LECTURE NOTES

For Health Science Students

Introduction to Public Health

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PREFACE

There is generally scarcity of teaching/ learning materials in the higher education institutions of Ethiopia. The available materials regarding the course on the Introduction to Public Health are not appropriate to our environmental and socio-economic set up.

This lecture note is prepared primarily for health officer students, and is organized based on the course outline of introduction to public health in the curriculum of health officers. Nevertheless, the lecture note is deemed to be useful for almost all degree and diploma health science students in the University and elsewhere in the country. Taking in to account the shortage of teaching /learning materials for the course- introduction to public health, this lecture note is recommended to be used as a reference for students. Concepts, principles and terms are defined and described to reduce confusion.

This material is presented in ten chapters. Chapters - 1 and 2 present the definitions and various perspectives of health and public health and discusses the determinants of health. Chapters - 3, 4 and 5 deal with culture, traditional health care practice and family health. Chapter

6 is about personal hygiene. Chapter 7 is about health and development. In this chapter the difference between development and economic growth, the role of health in development and health and development in the Ethiopian context are presented. Chapter 8 is about health service in Ethiopia and the history, the structure and the developments of the health service. Chapter 9 is about Primary Health Care and the definition, historical development, concepts and philosophies of Primary Health Care. Chapters 10 discusses community based health services and team approach in the health service. All chapters begin with learning objectives, by indicating what is expected from students on completion of the chapter. Furthermore, at the end of each chapter there are exercises related to the core issues of the respective chapter.

Ethiopia Public Health Training Initiative

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EPHTI

ABBREVIATIONS

AIDS	-Acquired Immuno Deficiency Syndrome
ALERT	-All Africa Leprosy Rehabilitation and Training Center
ALRI	- Acute Lower Respiratory Infection
AURI	- Acute Upper Respiratory Infection
ANC	- Antenatal Care
ARI	- Acute Respiratory Infection
CHA	- Community Health Agents
CHC	- Community Health Care
CHW	- Community Health Worker
CIH	-COMMUNITY INVOLVEMENT IN HEALTH
CPHC	- Comprehensive Primary Health Care
DPT	- Diphtheria Pertusis and Tetanus
EPI	- Expanded Program of Immunization
FP	- Family Planning
GOBIFF	-Growth monitoring, Oral rehydration, Breast-feeding, Immunization, Female education, Family Planning.
HIV	- Human Immuno Deficiency Virus
HLS	- Household Livelihood Security
HSEP	- Health Service Extension Package
IEC	- Information Education Communication

MCH	- Maternal and Child Health
MDG	- Millennium Development Goal
MOA	- Ministry Of Agriculture
MOE	- Ministry Of Education
MOH	- Ministry of Health
ORT	- Oral Rehydration Therapy
PHC	- Primary Health Care
PHCU	- Primary Heath Care Unit
RH	- Reproductive Health
SPHC	- Selective Primary Health Care
STD	- Sexually Transmitted Disease
STI	- Sexually Transmitted Infection
TB	- Tuberculosis
TBA	- Traditional Birth Attendant
TT	- Tetanus Toxoid
TTBA	- Trained Traditional Birth Attendant
UNICEF	- United Nation Children's Fund
WHO	- World Health Organization

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CHAPTER ONE

CONCEPT OF HEALTH

1.1 Objectives

At the end of this chapter, the students are expected to:

- Define health
- Describe the different concepts and perspectives of Health.
- Describe determinants of health.
- Define globalization & list its advantages and disadvantages on health population.
- Describe the different models of disease causation theories

1.2 Health

The word health is widely used in public communication, and yet its meaning looks simple. However, closer looks show various and diverse meanings. This chapter

discusses the various definitions and determinants of health.

For the purpose of this monograph, we consider definitions from lay point of view, professional, World Health Organization (WHO).

Lay Point of view: Persons are healthy when they are doing their activities with no apparent symptoms of disease in them. The New oxford Dictionary of English describes health as 'the state of being free from illness or injury'.

Professional points of view: From this point, health is defined as s a measure of the state of the physical bodily Organs, and the ability of the body as a whole to function. It refers to freedom from medically defined diseases.

WHO definition: The world Health Organization (WHO) described health in1948, in the preamble to its constitution, as "A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity".

Recently this statement has been expanded to include the ability to lead a “socially and economically productive life”. The World Health Organization definition of health cannot be considered as an operational definition because it does not lend itself to direct measurement. In order to overcome this lacuna a WHO group has devised an operational definition of health. According to this definition, the concept of health is viewed as being of two orders. In broader sense health can be defined as “a condition or quality of the human organism expressing the adequate functioning of the organism in given conditions, genetic or environmental”

As evident from the above definitions, health is multi-dimensional .The WHO definition envisages three specific dimensions (physical, mental, and social), some other dimensions like spiritual, emotional may also be included.

Physical health- is concerned with anatomical integrity and physiological functioning of the body. It means the ability to perform routine tasks without any physical restriction. E.g., Physical fitness is needed to walk from place to place.

Mental Health- is the ability to learn and think clearly and coherently. E.g., a person who is not mentally fit (retarded) could not learn something new at a pace in which an ordinary normal person learns.

Social health- is the ability to make and maintain acceptable interaction with other people. E.g. to celebrate during festivals; to mourn when a close family member dies; to create and maintain friendship and intimacy, etc.

Emotional health - is the ability of expressing emotions in the appropriate way, for example to fear, to be happy, and to be angry. The response of the body should be congruent with that of the stimuli. Emotional health is related to mental health and includes feelings. It also means maintaining one's own integrity in the presence of stressful situation such as tension, depression and anxiety.

Spiritual Health - Some people relate health with religion; for others it has to do with personal values, beliefs, principles and ways of achieving mental satisfaction, in which all are related to their spiritual well-being.

1.3 Different perspectives on health

Health is viewed as a right, as consumption good, and as an investment. Some view health as a right similar to justice or political freedom. The WHO constitution sates that " . . . the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition". Others view health as an important individual objective of material aspect i.e. as consumption good. The third view considers health as an investment, indicates health as an important prerequisite for development because of its consequence on the overall production through its effect on the productive ability of the productive force. These different views indicate differences in the emphases given to health by governments.

1.4 Determinants of health

Health or ill health is the result of a combination of different factors. There are different perspectives in expressing the determinants of health of an individual or a community.

The health field concept

According to the "Health field" concept. There are four major determinants of health or ill health.

A. Human Biology

Every Human being is made of genes. In addition, there are factors, which are genetically transmitted from parents to offspring. As a result, there is a chance of transferring defective trait. The modern medicine does not have a significant role in these cases.

a. Genetic Counseling: For instance during marriage parents could be made aware of their genetic component in order to overcome some risks that could arise.
b. Genetic Engineering: may have a role in cases like Breast cancer.

B. Environment: is all that which is external to the individual human host. Those are factors outside the human body. Environmental factors that could influence health include:

a. Life support, food, water, air etc
b. Physical factors, climate, Rain fall
c. Biological factors: microorganisms, toxins, Biological waste,

d. Psycho-social and economic e.g. Crowding, income level, access to health care
e. Chemical factors: industrial wastes, agricultural wastes, air pollution, etc

C. Life style (Behavior): is an action that has a specific frequency, duration, and purpose, whether conscious or unconscious. It is associated with practice. It is what we do and how we act.

Recently life style by itself received an increased amount of attention as a major determinant of health. Life style of individuals affects their health directly or indirectly.

For example: Cigarette smoking
Unsafe sexual practice
Eating contaminated food

D. Health care organization

Health care organizations in terms of their resource in human power, equipments, money and so on determine the health of people.

It is concerned with

a. Availability of health service

People living in areas where there is no access to health service are affected by health problems and

have lower health status than those with accessible health services.

b. Scarcity of Health Services leads to inefficient health service and resulting in poor quality of health status of people.

c. Acceptability of the service by the community
d. Accessibility : in terms of physical distance, finance etc
e. Quality of care that mainly focuses on the comprehensiveness, continuity and integration of the health care.

The other view of the determinants of health is from the ecological perspective. Accordingly, there are four different factors affecting health.

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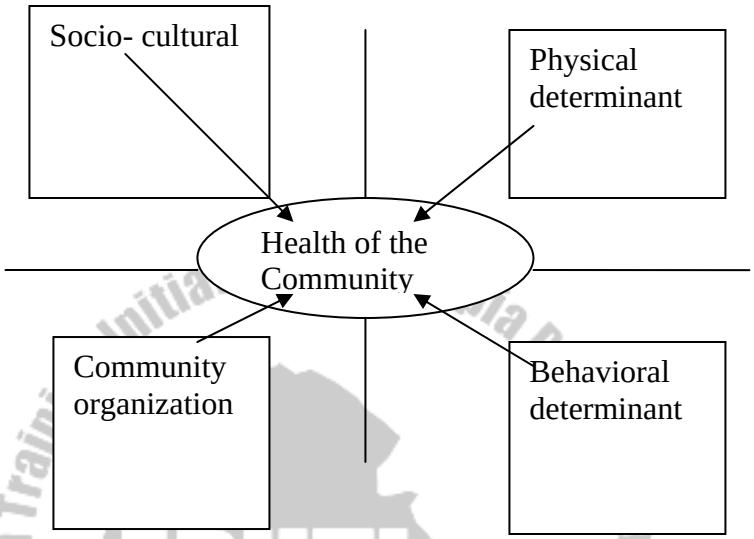

Fig-1- Factors affecting health of a community

These are:

1. Physical Determinants -The physical factors affecting the health of a community include: the geography (e.g. high land versus low land), the environment (e.g. manmade or natural catastrophes) and the industrial development (e.g. pollution occupational hazards)

2. Socio – cultural determinants – The socio- cultural factors affecting the health of a community include the beliefs, traditions, and social customs in the community.

It also involves the economy, politics and religion in the community.

3. Community organization - Community organization include the community size, arrangement and distribution of resources ("relations of productions')

4. Behavioral determinants- Thebehavioral determinants affecting health include individual behavior and life style affecting the health of an individual and the community. E.g. smoking, alcoholism and promiscuity

1.5 Globalization and Health

Globalization is the process of increasing political and social interdependence and global integration that takes place as capital, traded goods, persons, concepts, images, ideas and Values diffuse across the stated boundaries (Hurrel &woods 1995).

Globalization must ensure that people, particularly the poor, enjoy better health that is the most important factor in improving the economic wellbeing of the population in general and in reducing poverty in particular.

The effects of Globalization on health are diverse; these can be positive, negative or mixed. Some of the effects of Globalization are listed hereunder.

Effects of Globalization on health includes

- Externalities of some diseases due to increased communication decreased human mobility
- Accelerated economic growth and technological advances have enhanced health and life expectancy in many population
- Increasing effects of international and bilateral agencies (structural adjustment programs and Global initiatives)
- Jeopardizing population health Via erosion of social and environmental conditions and exacerbating inequalities
- Other health risks of Globalization includes
  - Fragmentation and weakening of labor markets due to greater power of mobile capital
  - Tobacco induced diseases

- Food markets & obesity as well as chemicals in food
- Rapid spread of infectious diseases
- Depression in aged and fragmented population
- Adverse effects on the environment

1.6 Model of disease causation theories

A model is a representation of a system that specifies its components and the relationships among the variables. E.g. includes graphs, charts, and decision trees

I – Nineteen-century models

Each effort to prevent disease in the 19th century was based on one or the other three theories of disease causality. These are:

1. Contagion theory
2. Supernatural theory
3. Personal behavior theory
4. Miasma theory

1. Contagion theory

This theory was common at the beginning of the 19th century. Most official disease prevention activities were based on the hypothesis that illness is contagious. It required:

- Keeping sick people away from well people.
- The institution of quarantine of ships (the traditional period was forty days *la quarantine)* during which time ships, their crews and cargos waited off shores or at some isolated islands.
- Setting up military cordons around infected towns
- Isolation of households if they were infected, and
- Fumigating or washing the bedding and clothing of the sick.

Problems confounded the acceptance of this theory were

- There were too many instances where people become ill regardless of their isolation from human contact and

- Too many others where brave souls nursed the dying and carried their bodies to the graveyard yet remained well.

2. Supernatural theory

Proponents of this theory argue that supernatural forces cause disease. Disease prevention measures based on this theory were important to the religious people. The view among them was that disease is a punishment for transgression of God's laws.

Because epidemic took a great toll on the poor than the rich, the healthier rich can employ the super natural theory as a justification for berating for the poor for sinful behavior i.e. presumed idleness, intemperance and uncleanness.

This theory expressed a political philosophy. People could not advocate the belief that sin causes disease with out, at the same time, implicitly supporting the idea that government need to redress poverty.

3. Personal behavior theory

This theory held that disease results from wrong personal behavior. It was democratic andante authoritarian in intent since it gave responsibility to

individuals to control their own lives. In this formulation the source of the disease was not tied up with the mysterious ways of God, instead people caused their own disease by living fully unhealthy. Hence, improper diet, lack of exercise, poor hygiene and emotional tension become the focus of preventive actions. This theory does not blame the poor for the illness and in many aspects; it was homage to middle-class life.

4. Miasma theory

This theory argues that disease is caused by the odor of decaying of organic materials. It dates back to the Hippocratic idea that disease is related to climate. It contrasted sharply from the other three theories since it conceptually separated the source of the disease from the victim of the disease.

II – Twenty-century models

Although economic and ideological considerations influenced the 19th century disease prevention policy, sound research determines policy today. The 20th century theory focuses on:

1. The Germ Theory
2. The Life Style Theory

3. The Environmental Theory
4. The Multi Causal Theory

1. The Germ Theory

This theory rapidly over took other explanations of disease causations. It held the notion that microorganisms cause diseases and it is possible to control diseases using antibiotics and vaccines. There was criticism on this theory by Thomas Mckeown that stated as the incidence of all major infectious diseases begun to fall several decades before the introduction of vaccines and antibiotics. Thus rising of living standards was responsible for the reduction of disease not the discovery of antibiotics and vaccines.

2. The Life Style Theory

This holds that unhealthy lifestyles are causes for diseases. This hypothesis blames stress, lack of exercise, the use of alcohol and tobacco improper nutrition for most chronic diseases. This theory rejects the notion central to the classic germ theory, that a single disease has a single etiology. Instead they emphasize the interrelatedness of many variables in disease causality, principally those under the control of the individual. Nevertheless, this approach resembles

the germ theory, for it conceives of disease as an individual event, the difference is that prevention, instead of requiring physicians' ministrations, demand personal behavior change. The critics surrounding this theory state that the change for lifestyle requires overall social change.

3. The Environmental Theory

Environmental theory explains that significant number of chronic disease are caused by toxins in the environment and it implies that disease prevention, instead of requiring medical treatments or personal hygiene, demands change in the industrial production.

The first aspect of the environmental hypothesis is occupational hazards, the second concentrates on toxic substances in the air water and soil (advocates of this theory places particular emphasis on radioactivity), and the third aspect focus on synthetic additives to foods "organic foods".

Two scientific disputes surround the hypothesis viz the suitability of extrapolating from animals to humans and the concept of threshold levels.

4. The Multi Causal Theory

It is also called the web of disease causation. The theory express that there are multiple factors for a cause of a single disease entity. But it is incapable of directing a truly effective disease prevention policy as the theories it replaces. Its shortcomings are it gives few clues about how to prevent disease, the actual prevention policies it implies are inefficient in many ways and there is a gap between what it promises and what epidemiologist's deliver.

1.7 Exercise

Describe the different concepts and perspectives of Health.

How do you perceive health?

List the various determinants of health a community.

Out line the strengths and weaknesses, the preventive measures demanded by each model.

What is the influence of globalization on community health?

Do you think that globalization affects the overall health situation of your country? How?

CHAPTER TWO

PUBLIC HEALTH

2.1 Learning Objectives

At the end of this chapter, the students are expected to:

- Discuss the history of public health
- Define public health and list its core activities.
- Be aware of the definition of key terms in public health
- Recognize the principal disciplines of public health
- Describe the difference and similarities between clinical medicine and community health.
- Discuss the ethical issues and challenges in public health.

2.2 History of public Health

The history of public health goes back to almost as long as history of civilization. Possible traditions during

civilization may be, taboos against waste disposal within communal areas or near drinking water sources; rites associated with burial of the dead; and communal assistance during birth.

In the **Ancient Societies (before 500 BC)** the history is that of archeological findings from the Indus valley (North India) around 2000 BC with the evidence of bathrooms and drains in homes and sewer below street level. There was evidence of drainage systems in the middle kingdom of ancient Egypt in the time 2700 -2000 BC. There were written records concerning public health, codes of Hamurabi of Babylon, 3900 years ago.

The **Book Of Leviticus (1500 BC)** had guidelines for personal cleanliness, sanitation of campsites, disinfection of wells, isolation of lepers, disposal of refuses and hygiene of maternity.

In **The Classical Cultures (500 BC - 500 AD)** public health was practiced as Olympics for physical fitness, community sanitation and water wells in the era golden age of ancient Greek; and aqueducts to transport water, sewer system, regulation on street cleaning and infirmaries for slaves by Romans.

In the middle ages (500 - 1500 AD), health problems

were considered as having spiritual cause and solutions. They were supernatural powers for pagans and punishments for sins for Christians. Leprosy, plague (Black Death) during the 14th century and syphilis were some of the deadliest epidemics resulted from failure to consider physical and biological cause.

The era of renaissance and exploration (1500 - 1700 AD) was the rebirth of thinking of about nature of the world and humankind. There was a growing belief that diseases were caused by environment, not by spirits and critical thinking about disease causation e.g. "malaria" - bad air.

In the eighteen century, there were problems of industrialization, urban slums leading to unsanitary conditions and unsafe work places. Edward Jenner (1796) demonstrated vaccination against smallpox.

In the nineteenth century there were still problems of industrialization but agricultural development led to improvements in nutrition and there was real progress towards understanding the causes of communicable diseases towards the last quarter of the century. The Luis Pasture's germ theory (1862) and Koch's Postulate (1876) were remarkable progresses.

Twentieth century has been the period of health resources development (1900-1960), social engineering (1960 - 1973), health promotion (Primary Health Care), and market period (1985 and beyond)

The challenge in the twenty first century are reducing the burden of excess morbidity and mortality among the poor; counter reacting the threats of economic crisis, unhealthy environment and lifestyle; developing more effective health system and investing in expanding knowledge base.

HISTORICAL MARKERS in the development of Public Health (selected)

1700 BC The Code of Hammurabi – Rules governing medical practice

1500 BC Mosaic Law – Personal, food and camp hygiene, segregating lepers, overriding duty of saving of life (Pikuah Nefesh) as religious imperatives.

400 BC Greece – Personal hygiene, fitness, nutrition, sanitation, municipal doctors, occupational health; Hippocrates –

	clinical and epidemic observation and environmental health.
500 BC to AD 500	Rome – aqueducts, baths, sanitation, municipal planning, and sanitation services, public baths, municipal doctors, military and occupational health.
500 – 1000	Europe – destruction of Roman society and the rise of Christianity; sickness as punishment for sin, mortification of the flesh, prayer, fasting and faith as therapy; poor nutrition and hygiene pandemics; antiscience; care of the sick as religious duty.
1348 – 1350	Black Death – origins in Asia, spread by armies of Genghis Khan, world pandemic kills 60 million in fourteenth century, 1/3 to 1/2 of the population of Europe.
1300	Pandemics – bubonic plague, smallpox, leprosy, diphtheria, typhoid, measles, influenza, tuberculosis, anthrax, trachoma, scabies and others until eighteenth century.

1673	Antony van Leeuwenhoek – microscope, observes sperm and bacteria.
1796	Edward Jenner – first vaccination against smallpox.
1830	Sanitary and social reform, growth of science.
1854	John Snow – waterborne cholera in London: the Broad Street Pump.
1854	Florence Nightingale, modern nursing and hospital reform – Crimean War
1858	Louis Pasteur proves no spontaneous generation of life.
1859	Charles Darwin publishes *On the Origin of Species*.
1862	Louis Pasteur publishes findings on microbial causes of disease.
1876	Robert Koch discovers anthrax bacillus.
1879	Neisser discovers gonococcus organism.
1882	Robert Koch discovers the tuberculosis organism, tubercle bacillus.
1880	Typhoid bacillus discovered (Laveran); leprosy organism (Hansen); malaria organism (Laveran).

1883	Robert Koch discovers bacillus of cholera.
1883	Louis Pasteur vaccinates against anthrax.
1884	Diphtheria, staphylococcus, streptococcus, tetanus organisms identified
1890	Anti-tetanus serum (ATS)
1892	Gas gangrene organism discovered by Welch and Nuttal
1894	Plague organism discovered (Yersin, Kitasato); botulism organism (Van Ermengem).
1923	Health Organization of League of Nations
1926	Pertussis vaccine developed
1928	Alexander Fleming discovers penicillin
1929 – 1936	The Great Depression – wide spread economic collapse, unemployment, poverty, and social distress in industrialized countries.
1946	World Health Organization founded.
1977	WHO adopts Health for all by the year 2000
1978	Alma-Ata Conference on Primary Health Crae

1979	WHO declares eradication of smallpox achieved
1981	First recognition of cases of acquired immune deficiency syndrome (AIDS).
1989	International Convention on the Rights of the Child.
1990	W.F. Anderson performs first successful gene therapy.
1992	United Nations Conference on Environmental and Development, Rio de Janiero
1992	International Conference on Nutrition.
1993	World Conference on Human Rights, Vienna.
1994	International Conference on Population and Development, Cairo.
1998	WHO Health for All in the Twenty-first Century adopted.

The new public health is compressive in scope. It relates to or encompasses all community and individual activities directed towards reducing factors that contribute to the burden of disease and foster those that relate directly to improved health. Its programs range

from Immunization, health promotion, and childcare to food labeling and food fortification to the assurance of well managed, accessible health care service. The planning, management, and monitoring functions of a health system are indispensable in a world of limited resources and high expectations. This requires a well-developed health information system to provide the feedback and control data needed for good management. It includes responsibilities and coordination at all levels of government and by non-governmental organizations (NGO'S) and participation of a well-informed media and strong professional and consumer organization. No less important are clear designations of responsibilities of the individual for his/her own health, and of the provider of care for human, high quality professional care

2.3 Definition of public health

Public health is defined as the science and art of preventing diseases, prolonging life, promoting health and efficiencies through organized community effort. It is concerned with the health of the whole population and the prevention of disease from which it suffers. It is also

one of the efforts organized by society to protect, promote, and restore the peoples' health. It is the combination of sciences, skills and beliefs that is directed to the maintenance and improvement of the health of all the people through collective social actions.

Key Terms in the definition

Health Promotion

Health promotion is a guiding concept involving activities intended to enhance individual and community health well-being. It seeks to increase involvement and control of the individual and the community in their own health. It acts to improve health and social welfare, and to reduce specific determinants of diseases and risk factors that adversely affect the health, well-being, and productive capacities of an individual or society, setting targets based on the size of the problem but also the feasibility of successful interventions, in a cost-effective way.

Health promotion is a key element in public health and is applicable in the community, clinics or hospitals, and in all other service settings. Raising awareness and

informing people about health and lifestyle factors that might put them at risk requires teaching.

The Elements of Health promotion comprises of :-

1. Addressing the population as a whole in health related issues , in every day life as well as people at risk for specific diseases:
2. Directing action to risk factors or causes of illness or death;
3. Undertaking activities approach to seek out and remedy risk factors in the community that adversely affect health;
4. Promoting factors that contribute to a better condition of health of the population;
5. Initiating actions against health hazards ,including communication ,education, legislation ,fiscal measures, organizational change ,community development , and spontaneous local activities ;
6. Involving public participation in defining problems ,deciding on action;
7. Advocating relevant environmental ,health , and social policy ;
8. Encouraging health professionals' participation in health education and health policy.

Prevention

Prevention refers to the goals of medicine that are to promote, to preserve, and to restore health when it is impaired, and to minimize suffering and distress.

There are three levels of prevention:

Primary Prevention refers to those activities that are undertaken to prevent the disease and injury from occurring. It works with both the individual and the community. It may be directed at the host, to increase resistance to the agent (such as immunization or cessation of smoking), or may be directed at environmental activities to reduce conditions favorable to the vector for a biological agent, such as mosquito vectors of malaria.

Secondary Prevention is the early diagnosis and management to prevent complications from a disease. It includes steps to isolate cases and treat or immunize contacts to prevent further epidemic outbreaks.

Tertiary Prevention involves activities directed at the host but also at the environment in order to promote rehabilitation, restoration, and maintenance of maximum function after the disease and its complications have

stabilized. Providing a wheelchair, special toilet facilities, doors, ramps, and transportation services for paraplegics are often the most vital factors for rehabilitation.

Rehabilitation

Rehabilitation is the process of restoring a person's social identity by repossession of his/her normal roles and functions in society. It involves the restoration and maintenance of a patient's physical, psychological, social, emotional, and vocational abilities. Interventions are directed towards the consequences of disease and injury. The provision of high quality rehabilitation services in a community should include the following:

1. Conducting a full assessment of people with disabilities and suitable support systems;
2. Establishing a clear care plan;
3. Providing measures and services to deliver the care plan.

2.4. MAJOR DISCIPLINES IN PUBLIC HEALTH

● **Nutrition**: is the science of food, the nutrients and other substances therein, their action, interaction and balance in relation to health and disease.

●**Reproductive health**: is a state of complete physical, mental and social being not only absence of disease or infirmity, in all matters relating to reproductive system and to its functions and process.

●**Environmental Health** The basic approach to environmental control is first to identify specific biologic, chemical, social and physical factors that represent hazards to health or well-being and to modify the environment in a manner that protects people from harmful exposures. The principal components of environmental health are water sanitation, waste disposal , etc.

● **Health Education** is defined as a combination of learning experiences designed to facilitate voluntary actions conducive to health. It is an essential part of health promotion.

●**Epidemiology** is the study of frequency, distribution, and determinants of diseases and other related states or

events in specified populations. The application of this study to the promotion of health and to the prevention and control of health problems is evident.

● **Health Economics** is concerned with the alternative uses of resources in the health services sector and with the efficient utilization of economic resources such as manpower, material and financial resources.

● **Biostatistics** is the application of statistics to biological problems; application of statistics especially to medical problems, but its real meaning is broader.

● **Health Service Management** is getting people to work harmoniously together and to make efficient use of resources in order to achieve objectives.

● **Ecology**: is the study of relationship among living organisms and their environment. It is the science, which deals with the inter-relationships between the various organisms living in an area and their relationship with the physical environment. Human ecology means the study of human groups as influenced by environmental factors, including social and behavioral factors.

● **Research** is a conscious action to acquire deeper knowledge or new facts about scientific or technical

subjects. It is a systematic investigation towards increasing knowledge. It aims at the discovery and interpretation of facts, revision of accepted theories, or laws in the light of new facts or practical application of such new theories or laws.

- **Demography** is the study of population, especially with reference to size and density, fertility, mortality, growth, age distribution, migration, and the interaction of all those with social and economic conditions.

2.5. Core activities in public health

1. Preventing epidemics
2. Protecting the environment, work place ,food and water ;
3. Promoting healthy behavior;
4. Monitoring the health status of the population;
5. Mobilizing community action;
6. Responding to disasters;
7. Assuring the quality ,accessibility, and accountability of medical care;
8. Reaching to develop new insights and innovative solutions and
9. Leading the development of sound health policy and Planning

2.6. Community Health, Clinical Medicine and Public Health

Community health refers to the health status of a defined group of people and the actions and conditions both private and public (governmental) to promote, protect and preserve their health.

Whereas Public health refers to the health status of a defined group of people and the governmental actions and conditions to promote, protect and preserve their health.

Clinical medicine is concerned with diagnosing and treating diseases in individual patients. It has evolved from primarily a medical and nursing service to involve a highly complex team of professionals.

The overall objective of both public health and clinical medicine is better health for individual and for society. Both of them are vital and interdependent to improve individual and public health. Ready access to high quality health care services is a right of the population and a requirement of good public health. This requires the availability of high quality providers of clinical and preventive care.

Public health involves both direct and indirect approaches. Direct measures in public health include immunization of children, modern birth control, hypertension, and diabetes case findings. Indirect methods used in public health protect the individual by community –wide means, such as raising standards of environmental safety, assurance of a safe water supply, sewage disposal, and improved nutrition. In public health practice, both the direct and indirect approaches are relevant.

2.7. Ethical issues and challenges in public health

Public health is usually viewed as a broad social movement, a way of asserting social justice, value and priority to human life. On the other hand, market justice prevents the fair distribution of burdens and benefits among society.

The following are challenges and ethical concerns in public health

1. Political conservatism and public health – in this view, politics conserves the broad vision of public

health and prefers it to limit into a technical enterprise focusing on controlling communicable diseases and a safety net providing medical care to the indigent.

2. Collective scope and individualism – individualistic societies resist the notion of public health's concern for the collective
3. Economic impacts - public health regulations affects the industries (E.g. tobacco), those paying for the public health benefits may not necessarily be the beneficiaries (E.g. Regulatory actions for worker safety raising costs to consumers), people may not be willing to pay costs for benefits that would accrue in the long future (E.g. measures to limit global warming) and it is easier to calculate current costs incurred for public health than the benefits that would come later.
4. Promoting public welfare versus individual liberty – the extent to which governments should restrict individual freedom for the purpose of improving community health (E.g. AIDS control in Cuba)
5. Paternalism versus libertarianism – restrictions on individual behavior for protecting their own

health (E.g. enforcing seat belts). libertarianism claims that “the only purpose for which power can be rightfully exercised over any member of a civilized community ,against her / his will is if her/his act harms others(E.g. regulate drunk behavior no drinking)

6. Public health measures and religion/moral – some public health measures are not acceptable on religious and moral grounds ,(E.g. sex education and distribution of contraceptives and/or condoms to adolescences),
7. Values and responsibilities - health authorities deciding on values and choices of those they serve (e.g. whether some one should not take the responsibility on behavior causing ill health such as smokers, alcoholics, promiscuous people),decision on whether to emphasize HIV/AIDS prevention versus ARV therapy in poor countries, the extent of providing access to benefits to research subjects
8. Surveillance versus cure – involves hoe to deal with sick subjects identified in routine survey/data collection

9. Dilemmas in cost benefit analysis – the difficulty of valuing life, and values to be assigned for the rich versus the poor.

2.8 Exercise

Define public health and discuss the similarities and difference with clinical medicine.

Mention the role of public health in the health care delivery system

What are the challenges of public health practice?

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CHAPTER THREE

HEALTH AND CULTURE

3.1 Learning Objectives

At the end of this chapter, the students are expected to:

- Define culture .
- Describe the relationship between culture and health *
- Discuss the influence of culture on health.
- Health is already defined in chapter one

3.2 Definition

Culture is that complex whole which includes knowledge, belief, art, morale, law, customs and other capabilities and habits acquired by man as a member of society.

Culture refers to the sum total of the life- ways of a group of people who share values, beliefs and practices that are passed on form generation to generation and

which change through time. Culture is the sum totals of the things that people do because of having been taught. For the perpetuation of human race, man depends on culture, which is a learned behavior.

Culture is peculiar to human beings. It separates man and the society from that of animals and insects, whose behavior is always only instinctual and therefore does not change. Man's culture or learned behavior makes possible to change continuously.

The three suggested levels of culture include:

- Concrete - the most visible tangible artifacts such as clothes, music, art, food and games. Festivals and celebration focus on these dimensions.
- Behavioral – practices reflect values and defined social and gender roles, languages spoken, and approaches to non-verbal communication. Behavioral aspects of culture include language, gender roles, family structure, political affiliation, and community organization.

- Symbolic – values and belief are often expressed in symbols and rituals. Although often abstract, symbolic meaning is key to how people define themselves in relation to each other, the world and the universe. Symbolic expression includes value systems, religion, worldview, customs, spirituality, morals and ethics.

3.3 Relation of Culture and Health

Culture is one of the determinants of health among the environmental factors. An individual's culture influences his or her attitude toward various health issues, including perceptions of what is and is not a health problem, methods of disease prevention, treatment of illness, and use of health providers. In every culture, the care of the sick person is clearly dictated not only as to what care he/she is given, but also who will do it and how he/she should proceed. We learn from our own cultural and ethnic backgrounds how to be healthy, how to recognize illness, and how to be ill. Meanings attached to the notions of health and illnesses are related to basic, culture-bound values by which we define a given experience and perceptions.

People around the world have beliefs and behaviors related to health and illness that stem from cultural forces and individual experience and perceptions.

To understand the cultural context of health, it is essential to work with several key concepts:

1. The concept of insider and outsider

Perspectives are useful for examining when we are seeing things from our point of view and when we are trying to understand some ones else's view of things.

Insider shows the culture as viewed from within. It refers to the meaning that people attach to things from their cultural perspective. For example, the view worms (ascaris) in children are normal and are caused by eating sweets in the perspective within some cultures.

The outsider perspective refers to some thing as seen from the outside. Rather than meaning, it conveys a structural approach, or something as seen without understanding its meaning for a culture. It can also convey an outsider's meaning attached to the same phenomenon. For example, that ascaris is contracted through eggs ingested by contact with contaminated soil or foods contaminated by contact with that soil. .

The concept of insider and outsider perspective allows us to look at health, illness and prevention and

treatment systems from several perspectives; to analyze the differences between these perspectives; and to develop approaches that will work within a cultural context.

The insider-outsider concept leads to other sets of concepts. Disease in the insider, usually the western biomedical definition refers to an undesirable deviation from a measurable norm. Example deviation in temperature, white cell counts and many others are seen as indicators of disease.

Illness on the other hand, means "not feeling well." thus, it is subjective, insider view. This set ups some immediate dissonance between the two views. It is possible to have an undesirable deviation from a western biomedical norm and to feel fine. For example, hypertension, early stage of cancer. HIV infection and early stages of diabetes are all instances where people might feel well , in spite of having a disease. This means that health care providers to “fix” something that people may not realize are wrong. It is also possible for some one to feel ill and for the western biomedical system not to identify a disease.

2. Ethnocentrisms refer to seeing ones own culture as "best". This is a natural tendency, because the survival

and perpetuation of a culture depends on teaching children to accept it and on its members feeling that it is a good thing. Cultural relativism in anthropology refers to the idea that each culture has developed its own ways of solving problems of how to live together; how to obtain the essential of life, such as food and shelter; how to explain phenomena; and so on.

No one is "better" or "worse"; they are just different. This is a challenge, what if a behavior is "wrong" from and epidemiological perspective. How does one distinguish between a 'dangerous' behavior (example, using HIV contaminated needle) and behavior that are merely different and therefore, seem odd? For example, Bolivian peasants use very fine clay in a drink believed to be good for digestion and stomach ailments. Health workers succeeded in discouraging this practice in some communities because 'eating dirt' seemed like a bad thing. The health workers then found themselves faced with increased caries (tooth decay) and other symptoms of calcium deficiency. Upon analysis, the clay was a key source of calcium for these communities.

Thus, there is a delicate balance between being judgmental without good reason and introducing behavior change because there is a real harm from

existing behaviors. In general, it is best to live harmless practices alone and focus on understanding and changing harmful behaviors.

3. The concept of holism is also useful in looking at health and disease cross culturally. Holism is an approach used by anthropologists that looks at broad context of whatever phenomenon is being studied. Holism involves staying alert for unexpected influences, because one never knows what may have a bearing on the program one is trying to implement. For public health, this is crucial because there may be diverse factors influencing health and health behavior.

3.4. Exercise

Discuss the negative and positive influences of culture to health by giving examples.

List cultural practices from your locality and discuss the influence of these cultural practices on the health of your community.

How does culture affect health of a certain community?

CHAPTER FOUR

TRADITIONAL HEALTH CARE PRACTICES

4.1 Learning Objectives

At the end of this chapter, the students are expected to:

- Describe the traditional beliefs &practices linked to health .
- Appreciate the importance of traditional health practices in modern medicine
- Discuss the structure of traditional medicine

4.2 Introduction

Nowadays, there is a mix of western biomedicine and indigenous practices in the
health care in different parts of the world, especially in developing counties. Countries like Brazil and China have well-developed traditional medicine in their health care system.

Traditional medicine was recognized by the Ministry of Health of Ethiopia as an important alternative health resource readily available to both rural and urban communities. An office for traditional medicine was established in the Ministry of Health in 1975 with the task of co-coordinating nationalized activities. This includes phytochemical screening of enthobontanical pharmacopoeia, clinical evaluation of traditional health practices and surgical procedures, and the census of traditional medical practitioners. Despite all aims, little was accomplished and only traditional birth attendants were trained and employed and some medicinal were screened.

Nevertheless, ethno medical beliefs and practices continue to be widely followed through out urban and rural Ethiopia, reflecting considerable cultural continuity and the persistent poor accessibility and quality of most modern health services. In Ethiopia where more than half of the population depends on traditional medicine, involving both the traditional healers and the practice in the health care system is a good opportunity.

4.3 Structure of Traditional Medicine

In reality, traditional medicine in Ethiopia is characterized by great variation and has been shaped by a host of ecological, social, cultural and historical factors. First, variation in climate, elevation, topography and soil type play a major role in the frequency and distribution of diseases that traditional medicine is called up on to deal with. Example, it is people who are living in hot lands/low lands are ethno medically familiar with visceral leshmaniasis and trypanosomiasis unlike the people living in high lands who have their healing practices on common cold and rheumatism.

Second the multiethnic character of the population and the uniqueness of the individual socio-cultural environments with in which it developed have influenced the Ethiopian ethno medical system.

Third, historical developments related to prolonged immigration from different areas surrounding the country such as the southern Arabian Peninsula, the influx of Greek culture and the introduction of Christianity and Islam has influenced the Ethiopian ethno medical heritage.

Despite the above-mentioned variation, the Ethiopian ethno medicine can be described as an integrated system of beliefs and practices, characterized by an internally coherent discourse on health and illness. Illness perception may either promote health-enhancing behaviors, or it can lead to health lowering behaviors and practices. The settlement pattern of Ethiopians concentrated in the highlands is due to the traditional fear of malaria in the lowland; which is an example to the health enhancing behavior. Where as the case of the traditional management of diarrhea in children by mothers in which the Ethiopian mothers believe that diarrhea is caused by teething, to which they respond by limiting food and fluid with the intention of decreasing the volume and frequency of diarrhea is a negative practice. These popular beliefs can affect treatment decision-making.

4.3.1 Ethno medical definition of Health

In the Ethiopian ethno medical setting, health is defined as a state of equilibrium among the physiological, spiritual, cosmological, ecological, and social forces surrounding man.

This state of balance is enhanced by factors of a spiritual behavioral and physiological nature. First well-being is thought to be secured by a peaceful relationship with the supernatural world (Sky-God, nature and ancestral sprites, magical agents). Additionally, behavioral modernization is considered as an important promise for health looking. Conversely, any excess in drinking eating working and uncontrolled conditions such as anger/grief may be conducive to ill health.

Moreover, a proper functioning of the human body is viewed as being dependent on physiological and adequate food intake. For example in Ethiopian context intestinal worms constitutes an integral part of the human body and when they exceed the ideal number, they can cause ill health. This equilibrium can be rectified through the traditional practice of taking powerful vermifuge (e.g. "*Kosso*") on a regular base.

The desirable state of well-being is disrupted by the onset of sickness. A number of factors influence the formulation of disease ethnologies.

- Circumstances surrounding the illness episode
- Individual subjectivity

- Opinion of elders and significant others and
- Demographic status (age, sex, religion)

Nonetheless, two broad domains of ethnological theories are identifiable in the Ethiopian ethno medical system. These are naturalistic and Magico-religious.

4.3.1.1 Naturalistic ethnologies:

In this ethological theory, aliments are ascribed to causes pertaining to the empirical domain and exclude the intervention of a supernatural agent. Hence sickness may result from

External factors – such as a faulty interaction with the environment, e.g. drinking polluted water, eating unaccustomed or bad food, atmospheric charges, inhaling dusts etc

Contagion through physical contact with a sick person, e.g. Sexual relationship, inhaling a sick person's breath, drinking from a sick person's cup

Interpersonal conflict, e.g. Wounds provoked by fights and wife beating

Personal excesses, e.g. prolonged exposure to sun and rain, bathing in cold water, eating unripe crop, drinking immoderately

4.3.1.2 Magico- religious domain:

In this domain of etiology for a disease, illnesses are attributed to God, nature and demonic sprites (e.g. “Zar”) ancestral ghosts, magical forces (evil eye, curse) and breach of social taboos or personal vows. Violation of religious and social norms is thought to bring about divine retribution in the form of epidemics. Moreover, sprits are believed to seize humans, bringing about prolonged illness while the diagnosis of possession by a sprit generally requires the validation of a ritual expert. Ailments such as mental illness and epilepsy are routinely attributed to the action of an evil sprit.

The fear of evil eye and sorcery is wide spread in Ethiopia. This phenomenon is known as “*Buda*” in several Ethiopian Semetic and Cushitic languages, and in a variety of terms in some other groups. This is usually associated with predominantly despised artisan castes like potters, tanners, and blacksmiths. Furthermore, sorcery in Ethiopian socio-cultural context consists of deliberate enticement of magical acts aimed at harming someone. Usually, it takes place in a situation of interpersonal conflicts, social deviance and/or desire for revenge. The deleterious health

consequences of sorcery are highly feared and counteracted with appropriate rituals.

In addition to ailments recognized by biomedicine, the Ethiopian ethno medical system comprises a number of folk syndromes ascribed to both empirical and supernatural etiologies. Example, the Sidamo label with the term "*ranta*" an ailment characterized by chest pain and back pains, fatigue and breathing difficulties. Its ethnology is described in empirical terms, and it is thought to be triggered by excess commonplace activities, e.g. Carrying heavy loads. The prescribed treatment includes drinking goat's blood, eating abundant food, horn cupping, thermal baths and rest.

4.4. Traditional Perinatal Care

The majorities of Ethiopian women deliver at home and follow the traditional birth customs. In this context, traditional birth attendants play an important role in prenatal and perinatal care.

These traditional birth attendants possess a vast range of cumulative knowledge in the field of midwifery and gynecological therapy. They are called especially in the event of childbirth complications. They facilitate

deliveries through massaging and other form of manipulation, often involving purification of the birth carnal with butter.

Traditional beliefs and practices concerning pregnancy and childbirth are also wide spread. Ethno medical beliefs predominate in the explanation of conception. For example in Sidamo, conception is thought to derive from mixing of male seminal fluid with female blood, while the function of female reproductive organs appeared to be ignored. Pregnancy is considered a dangerous state as the fetus could easily pray for evil eye and sorcery. These are believed to cause miscarriage, premature delivery and total malformation.

Preparation for childbirth also entails empirical practices, which aim at enhancing the health of both the expectant mother and the fetus. In some parts of the country, Kembata and Hadya, *Kosso* is taken at various stages of the pregnancy with the main purpose of cleaning the bowel as it would be "*shameful for a woman to show intestinal parasite at birth", "making space for the fetus",* and *"keeping the fetus weight down"* as the delivery of a big baby would cause protracted and painful labor.

Varieties of practices are enacted after delivery. The umbilical cord is cut with a razor blade after the placenta is expelled for the stated reason that the neonate needs the blood to breath. The placenta is usually buried out side the house and in Ethiopian culture its burial site has deep symbolic and emotional overtones as it signifies one's roots and desirable place of death.

Ethno botanical remedies are also used widely both during pre and postnatal period. Among various groups, fruits are given to expectant mothers as a remedy against eclampsia. In northern Ethiopia, the newly born baby is generally given some butter after birth so as to clear the baby's intestines from black tar and other fluids accumulated during gestation while colostrums is squeezed out and generally avoided as a potential source of abdominal pains, breast feeding carried out universally beginning the 3rd day of life. The birth of a new baby also results in weaning of the older child, for this purpose a bitter juice is placed on the nipples in order to discourage the baby on breast-feeding.

4.5. Secular Healing

Many ailments are routinely explained with in as empirical framework of illness etiology and treated with curative practices, which do not involve Magico-religious rituals. In this domain various levels of specialization exists, ranging from home remedies to professional treatment.

4.5.1 Self care

Self-care by household with out the use of professional healers is common through out Ethiopia. A popular remedy for different illnesses exists. For instance, remedies for headache include coffee and lemon tea drinking, and most ethnic groups place eucalyptus leaves in the nostrils to treat colds. Rheumatism and arthritis are treated with application of hot and dry leaves on the afflicted part of the body, in some population groups. Several skin problems are also treated at home, for example the Sidamo apply a poultice derived from butter and leaves to scabies caused burrows

4.5.2 Empirical Practitioners

Beyond the self-care practices, Ethiopians use different variety of traditional medical practitioners, who operate predominantly at an empirical level. Group specific taxonomic terms distinguish further ethno medical competence. Thus, a Sidamo traditional medical practitioner whose field of expertise is restricted solely to the preparation of herbal concoctions is designated with the term "*Taghissancho*", meaning medicine maker. The Amhara also classify the traditional medical practitioners as herbalists, "*Wegesha*" (bonesetter), uvula cutter, and cupper. These people are not distinguishable from the rest of the population in terms of social status or insignia. The majorities of them are engaged in farming and practice medicine on part time basis.

- *Cauterization*: - is popular medical practice in Ethiopia and is advised for ailments such as conjunctivitis, headaches, ear infections, chronic cough, and bone fracture. Although cautery is rarely harmful, cases of permanent disability following cauterization were observed among the Sidamo. The attributed efficacy of cautery is based on the belief that the emanation of heat

destroys the pathogenic substance in side the affected part of the body.

- *Surgery:* Though rare, literatures report the practices of tonsillectomy median episiotomies, amputation, and caesarian section. In Ethiopia presently the most common procedures that entail the excision of an anatomical part are Circumcisions and Uvulectomy.
- *Miscellaneous practices*: Additional ethno medical procedures include bathing, bone setting and cupping. Thermal springs have traditionally been important in Ethiopia in treating skin diseases, syphilis, leprosy, rheumatism, and other ailments. Segregation of highly contagious patients is generally enforced, especially in case of leprosy. Bone setting techniques vary among ethnic groups. Traditional practitioners treat bone fractures, dislocation and sprains. Therapeutic cupping is practiced along side other bleeding techniques. Its main objective is to extract “bad blood” from the body, which is thought to be decaying internally causing tissue swelling and ill health.

It is prescribed for elephantiasis, rheumatism, high fevers, headaches and others.

Additional ethno medical practices include dentistry involving the use of modern carpenter pliers to extract aching teeth, eye, and brow cutting to treat conjunctivitis, and scrapping the buccal tissue in the case of tonsillitis.

4.6. Exercise:

Discuss the traditional health practices you know from your locality, their intention and implication on health.

What are the differences between the naturalistic ethnologies and magico-religiuios theories?

What is the definition of health according to the ethno medical settings? And what are the factors affecting health?

CHAPTER FIVE

FAMILY HEALTH

5.1 Learning objectives

At the end of this chapter, the students are expected to:

- Define Family and family health.
- Describe the reason why there is a focus on family health

5.2 Family

Family is a social unit composed of group of individuals who are related by blood or marriage or adoption, live under the same roof and share a common kitchen, and/or share common social responsibilities. Such social unit is defined primarily by reference to relationships which pertain to arise from reproductive process and which are regulated by law or custom, especially relationship established between a couple by marriage and those existing between a couple as parents and

their children. However, it has to be differentiated from household.

Household consists of a group of individuals who share living quarters, take their principal meal from the same kitchen, i.e. live under the same roof, and eat from the same kitchen. There are two types of households- private households (or family households) and institutional (or non-family) households like hostels, jail, etc.

Nuclear family

Nuclear family includes a male and female couple related by marriage or living together by common consent, with or without children.

Extended family

The extended family is multigenerational and consists of the nuclear family and relatives of both parties, whether or not living in close geographic proximity. The extended family provides a broader basis of mutual support.

5.3 Family Health

Family Health deals with problem of health of the whole family as a single and fundamental social unit. Special and great emphasis is given to family health since the

problems of rapidly growing populations have important consequences at the family, community and the national level. Problems of maternal and child health, and human reproduction, including family planning, are now seen as aspects of the greater problem of the health of the whole family.

In developing countries like Ethiopia, families often consist of large numbers of children born to poorly educated parents living in poverty. The father or less commonly the mother may be absent for long periods while working in a distant place. This can create serious health hazards for all family members. In societies where death of adults occurs from civil wars, famine, or infectious diseases such as AIDS, raising of children by single parents, neighbors, or older siblings is common. Abandonment of children is also common in such situations.

Why do we focus on family health?

The family structure provides an important foundation for physical and emotional health of the individual and the community. A healthy family is a basis for a healthy society and healthy nation. Marital and family status and

interaction among family members affect each person's health and the well being of the community and nations Family health mainly focuses on maternal (mother's) heath and child health. Both at the national level and internationally, maternal and child health are among the major priorities with special focus on primary health care, since women and children have health needs different form those of the general population.

Public health must be sensitive to the special needs of the family by providing appropriate health promotion, disease prevention, medical care and support programs for each member of the family and the family as a whole.

Maternal health

Maternal health deals with insuring safe mother hood for all women of the world. This includes care for females starting from their conception through various stages of growth and development with special emphasis to women of childbearing age. Here pregnant mothers will get great emphasis towards care before delivery (prenatal care), care during labor and delivery

(childbirth), and care after delivery (postnatal care) and family planning.

Women's health issues relate to their many roles: as individuals, workers, wives, mothers, and daughters. This demand for life long responsibilities for knowledge, self-care, and family leadership in health related issues, such as nutrition, hygiene, education, exercise , safety, fertility, child care, and care of the elderly. Changes in the social roles of women create extra demand and risks in health.

Family Planning

It is a conscious effort on the part of a couple in planning the size of the family and thus consists of the restrictions of births or limitation of births either temporarily to achieve the planned interval between successive births or permanently to prevent more births than planned by the usage of various contraceptive techniques. Family planning and spacing of pregnancy is a vital issue in developing countries, where the burden of frequent pregnancies contributes to high maternal and infant mortality rates. It enables women to determine the time, spacing, and frequency of pregnancy, as well as adoption of children. Accordingly, it prevents Too Early

(e.g. Teenage), Too Soon (e.g. Short inter pregnancy interval), Too Many (e.g. Too many pregnancies and children) and Too Late (e.g. in older women >35 years) pregnancies. It includes a range of methods for preventing or terminating pregnancies, while maintaining a normal sex life. Male's involvement is of paramount importance in family planning especially in the decision making.

Child health

Public health has long played a major leadership role in improving the health of children by provision of care and regulation of conditions to prevent disease, provide early and adequate care of illness, and promote health.

Child health includes care for newborns, breast feeding and feeding practices, Immunization, growth monitoring and well baby clinics, treatment of common childhood infections, school health activities and advocating for the rights of children

5.4 Exercise

What is family health and why is there a focus on family health in the health system?

List the components of family health activities.

How does family planning contribute to family health?

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CHAPTER SIX

PERSONAL HYGIENE

6.1 Learning objectives

At the end of this chapter, the students are expected to:

- Define Hygiene.
- Describe the importance of hygiene to the individual and community

6.2 Hygiene

The concept of hygiene dates back to the time when the first man has moved in to the caves to protect himself from the forces of nature that act against his survival. The known religious leaders, Prophet Moses and Prophet Mohammed have stated to their followers to wash their body before religious practices and even before meal. This practice is more probably true to the other religions and sects of the world.

Hygiene is a word derived from hy.ge.ia the goddess of health in Greek mythology meaning the science of

health and embraces all factors, which contribute to healthful living. Hygiene is also defined as the science that deals with the establishment and maintenance of health in the individual and the group, conditions and practices conducive to health. Hygiene can be classified into community hygiene and personal hygiene. Community hygiene might include industrial hygiene, social hygiene, food hygiene, etc.

Personal Hygiene is part of hygiene, which tells us how an individual preserves, improves and maintains the health of his own mind and body. It is taking care of yourself everyday, from your hair to your feet, by following the rules of proper washing and grooming, healthful nutrition, and getting enough physical activity and rest. Personal hygiene and health are greatly affected by heredity and environment; it can be discussed in terms of constitution, posture, habit, sunshine, rest and sleep, fatigue, exercise, emotions, cleanliness of the body, mental hygiene and nutrition.

Constitution means physical make up of the body in relation to one's health vitality or condition of mind, which may greatly be influenced by the environment. The human body is constituted of several systems of

organs. They work together although they perform a particular job to keep the human body alive and active.

Posture is attitude/ way of holding the body. Good posture is highly appreciable and a social asset because of its aesthetic value. Poor posture interferes with respiration and diaphragm movement, flow of blood, circulatory and digestive system. Congenital structure, ill fitted footwear and high heals occupation which keeps body in incorrect posture for a long time and poor nutrition are some of the causes of incorrect posture.

Habit is settled or regular tendency or practice, especially one that is hard to give up. Habits grow out of our routines. Some habits are acquired from parents through unconscious imitation. Forming of good habits will determine a child's actions and thinking. Training in good habits both physical and mental have a definite effect on life.

Sunlight and fresh air have double beneficial action. They stimulate one's mind and produce important effects on skin, thus improving the metabolism of the body.

Rest and sleep are needed for maintaining health. During sleep mind is set at rest. Repair and growth of

the tissues take place during sleep because during working hours our tissues and nerves are constantly subjected to wear and tear. To take rest and have sufficient amount of sleep is necessary. Fatigue is the feeling of tiredness or weariness form muscular activity. It also means weariness resulting from either bodily or mental exertion in response of stimuli to any organs' over activity.

Exercise is the basis for the healthy body for majority of people. It is important for maintaining health and vigor and to promote growth. Ability to think and perceive is enhanced by means of exercise. Without exercise, the whole body becomes sluggish.

Emotion is a "stirred up" state of the organism; it is a subjective feeling state, which can influence perception, thinking, and behavior; usually accompanied by facial and bodily expressions; an excited state of mind based on a physiological departure from homeostasis. It includes love, hate, fear, grief, angry or joy experienced unconsciously due to some drive.

Nutrition is defined as the series of processes by which an organism takes in and assimilates food for promoting growth and replacing worn out and injured tissues.

Cleanliness of the body includes both, care of hair, teeth, eyes, ears, nails, care of the feet, hand etc. Menstrual hygiene means taking care of the sanitary condition of the vulvae. Menstruation is a normal physiological process of a normal womanhood.

Keeping personal cleanliness costs very little when it is compared with its importance. In this case, every body can practice it at home with available materials.

1. Hands and fingers nails: unclean hands considered important routes of transmission for diseases. Fingernails, if not properly cleaned and trimmed are suitable for accumulation of dirt and microorganisms. As a result, food can be contaminated during preparation and pathogens can directly transfer into the mouth when eating.

Control measure to prevent the transmission of diseases form hands and fingernails:

- Keep fingernails always clean and short
- Use detergent (soap) for the hand before food preparation and eating
- Use hand washing after eating and toilet visit including some other activities

NB. Improper hand washing is not better than hand washing not at all. Proper hand washing reduces the microbial load though it is not as remarkable as washing using soaps.

2. The skin: Sweat and oily secretions from the skin cause dust to stick on its surface. This clogs the skin pores and interferes with the natural function of the skin. Human skin serves as physical barrier and also has self disinfectant power. The disinfectant power of skin increases when the skin is clean

   More over, the bacteria can readily breed on unclean surface of the skin to cause various diseases and undesirable odor. Therefore, proper skin cleanliness is very relevant to break the transmission of disease.

3. Clothes: help to protect our body from harsh weather conditions. However, unclean cloths contribute to the multiplication of pests and the spread of pests born disease like relapsing fever. To prevent such health problems regular day and night clothes washing and ironing is advisable.

4. The mouth and teeth: Can harbor microorganisms when food particles left between

the teeth. The microorganism uses this food as a nutrient, multiplies in larger numbers, and can cause gum and tooth disease as well as bad breath. Therefore, to prevent the problem regular tooth brushing is relevant.

5. The head: unclean hair and scalp can harbor different microorganisms and pests, like lice, which can transmit disease. Therefore, to prevent the problem regular washing with soap and warm water is highly encouraged.
6. The nose: It contains hairs in the nostrils that filter dirt and microorganism from the air. Thus, the nose serves as a protecting devise against the entrance of harmful substances in to lungs and circulatory system. For this reason, the nostrils should at all times be kept clean by using a clean handkerchief or blowing at intervals to remove the accumulated dusts and spores.
7. The eye: Dirty eyes attract common housefly. Microorganisms carried by the flies' legs can be deposited in or near the eyes and may cause disease like trachoma, which eventually lead to blindness. Regular face washing with soap can break the transmission of such diseases

8. The Genitalia: Shaving the hair is one of the main important parts for the genital hygiene. It helps to avoid the harborage of pests and make cleaning of the genital organ easier. Cleaning of the genital areas can be done during general body cleaning or taking shower. However, there are conditions when one needs special cleaning of genital areas. These are before and after sexual intercourse, during menstruation period, before and after delivery.

6.3 Exercise

Discuss the role of hygiene in the prevention of diseases.

Mention and discuss some of diseases that can be prevented by certain aspects or practices of personal hygiene

CHAPTER SEVEN

HEALTH AND DEVELOPMENT

7.1 Learning objectives

At the end of this course, the students are expected:

- Differentiate between development and economic growth.
- Describe the relationship between the health sector and development
- Identify and define relationships existing between individual and community health and various socio-economic conditions.

7.2 Introduction

Individuals in good health are better able to study, learn and be more productive in their work. Improvements in standard of living have long been known to contribute to improved public health; however, the course has not always been recognized. Investment in health care was not considered a high priority in many countries where

economic considerations directed investment to the "productive" sectors such as manufacturing and large-scale infrastructure projects, such as hydroelectric dams.

Socially oriented approach sees investment in health as necessary for the protection and development of "human capital" just as investment in education is needed for the long-term benefit of the economy of a country. According to the World Development Report by World Bank in1993: Investing in health, articulated a new approach to economic growth in which health, along with education and social development are considered essential contributors for economic development.

Development on the other hand should be the concern of all in the developing countries. The health planner, manager, and others are equally charged with that concern and must be knowledgeable of what development implies and the role health should play in the development of ones country.

Hence, it is important to know what development means, how does it differ from economic growth? What role does health play in development?

What is development?

Development has been variously defined. The modern view of development perceives it as both a physical reality and a state of mind in which society has, through some combination of social, economic and institutional processes, secured the means for obtaining a better life.

Development in all societies must consist of at least the following:

- To increase the availability, distribution and accessibility of life sustaining goods such as food, shelter, health, security and protection to all members of society.
- To raise standards of living including higher incomes, the provision of more jobs, better education and better health and more attention to cultural and humanistic values so as to enhance not only material well-being, but also to generate greater individual, community and national esteem.
- To expand the range of economic and social opportunities and services to individuals and communities by freeing them from servitude,

and dependence on other people and communities and from ignorance and human misery.

7.3 The Difference between development and Economic growth

For a long time, the terms development and economic growth were used interchangeably. Although the two are closely related, they are, however, different.

Development

- Encompasses the total well-being of individual, a community or a nation.
- Must be measured by the rate of economic growth
- Concerned with the total person, his economic, social, political, physiological, and psychic and environmental requirements.

Economic growth can be defined as an increase in country's productive capacity, identifiable by a sustained rise in real national income over a period of years.

- Concerned with the area in per capital earning of the people making up the nation.
- Is one characteristic of development?
- It is possible for a county to experience economic growth without development.

7.4 The role of Health in Development

Health plays a major role in promoting economic development and reducing poverty. The health sector is the key social sector for development. Good health, both at the individual, Community and national levels, is a prerequisite for full-scale productivity and creativity.

In the first place, the health sector should not be looked at in isolation from the rest of the economy , as a sort of charitable handout to ensure that people do not die, for example, of preventive diseases. Development of the health sector is seen to be a necessary requirement for future development.

The fact that development in the health sector may lead to further general development has given rise to a new area of economic theory called "*Investment in Human Capital*". The importance of this theory is that, it not only

helps to explain the development process in an economic way, but it also forms the basis of measuring benefit in cost benefit-analysis in the health sector. This is not to suggest that all the benefit of health or education projects is necessarily economic.

Development is linked not just to the improvement of social indicators or the attainment of basic needs, but with wider aspirations such as high health status, and with social well-being and change. The development process embraces not only the so-called “productive” sectors of the economy, but also the social sectors.

The health sector, besides producing benefits, which in their own right are necessary for improving the well-being of the people, development of the health sector helps to lay the foundation for development in the wider sense. Improving human’s capacity to produce more and to fulfill this needs and aspirations does this.

7.5. Relation Ship between Health and Development

Health development is an important element in the overall development of a country. For instance in countries where HIV/AIDS is a public health problem

there is a great challenge in getting skilled human power and the country will get a burden in the health delivery by spending the significant figure of the health budget to the pandemic. Here HIV/AIDS is not only a health problem but also a situation that brings social, economic and political crisis for a country. In a country with a greater proportion of its people still struggling for their daily survival, the scope of development definition shall fit to the local scenarios. It has to be understood in terms of household Livelihood security.

What is Household Livelihood Security (HLS)? Household Livelihood Security is defined as: 'Adequate and Sustainable Access to Income and Resources to Meet Basic Needs', including: Food, Proper Nutrition, Clean Water; Health, Health Facilities and services; Economic Opportunities; Education; Housing/Habitat Security; Physical Safety; and time for Community Participation.

A system in which there are activities that households engage in to earn/make a living, which can consist of a range of on- and off-farm activities or procurement strategies together, provides food and/or cash. The

assets & other resources that households possess and the human and social capital that households possess or can call on in times of need. Livelihood systems of the poor are often quite diverse. Households often use their capabilities, skills, and know -how to diversify income sources and offset risks.

It can be said livelihood is secured, when households have secure ownership of, or access to, resources and income-earning opportunities. This includes reserves and assets to: offset risks, ease shocks, and meet contingencies.

The common factors or situations (risks or shocks) that lead to livelihood insecurity includes: Drought and Floods, Conflict, Disease outbreaks & illness, Population growth, Economic adjustment policies, Natural resource degradation, etc.

As it is described above livelihood, security is ‘Adequate and sustainable access to income and resources to meet basic needs (one of which is health)’. This means Health is a basic commodity of livelihood; it is an important means as well as prerequisite for achieving livelihood security. The three key linked and interrelated issues that justify such mechanism, are: first, the

important relation of health with access to income and other resources which are core to livelihood; second, any risk or shock of any cause are manifested in terms of health problems; and finally, health and health related problems (disease outbreaks & illness, population growth, etc) are among the key factors (risks or shocks) that lead to livelihood insecurity. All these three mechanisms affect the livelihood security via affecting level of productivity; income, savings and expenditures (key determinateness of access); utilization and distribution of resources.

Good health affects several aspects of life and personal well-being. A healthy population will have high work productivity, and thereby contribute to the improvement of country's living standards. A healthy population may also require less health care, which implies lower health expenditures for both the individual and the public sector.

Poor health on the other hand, make people unable to work full-time and thus their income level is reduced which will affect their livelihood and they will not be able to get their basic needs including health services. Hence, the relationship of health status and income is

like the ‘chicken and egg dilemma’ and is bi-direction. This effect is reflected at individual level, household and community level.

Health and health related problems affect household access to income, economic growth, and resource distribution resulting in challenged household livelihood security and resilience. Ill health not only affects the means (financial resources, asset, income, know-how, time, etc,) to livelihood, but also modifies or complicates the context such as the economic, cultural, political and social situations in which individuals` making effort to achieve their livelihood basic needs.

Thus, in order to have better livelihood, families should be economically secured. Economic security is achieved when individuals or household have the capacity to generate sufficient income to satisfy the basic needs of the family, and to maintain or increase the goods necessary for the stability of the family economy, as well as to protect it against shocks. As a prerequisite for this, households should have health security and should be nutritionally secured.

7.6 Health and the Millennium Development Goal

In September 2000, leaders of 191 countries around the world met at the UN to adopt the Millennium Declaration. The Declaration outlined the central concerns of the global community and articulated a set of interconnected and mutually reinforcing goals for sustainable development that are now designated as the Millennium Development Goals (MDGs). The MDGs, as set of global development agenda reflect the renewed commitment of the international community towards the overall well-being of people in the developing world. Political and economic externality issues aside, the altruistic rationale behind the MDGs within the health sector can be considered as paralleling the philanthropic drives of the 1970s that led to the emergence of the "Health For All by 2000" movement.

The eight major goals of the MDGs, most of which are to be achieved by the year 2015, are:

1. Eradication of extreme poverty and hunger
2. Achievement of universal primary education

3. Promotion of gender equality and empowerment of women
4. Reduction of child mortality
5. Improvement in maternal health
6. Combating HIV/AIDS, malaria and other diseases
7. Ensuring environmental sustainability
8. Developing a global partnership for development

In addition, 18 quantitative targets for each goal with 48 indicators for monitoring there have been set and agreed upon .The particular goals and targets that are relevant for health sector are shown below.

Goal 4: Reduce Child Mortality

- Target 5: Reduce the under five mortality rate by two-thirds, between 1990 and 2015

Goal 5: Improve Maternal Health

- Target 6: Reduce the maternal Mortality ratio by three quarters, between 1990 and 2015.

Goal 6: Combat HIV/AIDS, Malaria and other Diseases

- Target 7: have halted by 2015 and begun to reverse the spread of HIV/AIDS
- Target 8: have halted by 2015 and begun to reverse the incidence of Malaria and other major diseases

7.7 Exercise

Discuss the role of health in development

Discuss the difference between economic growth and development

Discuss the particular goals and targets in the MDG, which is relevant to the health sector.

How does HIV/AIDS affects the overall development of a country?

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CHAPTER EIGHT

HEALTH SERVICE IN ETHIOPIA

8.1 Learning objectives

At the end of this course, the students are expected to:

- Describe the developmental history of health services in Ethiopia,
- Describe the organization of health system and health services in Ethiopia.
- Describe the health service coverage and distribution in Ethiopia.
- Understand basic factors that influence health service coverage and distribution in the Ethiopian context,
- Discuss the existing health service coverage and distribution of Ethiopia.

8.2 History of Health service development in Ethiopia

The early history of modern medicine in Ethiopia dates back to the Reign of Emperor Libne Dingle (1508 – 1540). When the Portuguese mission to his court brought a physician named Joao Bermudes. Over four centuries, modern health care was brought to Ethiopia from many different countries by other European travelers, missionaries and members of diplomatic missions. Later on different emperors have facilitated the introduction and development of the health service. The foundation of r formalized health services goes back to 1908, when an office dealing with health was created in the Ministry of Interior. During the Haile Selassies Reign, starting 1930s, the health services development accelerated, and the establishment of the Ministry of Health (MOH) in 1948 marked the beginning of the National Health Service.

The Ethiopian Government, in 1952, began to develop a basic health service in which health centers have been considered the backbone of the service. This time, most of the rural health service providers were foreigners and many of them were missionaries.

After this development in the health services, three nursing schools were established between 1949-1951. The Public Health College and Training Center at Gondar was established in 1954. The purpose of this College was to train three categories at health workers namely Health officers, Sanitarians and Community Nurses. These health workers were meant to staff the rural health centers and the college had produced over 1000 such professionals until 1987.

The first Medical school at Black Lion Hospital was opened in 1966 and was followed in the 1970's by the establishment of additional training institutions for nurses, health assistants, Health officers, Sanitarians and Pharmacists.

There was no National Policy and Strategy for the development of the Health Service until 1963, when the Second Five-year Development Plan was launched. The second five-year development plan, which was from 1963 – 1967, contained major policies and strategies regarding the health sector. This plan emphasized, among other things, on preventive aspects of health services by adopting the eventual goal of establishing at

least one health center for every 50,000 people and one health station (Clinic) for every 5000 people.

The consecutive plans which were the third five-year (1968 – 1973) and the fourth five-year (1974 – 1979) gave much detailed emphasis on the expansion of basic health services, the importance of public health services and were aiming at raising the health service coverage.

There after, the Socialist Ethiopian Government revised the health policy to place more emphasis on primary health care, rural health services, prevention and control of common diseases, self-reliance, and community participation in health activity through its declaration of the national democratic Revolutionary program in 1976 and its adoption in 1978 of the Alma-ata Declaration of Health for All (HFA) by the Year 2000. Based on useful experiences of annual plans, from 1978-1984, a Ten Year Health Sector Plan 1985-1994 was prepared by the government. The goal of the ten-year perspective plan was to strengthen and expand Maternal and Child health (MCH) services, particularly:

- The immunization of all pregnant women and of children under 2 years,
- An increase per-capita visit to the health institutions,
- A decrease in infant mortality from 155/1000 to 95/1000,
- A decrease in child mortality from 247/1000 to 150/1000 and an increase in life expectancy from 42 to 55 years.

In order to achieve these targets, the plan emphasized on community participation, Intersectoral collaboration, integration of vertical programs and specialized health institutions, delivery of essential health service at affordable cost, and the development of a six-tier health system.

The six-tier health care system consisted of community health services (health posts) health stations or clinics, health centers, district hospitals, regional hospital, and central referral/teaching hospitals.

Community health service

It is the first contact of health service with the community; and each community health service is to be staffed with one community health agent (CHA) and one trained traditional birth attendant (TBA) rendering basic health services. Each health post, a community health service delivery point, is expected to serve at least 1000 population and the services include:

- Promotion of community participation,
- Control of communicable diseases,
- Provision of maternal and child health services,
- Provision of curative services for minor illnesses and injuries,
- The collection of health information and statistics.

Health stations

- The lowest level of health services operating directly by the Ministry of Health,
- Mostly located in villages and small towns.
- Staffed by health assistants and/or a nurse,

- Provides service for at least 10,000 populations with in 10-12 km radius.
- Provides regular out patient services, basic MCH care, develop and implement environmental sanitation and water supply programs, and supervise CHA and TBA

Health centers

- Are staffed by Nurses, sanitarians, laboratory technicians, health Assistants and increasingly by one or two physicians and also health officers.
- Are the major health facility at the "*Awraja*" level
- Provide more specialized out patient service, supervise, and support health stations.
- Each health center is expected to provide services for at least 100,000 population

Hospitals

- Are the most specialized and better-staffed health institutions,
- Provide curative services with increasing complexity /Specialization.
- Supervise the lower level health services.

8.3 Reorganization of the health service delivery

Historically this health care delivery system had been unable to respond qualitatively and quantitatively to the health needs of the people. It had been very centralized and services were delivered in a fragmented way with a reliance on vertical programs and with little collaboration between public and private sectors. The health service provision was also undemocratic and unprofessional with minimal community participation. These led to a great deal of undesirable impact on efficiency and resource allocation.

After a review of this health care delivery system in the early 1990s, a four tier health care organization was brought into the system. This health care delivery system has been organized in such a way that at the base of the system there is a primary health care unit (PHCU), followed by District hospital, regional hospital, and Specialized/teaching hospitals.

Primary Health Care Unit:

- Contains a health center along with five satellite community health posts,
- Serving a total of 25,000 population,
- Provides preventive, promotive, curative, training services, as well as referral services,
- Collect basic health and health related data, and
- Staffed with public health officers and other staffs (nurses, midwifes, laboratory technicians, sanitarians, and pharmacist) at the health center level, and PHC workers in the health posts.

District hospital

- The second higher level, which provides studies and researches to help promotive, preventive and training services.
- Curative services–including emergency services, with minimum of 50 beds
- Staffed with general practitioners and other staffs (nurses, midwifes, laboratory technicians, sanitarians, and pharmacist)
- Serve about a population of 250,000.

Regional hospital

- The third higher level, which provides secondary and tertiary level and training services
- Curative and specialized services, with minimum of 100 beds
- Staffed with specialists of different category, general practitioners and other staffs (nurses, midwifes, laboratory technicians, sanitarians, and pharmacist)
- Serve about a population of 1,000,000.

Specialized/Teaching Hospitals

- The last higher level, which provides tertiary level services,
- Teaching, research, and other specialized services, with minimum of 250 beds
- Staffed with sub-specialists, specialists of different category, general practitioners and other high level staffs (nurses, midwifes, laboratory technicians, sanitarians, and pharmacist)
- Serve about a population of 5,000,000.

The new health system organization is part of the implementation of the National Health Policy. The National Health Policy of course is a result of critical examination of the nature, magnitude and root causes of the prevailing health problems of the country and awareness of the newly emerging health problems. The Policy has declared clear general components, priority areas and general strategies.

The general health policy components are:

- Democratization and decentralization of the health service system
- Development of the preventive and promotive component of health care
- Development of an equitable and acceptable standard of health service system that will reach all segments of the population with in the limits of resources
- Promoting and strengthening of Intersectoral collaboration
- Promotion of attitudes and practices conducive to the strengthening of national self-reliance in

health development by mobilizing and maximally utilizing internal and external resources.

- Assurance of accessibility of health care for all segments of the population
- Working closely with neighboring countries regional and international organizations to share information and strengthen collaborations in all activities contributory to health development including the control of factors detrimental to health
- Development of appropriate capacity building based on assessed needs
- Provision of health care for the population on a scheme of payment according to ability, with special assistance mechanisms for those who can't afford to pay
- Promotion of the participation of the private sector and non-governmental organizations in health care.

Priorities of the policy include:

- Information, education and communication (IEC) of health shall be given appropriate prominence to enhance healthy awareness and to propagate the important concepts and practices of self-responsibility in health.
- Emphasis shall be gives to
    - The control of communicable disease, epidemics and diseases related to malnutrition and poor living condition
    - The promotion of occupational health and safety
    - The development of environmental health
    - The rehabilitation of the heath infrastructure and
    - The development of an appropriate health service management system.
- Appropriate support shall be given to the curative and rehabilitative components of health including mental health.

- Due attention shall be given to the development of the beneficial aspects of traditional medicine, including related research and its gradual integration in to modern medicine.
- Applied health research addressing the major health problems shall be emphasized.
- Provision of essential medicines, medical supplies and equipment shall be strengthened
- Development of human resources with emphasis on expansion of the number of frontline and middle level health professionals with community based task oriented team based training shall be undertaken.
- Special attention shall be given to the health needs of:
    - the family particularly woman and children,
    - those in the forefront of productivity,
    - those hitherto most neglected regions and segments of the population, including the majority of rural population, pastoralists, the urban

poor and national minorities victims of man made and natural disasters.

General Strategies

- Strengthening the preventive and promotive health service
  - Family health care
  - Community health service
  - Occupational health and safety
- Curative and Rehabilitative care
- Assuring availability of Drugs, supplies and equipments
- Health information documentation and processing
- Organization and management of the health delivery system
- Research and development
- Financing the health case delivery system

8.4 Health Service Coverage and Distribution

Health service distribution is a geographical and demographic allocation/placement or/and availability of a specific type of health service(s). It mainly focuses on the geographical availability of the service(s). Health service coverage, on the other hand, is the level of availability, accessibility and utilization of a given health service(s) in a specified population and geographical area. It is the interaction and out come of the service(s), service providers, and people targeted for the service(s).

The health service coverage as well as distribution in the country is relatively poor when it is compared to other developing nations. This can be clearly illustrated if one sees the health and health related indicators of the country.

Health service facilities in the country have stayed being centralized and neglecting the majority of the population. Roughly, more than 50% of the health facilities are located in the urban areas of which most of them are in the capital. Over 30% of the health, facilities need either repair or replacement facilities and the national potential health service coverage is still about 73.16%.

The Human resource of the country with respect to health is also relatively low compared to the WHO standard. The physical to population ratio is about 1:35604 compared to the WHO standard which is 1: 10,000, Nurse to population ratio is about 1: 4571 where by the WHO standard is 1 5,000. The country is at present having 1996 physicians 15544 Nurses, 683 health officers and around 5215 paramedical (sanitarians, pharmacy and laboratory technicians) according to the 2003/2004 health and health related indicators of Ministry of Health.

The environmental health and hygiene services of the country are also less developed. The percentage of population using improved drinking water source is around 37.3%. The percentage of population using access to excreta disposal is about 28.9%, which is quite lower compared to similar developing countries on the other hand, the maternal and child health service is gives special attention nevertheless different indicators are indicating that the service is still poor. The ANC coverage in the country is around 40.8%, the EPI coverage (where it is calculated using DPT_3 only) is about 60.78%.

Hence, the health service coverage and distribution, as seen briefly, is inadequate and needed to improve. Some of the indicators used to assess the service coverage and distribution in health include:

- Contraceptive Coverage
- EPI Coverage
- ANC coverage
- Coverage of TT2 to pregnant women
- Coverage of TT2 to non pregnant women
- Post natal service coverage
- Proportion of deliveries assisted by trained health workers
- Share of annual health budget
- Coverage of TB prevention and control services
- Provision of safe and equate water supply
- Proportion of the population with access to excreta disposal facilities
- Availability of essential drugs and medical supplies in

- Each health facility
- Drugs prescribed in generic name
- Per capital expenditure on health
- Blindness prevalence rate
- HIV Prevalence rate
- EPI defaulters
- Defaulters rates of TB and Leprosy

8.5 Exercise

Mention briefly the historical development of health services in Ethiopia.

Suppose you are responsible to lead the activities of a health center,

What are the activities to be accomplished? How do you manage your sponsibility?

What are the basic factors that influence health service coverage and distribution in the Ethiopian context?

Discuss on the existing health service coverage and distribution of Ethiopia.

CHAPTER NINE

PRIMARY HEALTH CARE

9.1 Learning Objective:

At the end of this course, the students are expected to:

- Define primary health care (PHC) and describe its concept;;
- Describe the historical development and challenges of PHC at national and international level;
- Describe the components, strategies and principles of PHC,

9.2 Introduction

International conference, organized by WHO and United Nations Children's Education Fund (UNICEF), was held in Alma-ata, Kazakhstan, in 1978 on the theme of 'health for all'. The Alma-Ata Declaration stated that health is a basic human right, and that governments are

responsible to assure that right for their citizens and to develop appropriate strategies to fulfill this promise. The existing gross inequalities in the health status of people, particularly between developed and developing countries as well as within countries are of common concern to all countries. The Conference stressed the right and duty of people to participate in the planning and implementation of their health care; it also advocates the use of scientifically, socially and economically sounds technologies. In order to attain these targets Primary Health Care (PHC) is taken as the appropriate method.

9.3 Definition

Primary Health Care is an essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participations and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.

The basic terms in the definition are:

- Essential health care: Group of functions essential for the health of the people given at lower level of health service. E.g. Medical care, MCH/FP, school health, environmental health, control of communicable diseases, health education, referral, etc.
- Scientifically sound: Scientifically explainable and acceptable
- Socially acceptable methods and technology: intervention should consider the local value, culture and belief.
- Universally accessible: Because of the inequitable distribution of the available resources, the services are not reachable by all who need them. Only a few can afford or within the reach to use them, while the majority are excluded from the service. Therefore, PHC being health care as close as possible to where people live and work, guarantee universal accessibility.

9.4 Historical development of PHC

The definition of health, in the Charter of WHO as a complete state of physical, mental, and social well-being had the ring of utopianism and irrelevance to states struggling to provide even minimal care in adverse economic, social and environmental conditions. The WHO was concentrating on vertical programs, such as eradication of smallpox and malaria during the 19960s. Hence, the historical development can be presented as follows:

Early Approaches

- In the 1950's, there were vertical health service strategies that included mass campaigns, specialized control programs for communicable diseases such as Tuberculosis, Malaria, Sexually transmitted diseases (STDs), etc.; but the strategy was very expensive and so unsuccessful.
- The concept of basic health service came into being in the mid 1960s. This gives more attention to rural areas through the construction of health

centers and health stations providing both curative and preventive services.

- Early 1970: Integration of specialized disease control programs with basic health services came to appear. However, even this approach was disease oriented, based on high cost health institutions and requires advanced technology.

Summary on the net effect of health services and programs during 1950-1970s

- Despite health being a fundamental human right the health status of hundreds of millions people in the world was unacceptable.
- In spite of the tremendous efforts in medicine and technology, the health status of people in disadvantaged areas of most countries remained low.
- The organized limited health institutions failed to meet the demands of those most in need who are usually too poor or geographically or socially remote to benefit from such facilities (Accessibility).

- The health services often created were in isolations, neglecting other sector (Agriculture, Education, Water Supply etc), which are relevant to the improvement and development of health.
- Health institutions stressed curative services with insufficient priority to preventive, promotive and rehabilitative care.
- The community has already been given the opportunity to play an active role in deciding the types of activities they want and have not participated in the actual services they receive.

All the above facts summed up and led WHO and UNICEF to evaluate and reexamine the existing policies in 1978, Alma-Ata, and the concept of PHC.

9.5 Components of PHC

Essential health care consisting of at least eight elements

a) Health Education
b) Provision of essential drugs
c) Immunization
d) MCH/FP

e) Treatment of common Diseases and injuries

f) Adequate supply of safe water and basic sanitation

g) Communicable Disease control

h) Food supply and proper nutrition

Additional elements incorporated after Alma-Ata

- Oral Health
- Mental Health
- Use of traditional medicine
- Occupational health
- HIV/AIDS
- ARI

9.6 PHC Principles

Emphasized principles in PHC are:

- Intersectoral collaboration
- Community participation
- Appropriate technology
- Equity
- Focused on prevention and promotion of health
- Decentralization

Intersectoral collaboration:

Means a joint concern and responsibility of sectors responsible for development in identifying problems, programs and undertaking tasks that have important bearing on human well-being. Intersectoral collaboration is very important, as the intrinsic relationship of health to other sectors is evident. That is low level of education, poor access to transport, limited access to safe water supply can affect health status. Similarly, development in these sectors cannot process smoothly without health development.

Lack of communication among the sectors and inadequate knowledge on the benefit of Intersectoral collaboration hinders the implementation of this principle. Further, it avoids resource wastage by minimizing duplications of projects and programs; encourages a forum for exchanging and sharing ideas, skills, resources and technologies; it leads to a successful project implementation; avoids confusion of the community; as a long term out come it promotes integrated and fast development of a country.

Community participation:

Community is a group of people living together in the same geographical area, sharing common interests.

Community participation/involvement: It implies sensitizing the people to their health problems, increasing their receptivity and ability to prevent disease, death and handicap. This helps them to respond to development programmers and encourages local initiatives. Community participation/involvement in programs is a spectrum that ranges from receiving the benefits to actually planning and evaluating them.

Types of participation / Involvement

- Marginal: Participation of people in the health programs may be limited and transitory
- Substantial: The community plays active role in determining priorities and helping in carrying out health related activities, such as, health education, provision of drinking water and maintenance of good personal and food hygiene.
- Structural: Participation of the community in health care becomes an integral part of the program and a major basis for health activities.

At a WHO sponsored meeting on community participation in health, held at Brioni, Yugoslavia, in 1985, two broad and distinct interpretations on community involvement were identified. Those were:

- Creating awareness and understanding regarding the causes of poor health, thus making it a basis for their involvement in health related activities.
- Ensuring easy access to information and knowledge about health service programs and projects.

Therefore, in this approach, people have the right and duty to actively involve themselves in:

- Solving their own health problems
- Assessing their health needs
- Taking responsibility for mobilizing local resources
- Supporting new approaches and solutions to their problems
- Creating and maintaining local organizations and
- Administration and financing of the health services.

What are the advantages of a community participation approach?

- It is a cost-effective way of extending a health care system to the geographical and social periphery of a country.
- Communities that begin to understand their health status objectively rather than fatalistically may be moved to take a series of preventive measures.
- Communities that invest labor, time, money and materials in health-promoting activities are more committed to the use and maintenance of the things they produce, such as water supplies.
- Health education is most effective as part and parcel of village activities.
- Community health workers if they are well chosen, have the people's confidence. They may know the most effective techniques for achieving commitment from their neighbors and, at the very best, are not likely to exploit them. They come under strong social pressure to help the community carry out its health-promoting

activities. However, they must also have dependable supplies and support from the higher levels of the health service.

Factors that hinder great involvement of the community in health:

- Rigid professional behavior of health service provides, which need to be tempered to allow greater community involvement
- The professional staff generally takes decisions in health services and there is no tradition of allowing people to be involved in decision-making.
- Wrong assumption by health staff that community does not know what is good for them and that only health staff can determine their needs
- Lack of flexibility in health service and general unwillingness to change.

Mechanisms for supporting community Involvement

- Political commitment, National health policy should clearly design the need and support of community involvement in health care, and lay

down working arrangement. The government should assure full political support.

- Reorientation of bureaucracy: Bureaucracy has the power to make all decisions. Their role should be changed and they should learn to seek community involvement in health, so that people can determine their own priorities and decide on the process to achieve their goals.
- Support to the community in managing health project: management support and guidance should be given to the community to help the people in overseeing primary health care activities in their area.
- Inputs,: There should be critical minimum inputs for basic health services, and coverage to ensure co-operation of the community people can be involved in health activities only if these are available to their satisfaction.
- Partnership and genuine partnership between health professionals and people is necessary for success.

- Leadership individual and collective leadership at the community level should be promoted.
- Community involvement: community involvement should be at a realistic level so that it is sustainable and durable.
- Decentralization: There should be decentralization of administrative and decision-making function. This should be accompanied by shift of resources to the locality.
- Safeguards: sufficient safeguards should be built in to prevent local political elite from exploiting the resource for their own ends.

Appropriate Technology

- It takes account of both the health care and the socio-economic context of the country.
- This must include consideration of cost (efficiency and attractiveness) in dealing with the health problem.
- It should also take consideration of the acceptability of the health care approach to both target community and health service technology; and it does not necessarily mean low cost.

Criteria for Appropriateness: To be appropriate, a technology must be

- Effective: meet its objective
- Culturally acceptable and valuable
- Affordable
- Locally sustainable: we should be not over dependent on important skills and supplies for its continuous function, maintenance and repair.
- Environmentally accountable: The technology should be environmentally harmless or at least minimally harmful.
- Measurable: - The impact and performance of technology should be measurable.

EQUITY

This is to close the gaps between the “haves and have not s” which will help to achieve more equitable distribution of health resources.

“If all cannot be served, those most in need should have priority”

Equal Health

↓

Equal utilization of health care → Equity ←Equal access to health care

While planning for equity in PHC, one requires the identification of groups, which are currently disadvantaged in terms of health service access, and utilization of service. Generally, it implies that the rural and peri-urban poor population should also have a reasonable access to health service.

Decentralization

- It is sharing and transferring power and decision away from the center to the periphery.
- It brings decision closer to the communities served and the field level providers of services.
- It leads to greater efficiency in service provision

Focus on prevention

In addition to the fact that prevention is better and easier than cure, the main health problems plaguing developing countries are (and still are) of preventive in

nature. For instance, 75-80% causes of morbidity and mortality in Ethiopia are communicable diseases.

9.7 PHC Philosophy and strategy

Health for all, is justified on the Alma-Ata Declaration as a “fundamental human right” on the basis of equity and or economic and social development. PHC is not more medicine for the poor and it should not be considered to mean a second-class health service meant for rural population. It is an essential health service value for all countries from the most to the least developed ones. In fact, it is particularly a burning necessity for developing countries. Therefore, PHC as a philosophy includes

- Equity and Justice
- Individual and community self reliance
- Inter relationship of Health and Development

PHC Strategy

- Changes in the Health care system
  - Total coverage with essential health care
  - Integrated system

- Involvement of communities
- Use and control of resources
- Redistribution of existing resources
- Reorientation of Health manpower to PHC
- Legislative changes- Health policy should address the need of the strategy of PHC.
- Design, planning and management of Health system

Individual and collective responsibility for Health

1st Aspect: is a political issue: - Decentralization of decision-making

2nd Aspect: Realization: - Personal responsibility for their own and their families health.

NB**:** It is important to have informed and motivated public on the practice at both aspects.

- Intersectoral Action for Health

The practical action for this is attention of over all economic development more consciously and directed towards the maximization of health and sharing awareness at the community level, health center, MOH etc.

9.8 PHC in Ethiopia

As one of the countries who signed the 1978 Alma-Ata Charter, Ethiopia has also adopted the declaration of "Health for All" using the PHC strategy. The activities include:

- Education on the prevailing health problems and methods of prevention and controlling them,
- Locally endemic diseases prevention and control,
- Expanded program on immunization,
- Maternal and child health including family planning,
- Essential drugs provision,
- Nutrition promotion and food supply,
- Treatment of common diseases and injuries, and
- Sanitation and safe water supply

Since 1980, PHC has been the main strategy on which the health Policy has been based. As part of a WHO sponsored international evaluative action, primary health care review was done in the country in the period of August 1984 - January 1985.

The reviewed showed

- Expansion of health services to the broad masses especially by establishing new health station and health posts.
- Modest achievements in the control of diarrheal diseases and iodine deficiency disorders and training on provision of essential drugs.

However, there were limited achievements regarding intersectoral collaboration, community involvement, both supporting and utilizing of the services. Moreover, there was over-ambitiousness in setting plans and goals.

Generally the major problems in the implementation of PHC in Ethiopia are:

- Absence of infrastructure at the district level,
- Difficulty in achieving intersectoral collaboration,
- Inadequate health service coverage and inappropriate distribution of available health services,
- Inadequate resource allocation

- PHC is not cheap. Initially PHC programs are expensive.

- Absence of clear guidelines or directives on how to implement PHC.
- Presence of culturally dictated harmful traditional practices of unscientific beliefs and practice in Ethiopia.
- Absence of sound legal rules to support environmental health activities.
- Weak community involvement in health.

9.9 Exercise

Define primary health care (PHC) and describe its concept;

Describe the historical development and challenges of PHC in the Ethiopian set up.

Describe the components, strategies and principles of PHC.

How can you involve the community in public health interventions?

CHAPTER TEN

COMMUNITY BASED HEALTH SERVICES

10.1 Learning objectives

At the end of this course, the students are expected to:

- Describe the responsibility of the community in the health care system.
- Describe the community involvement in the health delivery system
- Define the concept of the health care team.
- Describe the need for team based health care and role of the health service team leader.

10.2 Introduction

Community based programs are public Health interventions that are designed, implemented and evaluated with the participation of the community

representatives and with the guidance of professional experts. In Ethiopia, after the acceptance of PHC in the national health policy, different community based health programs has been initiated. Among these, the use of community health workers and the new Health service extension package are discussed hereunder.

Community Health Workers

The concept of the community health worker (CHW) has found new expression in health programs in many parts of the world as part of the Primary Health Care initiative springing from Alma-Ata. It is an adoption of traditional village practice of midwives and healers to modern, organized public health services. CHWs were first recruited to provide care in rural areas in developing countries without access to health care. They are selected from the community and training will be given by the Ministry of Health (health centers).

Community health workers may provide services on categorical target diseases. These include malaria control, tuberculosis directly observed therapy (DOT, providing medication under supervision to assure compliance), support services and counseling for

multiproblem families in an inner-city poverty area, STD follow-up, and promotion of immunization

Health Service Extension Package (HSEP)

The main objective of HSEP is to improve access and equity to preventive essential health intervention through community/kebele based health services with strong focus on sustained preventive health actions and increased health awareness. The health extension service is being provided as a package focusing on preventive health measures targeting households particularly women/mothers at the kebele level.

Definition

It is a package of services that includes provision of immunization, prevention, control and treatment of malaria, prevention of HIV/AIDS/STDs, tuberculosis, provision of oral contraceptives, deliveries, follow up of high risk pregnant mothers, first aid, sanitation services including excreta disposal, insect and rodent control, safe water supply, housing construction and overall environmental issues in the rural context. It is to improve access and equity to preventive essential health intervention through community/kebele based

health services with strong focus on sustained preventive health actions and increased health awareness.

10.3 Community responsibility

Need, demand, custom and general development have led society to accept certain health services as a community responsibility on behalf of the total citizens. As the population increases and tends to concentrate in urban centers, some new health problems that have long been with communities become more complex and more difficult to manage. If community health problems of today are more complex, society has advanced technology in dealing with some of them.

Most community health services directly or indirectly will be of value to all citizens but of greater value to lower income group than to higher economic groups. For instance, community immunization services will have a greater protective impact on lower income groups but will have some value, direct or indirect, for people on all income levels.

10.4 Community Health Councils

On the country level, health councils have been valuable in coordinating the health services of various agencies and individual. Health councils are usually not official organizations but are voluntary and composed of representatives from various organizations and groups having especial health interest or need.

Councils may vary from 10-30 in membership, with representatives from such groups as voluntary health agencies, medical professions, detail profession, patient-teacher organizations, labor unions, chamber of commerce, women's clubs, mosque and church groups, social agencies, and various other groups. The council usually represents a cross-section of the population and can be make known the health needs of the people.

In the Ethiopian setting such council may be represented in various forms. The most widely used committee to handle health problems at various levels is the health committee. This committee is led by the administrative council, and is composed of the health sector, all other sectors, and civil society organization.

10.5 Community involvement in health (CIH)

The idea of community involvement in health (CIH) emerged as a result of concern to encourage local participation in all aspects of development, including health development. It means local participation in the design and delivery of health care services. In most areas of development, preference seems to be given to the term 'community participation' because of its deeper implications.

Community participation: There are a Varity of different interpretation of the concept of participation. It is important to reduce the different views of concept of participation by distinguishing two broad, but very different categories of interpretations as the two ends of a continuum: participation as a means and participation as an end.

Participation as a means: Health development is an important element in the development process in general and is therefore influenced in practice by different perceptions of what constitutes development and what causes under development. Until recently, early 1970s, the development process was largely

dominated by attempts on the part of development planners and workers to modernize and improve the technical performance of the physical assets of a particular country or area. But starting from the early 1970s, a fundamental reappraisal of the nature and content of the development process has been underway. The essential feature of this appraisal has been the concept of “participation”. In this interpretation, participation is seen as the means of achieving a set of objectives or goals.

Government and development agencies responsible for providing services and with the power to control resources see participation as a means of improving the efficiency of their service delivery systems. Sharing in the benefits of the delivery system is the more characteristic outcome of this form of participation. It is the form of participation more commonly found in rural development programmers and projects.

Participation as an end: Participation in rural development may on the other hand be regarded as an end in itself. In a rural development project, participation as a process is a dynamic un-quantifiable and essentially unpredictable element. It is an active form of

participation, responding to local needs and changing circumstances.

Generally, participation as an end in itself presupposes the building-up of influence or involvement from the bottom upwards. As a result, this form of participation has come to be associated with development activities along with the formal government sector, and is concerned with building up pressures from below in order to bring about change in existing institutional arrangements.

10.6 Team Approach in Health Service

10.6.1 Need for the Health service team

In order to effectively respond to identified needs, health persons must be able to work within a team framework in which problem solving is approached in an integrated manner.

A health team must be in a position to effectively communicate information to communities and individuals and develop mechanisms, which facilitate their involvement in all health activities. A health team must also establish communication links with other sectors

and promote intersectoral collaboration. The need for a better-integrated health care team occurs because of

Poor communication: - Lack of integrated record keeping system result in an uneven and incomplete exchange of information among the professionals who provide health care services.

Duplications of services: Lack of coordination and communication at times leads to duplication of services. For instance, if service provider does not have access to test results previously ordered, a request will be made for new test. Diagnostic tests and other services may be repeated by several service provides, resulting in excess cost and additional stress for the patient. Errors and inappropriate therapy from prescription of medication may occur when more than one health professional are prescribing drugs for a patient.

Lack of patient focus: Patients are seeking continuity and coordination of care, competence, accessibility and timeliness, reasonable cost and some sense that some one in the “system” cares about them. When health care professionals do not work well together, patients feel that commitment to them as individuals in need of care is lost.

10.6.2 The health Team

The health team may be defined as a group of people who share a common health goal and common objectives, determined by community needs, to the achievement of which each member of the team contributes, in accordance with his/her competence and skill and in coordination with the functions of others.

All personnel working in the primary health care post, sub-center or center constitute the health team. The term does not refer only to the personnel concerned with the health care directly, such as medical officers, nurses, auxiliary nurses, midwives, sanitarians, and traditional or trained birth attendants, but also comprises of health care workers as well as other supporting personnel including, divers, clerks, storekeepers and other persons working in the health institution.

Competence of health care team: No one model is appropriate for the variety of settings in which team delivered health care operates. Membership of the team, and issues such as distribution of authority and communication mechanisms will vary widely depending on the purpose of the teams; whether the team is community based . . . delivering services to a home care

population; or clinic based . . . providing services to individuals with severe chronic diseases; or hospital based . . . furnishing care to the most severely ill, in an intensive care unit. However, the absence of a single model does not mean that good teams share no common attributes.

The following are key characteristics of a well functioning health care team

Patient centered focus: A good team must have as its first priority meeting the patient's need. A team with a patient centered focus will consider and respect the patients values and preferences when making care decisions.

Establishment of a common goal: If the patient's needs are to be the focus, it is critical that all team members know what a successful outcome for each patient's care will be. At times a successful outcome may not be self-evident. For example, health care professionals treating a critically ill patient may work at cross purposes if some feel the patient should be treated aggressively while other feel that the patient should only receive palliative care. Such confusion may be avoided only through an explicit process for goal

definition. If choices are to be made between competing outcomes, the patient and/or the patient family must of course be involved.

Confidence on other team members: Confidence in other team members develops with time and most certainly requires an understanding of other member's roles. Each member must be able to trust the work of others. If professionals do not have trust in another's work, duplication of services may occur. For example, a specialist physician who is not confident in the care provided by the general practitioner may order extra or unnecessary test for the patient.

Flexibility in Roles: While understanding and respect for each person's specific role is important, flexibility in assignments is also important. It is undesirable for each team member to duplicate efforts made by others; but, if meeting the agreed upon objective calls for changes or flexibility in roles, team members must be prepared to act accordingly and with respect to professional standards of practice.

Mechanisms for conflict Resolution: Every health care team will experience instances of conflict. However, a successful health care team will identify a specific

mechanism, clearly understood by all, for resolving conflict, through a team leader, outside leader, or other process.

Development of effective communication: Good health care team communication involves at least two components . . . a shared, efficient and effective reward keeping mechanisms, electronic or other, and a common vocabulary.

Shared Responsibility for team Action: Effective team functioning can occur only if each team member shares fully the responsibility for actions of the team as a group . . . and is willing to be held accountable to these actions. Understanding of such responsibility requires of course confidence in the abilities of the other team members, good communication and agreement up on a common goal.

Evaluation and Feedback: Team design must be dynamic open for evaluation and revision on a continuing basis. A model that worked previously may no longer be obtained, as there is change in the patient's needs, the health care delivery system or the expertise of team members. A specific mechanism must

be developed for ongoing evaluation of a team's effectiveness and redesign activities where needed.

10.6.3 Leader of the health Team

The health team should have a leader, who should inspire confidence in the community, which needs and seeks medical care. The leader should be able to induce collogues and team mates to work to the best of their capacity.

Co-ordination and co-operation: The team leader should be able to achieve preferred co-ordination and co-operation with all members of the team, so that the efficiency and out put of the heath team is high and the work is interesting, satisfying and rewarding.

The leader of the health team should realize, that the health team consists of individuals who have feeling, personal interests , stress, conflict, likes and dislikes, just as other people. Health team members appreciate encouragement praise and appreciation for their achievements, from their leader. The emotional needs of people are better satisfied, if they are given the

responsibility and authority to carry out the jobs assigned to them.

Approachability: The team leader should be easily approachable, so that the team members can reach him and seek his help and guidance for solutions to their personal, technical and official administrative problems. He should earn respect from his juniors and not command it by creating awe and by his blistering behavior.

Competence: The leader should be competent in his own technical work, so that his teammates respect him for his knowledge and skills.

Disciplined and well organized: The team leader should be disciplined and well organized in his thought and work. He should arrange to disburse the salaries of the staff regularly, procure supplies in time and exude an image of an efficient manager of affairs. This can easily be achieved by delegating responsibilities for simpler tasks to his subordinates.

Delegation of authority: The focus of a good team leader should be on setting the job done and not on who does the job. A manager should not overburden himself

with routine activities, because he must have time to think, plan and co-ordinate the work of his teammates.

Delegation of responsibility and authority by the team leader to the health team is equally important in the primary health care setting. The efficiency of the health care system improves since it saves time of the leader, particularly if the catchment area under him is large.

Supervision of the health team: For accomplishing the desired result, activities of different members of the team need to be co-coordinated. Health team is like a chain; one weak link in the chain breaks the entire chain. A good leader identifies the weak links by constant supervision at regular intervals.

The leader of the team should prescribe the proper norms of performance and define the time period during which the specific job should be completed. The workers should be made fully aware of what is expected of them. The supervision should then review their work by analyzing the tasks completed in the given time in relation to the expected quality of work and standard of performance.

Supervisory style: Depending on the nature of the team, the team leader may be an autocrat or a

democrat. Authoritative or autocratic and democratic or consultative style of supervision has a distinct place and role in taking management decisions.

The autocratic style of supervision is more suitable, when the results proposed to be accomplished have to be consistent and uniform and need to be achieved quickly, such as health problems due to epidemics rages of war and natural disasters.

It is good to apply democratic styles of supervision when the colleagues in the team are well educated, competent, reliable and experienced. In a consultative style of supervision, the workers shoulder greater responsibility and give their best to the organization.

Span of control of the supervisor: For the best result, the span of direct control of the supervisor should be restricted to about six to ten persons. But a good manager may be able to extend his supervisory span indirectly by delegating some of his supervisory change to appropriate workers lower in the line of command.

Co- ordination between the team members: the supervisor of the team should ensure that individuals in the health team cooperate with each other and coordinate their activities to accomplish the desired

tasks. Therefore, the first essential work by a supervisor to be communicated in unambiguous terms to the workers is what is to be done, by whom, where, how and when.

If the number of people in the team to be coordinated is large, it is useful to convene a meeting of all concerned at a convenient, time acceptable to majority of them. In this meeting, the team leader should sort out difficulties and doubts of the workers and decision should be taken and announced to all members.

10.7 Exercise

Describe the responsibility of the community in the health care system.

Describe the community involvement in the health delivery system.

Define the concept of the health care team.

Describe the need for team based health care and role of the health service team leader.

GLOSSARY

Acute Respiratory Tract Infection (ARI): is an acute infection of any part of the respiratory tract and related structures including Para nasal sinuses, middle ear and the pleural cavity. It includes all infections of less than 30 days duration except those of the middle ear where the duration of and acute episode is less than 14 days.

Aging: is a series of progressive and irreversible biological changes that result in reduced ability to progress, starts in adolescence or early adulthood, the pace of deterioration of different body systems varies considerably, and is influenced by behavioral and socioeconomic forces.

Anthropology: is a Greek word i.e. “the study of man”. This discipline is called as the most scientific of the humanities and the most humane of the sciences.

Appropriate Technology: an intervention, medication, device, or service meant to reduce morbidity and mortality, to improve health status, and to promote efficient use of resources that is in keeping with the financial ability of a country.

Biostatistics: is the application of statistics to biological problems; application of statistics specifically to medical problems, but its real meaning is broader.

Community Health Agents (CHA): they are one part of Community Health Workers (CHW), CHWs are nonprofessional health care providers selected from a designated community and trained to provide general or specific primary care services to ensure access to care for under served population groups.

Cooperation: is joint or collaborative behavior that is directed toward some goal and in which there is common interest or hope of reward.

Coordination: is the degree to which each of the various interdependent parts of a social system operates according to the requirements of the other parts and the total system.

Culture: that complex whole which includes knowledge, belief, art, morals, laws, customs, and any other capabilities and habits acquired by man as a member of society.

Decentralization: is the process, by which certain powers are associated to subordinates by legislation or regulation.

Demography: has Greek origins, demos (people) and graphein (to draw, describe). This is a study of population, especially with reference to size and density, fertility, mortality, growth, age distribution, migration, and vital statistics, and the interaction of all these with social and economic conditions.

Development: is the process of unfolding itself or growing into a fuller or mature condition; it is a process of growth in the direction of modernity, especially towards nation-building and socio-economic progress.

Disaster: is the combination of dis+astrum, meaning unfavorable aspect of a star; anything that befalls of ruinous or distressing nature; a sudden or great misfortunate, mishap, or disadvantage; a calamity. A disaster is an event that causes widespread destruction or distress and that usually occur suddenly or over as short period of time. It is also defined as " a disruption of the human ecology that exceeds the capacity of the community to function normally."

Ecology: is the study of the relationship among living organisms and their environment. Human ecology means the study of human groups as influenced by environmental factors, including social and behavioral factors. Ecology is the science that deals with inter-

relationships between the various organisms living in an area and also their relationship with the physical environment.

Environment: refers to surroundings or the conditions under which a person or a thing exists and develops his/her own character. It covers both physical and cultural elements.

Epidemic: derived from the Greek epi (upon), and demos (people). The occurrences in a community or region of cases of an illness, specific health-related behavior, or other health related events clearly in excess of normal expectancy.

Epidemiology: derived from Greek epi means upon, demos denotes the population, and the combining form –logy means the study of. Thus, epidemiology is the study of factors that determine the occurrence and distribution of disease that afflicts (affects) a population. It has been defined as "the study of the distribution and determinants of health-related states or events in specified populations, and the application of this study to control of health problems".

Equity: in simple terms, "equity means reducing unfair disparities as well as meeting acceptable standards for all, "i.e. fairness, e.g.,

Essential Drugs: **are those that satisfy the health care needs of the majority of the population; those therapeutic substances that are indispensable for the rational care of the majority of diseases in a given population.**

Ethnography: has its roots in social anthropology which traditionally focuses in small scale communities that were thought to share culturally specific belief and practices.

Family: a group of persons united by blood, adoptive, marital, or equivalent ties, usually sharing the same dwelling unit. The **extended family** is multigenerational; the **nuclear family**, in contrast, is a single generation family, usually husband-wife-children, but is often headed by a single parent.

Germ theory: the theory that specific microorganisms cause characteristic infectious diseases. This in contrast to miasma theory which attributed disease to influences spread in the air as a result of decaying organic matter.

Globalization: is the process of increasing economic, political, and social interdependence that takes place as capital, traded goods, persons, concepts, images, and values diffuse across the state boundaries.

Health Economics: economics principles applied to the health field. One role of health economics is to provide a set of analytical techniques to assist decision-making, usually in the health care sector, to promote efficiency and equity.

Health Education: is a process with intellectual, psychological and social dimensions affecting their personal, family and community well being.

Health Policy: is a set of statements and decisions defining health priorities and main directions for attaining health goals.

Health Promotion: a concept, set of activities, or process aimed at increasing people's ability to control and improve their health, and to reduce specific diseases and associated risk factors that reduce the health, well being, and productive capacity of the individual and the society.

Health: a complete sate of mental, physical, social, and emotional well-being, not merely the absence of disease or infirmity.

Hygiene: means the science of health and embraces all factors which contribute to healthful living.

Immunization: protection of susceptible individuals from communicable diseases through administration of a

living modified agent, a suspension of killed organisms (E.g., pertusis), a non infective portion of an infective agent(e.g. ,hepatitis B), or an inactivated toxin(e.g. , tetanus toxoid) .

Intersectoral Collaboration: is referred to the activities involving several sectors of the government, e.g., health, education, housing, industrial, etc., that, working together, can enhance health conditions more effectively than when working independently of one another.

Life Style: is the set of habits and customs that is influenced, modified, encouraged or constrained by the lifelong process of socialization. These habits and customs include use of substances such as alcohol, tobacco, tea, coffee; dietary habits, exercise, etc, which has important for health and are often the subject of epidemiological investigations.

Miasma Theory: the concept that epidemic disease transmission is due to “bad air” from decaying organic matter. Although proved to be scientifically unsound, it led to sanitary reforms that resulted in enormous progress in public health.

Occupation Health: is the specialized practice of medicine, public health, and ancillary health professions in an occupational setting.

Personal Hygiene: good personal hygiene means taking care of yourself everyday, from your hair to your feet, by following the rules of proper washing and grooming, healthful nutrition, and getting enough physical activity and rest.

Policy: a system that provides the logical framework and rationality of decision making for the achievement of intended objectives. It is the statements that guide and provide discretion within limited boundaries. Policy is a guide to action to change what would otherwise occur, a decision about and allocation of resources: the overall amount is a statement of commitment to certain areas of concern; the distribution of the amount shows the priorities of decision makers. Policy sets priorities and guides resources allocations.

Prevention is an intervention or intervention that interrupts the web of causality leading to one or more aspects of ill health.

Prevention: refers to the goals of medicine that are to promote health, to preserve health, to restore health when it is impaired, and to minimize suffering and distress.

Public Health: is defined as “organized community efforts aimed at the prevention of disease and promotion

of health. It links many disciplines and rests up on the scientific core of epidemiology"; predominantly observational and committed to health of the populations. Ultimately, its many components must accommodate multiple causes acting in the dimensions of time, space, and structure, and thus at several relevant levels of organization (from molecules to the encompassing environment).

Rehabilitation: is the process of restoring a person's social identity by repossession of his/ her normal roles and functions in society.

Reproductive Health: World Health Organization (WHO) has defined reproductive health as follows: "within the framework of WHO's definition of health as a state of complete physical, mental, and social well being, and not merely the absence of disease or infirmity; reproductive health addresses the reproductive processes, functions and systems at all stages of life. Reproductive health therefore implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide, if when, and how often to do so. This definition focuses on right of men and women to be informed of and to have access to safe, effective,

affordable, and acceptable methods of fertility regulation of their choice, and the right of access to appropriate health care services that will enable women to go safely through pregnancy and child birth and provide couples with best chance of having a healthy infant."

Strategy: is the determination of the basic long-term goals of an organization or government and the adoption of courses of an action and the allocation of resources necessary for carrying out these goals.

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