- sonal skills. This affects history taking, information .elicitation from the patient. Studies have also shown that as students increase their clinical experience, their behaviour pattern changes. In the first year, students enquire more freely about patient's own view of their

problems.

v) Curriculum planning

While planning a new curriculum or to revise the-existing curriculum in educational courses one needs to identify the attitudes of students and the teachers. Accordingly attitude change for altered behaviour patterns can be sought and incorporated in the curriculum. For example to plan a course on AIDS one may study the attitudes on the nursing care of the AIDS patient. Misconception or areas which need attitude change could be planned and incorporated. This would enhance the competency in dealing with AIDS patients.

vi) Effects of attitudes on meaningfulleaming and retention It is being recognised that besides cognitive factors, positive or negative attitudinal bias has differential effect on the learning of controversial material. With favourable attitude one is highly motivated to learn, puts greater efforts and concentrates better. Negative attitude leads to close minded view to analyse new material and hence learning is impaired. Attitude structure exerts an additional facilitating influence on retention that is independent of cognition and motivation.

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I» Exercise 4 II ,C u,", .",'-':;'--

State the importance of Attitudes to Nursing.

1.0 Summary

\.ttitudes are predisposition to behave or act towards some aspect of environment; ntensity of positive or negative affect for or against a psychological object; or an ~xpression of likes and dislikes. Attitudes has three components viz. Cognitive, Affective md Conative. Parents start the basis of attitude formation by giving information. This is ater influenced by conditioning. As per the Balance theory, the harmonious attitude are ~asily developed. Attitudes are mostly measured by the self report techniques. With lttitudes scales precise and quantitative measurement is done. The important factors to :hange attitudes are characteristics of the communicator, communication message and he audience.

~ttitudes playa very important role in nursing education as this has an effect on learning,)atient care, administration and the acceptance of new information.

~.O Glossary

\ffect : Mood of emotion

\ttitude : An enduring, acquired predisposition to behave in a particular way toward a given object or class of objects

\ttitude scale: A scale for the quantitative measurement of scale attitudes \ttribution: Characteristic traits, intentions, and abilities inferred on the basis of
observed behaviour

lJalance : Tendency to keep ideas about two or more attitudes in harmony lJeliefs : Cognitions, or thoughts, about the characteristics of objects Cognition: An individual's thoughts, knowledge, interpretations, understanding
or ideas about himself and his environment

Conditioning: The process by which conditioned responses are learned Conative: Motor, behaviour, action oriented

Emotion: A subjective feeling state which can influence perception, thinking, behaviour

Measurement: The assignment of numbers to objects or events according to certain rules

Opinion: Views people have about something

Questionnaire: A paper pencil test to measure personality or a survey of opinion and experiences.

6.0 Answers to exercises

1. Refer to and read carefully 2.0
2. Attitudes are developed through parents, peers and conditioning.

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UNIT 16: Economics of Health Care Services

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1.0 Introduction

Modem health care has made it possible for a large section of the people to enjoy the fruits of a healthy life, and to contribute their might to the economic growth and development of the community. Alas, it is also a sad fact that a substantial proportion of the world's population has poor health as well as high mortality and morbidity levels. Almost invariably, these people with poor health are not rich, but are often quite poor. Thus, there seems to be a link between economic development and health, and it runs-both ways. There is also an economic dimension of modem health-care services; both medical and sanitation services -as well as nutrition. This is what you would learn from this unit. You will also learn about economics of health care, and relationship between health and economic development. Let us begin with concept of economics.

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2.0 Objectives

After reading this unit, you should be able to:

.explain the meaning of economics and health economics, .discuss how health is treated in economic analysis

.analyse the relationship between health and economic development, and .describe the peculiar characteristics of health care, and the .appropriate ways to optimize its production and allocation.

3.0 Main contents

3.1 Concept of economics

As a beginner of Economics, you may like to ask a question about what is Economics, and what it is about. So at this stage, if you study the following example you should be able to understand the answer to your question.

To give you a rough idea about Economics, let us say that you have just joined a College of Nursing and suppose your father has given you a budget ofN5000 per month to enable you to carry on your studies. With this limited sum you have to meet all your needs. For example, you may have to pay tuition fee, hostel fee, mess charges and other dues of the college. In addition, you have to pay other bills like canteen .bill and washerman' s bill. You may like to go to cinema, entertain friends, but books and stationery etc. In fact, you want to do or buy many things. But, the amount of money you have is limited whereas your wants as we have seen are unlimited. In such a situation, knowledge of Economics will help you derive maximum satisfaction from the limited about of money you have. With this limited amount in hand you have to make your choice in spending on various necessities. So Economics will teach you to make the best use of your limited resources. It also tells how the scarce means or limited resources at our disposal can be put to several alternative uses so as to derive the maximum benefit out of them.

With this concept in mind we shall now define the Economics as given below.

3.1.1 *Definition and meaning*

Economics is the study of how people choose to use their limited resources (land, labour and capital goods) to produce, exchange and consume goods and services.

If we analyse the above definition we shall notice that there are many key concepts. We shall explain each one of them as follows:

'Resources as mentioned above include land, labour and capital.

.Land refers to resources that are permanently fixed in supply. .Labour refers to human strength and talent used in production.

.Capital refers to a class of resources that are produced by economic system e.g. machinery and buildings.

Scarcity means inability of economy to meet the unlimited wants of the society or individual or we can say that scarcity means an insufficient amount of resources to satisfy the unlimited wants.

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Choice: As you have seen that resources are in fact scarce relative to human wants, so j indiyiduals and societies have to choose among alternative use of resources. For example, you must choose between a job and higher education, between savings and consumption and/or as a health professional one has to choose which treatment strategy to apply, or which drug to be prescribed and what supportive care needs to be given in caring fora patient i.e. consumer of health care services. !

Production means any economic activity which is directed to the satisfaction of wants of the people. It may include making of material goods or the provision of any services, but it should satisfy the wants of some people.

Thus, we can say that is manufacturing of drugs by a pharmaceutical company is productioIf, the administration of such drugs by a health professional is also production.

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rhis is so because service done by health professional is a part of the process of satisfying :onsumer wants just as much as work done by pharmaceutical company.

?xchange: As we know that individuals and societies specialize in various tasks such lS physician specializes in medicine, lawyer in law, computer scientist in data processing md Saudi Arabi in oil production and so on. These specialized producers cannot meet heir consumption needs from their own production. So the goods and services are :xchanged for those that other individuals or societies produce.

n short we can say that Economics studies how society allocates scarce resources to ,atisfy competing and unlimited wants.

With the above concept in mind let us study the definition of economics given by Paul \. Samuelson (1964). He defines economics as ...the study of how men and society *~hoose,* with or without the use of money, to employ *scarce* productive resources to)roduce various commodities over time and distribute them for consumption, now and n the future, among various people and groups in society. Health care in general and lursing in particular, are commodities consumed by patients and clients.

1.1.2 *Positive and normative economics We have now seen that main concern of Economics is to study and analyse the questions)f scarcity and choices. This can be done from two angles.*

a) To study and analyse how resources were/are/will be employed. This area of Economics is called Positive Economics.

b) Makingjudgements about how resources should be employed. This area is called normative economics. It deals with such questions as how much price should be charged to people with different income levels.

ro have more clear understanding about positive and normative economics, we shall lefine these two terms as follows.

>ositive Economics is the study of what is in the economy. It refers to statements of facts, 'elationships among facts, and projections based upon facts. For example, the statements:

a) In fact mortality rate in 1994 was 73 per 1000 lived births. b) If facilities of safe excreta disposal are provided to the community there will be decrease in spread of disease through orofaecal route.

~ormative Economics is the study of what ought to be in the economy. It refers to ;tatements which include value judgements. For example a) We should eliminate >overty, is a judgement. b) Because many people cannot afford the cost of health care ;ervices, government ought to provide free

services. c) Since we are aware of economic nanifestations of ill health and disease, government ought to allocate more budget to lealth sector.
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Fill in the blanks:
i) Economic activity directed to the satisfaction of wants is
called. ii) Inability to meet the unlimited wants is iii) Human strength and talent used in production. iv) Positive economics studies. in the economy. 267

v) Normative economics studies. to be in the economy.

3.2 Concept of health economics

All of us are conscious about how ill health and disease can affect economy of an individual and society, how financial limitations restrict provision or procurement of adequate medical care and health care and, finally how health is important for its measurement in monetary terms.

You shall be able to realize the importance of these features only after you understand the concept of health economics as given below.

There are people engaged in the demand and supply of health: doctors, patient, hospitals, pharmaceutical companies, medical colleges, and so on. Health economics studies these institutions, the people engaged in them, and their behaviour as economic agents. Health economics cannot exist independent of economics. It is only the tools of economic theory brought to bear on society as the study of health. It is equally true that economics is not the only discipline which can contribute to the study of health care. Thus, health economics can be defined as:

Application of concepts, techniques and theories to the practical problems of ration- alizing, the use of resources, for the supply of effective health services in response to demand using modem management processes and techniques.

Health economics seeks to quantify over time the resources used in health care delivery, their organization and their financing, the efficiency with which resources are allocated j and used for health purposes and the effects of preventive, curative and rehabilitative i
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health services on individuals and national productivity. So we can say that the main! focus of health economics is on;

-How best the limited resources be used on preventive, curative and rehabilitative services to maximize health status of a society?

-What should be the allocation of financial, physical, and human resources, between different activities, within a hospital or institutional setting?

-How to realize health care sector efficiency. The study of health economics can be further classified into two areas: the *economics of health* itself and the *economics of health care services.* The *economics of health* deals with broader questions, like the role of health in development and how it should be provided in society, the *economics of medical care* deals with the narrower question of resource allocation. Both these areas of health care economics are interrelated. Let us now elaborate on these two areas of health economics.

Economics of *health* encompasses, *medical care industry* and involves such fields as the analysis of the economical costs of the diseases, and the benefits of disease control programmes, returns from investment in education and training, etc. From the point of view of economics, concepts like mortality, morbidity, capacity for work, and quality adjusted life years, have been used as indicators of health. Health is depicted is dependent and *independent variable.* This means that dependable variables like *output, productivity* and labout force participation is influenced by the independent variables like *health care*, income, *environmental pollution*, and *diet* etc.

Health has also been considered, in sthe analysis, both as consumption good; in the sense of providing 'utility' or over being directly, as well as an investment good; in the sense of helping to produce other goods and services. This is because if a person is health, her or his productivity, efficiency and capacity for work goes up. We shall consider these
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aspects in greater detail in the sections on economic development and health. The medical care industry is a prime example of 'services' rather than 'goods'. In medical care, it is rather difficult to measure 'output'. Hence, it is very difficult to study how the output of medical care

industry changes, when the expenditure on that sector increases. In other words, it is difficult to measure 'productivity' improvements in this sector.

Valuing life haqs emerged as an important part of the economics of health. Most modem human societies value human life. Hence, *suicide* is usually illegal, abortion is controver- sial in some societies, and even voluntary *euthanasia* is frowned upon. Medical research strives relentlessly to discover and refine treatments and drugs that prolong life, to find cures for hitherto terminal diseases; and to reduce risks and susceptibility to illnesses.

When we talk of the value of life we have to know to whom the life saved is worth? If the risk of death is lowered, and the person lives longer, who benefits from this? It may be her imme~iate family and friends, but it may also be considered beneficial to the entire society. When a person who is financial responsible for some others, dies, his family suffers- both because of the resultant sorrow and grief as well as the erosion of earnings. Sometimes, a person dies, and the institutions, which are sources or recipients or transfer to and from this person come into the picture. These may be insurance companies, which pay the insurance amount, or may be the borrowers from whom he/she had borrowed. These have to be taken into account when studying the value of her life.

Some economists have opined that somebody's death might, in purely economic terms, benefit the society at large. Here, we are not talking of issues like death penalty for severe crimes, but something different. To take an example, suppose these is a smoker who is not productive economically. If he dies of lung cancer quickly, the society cases to subsidize him for many things. Thus, the stream of future expenditure on him vanishes. The level of poppulation and risk of passive smoking goes down as well. Similarly, some writers contend that when a young person dies, say, in a motor-cycle accident, the future earnings or Gross National Product (GNP) enhancing potential of the economy disappears, which is a loss, but so does the source of much of the consumption out of the added national income, which could be a gain.

However, we hasten to add that looking at life through purely economic glasses sometimes blurs the vision. In this type of analysis, death of a person, as in the case above, is not very different from his migration to another country. Actually, death of a person is much more than monetary gain or loss. This brings in the issue of valuing human life, when there is concern for other people' s lives. What role does the government have in reducing the risks of death of other people?

Most of the instrUments and goods involved are public goods. This is, one reason that if one person derives the benefit, others derive it as well. Thus, eradication of some diseases and better sanitation and health conditionsw are all public goods. There are some other measures, taken by the government which benefit an individual but apply to all. Making the two-wheeler riders compulsorily wear helmets is one such step. Helments have to be paid for, too, by the individual themselves. These kind of goods are often called 'merit' goods. They are goods whose use or 'utility' is determined by some external agency or

source.

Important issues that the government have to tackle, include determining the budgetary provision for public health, determining which sections of populoation, are most of risk, calculating the consequent benefits of risk reduction to the concerned individual and societies and so on.

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i) What do you mean by scarce resources)

ii) State the fundamental concern of economics.

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'n"";"" ",;) ;
d ~d '
(,.~ iii) List two viewpoints of economists regarding health.

3.3 Health and economic development

In the previous section, we talked at some length about how health as a topic figures in economics; how economics as a subject tckles health. Interesting as the topic is, it is equally pertinent to learn how health affects economic development. We begin this section by stating that health and development are interlinked. Better health leads to development, and rapid development, in turn, results in a better health status.

You would except that if people are healthy, their productivity would increase, and, if they are economically well off, their health would be better. Of course, many rich people do not take care of their health, and may even be malnourished. Most of the poor peoploe fall short in health and nutrition standards, and most people suffering from poor health and malnutrition are, in turn, poor. This link between health and economic development, especially as it prevails in developing countries, is what we discuss in this section. Another important link is: better health -low fertility -low population growth -higher per capita income growth (each - means 'leads to').

The main indicators of health of an entire population (macro- level indicators) are the mortality and morbidity rates. The mortality rate gives an indication of deaths, and the morbidity rate shows how many days in a year people suffer from illness. These data are that, in the developing countries, the morbidity statistics are less available and less reliable than the mortality statistics. The basic reasons are: i) it is very expensi ve to collect the morbidity statistics as it requires elaborate population-based surveys; ii) seasonality of diseases requires monitoring of sample households at different points of time in a year; and iii) there are problems of accurate reporting of diseases and difficultures in diagnosis.

3.3.1 *Economic growth and life expectancy Economic growth means more production of goods and services. The total production of goods and services in a country during a year is measured by the Gross National*

.Product (GNP) or *Gross Domestic Production (GDP),* only final products are added together. Final products are those sold directly to users -for ~xample, a hospital bed.

Intermediate products may be sold to the maker of the bed (e.g. the metal from which the frame is made, springs or canvas, and the screws and nuts that hold it together) but these are not added to the value of production.

If we examine the relation between mortality and the Gross National Product (GNP), we find that, as the GNP 'per head goes up, mortality comes down. This is true of most countries. The Infant Mortality Rate (IMR) comes down even more sharply. In 1993 Life Expectancy at birth in the poorest countries was about fifty years, while in the richest countries it was seventy-six years. Although, on the whole, there is a strong correlation between life expectancy and the GNP per capita, there are some notable exceptions. Countries like Sri Lanks, China, and the state of Kerala in India for instance, have life expectancies; which are far above the average of the developing countries as a group. These societies have achieved higher health status at low level of economic devel- opm,ent, mainly on account of the higher investments on primary education and primary health care over a long period of time.

In most of the present day developed countries, the mortality rates fell considerably much before the the modem inexpensive antibiotics came into existence during the post war period. Improvements in public health standard increased the level of income; This together with universal primary education are responsible for such a remarkable fall in the mortality rates.

On the contrary, in the less developed countries the decline in mortality has been due to widespread application of antibiotics and immunization measures. Some improvement in safe drinking water supply has also contributed to some extent. In general, however, even today the publ;ic health standards, particularly in the matter of the disposal ofhuman faeces, are very inadequate.

The greatest different in the life expectancies, in the developed and developing countries, relate to those of children. In the developing countries, as a child grows, the life expectancy at various ages rises at a faster rate up to the early adulthood. This is because the infant mortality rates are very high. If the child can manage to live up to the age of five, then it can expect to live much longer than he could at birth. In the developed countries, since the infant mortality rates are low, there is not much difference between life expectancy at birth and life expectancy at early adulthood.

If we take cross-section relationships, the correlation between national income and life expectancy is positive, but reaches a plateau at high income levels. Further, if we draw a curve to show the changes in this relationship over time, we would find the curve shifting upward.

Thus, life expectancy has gone up at each income level. Some re- searchers have found that a growing national income accounts for only about a tenth of a quarter of this rise in life expectancy, and the rise has been accounted for by other factors. In many cases a direct social health policy, which provided certain nationally desired levels of health and sanitary services, educxation and nutrition, helped to reduce the mortality rates. This, along with an international speed of modem medicine, has helped to narrow the gap between the life expectancy of the developed and developing nations, much more than the narrowing in the gap between their incomes.

3.3.2 *Effects of health on development*

We just discussed the relation of economic development with health or rather one aspect of it, namely, life expectancy. Now we shall discuss the effect on development.

Just as you have financially capital, and physical capital, like machines and machine tools, you also can think of people as a type of capital, which, if invested wisely upon

health and education, will provide returns through better skills, higher productivity and improved well-being. Thus, health improves the quality of the human capital. But this process is slow and long drawn. We shall briefly list the positive effects of health on development.

i) Many areas which are not habitable because of infestation with diseases can be made fit for settlement through disease control programmes and thus it can help in the utilization of idle resources of that area.

ii) Good health can promote good labour morale and lead to greater productivity potential.

iii) Good health affects intelligence, inadequate diet and lack of maternal care can cause mental retardation and other mental problems thereby affecting produc- tivity on an individual.

iv) Better health is generally associated with better capability and leadership.

Better health induces possitive attitudes conducive to economic growth and modern- ization. The people with good health are generally enthusiastic and try to achieve higher and higher goals in life.

3.3.3 *Causes of health problems in the developing countries Here we investigate the reasons for the relatively high incidence of sickness and disease in the developing countries. Much of the sickness is caused by the preventable infectious diseases, poverty, low public health standards, lack of adequate medical care, insanitary living conditions, and demographic factors. Let us begin with the last one.*

In the developing countries, the *high fertility* is often the cause of the high *mortality* among the children and mothers. The infant mortality and maternal mortality rates are high, and are the main cause of the low life expectancy. The high fertility leads to the greater susceptibility to disease and illness among the children and mothers. If a baby is born into a family, which already has many children, it runs a high risk of death. This is because high fertility is usually associated with low birth spacing, exposing both mother and child (due to low birth weight) to a higher incidence of diseas~s. Further, in large families, resources are spread thinly. These problems are compounded by the fact that the utilization of the modem health facilities during pregnancy and at the time of delivery is very low in many developing countries. Most states in Nigeria are no exception to this. This puts both mother and child at high risk of mortality and mortality.

Let us now turn to *malnutrition,* for the poor people; usually means undernutrition. It is most prevalent among the children. It is a situation, where the average daily calories and protein intake is less than the minimum daily requirement. We can deduce, when a person's calories-intake is less than what is required, althougth the minimum requirement vary according to the climate, the people's body weights, and the activities they are engaged in. You must have heard of diseases like Kwashiorkor and Marasmus. These are caused by protein and calorie deficiency. Further malnutrition makes people suscep- tible to many other diseases. Malnutrition among children may stunt their growth and impair their physical and mental development, permanently. Aggravating the situation of the actual shortfall, in the nutritional requirement, is the fact that in the developingt countries food is unequally distributed even among the family members. The children, in general, and the female children, in particular, are often discriminated against, or given as much food and medical care as the others.

Consumption of food depends, like those of other *goods,* on *income* and *prices.* The

Economists know that when households' income rises, households tend to spend an increasing amount but a decreasing proportion of their income on food. At the lower levels of income, the proportion of money spent on food is very high, leaving little for other necessities. Even the expenditure on food may not be adequate to meet the minimum food requirement. In most societies, the governments step in and subsidize foodgrains through a public distribution system. They also run special nutrition pro- grammes to cover the vulnerable groups, particularly children.

Malnutrition affects *children,* and *pregnant* and *nursing women* more than the rest of the population. Hence, often special nutrition programmes are targetted at these groups. Maternal and Child Health (MCH) services in Nigeria, are examples of these schemes. Similar schemes exist in most countries including the developed countries.

The *environmental* and *sanitary* factors are important determinants of health of the people. Contamination of *water supply* often leads to typhoid, dysentry, and other *water-borne diseases.* As indicated above, considerable proportion of childhood mor- bidity and mortality can be reduced simply by providing clean drinking water to those who have no access to it. Water-borne diseases form a sigtnificant proportion of the total morbidity in most parts of Nigeria.

Policies to improve *sanitation,* usually focus on human and animal waste disposal, and an effective sewage system. Fecal contamination of water sources in the main cause of the water-borne diseases. Improvement in human and animal waste disposal will considerably reduce the spreade and prevalence of the water- borne diseases.

Housing is another component of *sanitation. Housing* in the developing countries is often sub-standard. Houses lack ventilation, access to sunlight and sufficient space, and are usually unclean. Insufficient space, ventilation, sunlight, etc., are problems primarily in the urban areas. These conditions ~read *air-borne diseases,* such as the upper respiratory tract infection and tuberculosis.

Let us now talk about the *medical services* in the developing societies. Most *developing countries* display certain common characteristics. Their spending on the medical services is, usually, inadequate, and much of what is spent is allocated to the tertiary level facilities, which' means large hospitals with modern facilities. The advanced medical services and facilities, at the tertiary level, are available only to the well-to-do sections of the population. Many doctors come from the *middle* and *upper stratum* of society, and to prestige and status values, prefer to do research and work on the Western style or modern medicine. Quite often, they are reluctant to practice in the rural and semi~ areas. The reluctance is mainly on account of *inadequate social infrastructure* (such as schools, recreations, etc). in the rural areas. Thus, subvject like bypass-surgery received a great deal of attention, while primary health care is neglected. Due to the inadequate attention given to the *primary health care,* and, the consequent absence of a proper *referral system,* one finds congestion at the tertiary level hospitals, and inadequate utilization of the secondary level facilities (such as, district hospitals). This kind of lopsided-use of facilities results in the higher overall cost of care, as the unit costs of treatment at tertiary level facilities tend to be very high.

A characteristic *feature* in the developing societies is what Michael Lipton has described as the 'urban bias'. It means that most of the resources, aid and assistance are cornered by, and directed towards the urban areas and urban people. Even in the urban areas, it is the elite who get a disproportionate share of the benefits. Yet, another worrying feature is that most developing countries spend much less on preventive services as compared to the curative services. This is not as it ought to be. Curing illnesses of all poor people

is an economically daunting task. The preventive care is inexpensive. Services, like vaccination, inocculation, are inexpensive ways of preventing illness. Similarly, proper sanitation and the availability of clean drinking water, in the developing countries also need to be laid greater stress on than is being done at present. On the community health services, the management of health services by the professional experts, even belonging to areas outside the health, say, a non-physician auxilIary worker at the grassroots level who is trained to assist the health personnel; and a better use of the referral system.

i) What is the basic link between health and economic development?
ii) Why is there such a vast difference in the life expectancies of the children of the developed countries with those in developing coun- tries?
iii) Identify the general relationship between the life expectancy and the national income.
iv) State True or False
a) A health individual cannot contribute to economic productiv- *J* ity. (True/False)
b) The main indicators of health are mortality and morbidity rates. (True/False)
c) Total production of goods and services in a country during a year is measured by gross national income. (True/False) d) Consumption of goods depend upon income and price (True/False)

4.0 Summary

This unit is the first in a series of four on the Economics of health care. We began the unit by defining Economics and health economics. We saw that the main concern of Economics is to study and analyze the questions of scarcity and choices. We distin- guished between positive and normative economics. Basically, positive economics deals with 'what is', and normative economics with 'what ought to be'. We saw that health economics, primarily applies the concepts, techniques and thinking of economics to the health-care sector.

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We next looked at the economics of health. In other words, we looked as to how 'health', as a variable, has been treaqted in economic theory as a dependent as well as independent variable. We also mentioned some of the concepts in economics that are used in health economics.
The next section probed the link between health and economic development, and we saw that the link was a fore away one. We focused on this link in the developing countries. We considered the macro-level indicators of health, like mortality and morbidity. The link between moratality and morbidity was investigated. We looked at the scenario of life-expectancy in the developing and developed countries; we also discussed the infant and child mortality.
We discussed, in considerable detail, the effects of health on development, and the factors causing health problems in the developing countries. We tackled the first question by considering health as an investment good. We looked at the latter question, and found that preventable diseases, malnutrition and high fertility are the main reasons for ilkl-health and mortality. We also considered the effect that the environmental and sanitary factors have on health. If clean drinking water is provided to a large populace, the incidence of morbidity would go down considerably.
After this, we discussed the medical services in the developing societies, particularly the structure of the spending pattern on medicine. We saw that, usually, the developing countries spend inadequately oin medical facilities. Tertiary level facilities get the bulk of spending. The supply of doctors, too, if fdrom the middle and upper stratas of populations. The developing countries are often found to be characterized by the 'urban bias', in medicine as in many other things. Finally, we saw that.the developing countries spend much less on preventive service than on curative services, and they also have a poor referral system.

5.0 Key words

Choice: It is the act of choosing among alternative goods or uses, on the basis of criteria, such as preference or cost.
Dependent and independent variable Ifwe say X causes Y or Y is explained by X then X is the Independent variable and Y is the dependent variable.
Investiment good: good which is not directly used for consumption purposes but to produce consumption goods, which will, in turn be directly used.
Morbidity: lllness.
Scarcity: Limited availability in comparison to demand.
Tertiary level: A higher or more advanced level. The lower levels are the primary and the secondary.

6.0 Answers to exercises

Exercise 1

i) production ii) scarcity iii) labour iv) what is
v) what ought
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Exercise 2
i) Scarce resources are those not available in unlimited supply.
ii) The fundamental concern of economics is to choose how to allocate scarce recources among alternative uses.
iii) a) Health is depicted as dependent and independent variable. b) Health is considered as consumption good as well as invest- ment good. Exercise 3
i) Health is an indicator of development. Better health leads to higher productivity, an, hence, the higher development, while higher development and income lead to better health.
ii) (Hint: Because IMR in the developing countries is higher (read the relevant text and answer).
iii) There is positive co-relation between life e;xpectancy and income.
The life expectancy goes up at each income level. ,
1
iv) a) False b) True c) False . d) True

7.0 References

Eastaugh, S.J. (1981) *Medical Economics and Health Finance,* Auburn Home Publishing Company, Boston: Massachussets.
Grossman, M. (1972) *The Demand for Health: A Theoretical and Empirical Investigation,* NBER: New York.
Perlman,M. (ed) (1974) *The Economics of Health and Medical* Care, John Wiley and Sons: New
York.
Vander Gaag J. and Perlman, M. (eds) (1981) *Health, Economics and Health Economics,* North Holland, Amsterdam.
World Health Organization (1964) *Constitution of WHO,* Geneva.
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Unit 17: Demand, Supply and Costs in Health Care

Table of contents 1.0 Introduction

1.0 Introduction

Health care in general and nursing care in particular are commodities consumed by patients and client's care is expensive to get as well as to provide. There is a need and demand for as well as supply of medical and health care services. We sh~l go step by step in trying to understand the nature of demand for health care, how it differs from

demand for other goods, how the supply side of health care is organized, what are the costs of health care. From there, we go on to discuss the techniques of cost-benefit analysis and cost-effectiveness analysis. How much should the government spend on identifying a cure for a disease? Do doctors charge exorbitantly? Is your demand for medical care manipulated by your doctor? This unit strives to answer such questions. Let us begin with definitions and meaning of common terms in relation to demand and supply.

2.0 Objectives

After going through thi~ unit, you should be able to:

.evaluate the role of economics in studying health care,

.explain the concepts of demand and supply,

.analyse the costs in medical care, and

.discuss the techniques of cost-benefit analysis and cost- effectiveness analysis

3.0 Main contents

3.1 Definition and meaning of common terms

Before we talk about the demand and supply in health care, we shall briefly discuss the meaning of commonly used terms in relation to demand and supply. Let us begin with 1..'i demand.

i) Demand: The word demand is often confused with desire. Desire as you know is the wish to have something but demand means that person is willing and able to pay for the ' object he desires. In other words we can say that demand is a need or desire backed by ,the ability and willingness to pay.

There are two key concepts in the above meaning of demand, both willingness and ability to pay, i.e. if a man is willing to pay but he is unable to pay, his desire will not become demand. Similarly, if he is able to pay but is not willing to pay, his desire will not be changed Into demand. For example, if a poor patient desires to have the services of a private room in a hospital has no significance because he cannot pay for it. On the other hand, if a rich patient desires to have the private room in a hospital, is a demand, as he is able to pay for it.

Besides, demand for anything varies with the price at which it is offered. We buy more of it at a lower price and less of it at a higher price. In the same manner demand also varies with the period of time. For example, demand for consuming ration is more for a week than for a day.

Thus we may explain the meaning of demand as follows:

By demand we mean the various quantities of a given commodity or service which, consumer would buy in one market, in a given period of ti~~ at various prices, or at various incomes, or at various prices of related goods. (Bobber)

So in general the demand for a commodity (thing) depends on its own price, the price of other goods, the income of consumers, people's tastes and so on. Suppose all other things except the price of a good are constant, then we usually observe that as the price of a good increases consumer consumes less of it and when price falls they consume more of it. This is called law of demand.

ii) The demand schedule and the law of demand: The demand schedule is a collection

or a listing, of the amounts that the potential buyers are willing to buy at different prices
of the commodity. The demand schedule depicts a 'if-then' situation. If the price is, say.
N30, then the cqnsumer would buy, say 25 units. If the price falls to N20, the consumer
would buy, say, 40 units. The demand schedule is represented diagramatically as follows:
In Figure 2.1 (see next page), price is plotted on the vertical axis and quantity demanded
on the horizontal axis, DD is demand curve on a good. If the price is PI, the consumer

Figure 1: The demand curve for a good
buys QdI amount of the good; if the price falls to P2, the consumer increases his
consumption to Qd2 and if the price is P3, the consumer buys the amount Qd3. Each point
on the demand curve shows a combination of price and quantity demanded. For example,
X shows a coordination of price PI and quantity demanded QdI.
Why does the consumer buy more as the price of a good falls? For two reasons; the
substitution effect, and the income effect. The former says that when the price of a thing
falls, it is cheaper than other goods, the prices which are unchanged (remember) so the
consumer substitutes, by this thing, some of his earlier consumption of some other goods.
For example, as the price of tea falls, the consumer might drink more tea and less coffee.
The income effect says that if the price of a good falls, his affording capacity goes up. In
other words, even ifhis income does not change, and neither do the prices of other goods,
but when the price of one thing falls, the consumer is in a position to buy more of all
goods. This is called income effect.
iii) Supply: In general, the supply means the quantity of goods that a seller is willing and
able to sell at different prices or it means putting deIJ}anded goods available in the market.
It is obvious that if price of a commodity goes high the seller will offer more for sale.
But, if price goes down he will offer less for sale. As you have seen that we cannot speak
of reference to price and time. Supply of an item is always at a particular price. Thus,
supply may be defined as schedule of respective quantities, of the goods which people
are ready to offer for sale at all possible prices.
As you have seen that in demand, there are two key points i.e. willingness and ability to
pay. Similarly, in supply also, the two key points are willingness and ability to deliver
the goods.
iv) Production function: In Economics production is a process where the inputs
combined in a particular way are transformed into outputs. The inputs are called factors
of production, which are land or natural resources, labour and capital. For example,
health services are produced by various forms of labours (with different kind of
investments in terms of education and training). fixed capital structures and installations

and consumable equipments etc. For all these components there are specific prices and
279costs at any point in time and space.
The production function could also be applicable to the production or development of certai~ items to re~der the servic~s. s~ch as construction ofho~pi.tals whic~ could b~ ?~ild
at vanable costs m terms of utiliZIng local labour and buIldIng matenal or utIlizIng foreign materials and designers.
v) Industry and markets: In general economics the basic producing unit is called a firm.
For example, a hospital producing health care services is a firm and a group of such firms
providing similar goods or services is called an industry.
There may be automobile industry, pharmaceutical industry and/or health care industry.
The health care industry for example consists of hospital services, services by physician,
dentists, and nursing professional, the pharmaceutical industry and medical research. So,
for goods and services there are the sellers who sell to the buyers who pay for them. This
institutional arrangement where the goods are exchanged, is called a market. In a market,
we have sellers and buyers.
~~;]
ii) Fill in the blanks:
a) A production functions shows. between inputs and outputs.
b) As the price of a thing falls the demand for it c) Quantity of goods that seller is willing and able to sell at dif-
ferent prices is called. d) Willingness and ability to pay for services are two key con-
cepts involved in e) Demand for a thing varies according to 3.2 Demand and supply for health care
In the previous section, we talked about demand, supply and production in general. In this section, we shall apply these concepts to health and medical care services. This is probably what you have been waiting for.
3.2.1 Demand and need
Demand as you have seen is desire for a thing backed by an ability to pay, whereas need
is some normaqtively determined requirement for that thing. Then, the question arises:
should we, when talking of health care, talk of demand? Some writers have contended that people's health care need should be the basis on which requirements for health
facilities should be based. The experts think of need in terms of the amount of medical
care, a person should have, to retain a certain level of health. Actually, for the economy, ;
as a whole, this is how governments plan for the number of hospitals or hospital beds j
and other health facilities. They consider the number of people in a certain area, and set!
up hospitals and hospital beds on the basis of certain predetermined population-bed ratio. 1
The danger in this approach is that need and utilization might diverge. All people may:

not use hospit~ls; th.is happens when people are .not aware of their need for he~lth care, i
or when there IS a pnce for health care. In these CIrcumstances, even when there IS a need 1
for people to use medical facilities up to a certain level, they might not be using them.
"
This is where the physicians inform people how much of health care services they should
utilize. There can be higher utilization and, consequentially, there might be a shortage
280
j-of health care facilities. This happens when there is excess use, or the facilities are less
than what are needed. Thus, need is independent of price and, hence, shortfalls or
excesses in quantities might crop up. Therefore, the question arises, if not need, then
what criterion do we adopt: price, income or a contribution? Let us, therefore, go on to
discuss the demand for medical care, keeping demand different from needs. This brings
us to the concept of elasticity of demand. Elasticity is related to alternatives or substitutes.
If the price of a good or a service rises, and the demand for it is elastic, it will either not
be bought at all or some attempt will be made to find substitute components which while
preserving the overall purpose, will make it cheaper to acquire. Providing the personal
direct care to patients can be an example of elasticity of demand. As the salaries of nursing
personnel rise, nursing care becomes more expensive. It is a service which cannot be
avoided at all: It has to be provided by one means or another and cheapest possible means
will be explored. If such nursing care is costed in terms of pairs of hands required for it,
the substitution of qualified nurses by norsing auxiliaries is an obvious answer. This all
will depend on the questions like; is the demand for the personal direct care of the patients
elastic with respect to pairs of hands, or elastic with respect to qualified pairs of hands?
Are we able to substitute qualified for unqualified personnel, or are we inelastic in our
demand, being unwilling to adjust out demand for qualified nurses, what ever their price?

3.2.2 Supply of health care services

We have discussed the concept of the market. Markets, as you know, are composed of
buyers and sellers. In this sub-section, we talk of the 'sellers', or the suppliers of medical
care. You have read that supply is carried out by 'production units or firms'. But, in the
health sector, the supply of health care is carried out by the health care providers and
institutions, such as hospitals, primary health centres, and individual physicians, special-
ists and nurses.
In the health sector, the production of health care is related to the number of various types

of specialists and attendants. The practitioners, or specialists, are not substitutable with
one another. The degree of substitutability is important for cost minimization. Apart from
limited substitutability, even the amount of each 'input' may not be variable. Hospitals cannot increase or decrease the number of beds and doctors in the short run. It might be
impossible to vary the composition or mix of the specialists. Only, in the long run, the number of the specialists could be varied. The short run and long run characteristics assume importance due to which supply needs to be varied in response to a change in demand. Apart from the specialists themselves, medicine, pharmaceuticals, instruments,
etc are parts of the inputs and health care is the output.
The contribution of each input to the overall output at the margin (holding the use of other inputs constant) signifies its marginal productivity. Any input is used only till its
margin is equal: to its price. Use of the inputs beyond the point does not minimize cost,
because it costs more to use an input than what is contributed to production.
3.2.3 Structure of the health care industry
The concept of industry is familiar to you. You are also familiar with the motion of markets: how they are organised and how they function. Here we shall see how the health
care industry is organized?
Take any market. On the supply side, the goods fIrst come to a wholeseller from the producer of the commodity. Thereafter, it goes to a retailer from whom the consumer would buy. These are various stages in the distribution of a commodity. You do not usually come into contact with the second-l~ne seller (the wholeseller or distributor) or
281the producer. As a thing processes through each stage, its cost goes up as, at each state,
the handling charges and profits are added. In the case of health care, the situation is different. You meet the first, line as well as the second-line providers. Let us explain this
a little.
In health care, the market is much more than the two-way relationship between the buyer
and the seller. For one thing, it is not always possible to determine which items constitute
the health-care commodities. For another, rather than bilateral transaction between the buyers and sellers, there are multilateral transactions. More than one agency/actio~l is involved in providing health care -for example, the first-line provider as well as the second-line provider, such as the specialists or hospitals, and pharmaceutical industries.
Other entrepreneurial and management decisions by one organization are taken, in part,
by another provider or organization. For example, a family doctor may refer the patient
to a hospital or specialist, or prescribe certain drugs. Thus, the pharmacies may not directly and unilaterally sell to the patients; the doctor's advice and decisions are crucial.
The hospital treatment is often determined by the first-line provider, namely, the family
doctor or the general practitioner.
3.4 Characteristics of the market for health care services

The health care industry possesses some unique characteristics which distinguish it from
other markets. We shall discuss these characteristics in relation to demand side and supply side. We shall begin with demand side.

3.4.1 Demand side

A ~ariety of characterisitics distinguish the demand for health services from the demand
for other services. First is the demand for health care services is irregular and unpredictable unlike the demand for other services or goods. This is because it is very different'
to predict illness for the individual and in many instances it occurs randomly.

Secondly illness is costly in itself, when a person is ill, he or she will forgo work. Therefore, illness may cause a person to lose pay in addition to cost of treatment.

Thirdly government health services are offered at minimal cost and in ~ome cases the government/private organization agrees to pay a portion or full amount of a bill 't'hich is not true with other services.

Fourthly, demand for health care is uncertain which the consumers of health care services
face with regard to the quality of care. There exists an information gap between providers
of health care services and the consumers; as a result, their decision may suffer from the
lack of full information. In most of the cases we cannot pretest, the health services i.e. whether the services are provided by an appropriately trained personnel or not. There is
also uncertainty regarding the outcome of services which hinders the decision making process. For example, if you go to a doctor for an upper respiratory infection or fever. There is no guarantee that the treatment provided to you will make you better. There may
be some reasons, such as exact nature of disease may not be apparent, the prescribed medication may notbe available. Thus, the fee which may be paid is only for a service and not for performance.

Finally health care industry produces external benefits. By external benefits we mean that when a consumer of health care services engages in an action, that yields benefit to
third party. For example, when a child is innoculated for any infectious disease such as
Polio, TB, etc., he is not the only one who receives benefits but others in the society also
get benefit by having reduced probability (chance) of getting that disease. Having

discussed the characteristic of health care industry on demand side we shall now talk
about the characteristics on the supply side.

3.4.2 Supply side

One of the major characteristics that differentiate medical care services from the supply
of other services is the lack of competition. The restrictions in the supply include: a) licensing, b) limitations on admissions to medical/nursing or health related institutions;
and c) lack of profit by most of the medical care hospitals.

Licensing ensures that high quality care will be available to people.

First, health care industry/market is regulated by government. This regulatory role is passed on the agency of the providers such as Medical Council of Nigerian and for Nigerian Nursing and Midwifery Council which accredit the medical and/or nursing colleges to maintain the standard in order to ensure high quality care.

Secondly, in medical care services, nursing care services and medical education costs are subsidized by the government. As a result the costs of medical care and/or education
are lowered. In certain cases such as under family welfare programmes the government
provides incentives to use more of the inputs.
Thirdly, advertising and price competitions in health care industry are prohibited i.e. most of the state government and central government does not allow provate practice and are thus divorced from profit motive.
Finally, hospital is the focal point of this industry where most of the services are provided
and most of the government hospitals are run as non-profit organizations.
[~:;;;;]
i) State True or False
a) The demand for health care services is irregular and unpre-
dictable (T/F)
b) Illness may cause a person to loose pay in addition to cost of
treatment. (T/F)
c) Hospital is the focal point of health care industry where
least services are provided.
d) Price competitions in medical care industry are encouraged.
(T/F)
e) In health care market there is much more than the two way
relationship between buyer and seller (T/F)
i) Fill in the blanks
a) In health sector supply of health-care is carried out by
health care and b) Production of health care in health sector is related to the
number of various types of and c) Apart from health specialists, medicine and instruments etc.
are parts of the. d) In health sector. in the output.
3.5 Costs in health care
When you think of the cost of a thing, you primarily think of the money you have to pay.
Doing the present course at National Open University of Nigeria (NOUN) cost you somemoney, buying a book costs you the price of the book, a visit to your local general
practitioner costs you, say N50 per visit, and so on. Costs, in Economics, are typically considered from the supplier's or producer's point of view; what it costs him to produce.
Costs are incurred in production, and these give a signal as to how much to supply. To
produce an item, it costs the producer a certain amount to hire his factory, to hire the workers, to buy the equipment, raw material, and so on. All these are his costs. In terms
of health care, costs refer to the amount of money spent on health services or headings
under which services are classified.
In case of health and health services these costs are incurred both by producers of health
services, through their use qf staff, buildings, equipment, materials and supplies etc., and
by consumers who use transport to the health services, drugs etc.
With this concept in mind we shall now discuss the different types of costs.
3.5.1 Opportunity cost
Opportunity cost is a term used to describe the loss to the community of failure to use

the available resources, technology or institutions in the best possible way. It refers to the value of alternatives which could have been chosen instead of one item which has incurred the specific cost; it is the cost of fore gone opportunity. Thus if there is a choice between appoiting an additional staff or providing opportunity for the development of existing staff, the cost of new staff can be expressed in terms of sending existing staff to refresher courses. Thus we can see that there are alternative uses of resources and their cost of use in one activity is the benefit they would have produced in the next by its most beneficial use. For example, if you invest in medical education to become a doctor, the alternatives that you did forgo by not studying, say engineering, is your opportunity cost.

If a nation can spend on defence or national health, and chooses to spend on defence, then the loss in the health status is the opportunity cost of spending on defence.

3.5.2 Total,flXed and variable cost

We have mentioned that costs are usually associated with production. In health care, we could think of various costs. What it costs the doctor/nurse to treat/care the patients, what it cost the government to spend on the health-care facilities, the cost of identifying and eliminating a disease.

If we take a producing unit. It incurs all the expenditure on paying for the premises, equipment, labour, material, etc. is its cost. For private practitioner, renting the house from where he operates, his machines and equipment, the payment to his compounder, are all his costs. The sum total of all costs is known as the total cost, which increases with the increase in the number of the units produced. The more patients a doctor sees, the more it costs to him. The more hospitals a government invests in, the more it would cost the government.

The total cost has two components: the fixed cost and the variable cost. The fixed costs, also called the overhead costs, which do not increase with increases in the number of the units produced. As an example, the rent of the building, in which a factory is situated, is a fixed cost -whether two units are produced or twenty, the rent of the building stays the same. For a hospital, expenditure on an X-ray machine is a fixed cost. Regardless of the numberof people X-rayed, the cost of the machine is fixed. It is, of course, true that beyond a considerable range, the fixed costs might not remain the same, to produce a very large number of units. Another building might have to be hired; to X-ray a very large number of people, another X- ray machine might have to. be installed.

The variable cost also known as prime costs, vary with the number of units of the goods

or service produced. For example, the more patients a general practitioner sees, the more prescriptions he writes, and the more his expenditure on stationary, if nothing else.

Similarly, the cost of the X-ray film is a variable cost as it it directly related to the number
of X-rays done.
Fixed and variable costs, together, make up the total costs. It is because of the variable
costs that the total costs too go up with the increase in output.

3.5.3 Average, marginal and sunk costs

We have total cost on the production of goods or services. There is a certain number produced. If Q is the quantity or number produced and C is ,the total cost, then C/Q is the average or per unit cost of production. We know that total cost changes with a change
in the number of units produced. So average cost C/Q will also change as C and Q increase. In the traditional economic theory of the firm, the average cost curve is U-shaped, as the output increases, the average costs first decline and, after a point, start
rising.
When the average costs decline as the output keeps increasing, it is a situation of what is called the economies of scale. It means that when more of a thing is produced, the costs
per unit fall. We see it sometimes when goods like Japanese electronic items or watches
are mass produced and are, therefore, cheap.
Marginal cost is defined as the cost of providing an additional unit of whatever is being
consted. It could be an additional hour of nursing time, an additional bed, an additional
lecture course, or an additional student. An additional unit may of course, result in an increase of the total or average cost. There are costs incurred. Suppose the total cost of
producing the fifty unit of an item is N900 and the total cost of producing the fifty-one
is N918. Then, the marginal cost of the fifty first unit is N18. We could calculate the total cost of producing the first unit, the second unit, the third unit, and so on. The difference in the total cost of the (n)th unit and the (n-l)th unit is the marginal cost of producing the nth unit.
Sunk costs are costs, which once incurred, cannot be recovered. These are important in
making decisions. Usually, in economics, the value at the margin is important. The marginal cost is related to the sunk cost. The marginal cost is cost on one additional unit
of output. The sunk cost is the cost already made. While considering cost on one additional unit of output, costs which have already been made do not have to be considered. Bygones are bygones. Consider an example, suppose, you have lost one hour
by waiting for someone at a bus stop, and the person has not yet turned up. Your watch
tells you it is one 0' clock. You feel that since you have waited for one hour already, why not wait for fifteen minutes more? You should have realized that at 1.00p.m. the hour you lost is a sunk cost: it cannot be recovered. It should not affect your decision whether to wait for fifteen more minutes. You should think afresh whether, at 1.oop.m.,
you want to spend fifteen more minutes at the bus-stop waiting for that person.
Average, marginal and sunk costs, as also total costs, are costs of production. But even
in analysis of medical care, cost and financial decisions are important.

3.6 Cost benefit analysis in health care

We shall discuss this under two heads i.e. cost benefits and cost benefit analysis.

3.6.1 Cost benefits

Cost benefits of health services are the resulting advantages or reduced disadvantages, 285not only in terms of health protection and promotion but also in terms of economic and social development and other desired outcomes. Benefits arising out of health programmes are the desired effects of the programme like reduction in morbidity, mortality and control or eradication of a disease. For example, family welfare services which are often provided within the health sector may contribute to a faster increase in national per capital income. This would be brought about mainly through increased saving and investment opportunities.

Secondly, most of the preventive health services in developing countries dramatically help in lowering the mortality rates in lower age group which ultimately results in economic development.

Thirdly, healtl;1 services can also increase the quality of the labour force i.e. a healthy worker can work full time and has a greater productivity potential.

Lastly, in many places the land is the only source of economic development and you may be knowing that in some cases this land also is undercultivated because of health hazard such as malaria and outbreak of other infectious diseases which affects the international trade and tourism thus affecting the economy of people. So health services geared to control of such communicable diseases will, therefore, help to foster economic development.

We can say that the health services have a significant impact on healtrh status of individuals and population as a whole and the improved health status leads to economic development:

Similarly, health services can compensate the economic disadvantages of certain geographic areas in the sense that they constitute a source of income in kind; i.e. the government health services are provided free of charges.

Heakfi services at local level can serve to promote the sense of community development bY providing equal services to the society irrespective of their racial, tribal and family feuds. Having understood the concept of cost benefit, we shall now focus on cost benefit analysis in health care.

3.6.2 Cost benefit analysis

Cost benefit analysis is an aid to systematic thought about the question of what should be done -on the relative merits of different programmes. The attempt is made to assess the benefits and compare them with the cost of obtaining thought. In general, the cost benefit analysis is a technique designed to express both the cost and the benefit of a specific good or service in monetary terms, and the purpose of such an analysis is based on the premise that the expenditure should not be incurred unless the benefit outweighs

the cost. Cost-benefit studies attempt to select programmes by comparing benefits with
the costs.

Cost benefit analysis would be relevant in situations, where one can exercise one's choice
in spending a given amount of money. For example, would it be better to build a new coronary care unit or a long stay unit? Should a college of nursing use its financial allocation on equipment or employ library staff and so on. So you can see that in each case there is a choice between competing uses for the available finance.

Thus, we can say that cost benefit analysis attempts to value all socially accepted outcomes in monetary terms.

In practice cost benefit analysis is mainly used to justify particular health service programme or action and it is an objective way of allocating resources. The difficulty is
that most benefits in terms of health and social development, cannot be reduced to
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monetary terms. Many of the benefits are of social, or human, rather than a financial value, for example, if a patient is provided with new seating in a hospital. The amount of comforts he gets cannot be measured in monetary terms. But, it would be possible to
compare the cost of maintaining a patient requiring long term care in his own home with
the cost of maintaining such a person in a hospital unit, which is designed for such patients
or for such purpose. It is not easy to measure the person's family and any social costs to
him and his family by removing him from his own home. These are intangible costs which tend to be elusive. The concept of objective way of allocating the resources brings
the idea of budgeting. We shall briefly discuss about the budgeting at this point. It means
a fixed amount of Rupees say R has been allotted to health sector in 8th five year plan and budgeting helps to allocate the funds in between different projects i.e. how much should, for example, be spent on building new primary health care centres, how much on certain number of beds in a secondary health care centre or so on.

You will learn more about budgeting or effective financial management in your final year.

At this point we shall now focus on cost effectiveness analysis in health care.

3.7 Cost-effectiveness analysis in health care

In health care effectiveness is defined in terms of benefits received by the recipients. We
shall discuss this in following sub-sections.

3.7.1 Cost-effectiveness.

Cost-effectiveness refers to the comparison between different methods to achieve a given
outcome. Like cost benefit, it is not a matter of choice between totally different projects,
but it is a matter of choosing between similar alternatives.

Suppose you are working in a college of Nursing and you have to decide about two courses of your college action; one; you have to install a Photo copy machine in library
and secondly you have to appoint a librarian. So in order to install the Photocopy machine
you have to choose between two different types of machines in terms of their effrective-

ness, and not between a photo copy machine and appointment of librarian, similarly for
appointing a librarian you have to choose between employing a qualified librarian on a
part time basis or two unqualified librarians on a full time baqsis for effective running of a library.
Effectiveness of health services is the relation between the actual and desired (or planned)
a,chievements of final objectives -mainly health protection and promotion.
Health status and effectiveness of health care system is moniotored by the use of healing
care indicators i.e. mortality indicators, morbidity indicators, economic and consumer satisfaction indicators. In addition certain other clinical measures are being used; such as assessment of client's attitudes, their self care ability, cure or arrest of disease and disability and prevention of complications.
Now that you have a clear concept about effectiveness of health care services you will be interested to know how this concept can be applied to nursing care services
Nursing care outcomes i.e. benefits received by the consumer of health services/nursing
services can be measured ?y keeping following points in mind:
.Whether nursing intervention are effective for improving the health and well being of people.
.Because nursing care is the only one of many factors that affects the outcomes in
,,~- terms of health care. So nursing research must use outcomes that are likely to result
from nursing interventions.
.The data required to use the effectiveness measures must be available and inexpens-ive to obtain.
.The data obtained from measuring outcomes must be credible.
Now the question arises how can you really help in cutting costs in the area of your work.
There are three main areas where you can apply the concept of cost effectiveness:
i) inefficient use of supplies,
ii) ineffective motivation and teaching of patients, and
iii) poor patient scheduling. j
Let us examine each one separately.
i) Inefficient use of supplies
You must have seen many situations where suture kits are opened and discarded only to
use the scissors, linen is used as restraints, adhesive plaster is used for binding treatment
books, etc. Dressing agents and materials are used inefficiently, using hospital forms for I
scratch papers. How can the ewxpensive practices be changed?
a) Unit meetings can be held once a month to discuss the cost of commonly used items.
b) Creating cost awareness by putting price tags or price list on each item. ,I
c) Provision of necessary supplies in hospital. tJ.
ii) Ineffective rrwtivation and teaching of patients
It has been seen that motivation and teaching affects the recovery rate which in turn affects length of stay of patients. The nurses can thus promote faster recovery by using
motivational and teaching techniques.
iii) Poor patient scheduling

Efficient scheduling of patient care is important. Involvement in non-nursing activities
can delay the progress towards discharge. Such scheduling problems can be prevented by using the Critical Path Method (CPM) which is a basic management tool which can
be u:sed to identify the sequence of time consuming tests ana procedure for each patient.

3.7.2 Cost-effectiveness analysis in health care

Cost effectiveness analysis (CEA) is an aid to deciding how to achieve a given level of
performance at minimum cost once it has been already decided that a particular objective
should be achieved. Cost-effectiveness analysis concentrates on one major desired outcome or benefit, such as health improvement or reduction in the incidence of one disease,expressing the benefit outcome in terms of effectiveness, i.e. percentage, reduc-
tion of the incidence of one disease outcome, rather than valuing it in terms of money. The advantage offered by malaria eradication programme leads to saving in recurring expenditure necessary for control programme is an example of cost effective approach.

Use of residual insecticide DDT is so effective and inexpensive and is considered as cost
effective method for vector control than other earlier methods. So cost effectiveness studies are concerned with how to achieve a stated level of performance of minimum cost or to obtain the maximum performance from a given budget.

The CEA is also used when the benefit is single, and is already specified. For example,
a country might have the target of reducing infant mortality rate to a certain number
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within a given number of years i.e. Government of Nigeria has fixed a target to reduce
infant mortality rate to less than 60 per thousand livebirths by 2000 AD.

There are no alternative benefits to be considered, which derive from their projects. However. cost-effectiveness analysis is free of value judgements -any target depends on the preference, choice and values of the planners or policy makers. Thus we can say
that cost-efft:.':'t:veness analysis may be used in two ways. First to determine which programme fulfils a specified obje~tive at the minimum cost. The second is to rank programmes' effects into a single index, when the effects are of diverse kinds. We shall
examine the main steps of the cost-effectiveness analysis along the lines of the second method.

There are five major steps in doing a successful cost- effectiveness analysis as given below:

.define the basic programme
.compute the monetary cost
.compute the benefits
.use a decision rule based on net costs and net effects
.perform sensitivity test or analysis

Thefirst step is to define the basic programme: its structure, focus, aims and limits. Even
minor differences in the definitions of projects can have impact on the costs and effects.

It is also important to distinguish a programme from its ultimate objective. An objective

in a health programme may be to reduce infant deaths, but this is not a programme. To
reduce infant deaths we may have programmes such as immunization, or treatment.
Immunization may be further classified into different types of programmes depending on the mode of delivery. After defining a programme, we can ask 'journalistic' types of
questions "what, who, when, why, where and how." This would help us to describe the
project.
The second step is to compute the monetary cost of the project. In a health project, we should calculate the cost of prevention and treatment of the illness. We compare this monetary cost of a project to the cost of the situation prevailing at the moment. This latter
cost in a health-care project could be the sacrifice society is having to make because of,
say, influenza. In other words, we compare the cost to society of going ahead with the project with the cost to society of not having the project and suffering the consequences
of that disease or illness, which the project is supposed to tackle.
Step three is to compute the benefits. In our health project, there will be the health benefits, accruing to the project. At this step the cost glaring difference of cost-effective-
ness analysis from cost benefit analysis becomes apparent. In cost benefit analysis, the
benefit is measured in monetary terms, whereas in the CEA it might be any commensur-
ate measure. One such measure is the quality adjusted life years (QALY). This measure
can be seen as difference between the number of years of health life a person would live
because of the implementation of the project aqnd the number of y~ars of healthy life he
would have lived without the project. In CEA, since costs are from a societal perspective,
so much benbefits be. In other words, we calculate total costs and gains to society as a whole and not to a few individuals. There can be variants of benefits in health care. The
most valued would be additional healthy life years. The next would be a general
postponement of death at the cost of disease. The health effects are all discounted for the
future, keeping in mind the preference for the present. We usually discount because the
decisions are taken in the present time. In step four we use a decision rule based on the net costs and net health effects. Effects
can sometimes be negative3. I might be forced to stop eating many enjoyable food items
or be compelled to pay weekly visits to my doctor. While this is preferable to disease, it
compares poorly with a completely healthy life. So we compute in Step 4 some type of
impact ratio or cost-effective ratio. Effectiveness is the improvement in years of healthy
life. The lower the cost-effectiveness ratio, the more efficient the programme.
Thefifth and final step is to perform what is called a sensitivity test or analysis. This is

used, because CEA is a usually carried out in an environment of uncertainty. Discount
rates cannot easily be determined. There might be value judgements regarding how many
years of health life after the programme a person is likely to have. Medical experts differ
about the efficiency of various preventive measures. Sensitivity analysis involves
making different assumptions about the level of uncertainty to examine the effect on the
cost-effectiveness. If varying assumption, about uncertainty, has little impact on the
decisions, then the decision might turn oUt to be a sound one. On the other hand, if the
decisions were to change with varying assumptions then one should be more cautious
while making decisions.

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i) Fill in the blanks

a) Opportunity cost is the cost of oppor;tunity.

b) Cost of providing an additional unit of whatever is being
costed is called. c) A technique to express the cost and benefits of a specific
good or service in monetary terms is d) Cost effectiveness analysis concentrates on
one major. ii) Distinguish briefly between cost benefit analysis and cost-effec-
tiveness analysis.

I ...~ 4.0 Summary

This unit follows the first in developing the treatment of the economics of health. This
unit goes into some basic concepts of economics, and then seeks to analyse the
application of these concepts to the economics of health.

The unit begins by explaining the concept of demand and supply. We studied the
production function and understood what is meant by industry, supply and the market.
There are many types of markets. Demand and supply are the two sides of the market.
So we next looked at demand and supply -the demand schedule, the law of demand and
shifts in demand curves. Then we took up one of the most important concepts in all
economics -this of equilibrium, which depicts a state of rest.

Next, the concepts of demand and supply are applied to health care. Demand, utility and
preference for health care industry particularly Evans.s typology of the industries and
,..nntransfactors. We also discussed the pricing of the supply of physicians.

Finally, we ewxplained and analysed the concept of cost in all its aspects, as also the
various types of costs like fixed cost, variable cost and sunk cost. We end the unit by
explaining and discussing two important methods and means of making choices and
deciding among alternative health care projects: cost benefit analysis and cost-effective-
ness analysis.

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5.0 Answers to exercises

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Exercise 1

i) a) technical relationship;

~ goes up;

c) supply;

d) demand;

e) price, income and need.

Exercise 2

i) a) True

b) True
c) False
d) False
,
e) True ,
" ."
ii) a) providers and institutions' ,
'. .
b) specialists and attendants ~tf! ,;c
c) input
d) health care , c"' "c '
Exercise 3
i) a) foregone opportunity
b) marginal cost
c) cost benefit analysis
d) desired outcome
ii) Hint: Benefits can be tangibly measured; in cost-effectiveness analysis, effectiveness cannot be so tangibly measured, in cost-effectiveness analysis, benefit is often a single entity. Unit 18: Economics of Illness in the Family
Table of contents

1.0 Introduction
The family is one of the basic and universal units of social interaction. It is also a very complex institution. We do not attempt to focus on sociological analysis of the family in this unit; such as how the institution of the family originated and evolved, whether the
family performs any useful function, or whether in some societies it is disintegrating or
undergoing serious metamorphosis, we do attempt to analysis some important areas of
its internal working, relating to now economic divisions are made, and how resources

and time are allocated, especially when illness strikes. It is useful to begin our study of
illness within the family by trying to define the family. Sociologist, George Peter Murdock, has defined the family as follows:
The family is a social group characterized by common residence, economic cooper- i ation and reproduction. It includes adults of both sexes, at least two of whom' maintain a socially approved sexual relationship, and one or more children, own or . adopted, of the sexually cohabiting adults. i
We shall see, later, that in many cases the family has adults of only the female sex, either
because of death or divorce or, because the male has migrated. Moreover, from Murdock's definition, we focus on 'common residence and economic cooperation'. Hence, we make no distinction between nuclear or extended families, and use the term 'house-
292hold' interchangeably with 'family'.
We shall not regorously try and define illness. Loosely, we can say that any negative deviation from a state of total health constitutes illness. In this unit, we shall discuss, from the perspective of economics, how families allocate time among iots members, particularly when there is illness in the family. We shall also see whether there are intra-family deprivations regarding food, health care, etc. To derive benefit out of the discussions, keep in mind what you have read in the previous two units.
2.0 Objectives
After going through this unit, you should be able to:
.discuss the treatment of the 'family' in economic analysis,
.describe some areas of importance in the study of intra-family dynamics,
.explain the household production model, and
analyse the application of the economics of the family to some aspects of the health of
the children in the family.
3.0 Main contents
3.1 Approaches in economic analysis of the family
Traditional economic theory, usually, leaves out the family from the institutions it considers worthy of analysis. It analyse such institutions and units as firms, consumers,
the government, but rarely the family.
Although, the leaving out of the family from the analysis is not a serious error, it might
alter results where the individual cannot, himself or herself, determine what or how much
to buy or consume. In fact, traditional models of maximization depend on the assumption
that each individual makes his own choice. Another point is that economics has paid scant attention to division and allocation of work and goods by a mechanism outside the
price mechanism. The assumption of rationality also creates problems.
Amartya Sen, a well known economist, distinguishes three methods of attempting to bring in price and equilibrium in the economic analysis of the family, that is, the methods
by which family has been analysed in economics. We shall discuss these methods/approaches in following sub-sections as given below:
i) Glued together family
ii) Super trader family
iii) Despotic family
3.1.1 Glued together family

This approach removes individuals altogether, and take the family as one unit. Economic
decisions are made by this single unit. There are no individual decisions, no individual
choice and no individual welfare. It is not to be taken as a united unit, only a homogeneous
one. This model is also different from that where one individual's (usually the head's)
decision is the decision of the family. As you would expect, it is rather difficult to analyse
illness within the family, using this approach. 3.1.2 Super trader family
The second approach is what Sen calls the 'super trader' family. This approach is in some
ways diametrically opposite to that of 'glued together' family. In this approach, each
individual relentlessly pursues his or her own self interest, and in doing so, enters into
'transactions' with other individuals of the family. Thus marriage is seen as a type of
bilateral exchange. Relationship among the members of such a family takes the form of
'as if market transactions with 'implicit prices'. One person's welfare can be someone
else's welfare too, but that person's views about what is his own welfare also matters.
Some merit may be claimed from this model. Institutions such as dowry, which is actually
a relationship between famiolies, could be captured by the model. Sen, however, critizes
this model on two grounds. First, the assumed behaviour of individuals within the
families is rather odd, and not what may be said to be commonly observed. Second, to
say that 'transactions' within the families take place with the help of 'prices' adjustment
and 'trade' actually means equating the family with the market. Thus, this approach
ignores the complex 'non-market' relationships that exist in a family unit.
3.1.3 Despotic family
The third approach is what Sen calls the 'despotic' family'. This too is very different
from the 'glued together' family approach. This approach assumes that the head of a
family takes all decisions, on everybody's behalf. The head's welfare is everyone's
welfare, his choice is everyone's choice; at best, his decisions smack of paternalism.
Although, this type of a family could be found, but, empirically, from a welfare point of
view, it is not clear whether it is the correct approach. When there is illness within this
family, what is that individual's welfare, important to bear in mind when considering
illness within the family. The female children, in some societies, may have the poorest
access to medicine, hospital care, nutrition, and so on. Hence, a powerful case can be
made for direct action by the state to undertake programmes on nutrition, health, etc, as
some individuals are not only deprived at the societal level, but also at the family level.
The despotic family approach is a special case of the bargaining approach. Moreover,
this approach considering cooperative conflicts, may be seen as an 'implicit market'
approach, which, in some cases, may yield results different than those predicted by the .,
super trader family. j
Of the three approaches, the first and the third do not offer much practical tools for
analysing illness within the family. Hence, it is natural that, despite its shortcomings, the
second approach is the one, which is used the most.

3.1.41mprovement in economic analysis of family

Sen has suggested some ways in which the family could be analysed with greater insight,
although, his suggestions have not been much used. The basic among these is what he called 'cooperative conflict'. He contends that both cooperative and conflicting elements
exists in families. There may be 'bargaining' on different aspects between the family members. The outcome of the bargain would depend on the relative strengths of the individual family members. For example, typically, the children would have poorer bargaining power compared to the adults, and the females would have lower bargaining
power than the males. The female children in some societies would have particularly weak bargaining power.

3.2 Intra-family dynamics

In the last section, we mentioned that traditional economic theory has usually neglected
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he family, and also spoke of the three approaches to the study of the family. In this ,ection, we shall discuss the internal workings in some areas of the household.

J.2.1 What is the importance of the family?

t is very well to say that the family has not been given the importance it deserves, but why should the family or household, as a unit, be important? One answer seems to be hat when any development project is launched, its rationale or area level implications lfe not the only ones to be considered. Relationship within the household plays a iignificant role in determining the utilization pattern of the benefits from the project.)uccessful projects should take into account how households allocate time, resources, work, and so on, and what influence the project would have on the intra-family "elationships.

)ometimes, projects targetted at the household or family level have failed to work very
well, because the project might have increased the overall family earnings or well-being,
while reducing the welfare of some of the members. Some implications folow. It is not
llways correct to assume that the households pool their resources, and that it makes no
lifference as to who receives the benefits in the name of the household. The 'glued-ogether' family is not a common occurence, therefore, benefits to some members of a 10usehold from a project may increase the burden on the other members. An example)f this is the primary education programme for children in the developing countries. When such children are sent to school, other family members find that their burden has
~one up, because previously these children would have been helping in the household work. Going to school reduces the children's labour time.

::,urther, benefits flowing from projects, particularly economic benefits, sometimes alter
he intra-family relations and existing pattern of support within the families. If women lerived economic benefits from a project, their bargaining power increases. It follows hat when we talk of any project or programme, including medical care, it is important :0 bear in mind that understanding the complex network of relationship within a family
;ignificantly affect the success of the programme. Study of the intra-family dynamics is
mportant while designing programmes for the children and women.

J.2.2 Areas related to intra-family dynamics

While studying the intra-family dynamics four broad areas must be considered.
i) amount of time available to different members of the household to take part in the project.
ii) allocation of time to members of a household
iii) differential access to resources (varying access to goods and services, both for production and consumption), and
iv) differential access to income.

fo begin with time, it is a common observation that households allocate time differently to different memkbers of the household. When an intervention is made with a project, time may be reallocated. Labour-time, in particular, is very important. Also important is whether the members of the household have all the time to participate in the project. Sometimes, tasks and time for tasks are allocated on cultural basis. Different tasks are found suitable for different members of the household. But, often, changing circum-)tances lead to changing division of labour. It is also seen that women can more easily take over men's taks than men can over women's. But change in the task allocation does take place both ways in a few instances. The project planners must understand that particular tasks are not always transferable among members, and, once transferred, might

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not revert to the earlier member. --

The differential access to resources has a bearing on the study of illness within the family

Different members of the household may have differential access to resources like nutrition, medicine, food, etc. Resources are sometimes distributed according to 'per-ceived' contribution of the various members to the household.

Differential access to income is important to be taken into account while discussing policies for the families. All incomes entering a family are not distributed equally among the members. This imply that benefits from the income might not be derived equally by all members. Moreover, the mode and manner in which the income is earned also has a bearing on the welfare of the household. For instance, the research results show that even when the family income is the same, the children in a household, where women earn, are better-fed and cared for. Thus, the intra-family distribution of men's and women's earning is generally different.

lE:;;;;] ,
i) List the three kinds of 'families' analysed in economics, as sug-gested by Amartya Sen
ii) List four areas related to intra-family dynamics
iii) State True or False
a) Relationships within the household playa significant role in determining the utilization pattern of the benefits from pro-jects (T/F)
b) Different members of the household may have same access to the resources like food, nutrition, etc (T/F)
,
, c) The income of the family is equally distributed among all the members (T/F)

d) Households allocate time differently to different members
(T/F)
e) Bargaining power of women increase if they derive economic
benefits from project. (T/F)

3.3 The household production model

The previous section acquainted you with the dynamics of household functioning and the need to tie the households with the planning process. We saw that policies do not have implications only at the national or state levels, but also at the household level, as
there are intra-household resource allocation processes. This section aims to acquaint you withy a strand in economic theory, which analyses the household, and brings to bear
standard economic tools in the analysis. You would recognize it for being mentioned as
the 'super trader family' in an earlier section. f
"'tnt: --.

3.3.1 New theories of consumption

In the previous unit, you read about demand and supply. You also read that demand is formed with utility as the motive force. Individuals desire to maximize utility subject to
certain constraints, primarily, regarding their budget. Implicit in this formulation is the
assumption that goods confer utility directly. You derived utility by consuming the good.
The more you consume, the more utility you get.
This view has been extended, elaborated and refined by some economists. In particular,
Kelvin Lancaster has argued that goods by themselves do not possess utility, but have characteristics which, in turn, yield utility. For example, a cycle has no utility in itself,
but has the characteristic of allowing you to ride it, and thereby, derive its utility.
Similarlyif you receive an injection from your family doctor, you do not derive any intrinsic utility from the job of injection needle, but, from the fact, that it attacks a disease,
and the disappearance of the ailment cheers you up, and enables you to work better. Such
examples could be multiplied.
Economist, Gary Becker, who is one of the leading practitioner of what is called as Household Economics, has observed that what households actually do is not to consume
goods, but they 'produce' the 'characteristics' and use of the good. Goods are actually inputs in the household production function, and time is an essential additional input.
What Becket is saying is that you buy, say, medicines, doctor's services and tonics, and
combine these with time to 'produce' medical care. Thus, in Becker's model, households
are not just consumers and firms are not the sole 'producers'. The households 'produce'
the benefits of the goods, and time is an important input. The households maximize welfare, subject to the wealth and time constraints.
The main contribution of these theories is that they bring in explicitly the notion of characteristics of goods and the concept of time allocation into the analysis. But these are not strictly home production and work models. That is a slightly expanded version of the Lancaster and Becker formulations. The h<>:me production models, distinguished,

for the first time, between work at home, work outside, and leisure. We take up the home
production models below.
In the household production model, by Mincer, for example, unlike in the traditional theories, a distinction is made between leisure and work at home. It was felt that women
do not only have leisure at home. They work and worry about the household. Work at home is different from leisure in the sense that we would rather bave someone else do the work at home for us. Thus, there is a demand for the maids and servants. Or course,
the cost of doing this has to be low enough. One's leisure, on the other hand, one has to
enjoy oneself. Sometimes, it is difficult to distinguish between home production or work
at home and leisure. For instance, is bringing up children, work or leisure? For work at
home, one would have to think in terms oif implicit prices. Leisure does not necessitate
that. It has been seen that work at home at leisure react differently to changes in the socio-
economic variables.

3.3.2 Time-use patterns within the household

We said above that changes in the socio-economic variables have different effects on the use of leisure and on work at home. Basically, it is a matter of allocating time between
various activities: how much time to spend on leisure, and how long to work at home.
Studies have been made for several countries, and the data seem to point towards a common conclusion. Increase in the education of women, particularly married women,
has increased the labour supply. This leaves time for them at home. It is seen that this
297time is taken from work at home, while time for leisure is not lowered. But the arrival
of children in the family lowers the labour supply in the market, and .varies time giv.en
to work at home. A rise in the wife's wages induces her to give greater time to work in
the labour market and, while it does not affect the husband's work at home, it reduces his leisure. Usually, married people have less leisure than the unmarried, and it holds
,more for men than for women.

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~£r': 3.4 Intra-household allocation and welfare ., ..'

We use the model of the household developed in the last section to analyse some dynamics of the intra-household allocation, and to see the consequences for the family
welfare. This unit is about illness in the family, and this section lwks at how questions o~ health and illness would be analysed by the household production model.

3.4.1 Joint utility maximization

The basic characteristic of the household production model, we said, was the fact that households produce the characteristic of goods to derive utility, and that they determine
the method of allocating time between the household work, work outside home, and leisure. So, the household maximizes utility. But, who derives the utility? It IS a combined
'family' utility function. Some writers, such as Roseilwing, suggest that the household maximizes such a utility function. Such utility depends on goods an~ services. Some

works depict the family as maximizing the amount of a household 'commodity', where
commodity depends on goods, service and time.
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Basically, these models posit a homogenous family maximization exercise. There may'
be some variants, where there is assumed to be some altruist; who allocates time and
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resources on behalf of the family; the utility depends on his consumption as well as that;
of the other family members. He may sometimes reduce his own consumption to increase
the consumption of the other family members.

3.4.2 Health problems of children'

We can utilize the household production models and joint utility maximization exercises
to consider the health problems of the children in thefamily.,In the subsequent sub-sec-
tion, we shalltak~ a)ook.atthe effect of children's ill health on the work capability and
labour supply of the p~ents, child tlealth is produced in the family with the maternal and
paternal health care time of the parents, with medical care and with initial endowment
of children's health. When the child is ill, his/her health encowment declines, and goes
down. Thus, there is need for expenditure on medical care.

3.4.3 Effect of child health on the parental labour supply

Child health has an effect on the health endowment of the child. This ne3cessitates
increase in the medical care. We saw thaqtin the production functions of the child health,
'the parental time for care of the child enter as 'input'. If the child is ill, the time necessary
for the child care goes up. This implies that the parents may reduce the time for labour.
Their earnings, too may decline. This has be~n found in many situations and cases
empirically. If the parental earnings decline, the amount of goods consumed would also
decline. ~swouldreduce,in turn the utility.
Thus, family utility function may decline both directly, as child healthgres down or
indirectly as service goes down.
What the household mode basically says is that when the child is ill, the child health goes
down. Since the child health goes down, the utility also declines. Moreover, if the child
298-
.1ealth declines, the parents will have to spend more time with the children, and can devote
less time to the labour market. This, in turn, reduces their earnings and, therefore, their
:otal consumption of goods. So, in this way also, utility comes down.

G:;;d

i) Fill in the blanks:

a) Goods by themselves do not possess utility, but have. which in turn yield utility.
b) Increase in education of women tends to increase. supply,
c) The family utility function may decline as goes down.
d) Households produce the characteristics of household produc-

tion model. '
;.." ;';;..'' ',.
";. ...
4.0 Summary
This unit focused on analysis of illness in the family. Most people are members of same
family, and the family is perhaps the smallest social u~~. But since this Unit was
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concerned with economic aspects and about one aspect of health, namely illness, we began the Unit by considering how the family has been treated in economic analysis. We observed that the traditional economic analysis usually leaves out the family. Economic analysis has focused on maximization by the undivided units: firms, households, etc. But, intra-household decision-making has not been studied much. Also, economics has not paid much attention to resource allocation by a method other than the
price mechanism.
Continuing our discussion of the family, we spelt out Amartya Sen' sanalysis of the three
methods or approaches to analysing the family in economics. The three types of families
from the three approaches are what Sen calls the 'glued together' framily, the 'super trader' family and the 'despotic' family. The 'super trader' family and its members come
closest to the concept of the usual 'rational economic man'.
We briefly mentioned the importance of studying economics of the faniily. Often, projects imposed from outside are launched without adequately considering the benefit
distribution within the family, and whether it would bring about changes in the family.
The family relations often influence the utilization pattern of the benefits from the project. Projects might sometimes reduce the welfare of some individual within the family.
We dealt upon four areas in family dynamics: time available to different members of the
family; allocation of time among the members of a household; varying access to goods
and services, both for production and consumption; and differential control over income.
Following these, we proceeded to discuss the household production model. We began our discussion of these models by talking about new theories of consumption models, ,-,nnspeciafically those proposed by Lancaster and Becker. We saw that the main contribution
of these theories is to bring us the importance of the characteristics of goods and concept
of time allocation in the analysis of the economic acti vity, particularly consumption.
While discussing the home production models, we saw that these models-were the first
to distinguish between work at home and work outside the home, and leisure. We then
went on to talk about time-use patterns of the women on the labour supply by the household for work outside the house, and whether the married people have less or more
time than the unmarried people for work and leisure. The effect of the birth of children

in the family was also considered. We discussed some issues in the household production
model, particularly one relating to the GNP measurement. We mentioned Amartya Sen' s
capabilities, and compared it to Lancaster's concept of characteristics.
Finally, in this unit, we discussion the intra-household allocation and welfare. Out
discussion included all that went before it, in the unit, and also the illness in the family.
We began this section discussing joing utility maximization and its implication. We then
used it to discuss the health problem of the children within the family, and the effect of
the children's health, rather ill-health on the parental labour supply.

5.0 Key words

Equilibrium: A state of rest with no motivation on the part of anyone to bring about a change in the existing situation.
Disutility: If thing gives disutility, it means the more you consume of that thing, the less utility you get. Disutility means negative utility.

6.0 Answers to exercise

Exercise 1 W
i) a) Glued together family ~ ,,: ,;3'
b) Super treader family b!"tju
c) Despotic family "4i';'
ii) a) Amount of time available to diff~rent members of the household '~I1~f to take part in the project.
i b) Allocation of time oto different members of a household
c) Varying access to goods and services
d) Differential control over income.
iii) a) True
b) False i i;
c) False ; ~";..:.,
d) True ." .
e) True
Exercise 2 .-
i) a) Characteristics
, : ,.:
b) Labour
c) Child health
d) Utility .
ii) a) Households produce the characterisitics of goods to derive utility.
300b) Determine the method of allocating time between the house-hold work, work outside home and leisure.
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7.0 References

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Blum, Henrik L. 1981, Planning for Health: Genetics for the Eighties, Human Science Press;
New York.
Culyer, A.J. (ed) 1988, Health Care Economics, 3rd edn., Delman Publishing; New York.
Fuchs, V.R. 1982, Economic Aspects of Health, University of Chicago.
Sen A.K. 1984, "Economics and the Family" in A.K. Sen 's Resources, Values and Development,
Oxford University Press: London.

Sen, A.K. 1985, Commodities and Capabilities, North Holland; Amsterdam.