COURSE CODE: MASOD 404

COURSE NAME: SOCIOLOGY OF HEALTH AND ILLNESS

CENTRE FOR DISTANCE AND ONLINE EDUCATION
TEZPUR UNIVERSITY

MASTER OF ARTS

SOCIOLOGY

BLOCK II

Tezpur University
Centre for Distance and Online Education
Napaam, Sonitpur, Assam - 784028

www.tezu.ernet.in/tu_codl

Vision

To grow to be a leading centre for human resource development through distance, open and universal learning system.

Mission

To provide quality higher education at door step through barrierless, flexible and open learning mode in conformity with national priority and societal need.

Objective

- **To offer degree, diploma, certificate level programme of study through distance learning in various emerging subjects across the disciplines.**

- **To offer job oriented and vocational programmes in flexible terms in the line of the national and regional level demand of manpower.**

- **To offer various programmes under lifelong learning contributing to the local and regional level requirements and as per the need of the society at large.**

- **To undertake various research and academic activities for furtherance of distance education in the region.**

- **To contribute to conserve and promote cultural heritage, literature, traditional knowledge and environment conducting short programmes, workshops, seminars and research in interdisciplinary field.**

MSO-401: SOCIOLOGY OF HEALTH AND ILLNESS

ADVISORY COMMITTEE

Prof. Rabin Deka	Professor and Head, Department of Sociology, Tezpur University
Prof. Chandan Kumar Sharma	Professor, Department of Sociology, Tezpur University
Prof. Kedilezo Kikhi	Professor, Department of Sociology, Tezpur University
Dr Amiya Kumar Das	Assistant Professor, Department of Sociology, Tezpur University
Ms Ankita Bhattacharyya	Assistant Professor, Centre for Open and Distance Learning, Tezpur University

CONTRIBUTORS

Module III	Ms Sangeeta Das	Consultant at the Ministry of Women and Child Development, New Delhi
	Ms Purabi Bhagawati	Assistant Professor, Department of Sociology, Mahapurusha Srimanta Sankaradeva Viswavidyalaya
Module IV	Ms Priyanka Borah	Lecturer, Department of Sociology, DHS Kanoi College, Dibrugarh

EDITOR

Dr Amiya Kumar Das	Associate Professor, Department of Sociology, Tezpur University

Published by the Director on behalf of the Centre for Distance and Online Education, Tezpur University, Assam.

BLOCK II

MODULE III: SOCIAL HEALTH

UNIT 10: PUBLIC HEALTH AND COMMUNITY HEALTH

UNIT 11: SOCIAL EPIDEMIOLOGY

UNIT 12: HEALTH POLICIES OF GOVERNMENT OF INDIA

MODULE IV: POLITICS OF HEALTH AND MEDICINE

UNIT 13: POLITICS OF HEALTH INSURANCE

UNIT 14: PHARMACEUTICAL INDUSTRIES AND MEDICINES

TABLE OF CONTENT

MODULE III: SOCIAL HEALTH	
UNIT 10: PUBLIC HEALTH AND COMMUNITY HEALTH	**3-20**
10.1 Introduction 10.2 Objectives 10.3 History of Public Health 10.3.1 Definition of Public Health 10.3.2 Core Activities in Public Health 10.4 Public Health in India 10.5 Sociology of Public Health 10.5.1 Sociology in Public Health 10.6 Definition of Community Health 10.6.1 Community Involvement in Health 10.6.2 Community Health Workers 10.7 Factors Affecting Health of a Community 10.8 Measures in Maintaining Community Health 10.9 Elements of Health Promotion 10.10 Summing up 10.11 Questions 10.12 Recommended Readings and References	
UNIT 11: SOCIAL EPIDEMIOLOGY	**21-31**
11.1 Introduction 11.2 Objectives 11.3 Concept and Meaning 11.4 Origin of Social Epidemiology	

11.5 Epidemiological Transition 11.6 Environmental Epidemiology 11.7 Summing up 11.8 Questions 11.9 Recommended Readings and References	
UNIT 12: HEALTH POLICIES OF GOVERNMENT OF INDIA	**32-52**
12.1 Introduction 12.2 Objectives 12.3 History of Evolution of Health Policy in India 12.3.1 Colonial Period 12.3.2 Post-Independence Period 12.4. Goals, Principles and Objectives of National Health Policy of India 12.4.1 Goals 12.4.2 Key Policy Principles 12.4.3 Objectives of the Policy 12.5 Thrust of the Current Health Policy of India 12.6 Priority Areas for Improving the Environment for Health 12.7 Some Important Areas of National Health Programmes of Government of India 12.8 Summing Up 12.9 Questions 12.10 Recommended Readings and References	
MODULE IV: POLITICS OF HEALTH AND MEDICINE	
UNIT 13: POLITICS OF HEALTH INSURANCE	**54-66**
13.1 Introduction	

13.2 Objectives 13.3 Healthcare Delivery Systems 13.3.1 Types of Healthcare Delivery Systems 13.4 The Politics of Healthcare 13.5 Issues in Regulation of Insurance 13.6 Summing up 13.7 Questions 13.8 Recommended Readings and References	
UNIT 14: PHARMACEUTICAL INDUSTRIES AND MEDICINES	**67-81**
14.1 Introduction 14.2 Objectives 14.3 What are Pharmaceutical Industries? 14.4 History of Indian Pharmaceutical Industries 14.5 Pharmaceutical Industries and Society 14.5.1 Sociological Understandings of the Pharmaceutical Industry 14.6 Summing Up 14.7 Questions 14.8 Recommended Readings and References	

****

BLOCK INTRODUCTION

This Block comprises of Modules **III** and **IV** of MSO 403: Sociology of Health and Illness. **Module III** focuses on social health. **Unit 10** explores public health and community health while **Unit 11** deals with social epidemiology. **Unit 12** introduces the learners to the health policies of the government of India.

Module IV is dedicated to the politics of health and medicine. **Unit 13** deals with the politics of health insurance. On the other hand, **Unit 14** deals with pharmaceutical industries and medicines.

****

MODULE III: SOCIAL HEALTH

UNIT 10: PUBLIC HEALTH AND COMMUNITY HEALTH

UNIT STRUCTURE

10.1 Introduction

10.2 Objectives

10.3 History of Public Health

10.3.1 Definition of Public Health

10.3.2 Core Activities in Public Health

10.4 Public Health in India

10.5 Sociology of Public Health

10.5.1 Sociology in Public Health

10.6 Definition of Community Health

10.6.1 Community Involvement in Health

10.6.2 Community Health Workers

10.7 Factors Affecting Health of a Community

10.8 Measures in Maintaining Community Health

10.9 Elements of Health Promotion

10.10 Summing up

10.11 Questions

10.12 Recommended Readings and References

10.1 INTRODUCTION

Both public health and community health aim at promoting, preserving and maintaining the health of the entire population or group of individuals within a society. Public health covers the entire population as opposed to particular individuals. It, therefore, inevitably also covers community which is within the population. Focusing on the population, public health

strives for preventing diseases and thereby creating healthy communities. In the process, it takes into consideration the social, physical, and cultural environments that play a significant role in the context of health of a population. Public health tries to prevent disease and enhance the life expectancy through mass vaccinations. It concentrates on the threats to the overall health of a community, focusing on controlling rather than treating diseases and promoting healthy behaviours. Thus, public health is all about preventing diseases, prolonging life and promoting health through organized state and community effort.

Community health can be considered as a sub-field within public health. It focuses on the study and betterment of the health characteristics of biological communities. It mainly concentrates on geographic rather than people with shared characteristics. Thus, public health and community health are not mutually exclusive.

10.2 OBJECTIVES

After going through this unit you will be able to:

- Define public health and community health;
- Analyse the role of the government in public health in India;
- Explain sociology of public health and sociological methods to understand public health;
- Discuss factors affecting community health and the measures in maintaining community health.

10.3 HISTORY OF PUBLIC HEALTH

The history of public health can be traced back almost to the dawn of civilisation. Practices like prohibiting disposal of waste within communal areas or near drinking water sources, rites and rituals associated with birth and death, providing communal help during birth, etc. can all be identified as possible traditions associated with public health during early civilization. For instance, if we take into account the Indus Valley Civilisation, the evidence of bathrooms and elaborate underground drainage system speak

volumes about the concern for hygiene associated with public health. Similar evidence of sanitation can also be seen in the context of ancient Egypt. Even in ancient Greece, community sanitation was given much importance and the Olympics also served as an important arrangement for physical fitness for all free Greek males.

During the Middle Ages (500 - 1500 AD), spiritual causes and solutions were attributed to health problems. The failure to understand the physical and biological causes behind health problems led to epidemics like plague, leprosy and syphilis. However, the era of rebirth brought in by the Renaissance (1500-1700 AD) also led to changes in thoughts regarding health problems. Diseases were begun to be seen as caused by the environment as opposed to spiritual reasons.

Thus, we can see that preventing disease and preserving the health of the population have always been a part of human civilisation. The epidemic outbreaks, in particular, compelled people to look for ways of preventing disease in the population. To prevent disease in a population, it is important to define the disease, identify its occurrence and find out effective interventions. With the development of community life, the need for organized measures to protect health also grew. Measures for prevention of diseases were influenced by societal beliefs wherein religion also played a significant role. Here, it may also be noted that religions have also served as a deterrent to developments in public health as scientific knowledge is often seen as a threat to religions.

Now let us talk about the 18^{th} century which saw the rise of industrialisation. During this period, industrialisation also brought with it several problems in terms of urban slums that created unhygienic conditions and unsafe workplaces. The problems of industrialisation also continued in the 19^{th} century. However, during this period, there emerged striking development in the field of agriculture thereby leading to

improvements in nutrition among the population. Besides, towards the latter part of this century, much progress was also seen in terms of understanding the causes of communicable diseases. A major breakthrough in this regard was Louis Pasteur's germ theory and Koch's Postulates. Further developments in the field of health were seen in the twentieth century which included social engineering, health promotion in the form of primary health care, etc.

Now, in the twenty-first century, the major challenges include reducing the burden of excess morbidity and mortality among the poor, dealing with economic crisis and unhealthy environment and lifestyle and developing more effective health system.

10.3.1 Definition of Public Health

Public health is defined as the science of protecting the safety and improving the health of communities through education, policymaking and research for disease and injury prevention. Public health is defined as "the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society" (Acheson, 1988; WHO).

The three core public health functions are:

- To assess and the health of populations at risk and thereby identify health problems and priorities;
- To formulate of public policies for dealing with the identified health problems and priorities;
- To assure that all populations have access to cost-effective medical care and evaluation of the effectiveness of that care.

Public health consists of not only the discipline of medicine rather it also covers many other disciplines like dentistry, nursing, nutrition, social work, environmental sciences, health education, health services administration, optometry and the behavioural sciences. By now, it should be clear to you

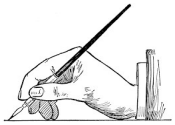
that public health focuses on entire population as opposed to individual patients.

Stop and Read
The four main updates in the National Health Policy of India (2017) focus on: 1. The growing burden of non-communicable diseases, 2. The emergence of the robust healthcare industry, 3. The growing incidences of unsustainable expenditure due to health care costs and 4. Focus on rising economic growth enabling enhanced fiscal capacity.

10.3.2 Core Activities in Public Health

1. Preventing epidemics
2. Protecting the environment, work place, food and water
3. Promoting healthy behaviour
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
9. Leading the development of sound health policy and planning

CHECK YOUR PROGRESS



1. Define public health.

---

2. What are the three core public health functions?

10.4 PUBLIC HEALTH IN INDIA

In India since independence, the government, through concerted action, has been dealing with major public health problems like malaria, tuberculosis, leprosy, high maternal and child mortality and human immunodeficiency virus (HIV). With the advances in scientific knowledge and healthcare, there has been a decrease in mortality rates and birth rates. However, the existing communicable and non-communicable diseases are yet to be dealt with. There is also the increasing burden of emerging and re-emerging diseases like malaria, SARS, avian flu, etc. The new agenda for Public Health in India includes the epidemiological transition (rising burden of chronic non-communicable diseases), demographic transition (increasing elderly population) and environmental changes.

Inequalities in health form another problem to be dealt with. Social stratification on the basis of occupation, income, education, gender or ethnicity leads to health inequalities. Inability to adequately deal with these underlying social determinants of health can be seen as a failure of public health.

It was declared that India has been polio-free since 2014. In a country of 1.35 billion people, this could be considered a big success. Strict targets are also set for the elimination of malaria, tuberculosis (TB), and lymphatic filariasis. While we still represent a large percentage of the global burden for these diseases, we have made significant progress.

In reducing the spread of communicable diseases, the Swachh Bharat Abhiyan or Clean India Movement has given a new momentum. Now if we look at the figures, we find that while in 2014, 65 per cent of the population in India defecated in the open, the percentage has come down to 20 per cent now. This shows how successful the collaborative effort of communities and government can be. Communicable diseases have been decreasing but at the same time, we have seen new challenges emerge around non-communicable diseases like hypertension, diabetes, cardiovascular diseases, stroke, and cancer. India's public health system is yet to gear up for non-communicable diseases.

In the past decade, there has been a striking increase in health centres in India. The focus has now shifted from merely primary health to universal health coverage. This shift is a big step toward all-round wellness. In this context, a prominent example is the National Health Mission (NHM) which came as an outcome of merging the National Urban Health Mission and the National Rural Health Mission in 2013. It has already made a huge impact on our healthcare system through disease control, prevention, and surveillance.

The Ministry of Health and Family Welfare (MOHFW) plays a significant role in the context of India's public health system. It may be noted here that it is not merely the healthcare system that determines the health of a population rather various other sectors also play a significant role in this regard. Thus, the role of government in influencing the health of the population is not confined only to the health sector but it has to take into consideration the sectors outside the healthcare system which also influence public health. Lack of resources, especially financial resources and lack of adequate healthcare professionals are two major deterrents to

equity in healthcare. The launch of the National Rural Health Mission (NRHM) is also an effective step by the Government of India is a leap forward in establishing effective integration of health services and improving healthcare delivery system in India.

There has also been an effort on the part of the Government of India to initiate digital health and artificial intelligence (AI) to improve public health. A significant initiative in this regard is the digital health programme called eVIN to track immunization. In a country with a huge population, this initiative is critically important.

10.5 SOCIOLOGY OF PUBLIC HEALTH

Sociology plays a significant role in public health by identifying and analyzing the macro components of society that affect public health at the population level. This helps understanding the reasons behind inequalities in health as well as the factors that sustain those inequalities. Accordingly, sociology also helps in identifying the ways for changes that can reduce the health inequalities.

However, the outcome of sociological thinking in public health cannot be witnessed immediately. In other words, it does not provide quick solution. This is because many sociological variables are at the macro-level and so it is somewhat difficult to intervene rapidly or directly. For instance, the socio-economic status of a group that immensely influences the health of the group, involves aspects like education and occupation. Thus, to change the socio-economic status would mean changing the distribution of these resources which requires a considerable amount of time and effort. Similarly, reducing behavioural risk factors related to chronic diseases is also time-consuming and requires a lot of effort.

Social and behavioral factors in health play a significant role in sociological approaches to public health. Many key concepts in sociology play an important role in public health, the important among which is the emphasis on society as opposed to the individual. The individual is viewed

as an actor within larger social processes. This is what makes it distinct from psychology. Sociology emphasizes on the units at the collective level, for example, the family, the city, the state, etc. Importance is given to how social structure is maintained and how it is changed through social process like conflict. Sociology, therefore, enables one to study the processes that create and maintain a social system like a healthcare system in a society or country. Since the social structure and social processes are very complex, the methodology applied is also complex and often dominated by multivariate statistical methods of analysis. In this context, the use of computer has helped in working effectively with large data and complex variables.

10.5.1 Sociology in Public Health

By now, we have understood that public health focuses on controlling and preventing large-scale processes that negatively affect the health of population. Thus, it is evident that sociological principles fit appropriately within the field of public health. Sociology, however, is not the only social science discipline that plays a significant role in public health. Psychology is another social science discipline that focuses on individual behaviour which resonates more with the biomedical model. However, it may be noted here that many of the prime concerns of public health today involve large-scale variables like social inequality, social status, healthcare financing, etc. that can be best dealt with through sociological perspective and methodology. Thus, the focus of public health in contemporary times is more on a sociological perspective.

Social stratification forms an important concept in sociology and it has far-reaching effects on public health. Societies, where there is little variation in social class experience, have far better health outcomes as compared to those which have wide social class variation. In other words, it can be observed that inequalities in health are directly related to socio-economic inequalities.

CHECK YOUR PROGRESS

Fill up the gaps:

1. The Germ Theory was developed by_____.

2. India has implemented a digital health programme called eVIN to track _____.

10.6 DEFINITION OF COMMUNITY HEALTH

Community health can be defined as the entire range of community-organized efforts for maintaining, protecting and improving the health of the people. It includes motivating individuals and groups to change their behaviour to improve their health. It aims at developing healthcare facilities to achieve optimal health of the members of the community as a whole. It makes the community a part of the decision-making in the context of health. Thus, we have primary healthcare structures managed by community-selected and supported health committees, community-selected groups for the health of adolescents, birth attendants from the community, etc. In a nutshell, community health basically identifies community as the key actor in preserving and ensuring the health of its members.

Twaddle and Hessler (1977) referred to community health as a normatively described social label. Norms define what a community accepts as adequate health, how community members feel about health and the lack of health, and what level of functioning is expected by the community.

According to the World Health Organisation, community-based primary healthcare must be a part of overall community development. Primary health care includes the essential health services which are acceptable and accessible to the entire community. Now, the term ‘essential health

services' may be defined differently across societies. However, this term has been used universally to mean health promotion and disease prevention services such as the provision of clean air, safe water, adequate food, maternal and child health care, immunizations, and health education, as well as basic curative services focused on prevailing health problems. WHO urges each country to establish national health goals. Traditional public health indicators such as infant mortality are combined with social, economic, and political indicators to measure progress toward community health. Although such indicators often are used comparatively to rank the health status of various countries, the WHO reiterates that the desired outcomes are to be normatively determined within each country. Within the framework of primary healthcare, the WHO indicated that community health should be promoted through community development.

10.6.1 Community Involvement in Health

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 healthcare services. The term 'community participation' can be interpreted variously. However, it can be broadly interpreted in two ways- participation as a means and participation as an end.

Participation as a means: Here, participation is considered as the means of achieving a set of goals or objectives. 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.

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.

10.6.2 Community Health Workers

The concept of the Community Health Worker (CHW) has found new expression in health programmes in many parts of the world as part of the Primary Health Care initiative. It refers to the inclusion of traditional village practice of midwives and healers to modern, organized public health services. CHWs were first recruited to provide healthcare in rural areas in developing countries which lag behind in terms of access to healthcare. They are selected from the community and given training by the Ministry of Health. Community Health Workers may provide services on categorical target diseases like malaria and tuberculosis, support services and counselling for families, promotion of immunization, etc.

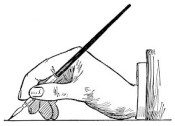
ASHAs (Accredited Social Health Activists) and ANMs (Auxiliary Nursing Midwives) are important community health workers in India. The services of *Anganwadi* (child daycare centres) workers are also utilized in the context of healthcare to increase the outreach.

These community health workers are drawn primarily from the same village where they work have and therefore they can effectively reach out to the population for nutrition, reproductive health and contraception

and immunization. They have also been influential in bringing about behavioural changes like hygiene practices like washing hands, use of ORS, and benefits of breastfeeding, safe sex, etc. Even in the context of achieving the status of polio-free India, they have played a crucial role.

India has three cadres of CHWs. The first created is the Auxiliary Nurse-Midwife (ANM), who is based at a sub-centre and visits villages in addition to providing care at the sub-centre. The second is the Anganwadi Worker (AWW), who works solely in her village and focuses on the provision of food supplements to young children, adolescent girls, and lactating women. The most recently created cadre is the Accredited Social Health Activist (ASHA), who also works solely in her village. ASHA workers focus on immunizations and institutional-based deliveries, for which they receive a performance-related fee.

CHECK YOUR PROGRESS



1. Define community health.

---

2. Fill up the gap: CIH stands for_____.

10.7 FACTORS AFFECTING HEALTH OF A COMMUNITY

1. **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. **Behavioural determinants** - The behavioural determinants affecting health include individual behaviour and lifestyle affecting the health of an individual and the community.

10.8 MEASURES IN MAINTAINING COMMUNITY HEALTH

1. Creating basic conditions for keeping fit

2. Inculcating good habits about health among people.

3. Acquainting the people of the need for a balanced diet.

4. Personal health and cleanliness of the environment should be attended too.

5. Proper arrangement for pure water.

6. Proper arrangement for sewerage.

7. Providing proper and suitable medical facilities.

8. Arrangement for clean, open parks for fresh air and sunshine.

9. Prevention of pollution.

10. Arrangement for community secretion facilities.

10.9 ELEMENTS OF HEALTH PROMOTION

Health promotion includes activities that are meant to enhance individual and community health. It aims at increasing the involvement and control of the individual and the community in the context of their health. In order to improve health, it seeks to reduce determinants of diseases as well as factors that affect the health of an individual or a community in a cost-effective manner.

Health promotion forms an important aspect in public health as it is important to raise awareness and inform people about health and lifestyle factors that might put them at risk. Health Promotion involves the following process:

a. 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, increase resistance to the agent (such as immunization or cessation of smoking), or at environmental activities to reduce conditions favourable 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 the 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 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.

b. 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 iii. Providing measures and services to deliver the care plan.

10.10 SUMMING UP

- Both public health and community health aim at promoting, preserving and maintaining the health of the entire population or group of individuals within a society.
- Public health is defined as the science of protecting the safety and improving the health of communities through education, policymaking and research for disease and injury prevention.
- Community health covers community-organized efforts for maintaining, protecting and improving the health of the people.
- Community participation in health can be broadly interpreted in two ways- participation as a means and participation as an end.
- Health promotion 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.

10.11 QUESTIONS

1. Define Public Health. Discuss its historical development.
2. Explain the role of government in public health in India.
3. Define Community Health. Discuss the responsibility of the community in the health care system.
4. Discuss the role of Sociology in understanding the concept of public health.

10.12 RECOMMENDED READINGS AND REFERENCES

Cockerham, W. (2001) (ed). *The Blackwell Companion to Medical Sociology*. Blackwell Publishers, Oxford.

Coleman, J. S. (1994). *Foundations of Social Theory.* Belknap Press, Cambridge.

Durkheim, E. (1982). *The Rules of Sociological Method.* . Free Press, New York.

Hickman. P. (1990). Community Health and Development: Applying Sociological Concepts to Practice (Vol.8. Issue 1, Article 15). Community Development and other Community Applications. http://digitalcommons.wayne.edu/socprac/vol8/iss1/13. Tulchinsky,T.

Twaddle A., Hessler, A. (1977). *Sociology of Health*. Macmillan, New York.

Varavikova, E. (2014). *The New Public Health*. (Third Edition). Elsevier. Academia Press. San Diego.

****

UNIT 11: SOCIAL EPIDEMIOLOGY

UNIT STRUCTURE

11.1 Introduction

11.2 Objectives

11.3 Concept and Meaning

11.4 Origin of Social Epidemiology

11.5 Epidemiological Transition

11.6 Environmental Epidemiology

11.7 Summing up

11.8 Questions

11.9 Recommended Readings and References

11.1 INTRODUCTION

Social epidemiology is a branch of epidemiology which focuses on how socio-economic characteristics have been influencing one's health. Social and economic factors are considered crucial as far as one's health is concerned. Most of the epidemiologists also study the correlation of morbidity and mortality with one's socio-economic condition. If we see the history of social epidemiology, we will find that the renaissance period played a very significant role. In the late seventeenth century, Bernardino Ramazzini looked at the connection between particular occupations and health disorders. His work *De Morbis Artificum Diatriba* (1700) occupies a significant place in occupational epidemiology and is also identified among the earliest works on the connection between occupational status, social position, and health (Myer et al, 2017). In this unit, along with social epidemiology, you will also learn about other important categories such as genetic epidemiology and environmental epidemiology. The unit will also

help you understand the methodology of epidemiology. Further, epidemiological transition and epidemic model will also be covered in this unit.

11.2 OBJECTIVES

By the end of this unit, you will be able to:

- Explain the concept and meaning of social epidemiology;
- Discuss the origin of Social Epidemiology;
- Explain the epidemic model;
- Explain genetic epidemiology and environmental epidemiology.

11.3 CONCEPT AND MEANING

Social epidemiology is defined as "The branch of epidemiology that studies the social distribution and the social determinants of health", that is, "both specific features of and pathways by which societal conditions affect health" (Sunder 2012). Social epidemiology focuses on both social and individual measures, simultaneous analysis of both the context is considered necessary. Social epidemiology is the unification of medical sociology, medical geography and social sciences. Medical sociology and medical geography often use health and disease to explain social phenomenon such as the growth of lay health advocacy movements. On the other hand, social epidemiologists generally use the social concepts to explain patterns of health in the population (ibid).

It could be noted that epidemiology is the study of health evident, health-characteristic or health-determinant patterns of society. It is also considered as one of the important methods of public health research which also helps in terms of developing different policies and programmes of Nation's

health. Health programmes and policies have been significant not only for creating the curative health needs but these are also responsible for adopting preventive measures. Important areas in epidemiologic work include investigation of an outbreak of disease, disease surveillance and screening in the purpose of medicine, biomonitoring and comparison of treatment effects such as in clinical trials (ibid). Epidemiologists also depend on other scientific disciplines like biology to better understand the different process of diseases.

The term epidemiology comes from the Greek words *epi* which means 'on or upon', *demos* meaning about the people and *logos* indicating 'the study of'. Epidemiology can be translated into the phrase 'the study of that which is upon the people' (Akram, 2014). Epidemiology is the branch of medicine that refers to the study of the causes, distribution and determinants of diseases and injuries and the ways of controlling their spread in the human population (Hang 2008, Hansen and Easthop, 2007). The main aim of epidemiology is to control disease, injury and death in a community by preventing or limiting outbreaks of disease and injury (McKenzie, Pinger and Kotecki, 2005). According to Turner (2006), epidemiology is defined as the study of the patterning and determinants of the incidence and distribution of disease. Epidemiology focuses on environmental factors—physical, biological, chemical, psychological and social—that affect health. It also examines the course and outcomes of diseases in individual and in groups.

11.4 ORIGIN OF SOCIAL EPIDEMIOLOGY

According to Thomas (2002), "social epidemiology is the branch of epidemiology that deals with the social distribution of disease and the social determinants of health and illness". It includes the concepts and methods of sociology, psychology, political science, economics demography, geography and biology. Social Epidemiology tries to examine the origin and spread of various health conditions. It studies the

significance of various social factors and how such factors have been attached to one's health. The root of social epidemiology is found in medical epidemiology. Originally the term epidemiology has been associated with the study of communicable diseases with epidemic potential. The 'social' dimension was added in the twentieth century and later the subject social epidemiology has helped to study health perspective through a social lens. Social Epidemiology emphasizes the variety of socio-economic conditions of the people, which have been considered as one of the important reasons for creating different health problems. In terms of studying this correlation between the socio-economic condition and health problems, there are various scholars who have studied this relation. For instance, during the late seventeen century, Bernardino Ramazzini explored the connection between occupations and health disorders. During the nineteenth century, with the emergence of epidemiology as a formal discipline in Europe, social factors were predominantly identified as determinants of health. In France, Louis Rene Villerme's study pointed out the relation between poverty and mortality. His study pointed out that the poor relatively have a higher mortality rate than the others (Krieger, 2001). The earliest sociologists contributed to the study of nature of population and health outcome. For example, Emile Durkheim has investigated the social aetiology of suicide which indicates different characteristics of the individual. On the basis of different individual characteristics, there is a possibility of different types of behaviour. Farris and Dunham (1939) pointed out that most of the hospitalized cases of mental health patients in Chicago were from urban areas. Their study pointed out that there is a relationship between mental health and individual social location.

From the 1950s due to the changing nature of industrialised society, rather than studying the infectious diseases, the epidemiologists have started to study chronic illness. The first social medicine department was established in Britain after the World War-II. During that time scholars like Jeremy Morris, Richard Doll started investigating about the unequal distribution of chronic illness among different classes of people. By the 1960s, most of the

epidemiologists in the United States have also pointed out the environmental and behavioural factors as responsible for creating diseases. For these epidemiologists, the environmental and behavioural factors are the most important components as far as the disease is concerned. This new paradigm which has systematically denied the socio-economic components of creating diseases and emphasised more on environmental and behavioural issues is itself considered as one of the new designs of an epidemiological study. But in recent times, epidemiologists never deny the importance of socio-economic factors in the study of the cause of diseases. The work of Jeremy Morris, Geoffrey Rose, and, later, Michael Marmot was crucial in explaining that despite massive improvements in standards of living and population health during the second half of the twentieth century, the social inequalities in health that were present a century before were still prevalent (Sunder, 2012).

CHECK YOUR PROGRESS

1. Define social epidemiology.

---

2. Who is the author of *De Morbis Artificum Diatriba*?

11.5 EPIDEMIOLOGICAL TRANSITION

Conceptually the epidemiological transition focuses on the complex change in patterns of health and disease pattern. However while studying about health and diseases, people's demographic, economic and sociological points have also been taking into account. A fundamental change in the most frequently recorded causes of death, longer life expectancy, and an increasing proposition of older people in the population have been characteristic features of the epidemiological transition in western countries (ibid). The main feature of the epidemiological transition is to shift from infectious diseases to other morbid condition. Epidemiological Transition theory was originally posited by Abdel R Omran in 1971. Omran divided the epidemiological transition of mortality into three phases. These are as follows:

a. The Age of Pestilence and Famine: In this stage mortality is high and fluctuating, precluding sustained population growth with low and variable life expectancy, vacillating between 20 and 40 years.
b. The Age of Receding Pandemics: Once pandemic reaches its peak, its downhill course is initiated and therefore mortality begins to decline progressively. In this stage, average life expectancy increases steadily from about 30 to 50.
c. The Age of Degenerative and Man-Made Diseases: Mortality continues to decline and eventually approaches stability at a relatively low level. Life expectancy rises and exceeds 50 years, with fertility becoming the crucial factor in population growth (ibid).

The epidemiological transition arises in such a stage when a country undergoes the process of modernization from third to first-world status. With the developments of modern healthcare, medicine like antibiotics and other life-saving medicines have been developed and as a result, people's life expectancy is getting increased. However, both the infant mortality rate (IMR) and maternal mortality rate (MMR) have been relatively decreasing

in this stage. Again, the decline in fertility rate reflects a transition to chronic and degenerative diseases as more important causes of death (ibid). Omran's first phase occurs when the human population sustains frequent, low-growth, and mostly linear, up and down patterns associated with wars, famine, epidemic. In early pre-agricultural history, infant mortality rates were high and average life expectancy low. The second phase involves advancements in medicine and the development of a healthcare system. A breakthrough in treatment was the discovery of penicillin in the mid 20th century which led to widespread and dramatic declines in death rates from previously serious diseases such as syphilis. Omran's third phase occurs when human birth rates drastically decline from highly positive replacement number to stable replacement rates. At this stage, people's awareness about the family planning method is the probable reason behind the declining fertility rate (ibid).

Epidemiological transition theory emphasizes on mortality which gives a clear picture of population transition of a locality. Due to better healthcare facility, the rate of mortality of infectious diseases has been decreasing and that probably leads to a shift to the new paradigm.

Stop and Read

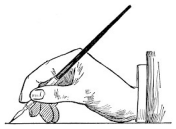
Epidemiological transition focuses on the complex change in patterns of health and disease.

Epidemiological transition not only studies the diseases but also keeps concentrating on IMR (Infant Mortality Rate) and MMR (Maternal Mortality Rate).

Epidemiological Transition theory was originally posited by Abdel R Omran in 1971.

Omran divided the epidemiological transition of mortality into three phases: *The Age of Pestilence and Famine, the Age of Receding Pandemics* and *the Age of Degenerative and Man-Made Diseases.*

CHECK YOUR PROGRESS



1. Fill up the gap:

Epidemiological Transition theory was originally posited by _____ in _____.

11.6 ENVIRONMENTAL EPIDEMIOLOGY

Environmental epidemiology studies the importance of the environment in the creating of different diseases. It basically deals with the environmental determinants of health. The International Society for Environmental Epidemiology (ISEE) defines these determinants as any or all of the physical, chemical, biological, social, economic, cultural and behavioural factors that affect health. Environmental epidemiology also tries to study the effect of urbanization on one's health, where the importance of agricultural development, energy production is also taken into account. It is the branch of epidemiology that concerns about the different environmental issues which have been responsible for creating different diseases. It studies the different external factors that affect the incidences, prevalence and geographical aspect of health conditions. The reason behind these factors may be natural or environmental. Environmental epidemiology has been constantly recognizing different factors that are considered as relatively more harmful to the health of the people. Further, it indicates how different chemicals, physical agents and microbiological pathogens have been posing a threat to the environment. Environmental epidemiology seeks to analyse a few things. These are mainly: a) understand who is most vulnerable and sensitive to an exposure; b) evaluate mechanisms of action of environmental exposures, c) identify public health and healthcare policies and measures to manage risks and d) evaluate effectiveness, costs

and benefits of these policies and measures as well as provide evidence for accountability (Sundar, 2012). Environmental epidemiology research can inform risk assessments, development of standards and other risk management activities and estimates of the co-benefits and co-harms of policies designed to reduce global environmental change, including policies implemented in other sectors such as food and water that can affect human health.

Modern Epidemiology not only studies the disease pattern, but it also concentrates on various domains of clinical observation such as pharmaceutical agents, infectious diseases and chronic diseases. However, it also attempts to understand the different threats to health, for instance, occupation-related risk, consumption of alcohol. Thus, epidemiology includes controlled clinical evaluations of different treatment methods; comparative assessment of lifestyle factors, such as smoking, drugs, and drinking habits; estimations of the risks of occupational factors; and cross-sectional and time-series analyses of factors that may affect health (Committee on Environmental Epidemiology, National Research Council, 1997). The epidemiological study involves the examination of the extent to which observed rates of a given phenomenon differ significantly from those that would be expected under specified conditions (Miettinen, 1985).

Human health has been affected by physical, biological, and chemical factors in the external environment. By examining specific populations or communities exposed to different ambient environments, environmental epidemiology seeks to clarify the relationship between physical, biological, and chemical factors and human health. In a nutshell, environmental epidemiology tries to establish a link among different components like physical, biological and chemical.

11.7 SUMMING UP

In this unit, we have learnt about social epidemiology. We have also covered epidemiological transition and environmental epidemiology. The

unit has explored the development and changes of social epidemiology at different periods in history. Epidemiology studies the distribution of diseases and their relation with the social determinants of health. With the help of the above discussion, we have understood that the environment is one of the important components which determine the status of health. Epidemiological tradition helps us to understand the relationship between the structure of society and the nature of diseases.

11.8 QUESTIONS

1. Write a note on meaning and scope of Social Epidemiology.
2. Write about your understanding on history of social epidemiology.
3. What do you understand by epidemiological transition?
4. What is environmental epidemiology? Explain.

11.9 RECOMMENDED READINGS AND REFERENCES

Akram, M (2014). *Sociology of Health*, Rawat Publications, India.

Committee on Environmental Epidemiology, National Research Council (1997). Environmental Epidemiology, Volume 2: Use of the Gray Literature and Other Data in Environmental Epidemiology, National Academy Press, Washington, D.C.

Farris, R.E., Dunham, H.W. (1939). Mental Disorders in Urban Areas. University of Chicago Press, Chicago, IL.

Hang, Y. (2008). *Encyclopedia of Global Health.* Sage Publication, New Delhi.

Hansen, E and Easthop, G. (2007). *Lifestyle in Medicine.* Routledge, New Delhi.

Krieger, N. (2001). Historical roots of social epidemiology: socioeconomic gradients in health and contextual analysis. *Int. J. Epidemiol*, 30: 899– 900.

McKenzie, J.F., Pinger, R.R and Kotecki, J.E. (2005). *An Introduction to Community Health,* Jones and Bartlett Publishers, London.

Miettinen, O.S. (1985). *Theoretical Epidemiology: Principles of Occurrence Research in Medicine.* John Wiley & Sons, New York.

Myer, L., Susser, E., Link, B., Morroni, C. (2017). Social Epidemiology, *International Encyclopedia of Public Health*, 6: 74–86.

Sundar, I (2012). *Principles of Medical Sociology*. Sarup Book Publishers, New Delhi.

****

UNIT 12: HEALTH POLICIES OF GOVERNMENT OF INDIA

UNIT STRUCTURE

12.1 Introduction

12.2 Objectives

12.3 History of Evolution of Health Policy in India

12.3.1 Colonial Period

12.3.2 Post-Independence Period

12.4. Goals, Principles and Objectives of National Health Policy of India

12.4.1 Goals

12.4.2 Key Policy Principles

12.4.3 Objectives of the Policy

12.5 Thrust of the Current Health Policy of India

12.6 Priority Areas for Improving the Environment for Health

12.7 Some Important Areas of National Health Programmes of Government of India

12.8 Summing Up

12.9 Questions

12.10 Recommended Readings and References

12.1 INTRODUCTION

A health policy generally describes fundamental principles regarding which health providers are expected to make value decisions. Health policy provides a broad framework of decisions for guiding health actions that are useful to its community in improving their health, reducing the gap between the health statuses of different sections of people and ultimately contributes to the quality of life.

The National Health Policy of 1983 and the National Health Policy of 2002 have been instrumental in guiding the approach for the health sector in the Five-Year Plans. Now, 17 years after the last health policy, a new policy is introduced. The primary aim of the National Health Policy is to inform, clarify, strengthen and prioritize the role of the Government in shaping health systems in all its dimensions.

The National Health Policy 2017 by the central government is a significant step towards ensuring universal health access and services to the citizens in both rural and urban areas. It is the country's largest public health initiative that aims for a healthy India through concrete policy decisions.

The national health policy was revised in 2002 and since then it has remained unchanged for the past 15 years. Hence, this time, the national health policy has been introduced with the sole purpose of addressing the inequalities and tackling the emerging challenges in India's health sector.

The government adopted a highly participative and consultative approach while formulating India's health policy. Hence, the state government and other stakeholders were made a part of the process of fine-tuning the draft. The government also received more than 5000 suggestions from various quarters for improving the national health policy draft.

The Union government's citizen-centric approach has been the cornerstone of the new national health policy that was also endorsed by the Central Council for Health & Family Welfare.

12.2. OBJECTIVES

By the end of this unit, you will be able to:

- Explain the evolution history of health policies of the Indian Government;
- Analyse the goals, principles and objectives of the current National Health Policy of India;
- Analyse the thrust of the current health policy of the government of India;
- Explain the key areas of Health Programme in India.

12.3 HISTORY OF EVOLUTION OF HEALTH POLICY IN INDIA

12.3.1 The Colonial Period

During the colonial period, modern medicine and healthcare were introduced in India. It was also during period that there was a gradual destruction of pre-capitalist modes of production in India. Under the pre-capitalist mode of production, institutionalized forms of healthcare delivery, as we understand today, did not exist. Practitioners who were not formally trained professionals but inheritors of a caste-based occupational system provided healthcare services. This does not mean that there was no attempt at evolving a formal system. *Charaka Samhita* and *Sushruta Samhita*, among other texts, are evidence of putting together a system of medicine. Universities like Takshashila, Nalanda and Kashi did provide formal training in Indian medicine (Jaggi, 1979: XII, 1-3). But the little evidence that exists shows that such structured medicine existed mostly in towns around the courts of the rulers; and in the countryside, healers operated as practitioners of what we term today as `folk medicine'.

However, the institutions that functioned as hospitals were more in the nature of *punyasthanas*, *dharmashalas*, *viharas* and *maths*. They were the Indian equivalent of Western almshouses, monasteries and infirmaries which were provided with stocks of medicine and lodged the destitute, the cripple and the diseased who received every kind of help (Fa-Hein as quoted in Jaggi, 1979: XIV.3). Similarly, during the Mughal Sultanate, the rulers established such hospitals in large numbers in the cities of their kingdom where all the facilities were provided to the patients free of charge (Jaggi, 1979: XIV.4). These activities were financed not only by the kings but also through charities of the rich traders and wealthy persons in the kingdom (ibid, 3-4). Hence, in the pre-colonial period, which coincides with the pre-capitalist period, structured healthcare delivery had clearly established three characteristics. Firstly, it was considered a social responsibility and thus state and philanthropic intervention were highly significant. Secondly, the services that were provided by these facilities were provided free to all who availed them or had access to them. Caste, class and occupation did, however, limit access. And thirdly, most of these facilities were located in towns thus projecting a clear urban bias.

It is generally believed that the Ayurvedic system of medicine became stagnant after 10^{th} Century A.D. Unani-Tibb, which was based on Greek medical theory, received greater state patronage, at least until the advent of Europeans on Indian soil (Jaggi, 1980: XV. 7-8).

The first Europeans to set up a medical establishment in India were the Portuguese. In 1510 the Royal Portuguese Hospital was established in Goa. This was transferred to the Jesuits in 1591 and it became one of the best-run hospitals in the world. Of course, its access was limited to European Christians only, though later Jesuits set up a separate unit to cater to Indian Christians (Jaggi, 1979: XIV. 71-73). This was followed by hospitals in Bombay and Calcutta for the same reasons.

As the needs of the British population, especially the armed forces increased due to larger territories coming under their administration and an increased number of English troops, a more organized medical establishment was necessitated. Thus, on 1st January 1764, the Indian Medical Service (IMS) was founded, initially as the Bengal Medical Service (Jaggi, 1979: XIV.27). The IMS catered mostly to the needs of the armed forces. However, by the early 19th century, hospitals for the general population were established in chief mofussil towns, besides the Presidency headquarters (Crawford, 1914: II.430).

The expansion of medical facilities followed the devolution of the imperial government especially after 1880 with the setting up of Municipalities and District Boards. However, these medical facilities had a distinct racial and urban bias. Separate provisions were made on employment and racial grounds, though in some places non-official Europeans were allowed access to hospitals designed for civil servants. In General Hospitals, wards for Europeans and Eurasians were separated from those for the rest of the population (Jeffery, 1988:87). These facilities, at least till the Montagu-Chelmsford Reforms of 1919, were located in urban areas in the military and civilian enclaves of the English.

Another aspect, which received early attention, at least in the cantonments, was public health measures. The continued high mortality of British soldiers despite good access to medical services led to the appointment of a Royal Commission to inquire into sanitary conditions of the army in 1859. “Fevers, intermittent, remittent, and typhoid, cholera, dysentery, smallpox, spleen disease, diarrhoea, rheumatism, such is the account of station after station. Epidemics, the result of imperfect civilization and removable causes prevail in India at the present day, as epidemics used to prevail in Europe in the Middle Ages. The work of civilization and sanitary improvement has yet to be initiated in this great country. The prevailing causes are everywhere the same – filth, stagnant water, damp, foul ditches, want of drainage, bad drinking water, utter neglect of ventilation and of all

sanitary measures, overcrowding of houses, and foul air" (Indian Medical Gazette, 1871: VI.214).

The Royal Commission submitted its report in 1864, recommending setting up of Sanitary Commissioners in each Presidency. Preventive healthcare consequently began to get some importance at least in the cantonments. Within 30 years of the creation of such Commissioners, the death rate in the army declined from 69 per 1000 in 1857 to about 16 per 1000 (Jaggi, 1979: XIV.105). But in the general population, mortality due to diseases emanating from unsanitary conditions continued to be extremely high. For instance, just four diseases – cholera, smallpox, fever and bowel complaints - in 1886 claimed over 368,000 lives in Madras Presidency alone, in contrast to 368,000 deaths in 50 years ending 1886 from four countries – England, France, Germany and Austria - on the battle-fields! (Ibid: 103).

The rural areas had to wait till the Government of India Act of 1919 whereby health was transferred to the provincial governments and the latter began to take some interest in rural healthcare. In fact, rural healthcare expansion in a limited way began in India first from 1920 onwards when the Rockefeller Foundation entered India and started preventive health programmes in the Madras Presidency in collaboration with the government, and gradually extended its support for such activities in Mysore, Travancore, United Provinces and Delhi. The focus of their activities was on developing health unit organizations in rural and semi-rural areas, in addition, to support malaria research and medical education. This intervention of the Rockefeller Foundation is historically very important for the development of healthcare services and health policy in India, especially for rural areas. It may be considered a watershed that paved the path for the ideology that rural areas need only preventive healthcare and not hospitals and medical care clinics, i.e., they need "Public Health" and not medical care. The result of this was that medical care activities of the State were developed mainly in the urban areas and rural areas were deprived of the devolution of medical care within their reach.

This is an important historical fact to note because these same differential treatments for urban and rural areas have continued to some extent even after Independence.

With regard to public health, the same biases were seen. Only European areas enjoyed the benefits of civic concern. This racial distinction and the much more pronounced role taken by the States in Indian towns, provide the main points of difference between the Indian and the British experience. Despite having a more centralized, active and interventionist government than in Britain and one that attempted to draw on the British experience, India gained few benefits (Jeffery, 1988: 98). The same was true in the case of medical education in India. Europeans and certain western-oriented Indian communities like Christians in Bengal and Parsis in Bombay largely monopolized it, at least until 1920 (ibid: 84).

The Imperial government in India adopted measures that were totally inadequate to deal with the problems at hand because of the racial and urban bias - the European minority and later "Indian Gentlemen" received undue concern, while the Indian majority received little more than crumbs from the white table (Ramasubban, 1982: as quoted in ibid: 19). During the colonial period, hospitals and dispensaries were mostly state-owned or state-financed. The private sector played a minor role as far as this aspect of healthcare delivery was concerned. However, the private health sector existed in a large measure as individual practitioners. The earliest data available on medical practitioners are from the 1881 census which records 108,751 male medical practitioners (female occupation data was not recorded). Of these 12,620 were classified as physicians and surgeons (qualified doctors of modern medicine) and 60,678 as unqualified practitioners (which included Indian System Practitioners) (Census-1881, 1883: III.72). In addition, there were 582 qualified medical practitioners serving in army hospitals (ibid: 71).

However, the census data does not reveal the proportion of private practitioners. The earliest data available for private practitioners are for the year 1938 when an estimated 40,000 doctors were reported to be active. Of these only 9,225 or 23% were in public service and the rest in private practice or private institutions (Bradfield, 1938: 2-4). The Bhore Committee Report corroborates this when for 1941-42 it reports 47,524 registered medical practitioners in India (17,654 graduates and 29,870 licentiates) (Bhore 1946: I.35). Of these only 13,000 or 27% worked in government and other agencies (including private institutions) and the remaining were in private professional practice (ibid: I.13-14). Besides, there were practitioners of non-allopathic systems, both of the formally trained variety and the informal inheritors of medical practice. One estimate reveals that there was one vaid/hakim per 4285 population in 1868 i.e. about 47,000 known indigenous practitioners (Indian Medical Gazette, 1868: III.87). This clearly shows that the private health sector was fairly large and well established. It also indicates the early commodification of healthcare delivery, which is inevitable under capitalism. Given the racial and urban bias of the State health services, this large group of private practitioners must have catered to a large chunk of Indians who didn't have access to the State services. The above historical overview is necessary to understand the development of healthcare services in India in the post-independence period because one can see a remarkable continuity in the pattern of development of healthcare services from the colonial period into free India.

12.3.2 Post-Independence Period

The postcolonial period health care sector has seen private medical practice develop as the core of the health sector in India, initially strengthening the enclave sector, and then gradually spreading into the periphery as opportunities for the expropriation of surplus by providing healthcare increased due to the expansion of the socio-economic infrastructure. It must be noted that this pattern of development of the health sector was in

keeping with the general economic policy of capitalism. Therefore, the health policy of India cannot be seen as divorced from the economic and industrial policy of the country.

In India, until 1982-83 there was no formal health policy statement. The policy was part and parcel of the planning process (and various committees appointed from time to time), which provided most of the inputs for the formulation of health programme designs. In the early years after independence, the Indian state was engrossed in helping and supporting the process of accumulation of capital in the private sector through large scale investments in capital goods industry, infrastructure and financial services. The social sectors like health and education were low priority areas. Rural Development Programmes (earlier called community development projects) have seen a quantum jump, especially since the introduction of the minimum needs programme with the fourth five-year plan to give a boost to rural infrastructure and provide some placebos to the small and marginal peasantry. However, these efforts at programming have not contributed in any significant manner of reducing rural poverty or in enhancing rural purchasing power. Though the second five-year plan talked of socialism, the State's increased participation in these basic economic sectors was very important for capitalism to flourish. Health, water supply and education are the three main sub-sectors under social services. Healthcare facilities are far below any acceptable human standard. Even the targets set out by the Bhore Committee on the eve of India's independence are nowhere close to being achieved. We have not even reached half the level in the provision of healthcare that most developed countries had reached between the two world wars. Curative healthcare services in the country are mostly provided by the private sector (to the extent of two-thirds) and preventive and promotive services are almost entirely provided by the State sector.

It was not until 1983 that India adopted a formal or official National Health Policy. Prior to that, health activities of the state were formulated through

the Five-Year Plans and recommendations of various Committees. For the Five Year Plans, the health sector constituted schemes that had targets to be fulfilled. Each plan period had a number of schemes and every subsequent plan added more and dropped a few. In the fifties and sixties, the entire focus of the health sector in India was to manage epidemics. Mass campaigns were started to eradicate various diseases. These separate countrywide campaigns with a techno-centric approach were launched against malaria, smallpox, tuberculosis, leprosy, filaria, trachoma and cholera. Cadres of workers were trained in each of the vertical programmes.

The National Malaria Eradication Programme (NMEP) alone required the training of 150,000 workers spread over in 400 units in the prevention and curative aspects of malaria control (Banerji, 1985). The policy of going in for mass campaigns was in continuation of the policy of colonialists who subscribed to the precepts of modern medicine that health could be looked after if the germs which were causing it were removed. But the basic cause of the various diseases is social, i.e. inadequate nutrition, clothing, and housing, and the lack of a proper environment. These were ignored.

National programmes were launched to eradicate the diseases. The NMEP was started in 1953 with aid from the Technical Cooperation Mission of the USA and technical advice of the WHO. Malaria at that period was considered an international threat. DDT spraying operations was one of the most important activities of the programme. The tuberculosis programme involved vaccination with BCG, T.B. clinics, and domiciliary services and aftercare. The emphasis, however, was on prevention through BCG. These programmes depended on international agencies like UNICEF, WHO and the Rockefeller Foundation for supplies of necessary chemicals and vaccines. The policy with regard to communicable diseases was dictated by the imperialist powers as in the other sectors of the economy. Along with financial aid came political and ideological influence. Experts of various

international agencies decided the entire policy framework, programme design, and financial commitments, etc.

Up to the eighties, the influence came through advice and ideology and hence its penetration was limited but post-eighties there is a lot of money also coming in, mostly as soft loans and along with conditionalities, Prior to the eighties, external assistance was mostly grants and very insignificant in volume. During the entire decade of the seventies about $85 million per year of external assistance in the health sector was being received, largely as grants but after World Bank entered the picture in the eighties with IPP projects the scenario changed significantly with the annual average varying between $300 million and $600 million during eighties and nineties and mostly as loans with World Bank dominating with over two-thirds of such funds coming from it by the end of the eighties (Gupta and Gumber, 2002).

12.4 GOALS, PRINCIPLES AND OBJECTIVES OF NATIONAL HEALTH POLICY OF INDIA

12.4.1 Goals

The policy envisages as its goal the attainment of the highest possible level of health and wellbeing for all at all ages, through a preventive and promotive healthcare orientation in all developmental policies, and universal access to good quality healthcare services without anyone having to face financial hardship as a consequence. This would be achieved through increasing access, improving quality and lowering the cost of healthcare delivery.

The policy recognizes the pivotal importance of Sustainable Development Goals (SDGs). An indicative list of time-bound quantitative goals aligned to ongoing national efforts, as well as the global strategic directions, is detailed at the end of this section.

12.4.2 Key Policy Principles

I. **Professionalism, Integrity and Ethics**: The health policy commits itself to the highest professional standards, integrity and ethics to be maintained in the entire system of healthcare delivery in the country, supported by a credible, transparent and responsible regulatory environment.

II. **Equity**: Reducing inequity would mean affirmative action to reach the poorest. It would mean minimizing disparity on account of gender, poverty, caste, disability, other forms of social exclusion and geographical barriers. It would imply greater investments and financial protection for the poor who suffer the largest burden of disease.

III. **Affordability**: As costs of care increases, affordability, as distinct from equity, requires emphasis. Catastrophic household healthcare expenditures defined as health expenditure exceeding 10% of its total monthly consumption expenditure or 40% of its monthly non-food consumption expenditure are unacceptable.

IV. **Universality**: Prevention of exclusions on social, economic or on grounds of current health status. In this backdrop, systems and services are envisaged to be designed to cater to the entire population- including special groups.

V. **Patient-Centred and Quality of Care**: Gender-sensitive, effective, safe, and convenient healthcare services to be provided with dignity and confidentiality. There is a need to evolve and disseminate standards and guidelines for all levels of facilities and a system to ensure that the quality of healthcare is not compromised.

VI. **Accountability**: Financial and performance accountability, transparency in decision making, and elimination of corruption in healthcare systems, both in public and private.

VII. **Inclusive Partnerships**: A multi-stakeholder approach with partnership and participation of all non-health ministries and communities. This approach would include partnerships with academic institutions, not for profit agencies, and health care industry as well.

VIII. **Pluralism**: Patients who so choose and when appropriate, would have access to AYUSH care providers based on documented and validated local, home and community-based practices. These systems, inter alia, would also have Government support in research and supervision to develop and enrich their contribution to meeting the national health goals and objectives through integrative practices.

IX. **Decentralization**: Decentralization of decision making to a level as is consistent with practical considerations and institutional capacity. Community participation in health planning processes to be promoted side by side.

X. **Dynamism and Adaptiveness**: constantly improving the dynamic organization of healthcare based on new knowledge and evidence with learning from the communities and from national and international knowledge partners is designed.

CHECK YOUR PROGRESS

1. When was the first Health Policy of Indian Government formulated?

---

2. What are the key principles of current Health policy of India?

12.4.3 Objectives of the Policy

The main objective of the policy is to improve health status through concerted policy action in all sectors and expand preventive, promotive, curative, palliative and rehabilitative services provided through the public health sector with a focus on quality. The other objectives of the policy can be understood through the following points:

I. Progressively Achieve Universal Health Coverage

a. Assuring availability of free, comprehensive primary healthcare services, for all aspects of reproductive, maternal, child and adolescent health and for the most prevalent communicable, non-communicable and occupational diseases in the population. The Policy also envisages optimum use of existing manpower and infrastructure as available in the health sector and advocates collaboration with non -government sector on a pro-bono basis for delivery of healthcare services linked to a health card to enable every family to have access to a doctor of their choice from amongst those volunteering their services.

b. Ensuring improved access and affordability, of quality secondary and tertiary care services through a combination of public hospitals and well-measured strategic purchasing of services in healthcare deficit areas, from private care providers, especially the not-for-profit providers

c. Achieving a significant reduction in out of pocket expenditure due to healthcare costs and achieving a reduction in the proportion of households experiencing catastrophic health expenditures and consequent impoverishment.

II. Reinforcing Trust in Public Health Care System:

Strengthening the trust of the common man in the public healthcare system by making it predictable, efficient, patient-centric, affordable and effective,

with a comprehensive package of services and products that meet immediate healthcare needs of most people.

III. Align the Growth of Private Healthcare Sector with Public Health Goals:

Influence the operation and growth of the private health care sector and medical technologies to ensure alignment with public health goals. Enable private sector contribution to making healthcare systems more effective, efficient, rational, safe, affordable and ethical. Strategic purchasing by the Government to fill critical gaps in public health facilities would create a demand for the private healthcare sector, in alignment with the public health goals.

The policy visualizes the integration of AYUSH systems across systems of medicines. Apart from being safe and cost-effective, this would help in effective disease prevention. To promote healthy living, yoga is to be introduced in schools and workplaces.

The priority of the government is to ensure universal access, high quality and low-cost healthcare facilities to all. The national health policy is a milestone in providing health security for all in India. The focus has shifted from sick-care to wellness, and the thrust is on prevention and health promotion.

The government has successfully introduced a comprehensive health policy with clear deliverables and milestones. All this would benefit the citizens immensely in leading better healthy lives.

12.5 THRUST OF THE CURRENT HEALTH POLICY OF INDIA

a. **Ensuring Adequate Investment**

   The policy proposes a potentially achievable target of raising public health expenditure to 2.5% of the GDP in a time-bound manner. It

envisages that resource allocation to states will be linked with state development indicators, absorptive capacity and financial indicators. General taxation will remain the predominant means for financing care.

b. Preventive and Promotive Health

The Policy articulates to institutionalize inter-sectoral coordination at national and sub-national levels to optimize health outcomes through the constitution of bodies that have representation from relevant non-health ministries.

12.6 PRIORITY AREAS FOR IMPROVING THE ENVIRONMENT FOR HEALTH

There are seven prioritized areas in the current health policy of Government of India for improving the Environment for health:

a. The Swachh Bharat Abhiyan
b. Balanced, healthy diets and exercises
c. Addressing tobacco, alcohol and substance abuse
d. Yatri Suraksha- preventing deaths due to rail and road traffic accidents
e. Nirbhaya Nari- action against gender violence
f. Reduced stress and improved safety in the workplace
g. Reducing indoor and outdoor air pollution

12.7 SOME IMPORTANT AREAS OF NATIONAL HEALTH PROGRAMME OF GOVERNMENT OF INDIA

I. Child and Adolescent Health

- The policy endorses the national consensus on the accelerated achievement of neo-natal mortality targets and 'single-digit' stillbirth rates through home-based and facility-based management of sick newborns.

- It makes school health programmes a major focus area, health and hygiene being made a part of the school curriculum.

- It emphasizes on the health challenges of adolescents and long-term potential of investing in their health care.

II. Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A)

This policy aspires to develop the action of all sectors to support maternal and child survival. This policy strongly recommends the strengthening of the general health system to prevent and manage maternal complications to ensure continuity of care and emergency services for maternal health

III. Interventions to address Malnutrition and Micro-Nutritional deficiencies

The focus is on reducing micronutrient and malnourishment and augmenting initiatives like micronutrient supplementation, food fortification, screening for anaemia and public awareness.

IV. Universal Immunization

Priority is to improve immunization with quality and safety, vaccine security as per National Vaccine Policy 2011 and introduction of newer vaccines based on epidemiological consideration. The focus is to be built upon the success of mission Indradhanush and strengthen it.

V. Communicable Diseases

- The policy recognizes the inter-relationship between communicable disease control programmes and the strengthening of the public health system.

- It advocates the need for districts to respond to the communicable disease priorities of their locality.

- The policy acknowledges HIV and tuberculosis infection and increased incidence of drug-resistant tuberculosis as key challenges in the control of tuberculosis.

VI. Non-Communicable Diseases

-An integrated approach for screening the most prevalent NCDs with secondary prevention impact on the reduction of morbidity and preventive mortality.

-Secondary approach for oral, breast and cervical cancer and chronic Obstructive Pulmonary Disease is being focused in addition to hypertension and diabetes.

VII. Mental Health

-Increase the creation of specialists through public financing and develop special rules to give preference to those willing to work in public systems.

-Create a network of community dwellers to provide psychosocial support to strengthen mental health services at primary level facilities.

-Leverage digital technology in the context where access to a qualified psychiatrist is difficult.

IX. Population Stabilization

-Policy imperative is to move away from camp-based services to a situation where these services are available on any day of the week.

-To increase the proportion of male sterilization of less than 5% to at least 30% and if possible, much higher.

Stop and Read

Women's Health & Gender Mainstreaming

There are provisions for reproductive morbidities and health needs of women beyond the reproductive age group (40+) in the National Health Policy of Government of India.

Gender Based Violence (GBV)

Women's access to healthcare is to be strengthened by making public hospitals more women-friendly and ensuring that the staff has an orientation to gender-sensitivity issues. This policy notes with concern the serious and wide-ranging consequences of GBV and recommends that the health care to the survivors/ victims need to be provided free and with dignity in the public and private sector.

12.8 SUMMING UP

- Education and the promotion of the fundamentals of good health should be a global initiative undertaken by all governments along with specific strategies to provide poorer communities with the basic requirements to enable them to adopt healthier lifestyles.
- The National Health Policy 2017 by the central government is a significant step towards ensuring universal health access and services to the citizens, residing both in rural and urban areas. It is the country's largest public health initiative that brings together a vision of a healthy India as well as the dedication to implementing this vision through concrete policy decisions.
- The policy envisages as its goal the attainment of the highest possible level of health and wellbeing for all at all ages, through a preventive and promotive health care orientation in all

developmental policies, and universal access to good quality healthcare services without anyone having to face financial hardship as a consequence.

- The objective of the health policy aims at improving health status through concerted policy action in all sectors and expand preventive, promotive, curative, palliative and rehabilitative services provided through the public health sector with a focus on quality.

12.9 QUESTION

Short Questions:

1. When did India first adopt a formal or official National Health Policy?
2. What does NMEP stand for?
3. When was NMEP started?
4. What are the seven prioritized areas of the current health policy of Government?

Essay Type Questions:

1. Explain the thrust of the current Health Policy of India.
2. Discuss the key principles of Health Policy of India.
3. Is the current Health Policy of India being sensitive to the issue of women? Explain.

12.10 RECOMMENDED READINGS AND REFERENCES

Bhore Committee Report, 1946. Vol. No.1. https://www.nhp.gov.in/bhore-committee-1946.

Cockerham, W, (2001). (ed). *The Blackwell Companion to Medical Sociology*. Blackwell Publishers, Oxford.

Gumber, A and Gupta, D.B. (1999). Decentralization: Some Initiative in Health Sector. *Economic and Political Weekly*, 34(6).

Gumber, A and Gupta, D.B. (2002). External Assistance to the Health Sector and its Contributions: Problems and Prognosis. Indian Council for Research on International Economic Relations, New Delhi.

Jaggi, O. (1979). *Western Medicine in India, Vol XII. Medical Education and Research, History of Science, Technology and Medicine in India*, New Delhi.

Jaggi, O. (1979). *Western Medicine in India, Vol XIV. Medical Education and Research, History of Science, Technology and Medicine in India*, New Delhi.

Jeffery, R, (1988). *The Politics of Health in India*. University of California Press, Berkeley.

National Health Policy of India 2017. Ministry of Health and Family Welfare, Government of India.

****

MODULE IV: POLITICS OF HEALTH AND MEDICINE

UNIT 13: POLITICS OF HEALTH INSURANCE

UNIT STRUCTURE

13.1 Introduction

13.2 Objectives

13.3 Healthcare Delivery Systems

13.3.1 Types of Healthcare Delivery Systems

13.4 The Politics of Healthcare

13.5 Issues in Regulation of Insurance

13.6 Summing up

13.7 Questions

13.8 Recommended Readings and References

13.1 INTRODUCTION

By now you have learnt in detail about the various health policies of the government of India in the sociological context. In this unit, you will learn about the politics of health insurance and healthcare. We are going to learn why it is important to look at the politics of healthcare and health insurances from a sociological perspective. As we know that with the new industrial policies all over the world and the success of globalisation, there has been a drastic change which has impacted all the aspects of a society, one among such aspects is the human health and illness. This unit specifically deals with the question of politicization of healthcare delivery systems and health insurances. Healthcare is everybody's fundamental right. However, it has remained a paradox in the context of India, as under Article 21 of the Indian Constitution, everyone irrespective of one's status quo must get all the necessary health services but in practice, the same is not properly reflected. Politics of healthcare and health acts as a major deterrent in this regard. Healthcare being a state subject, the outcomes have remained divergent because of the differences in the quality of the state administrations. In the same breath, the doctor-patient ratio is also less than the WHO prescribed limit of 1:1000. Hospitals are overburdened,

understaffed and not properly equipped. Our ruling government has prioritized universal health coverage as part of their political regime yet in reality, the politicization of healthcare delivery systems and health insurances stands in the way healthcare services for all.

13.2 OBJECTIVES

After going through this unit you will be able to:

- Explain the healthcare delivery systems;
- Analyse the politics of healthcare;
- Identify the issues in the regulation of health insurance.

13.3 HEALTHCARE DELIVERY SYSTEMS

A healthcare delivery system is the organized response of a society to the health problems of its inhabitants. Societies choose from alternative healthcare delivery models and, in doing so, they organize and set goals and priorities in such a way that the actions of different actors are effective, meaningful, and socially accepted. Sociologically, the analysis of healthcare delivery systems implies recognition of their distinct history over time, their specific values and value patterns that go beyond technological requirements, and their commitment to a set of normative standards (Ritzer, 2007). Healthcare delivery system varies contextually because of the long term cultural and structural developments. It is typified by its structure and relationships between actors and organizations. Healthcare delivery system also has a specific pattern of underlying norms, values, and value orientations. Three factors are significant in understanding the origins of modern healthcare delivery systems: (1) the socioeconomic level of development of a society, (2) its demographic situation, and (3) the epidemiological state of affairs (Ritzer, 2007).

Modern societies developed through industrialization into service economies in a societal transition. At the initial period, they mostly focused

on survival and self-sustenance of the small landholder and his or her (extended) family. But, it evolved towards economies creating more surpluses (wealth) and added value to products that could be sold and brought. Surpluses were commonly used to produce new roles and occupations that were important but not necessarily productive, such as priests, soldiers, tax collectors, and healers. As societies further developed and modernized, more structures and institutions came into existence that reduced the risks of daily life. Here, kinship roles too played a significant role. The widespread kinship-based arrangements were gradually replaced by collective arrangements. This culminated in a demographic transition consisting of the reduction of a population's fertility.

At the end of the 19th century, in Germany, social security systems were first introduced against loss of income due to accidents and disabilities. After many decades public pension schemes were also added. In addition to these collective arrangements, financial surpluses were the foundation of economic growth, by extending educational facilities, also creating more services and typical professions like teachers, healthcare providers, lawyers, and engineers. In Europe, taxes or fee collections were the primary mechanisms and financial resources for these collective arrangements. In the course of this modernization process, the epidemiological transition took place. A gradual shift from the sheer necessity to overcome infectious diseases (mainly affecting infants) toward dealing with chronic diseases (primarily affecting the late middle-aged and elderly). Nowadays, healthcare delivery systems in modern societies are largely focused on the changing needs and demands of an ageing population (Ritzer, 2007).

There is a strong relationship between health and wealth. The wealth of a society is a major determinant of health. Healthcare organizations usually lag behind because of the changing patterns of the needs of the population. The reason is that modern, more sophisticated healthcare delivery systems,

characterized by an advanced division of labour, high levels of complexity, and structural means for coordination and planning require extensive financial resources. Only advanced economies are able to put aside sufficient resources for healthcare (Ritzer, 2007).

13.3.1 Types of Healthcare Delivery Systems

The healthcare sector varies from a market structure as interactions between actors are not organized among producers and consumers and the price of a healthcare procedure is not the balancing mechanism. Instead, healthcare delivery systems consist of five principal factors that are multi-directional and are interdependent. They are the consumers (patients), first-line providers (usually general practitioners), second-line providers (hospitals, institutional facilities), the state, and insurers. Dependent on the organization and system features, consumers (1) have direct access to hospital services; (2) may need a referral from a general practitioner; (3) get their health care expenses reimbursed from an insurer; (4) have total or partial health care insurance coverage and pay taxes or insurance premiums for that reason; or (5) have to pay their bill directly to the provider (like the simple market structure) (Ritzer, 2007).

There are some ideal ways in which state funding is done. They are- *Largely absent:* the state propagates non-interventionism, leaving room primarily for private insurance to fill this role. The organization and provision of healthcare in the US and Switzerland are some examples. *In between*: the state harmonizes the arrangements that developed between groups of citizens (e.g., employers, employees). This is the case in many European countries. *Central*: the state controls funding, with or without the provision of healthcare. The former is/was typical of Eastern Europe and Russia; the latter is typical for the National Health Services (NHS) model as found in the UK. These can be sum up into various models such as –

free-market model, social insurance system and National Health Services (Ritzer, 2007).

13.4 POLITICS OF HEALTHCARE

In this section, you will learn how the politicization of healthcare systems takes place that immensely affects the human body and people at large. In the same breath, we shall try to understand this paradoxical notion by looking into the various healthcare problems that people face in general. We are well aware that despite the intensive and rigorous scientific application in the arenas of healthcare and biological sciences, holistic development and progress in the true sense in these areas is still a distant dream to come true. We are still lagging behind and have a huge unfinished agenda and several problems to be addressed. Our societies are health-illiterate societies that confront extensive health-related issues starting from healthcare systems. Humans, being the highest of all the species have discovered the secret of the cell, explored and mapped the human body. They have also developed a thorough methodology for controlling human reproduction, created lasers that can read license plates, have designed scanning images for every part of the body, and carried out stem cell research that can cure diseases. Yet, we have health policies that limit optimal benefit for our population. We lack behind in comprehensive health education. 50 per cent of all of the 1.9 million sexually transmitted diseases (STDs), including deadly viruses like HIV, occur annually in young people less than 24 years of age. We downplay the value of condoms when scientific data support their use in the prevention of unplanned pregnancy and certain sexually transmitted diseases, including HIV and Human Papillomavirus (HPV). All these are results of short-term political gain by some power elites who capitalize on the sensationalism of the word "sex" brought up in any context.

The human population continues to increase every day. Politics and healthcare are strangely interrelated with little regard for the healthy

outcome of the populace (Elders, 2006). Even though the government is taking initiatives but there are many unprecedented problems that cannot be overemphasized.

Creating a healthy society in the 21st century is very difficult. The first is a crisis of vision. While we have the best doctors, nurses, hospitals, support staff, and cutting-edge research, we do not have the visionaries to design the system to serve all of our people. Our present system is highly monetary-based; it costs very high but delivers too little. It is not comprehensive. Our second crisis is a crisis of anticipation. We are not looking to the future, not using all available resources, not realizing that prevention is far better than intervention. The third is a crisis of creativity. We must learn and develop a healthcare system that is available, affordable, assessable, high quality, and culturally competent (Elders, 2006). We have gained many successes in public health. However, we have lagged behind and have not met the goals of *Healthy People 2000* or *Healthy People 2010*. We will need to use multiple strategies to achieve these goals of Healthy People 2010,

These are:

► increase the quality and years of a healthy life,

► eliminate health disparities, and

► provide access to primary preventive care for all citizens.

We need educational strategies, access strategies, prevention strategies, intervention strategies, leadership strategies, political strategies as well as strategies of compassion. Quality healthcare is a universal concern. However, it is dependent upon a very few key interrelated factors, number one of which is a sound scientific basis with continuing scientific discovery. It is dependent upon having a healthcare system that is coherent, comprehensive, and cost-effective, offers the choice of providers, is accessible and equitable. It involves the education of providers, patients, and the community. Providers must be trained to be culturally sensitive and culturally competent. According to Elders (2006), the

healthcare that we have is very expensive and it is more of a sick care system and not adequately a healthcare system.

In the context of India, healthcare system is the biggest item in the budget every year but there is lack of equity in terms of delivery of the health services to all the sections of the society. We have wide disparities in healthcare in terms of race, language, gender, socioeconomic aspects. We owe the world's best doctors, nurses, hospitals and academic health centres, along with many types of research underway. Our population is growing older, more diverse and with it, India is also another most overpopulated country. The burden of diseases here is shifting from acute illnesses to chronic diseases, mental illnesses and lifestyle behaviour problems. We have healthier children than ever before but many are at critical situations overcoming many risks. Yet, in light of this, a seeming unending lack of decision on healthcare is maintained by some groups favouring their own self-interest. As pointed out by Elders (2006), politicians ask, "What would be the political fallout?" Politicians want to please their constituents enough to have them support their campaigns financially and to gain votes in political contests. Again religious leaders ask, "Does this reflect what I believe?" Religious leaders want to promote their own ideologies or their specific beliefs and organization. The line between government and religion is blurring, possibly because some religious groups can deliver large voting blocs to politicians. He further added that scientists ask, "Is it scientifically accurate or correct?". Science seems to be increasingly less respected except as a moneymaker in today's political climate. Scientists have decoded the human genome system, developed better anaesthesia; developed better microtechnology, developed better nanotechnology, improved communication, and helped women better control their reproduction (Elders, 2006).

In this arena of health and illness and healthcare delivery systems, the corporations play a very crucial role. They have gained strength with the government through controlling the wealth. In some ways, they also act like super-citizens, with rights that are greater than that of individuals. Most

corporations want to spend as little as possible to offer the healthcare required by the government or demanded by workers. They have a vested interest. These corporations are building the corporation itself to provide investors with financial returns rather than spending money on healthcare. Health is present when children are nurtured, loved and cared for by the society in which they develop. Health as said by Elders (2006), is productive constructive, and practical; the absence of health is the decay of not only the individual but of society. Many people from different background have asked different questions from critical lenses. Like the philosophers, ethicists and bioethicists ask, "Is it ethical?" The insufficiency of our healthcare system affects every individual because our society as a whole is adversely affected. Author Kurt Vonnegut writes, "We are healthy only to the extent that our ideas are humane" (as cited in Elders, 2006).

The Educators have pointed out, why it is our job and not the job of healthcare professionals to train the population about healthcare?" They have said that people cannot be educated if they are not healthy and they cannot maintain health without the benefit of education. Education must do more than teach the 3 R's of reading, writing, and arithmetic; it must teach our young people to be physically, mentally, and emotionally healthy. The relationship between poor health and economic status is well documented. An adequate healthcare system is the urgent need of the hour which has been put forward by Elders (2006). It includes:

1. Financial access that includes, supporting academic health centres and biomedical research, guaranteeing health insurance coverage all the people (medical, including health maintenance, dental, mental and long-term), eliminating unfair insurance practices, providing subsidies for the unemployed and impoverished, and preserving and strengthening medicare.
2. Provider access includes providing services where people live, work, and go to school, training more primary care doctors and doctors who are culturally sensitive, increasing incentives for doctors to practice in underserved areas,

3. Cultural access includes training more minority doctors and nurses, providing culturally sensitive health care information and services - "informed access", providing outreach (translation and transportation services) and,
4. Transportation access.

Elders (2006) has suggested that healthcare professionals often say that they do not want to be politically involved but we cannot always sit on the side-lines and let non-health care professionals decide all health policy. As leaders, we must listen to our patients, learn what needs to be done and provide the leadership to get it done. We must educate ourselves about health policy; educate our patients on how to take care of themselves, nutritionally, physically, emotionally, sexually, and mentally. They must be empowered with the knowledge to make appropriate choices for their own health so that they understand political decisions. Healthcare providers must not only be aware of the problems, but they must take proper initiative for healthcare and develop an action plan for accomplishing the implementation of a new healthcare system. We must realize that it is our responsibility to develop a healthcare system that is coherent, comprehensive, offers choice, and is cost-effective, equitable, and universal (Elders, 2006).

CHECK YOUR PROGRESS

1. What are the necessary measures we can adopt for the proper functioning of the healthcare systems?

13.5 ISSUES IN REGULATION OF HEALTH INSURANCE

In this section, you will learn about the issues and politics that are associated with the health insurances in India. India is not only suffering from employment crises but also health crises. Extensive documents and research manifests as evidence of these health crises. Our government has not only set a new course for health policy but also has provided opportunities to redefine the idea of India for the new generations. Health is a state subject and should be given the highest priority. After years of negligence, the Indian Government has at last recognized the plights of the general public about health. The ruling government has implemented two programmes, they are- *Ayushman Bharat* that has created 150,000 health and wellness centres across India that delivers universal health coverage and another is *National Health Protection Mission* (NHPM) that is, a system of health insurance that is trying to cover 500 million people across the nation. But, there are various issues and problems that stand as a barrier to promote a holistic approach to health that comes both from the people itself and also through the vested interests of some power elites. The Indian government is aiming to provide Universal Health Coverage (UHC) to all the citizens by 2022. But it seems a distant dream with the majority of the population losing faith in the quality of the services delivered by the government health centres.

It was found that 56 per cent in the urban areas and the 49 per cent of the rural areas respectively seek private healthcare. As per the National Family Health Survey (NFHS), 55 per cent of households in India do not want to seek healthcare from the public sector mainly due to the poor care, long waiting queues and health services. Again this survey reveals that only 20 per cent women and 23 per cent men are under the coverage of health insurance in India. Health insurance coverage in India is not satisfactory as less than 29 per cent of the population has only one member under health schemes or health insurance. The survey by the NFHS has also found that

most of the population is under the schemes of Rashtriya Swasthya Bima Yojana (RSBY) and the Employee State Insurance Scheme (ESIS). There is a very low penetration of health insurances in India because it is optional. The government can, however, make it mandatory for all.

The Ministry of Health and Family Welfare has brought an agenda to bring both public and private sectors together. In doing so, a model has been developed known as a public-private partnership (PPP Model). The contributions of public and private sectors in the Indian healthcare system are very astonishing. As per the National Sample Survey Office (NSSO), in 2014, 243 people out of 1,000 sought medical treatment within the public healthcare system, whereas 756 people out of 1,000 opted to visit a private doctor or private hospital. In India, the public sector accounts for only about 20 per cent of the total healthcare expenditure, the remaining 80 per cent contribution coming from the private sector. Again between the year 1995 and 2014, India's public expenditure on healthcare rose only from 1.1 per cent of GDP to 1.4 per cent. Of the total private expenditure on healthcare, 94 per cent is the out of pocket expenditure which is one of the highest in the world. During the period 1991-2003, private out of pocket expenditure on health grew at 10.9 per cent per annum in real terms, while per capita income grew only at 3.8 per cent during the same period. This has led to a serious burden not only on the poor families but also the middle class. On average, the poorest 20 per cent of the Indian population is 2.6 times more likely than the richest population to do away with the medical treatment when ill because of the financial reasons.

CHECK YOUR PROGRESS

1. Do Indians stand to benefit from the health insurance push? Reflect.

13.6 SUMMING UP

It has been found that the healthcare sector in India has many complications where the right policy action is extremely critical in determining the future of the sector. The health sector in India faces major challenges owing to the changing demography of the country, the poor state of the public infrastructure, lack of financial resources, poor human capital and poor governance. The low contribution of the public sector in the healthcare industry is at the centre of all these problems. We cannot deny that our government is taking initiatives to rejuvenate and bring change in the existing structure of the health system. In doing so, many schemes and policies are also taken in hand but the politicization of healthcare and health insurances serves as a major deterrent in this regard.

13.7 QUESTIONS

1. What do you understand by healthcare delivery systems?
2. Can we say that the rise in government initiatives on healthcare is truly benefiting people of all strata? Elaborate.
3. Critically analyse the politics of health insurance in India.

13.8 RECOMMENDED READINGS AND REFERENCES

Elders, M.J (2006). The Politics of Health Care. *The Johns Hopkins University Press,* 73: 805-818
Retrieved from: https://www.jstor.org/stable/40971853

Gangoli, L.V, Duggal, R & Shukla, A (2005). *Review of Healthcare in India.* Centre for Enquiry into Health Allied Themes, Mumbai

Ritzer, George (2007). *The Blackwell Encyclopaedia of Sociology.* Blackwell Publishing Ltd., Australia

****

UNIT 14: PHARMACEUTICAL INDUSTRIES AND MEDICINE

UNIT STRUCTURE

14.1 Introduction

14.2 Objectives

14.3 What are Pharmaceutical Industries?

14.4 History of Indian Pharmaceutical Industries

14.5 Pharmaceutical Industries and Society

14.5.1 Sociological Understandings of the Pharmaceutical Industry

14.6 Summing Up

14.7 Questions

14.8 Recommended Readings and References

14.1 INTRODUCTION

By now you have learnt in detail about politics of health insurances in a sociological context. In this unit, you will learn about the pharmaceutical industries and medicines from the sociological standpoint. If we talk in terms of India, it is one of the fastest-growing pharmaceutical markets in the world. It has established itself as a global manufacturing and research hub. In terms of pharmaceutical industries, India is ranked 14th in the world. India has a well-established domestic manufacturing base and low-cost skilled manpower. As such, it is emerging as a global hub for pharmaceutical products. From the last few decades, there is a rapid expansion of this industry. In fact, the Indian pharmaceutical sector is highly fragmented. There are more than 20,000 registered units. Besides, the Pharmaceutical and Chemical industry, India is an extremely fragmented market with severe price competition and government price

control. 70% of the country's demand is met by these Pharmaceutical industries. Considered to be a highly fragmented industry, consolidation has increasingly become an important feature of the Indian pharmaceutical market. This has also affected the daily lives of the people at large which will be discussed in this unit in detail.

14.2 OBJECTIVES

After going through this unit you will be able to:

- Discuss the historical development of pharmaceutical industries;
- Analyse some commercial realities connected with pharmaceutical industries affecting society;
- Explain the pharmaceutical industry from a sociological perspective.

14.3 WHAT ARE PHARMACEUTICAL INDUSTRIES?

The pharmaceutical industry has many unusual characteristics. This makes it very different from the way that the general public normally thinks of an industry. The pharmaceutical industry is also an industry which has many contradictions yet over a century, the industry has made many significant contributions to human wellbeing and has helped in the reduction of ill health and suffering. The pharmaceutical industry is undoubtedly one of the riskiest businesses yet it is perceived by the general public to be very profitable. Some major pharmaceutical companies promote themselves as being research-based organizations whereas most people believe that they spend mostly on marketing than on research. The term pharmaceutical industry means the industrial-scale manufacturing of drugs that natural or of synthetic origin. This industry is made up of hundreds of firms that discover, develop, produce and sell drug products. These products are used by health professionals to prevent and cure some diseases and relieve symptoms of other ailments and sufferings. In the 20th century and specifically from the 1940s onwards, members of the industry have discovered new drugs, which are helpful to cure previously many incurable

diseases. It also prevents diseases that are epidemic in nature, further reduce the frequency and length of hospital stays, and has also increased life expectancy.

Pharmaceutical industries are a group of firms that manufactures and distributes medicines in finished forms. Like ointments, capsules, tablets and syrups which are based upon substances of vegetables, organic or synthetic. The industry performs manufacturing and processing activities. According to, The World Health Organisation (WHO), a drug or pharmaceutical preparation is any substance or mixture of substances manufactured, sold or offered for sale, or represented for use in the diagnosis, treatment, mitigation or prevention of disease, abnormal physical state, or the symptoms thereof in man or animal, (and for use in) restoring, correcting or modifying organic functions in man or animal. There are also different terms related to the pharmaceutical industry such as drug, pharmacognosy, pharmacology, pharmacy and also pharmaceutical.

14.4 HISTORY OF INDIAN PHARMACEUTICAL INDUSTRIES

Indian pharmaceutical history can be said to have begun in the Gupta period. This period was from approximately 320 to 550 CE. There are two foundational texts, *Charak Samhita* and *Sushruta Samhita* that cover medicine, pharmaceutics and surgery. In the pre-colonial period, Indians relied only on the indigenous form of medicine. The use of this Ayurvedic therapy is still being studied and used worldwide. It was only after the colonial rule that in India that Allopathic medication was started. However, the manufacturing and production of such medicines were not done in India. The manufacturing was done in foreign countries using the raw materials imported from India. Again, the manufactured medicines were exported back to India. In the year 1982, a few of the Indian scientists like P C Ray, T K Gajjr, and A.S Kotibhaskar laid a founding stone for the

pharmaceutical industry. In 1901, Acharya P.C Ray started the first Indian Pharmaceutical Industry in Calcutta.

In the year 1907, Alembic Chemical Works in Baroda and in 1919, Bengal Immunity were started respectively. With these developments, the foundation of pharmaceutical industry was laid in India. These drug industries could meet 13% of the country's medicinal requirement. However, there was a huge fall in drug supply from foreign companies due to the Second World War (1939-1945). As a result, several pharmaceutical companies were set up in India to meet the medicinal requirements. With the establishment of such new pharmaceutical industries prior to independence, almost 70% of the countries requirement was achieved. Tremendous growth was seen from the 1950s in this global pharmaceutical sector. We must also note that the Indian pharmaceutical sector was not a part of the global revolution. Capital and new technologies were major factors affecting the growth of the Indian sector. It was also recognized that participation of foreign capital and enterprise will lead to the rapid industrialization of the country. Therefore, the government of India tried to attract multinational companies to invest in India and this resulted in liberalization in government policies.

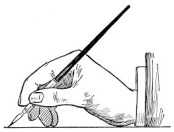
Soon after some time, the Government of India realized that in the pharmaceutical sector, the multinational companies (MNCs) were behaving just like trade agents. As per The Industrial Policy Resolution of 1956, it has classified industries into three categories based on their priorities. "Schedule A" industries were exclusively reserved for the public sector and "Schedule B" consisted of industries, where the public sector would play a lead role and the private sector was expected to supplement the efforts of the State. "Schedule C" consisted of the remaining industries whose future development was left to the private initiatives. Therefore, the pharmaceutical industry fell under Schedule B. However, private industry was also encouraged, though strictly regulated through industrial licensing.

These policies by the Government of India led to the establishment of five public sector companies in India of which two played very important roles- Hindustan Antibiotics Ltd. (HAL) and Indian Drugs and Pharmaceuticals Ltd (IDPL) in 1954 and 1961 respectively.

This change in the government policy has lead to a huge boost in this sector and also the MNC monopolies came under control. Contribution of the MNCs was dropped closer to 50 per cent by 1980s. To increase private companies in the sector, the government again revised the policy in 1986 by relaxing a lot of regulations. But due to lack of proper orientation, the sector suffered industrial sickness. There are also many controversies associated with the pharmaceutical industry which cannot be overemphasized. Among many such controversies, a major organization like the WHO has reported of fake drugs produced from India. Indian government became more cautious about the quality of medicine and therefore introduced certain rules in its new drug policy to follow good manufacturing practices to produce good quality products as per the WHO standards.

Today, India is one of the top emerging markets in the global pharmaceutical sector. The sector is highly knowledge-based and is positively affecting the Indian economic system. The organized nature of the Indian pharmaceutical industry is attracting several multinational companies that are paving their way to invest and operate in our country. The history of the Indian pharmaceutical and healthcare industry has revolutionized and modularized with growth to be organized corporate houses and also taking on several challenges in the international markets which are being supervised by the effective national policies in this sector, and the development of human resources and infrastructure, especially related to science and technology.

CHECK YOUR PROGRESS



1. As per The Industrial Policy Resolution of 1956, under which Schedule does the Indian Pharmaceutical industry fall?

---

2. Mention the two important public sectors introduced by the Government of India.

14.5 PHARMACEUTICAL INDUSTRIES AND SOCIETY

Now, we shall try to understand theoretically and empirically the rigorous framework within which sociology can progressively pursue several answers about 'pharmaceuticals and society'. Sociological interests in pharmaceuticals have intensified, heightening awareness of 'pharmaceuticalization'. It has been argued that 'pharmaceuticalization' should be understood by reference to five main bio-sociological explanatory factors. They are- biomedicalism, medicalization, pharmaceutical industry promotion and marketing, consumerism and regulatory state ideology or policy.

The biomedicalism thesis claims that expansion of drug treatment reflects advances in biomedical science to meet the various needs of health but such advances are found to be weak. It is because significant therapeutic advances have been declining across the sector, including health. Consumerism has undermined pharmaceuticalization sometimes causing many therapeutic sub-fields. Apart from this, consumerism has also led to industry promotion, medicalization and deregulatory state policies that are found to increase pharmaceuticalization in ways that are largely outside, or

sub-optimal for significant therapeutic advances in the interests of the public health (Abraham, 2010).

Abraham (2008) has proposed a realist conceptualization of interests as opposed to the popular view that interests, objectivity and reality are considered to be merely social constructs, and that sociological analyses should be confined to discourse, actor-networks and micro-contextual practices. The objective interests of pharmaceutical companies mostly revolve around profit-maximization and patients/public health in the optimization of drugs' benefit-risk ratios. The relationship between those interests and pharmaceutical regulation is best characterized by 'neo-liberal corporate biases' at the macro- and meso-levels. How such a bias manifests itself at the micro-social level of science-based pharmaceutical testing and regulatory decision making is examined using realist sociology of scientific knowledge, which appreciates that assessment of the validity of techno-scientific knowledge claims is essential for their sociological explanation. As said earlier commercial interests are shown to have biased science away from the interests of public health which favours industry. International comparisons of drug regulation demonstrate that drug injuries are not necessarily an inevitable by-product of pharmaceutical progress because some countries have fewer drug safety problems than others. Similarly, the lowering of techno-scientific standards for drug safety testing is not an inevitable cost of faster development of therapeutically valuable medicines, but a consequence of the internationalization of neo-liberal corporate bias (Abraham, 2008).

Since the 1980s, the concept of 'interests' has become unfashionable in social sciences, giving way to a discourse of 'stakeholders' or 'fluid' 'actor-networks. The attack on sociological explanations using a conceptualization of interests came from within sociology and political commentary. Hayekian writings show the appropriateness of the market for distributing resources and opportunities in society. The intelligibility of

elevating the marketization of society to such importance depended on the presupposition that people do not have interests beyond the preferences that they express in the market. The application of 'stakeholder' discourse reflected the application of this philosophy to the political process. Like consumers in a market, it was assumed that analysis could stop at stakeholders' expressed political preferences. Indeed, some commentators sought to define interests as nothing more than social actions and processes. This is an impoverished view of sociological explanation. At a basic level of sociological theory, it is preferable to differentiate between actions and behaviours on the one hand and interests on the other. It is because there is a possibility that people might behave against their own interests (ibid.). For many years pharmaceuticals escaped sociological scrutiny, because of the extremely limited conception of their links with 'society'. In the late 19th and early 20th century, in Western industrialized countries, 'society' was little more than a market receptacle for the products of expanding industry and profession of science and medicine. Few questioned the wisdom of doctors and scientists involved in the pharmaceutical trade. This permitted dominant producer interests to mobilize the powerful ideology that the market could determine the best remedies for patients and healthcare (ibid.). This view shows the concept of 'interests' seemed very insignificant because there was supposed to be a coincidence of interests between scientists, the medical profession and the society. The first signs of the need to distinguish between the interests of the drug trade and consumers were when consumers were being sold products of defective *quality* – they did not contain the ingredients they were supposed to.

By the early 20th century, some government scientists and influential medical experts were campaigning for drug quality regulation to protect consumers' health against the dangers of drug adulteration. They were joined by the large, technologically sophisticated pharmaceutical firms, who saw an opportunity to close out competition from other drug traders

because the large companies could easily meet the expected new regulatory standards, while other drug producers could not. This coalition was successful in bringing about the introduction of drug-quality regulation. While drug quality was subject to government regulation, there continued an assumption that the techno-science of the 'ethical' pharmaceutical industry could be trusted to provide safe and effective medicines. Patients' interests were subsumed by the industries as it was argued by industry and governments that it was not in firms' commercial interests to produce unsafe or ineffective drugs. However, pharmaceutical companies' commercial interests in the market proved a very poor barometer for drug safety or efficacy as demonstrated by drug disasters and thousands of products that were found to be ineffective when eventually tested independently of the industry. While pharmaceutical firms did not want drug disasters, their commercial interests evidently did not coincide sufficiently with those of patients to investigate thoroughly enough drugs of dubious safety.

Consequently, between the late 1920s and the mid-1970s, all the Western industrialized countries introduced government regulation of drug safety and efficacy, as well as quality. For the first time, only *government* agencies had the legal authority to determine whether a new drug was safe and effective enough to be permitted on to the market (ibid.). Hence, governments came to regulate drug quality, safety and efficacy on the behalf of patients and public health. Governments started accepting that it is their legal responsibility to protect the interests of patients at large. Evidently, therefore, the rationale for the historical emergence of pharmaceutical regulation demonstrates that the health interests of patients and the wider public reside *beyond* the preferences and desires that consumers or patients express in either the market or the political processes.

There is extensive evidence that the corporate bias of pharmaceuticals regulation has taken on a neo-liberal flavour since the 1980s. There is a corporate bias of political *organisation* and *representation* in pharmaceutical regulation. Drug testing and regulatory review are conducted by scientists, drawing on fields such as biochemistry, toxicology, pharmacology, clinical pharmacology and pharmaco-epidemiology. Typically, such scientists deny that their assessments and knowledge-claims are biased by commercial or other political interests. A challenge for sociology was, and remains, to determine how social factors, such as interests, may influence and bias scientific knowledge claims in drug testing and regulation. In short, sociology of scientific knowledge (SSK) was required and an understanding of this sub-discipline within sociology had to be mobilized (ibid.). With sustained sociological endeavour, they can be systematically linked with pharmaceutical regulation and may be best characterized as neo-liberal corporate bias. Such bias in a political organisation at the macro- and meso-levels does indeed produce biases in regulatory science at the micro-level of decision making. The consequence is that pharmaceutical development and regulation is failing to maximize the interests of patients and public health. This failure is however camouflaged by ideologies that give the impression that regulatory approaches promoting the interests of the pharmaceutical industry are also in the interests of public health, when they are, in fact, contrary to health interests. Thus, as realist sociology seeks to discover the truth about how well regulatory agencies achieve their publicly declared goal of protecting public health. Furthermore, as realist sociology exposes and explains the biases of pharmaceutical regulation, it also identifies ways in which such biases could be reduced by bringing regulatory organisation and practice closer to its declared goal to protect public health (ibid.).

14.5.1 Sociological Understandings of the Pharmaceutical Industry

The pharmaceutical industry is now a major global industry dominated by multinational companies selling their products across the world. The leading pharmaceutical companies all have head offices in advanced industrial societies, and their hold on the world market is increasing. In 1992, the top 10 companies accounted for roughly one-third of global pharmaceutical revenue. After a period of consolidation, by 2001 the top 10 accounted for nearly half. Most of their revenue comes from patented drugs, the standard patent now lasting 20 years, although under certain circumstances patents can be extended. The United States is the largest market for pharmaceuticals, accounting for just under half of the world revenue in 2003 (Busfield, 2003).

In order to protect the flow of new drugs crucial to profitability, the companies are also entering into alliances with the smaller biotechnology companies, which now contribute to the research that leads to marketable drugs. In addition, there are pharmaceutical companies in developing countries; the most important are located in India, Brazil and China. These countries are increasingly being pressured to accept World Trade Organization requirements on intellectual property and the companies largely concentrate on the production of 'generic' drugs that are out of patent. Despite the importance of the industry as a productive activity to national economies and international markets and its role in patterns of consumption, it has not received much sociological attention. Sociologists with keen interests in health and illness have done some research on pharmaceutical regulation, on the controversies around specific preparations that draw on the sociology of science and rather more on medical prescribing. Unfortunately, the industry is rarely mentioned in some major textbooks. The lack of interest in the industry may spring from the field's origins as sociology of medicine and, in Britain, from the focus on the experience of illness, a reflection of the sociological tendency to

focus on the powerless rather than the powerful. Notwithstanding the industry's importance to the global economy, standard sociological discussions of globalization have not used the industry as a case study. Nor do sociological analyses of consumption discuss medicines as a major consumer good, even though they are open to many of the analyses of the construction of desires and wants as other goods. Perhaps this is because the medical prescribing, that mediates between the industry and consumers, makes medicines seem less obviously governed by consumer choice. Pills also belong to the category of 'inconspicuous consumption', items that are not part of any visible display and have received less sociological examination (ibid.).

Pharmaceutical industry forms a major power within both global and national economies and therefore, it should be given adequate focus. Also, the industry also plays a significant role in shaping the healthcare in a country because the prescribing of medicines occupies a dominant place in medical care. There has also been a significant cultural shift in which people increasingly see medicines as a way of solving a wide range of problems, which are transformed into illnesses, instead of seeing them as a possible solution for a narrower range of physical sicknesses. Consumption of pills has become a conspicuous feature of life in contemporary societies which is likely to continue in the future as well. According to Busfield (2003), drugs are frequently used indiscriminately, for example- antibiotics. This is done basically through three ways. Firstly, pills are frequently taken by individuals whose problems can be easily taken care of through other means. Besides, they take those pills despite the fact that they have little or no benefit for them and also have chances for side effects. Secondly, pills are frequently produced and prescribed in dosages that are far too high. And thirdly, pills are often prescribed for longer period than needed. Busfield argues that an industry in the business of meeting health needs, in fact, creates a culture in which the use of drugs is encouraged even when this is unhelpful and even harmful. This is not just a matter of the

industry's promotional activities but also arises because of its contribution to the science on which judgments of the safety and effectiveness of drugs are made.

Drawing on the work of sociologists of science, science must underpin drug evaluation. Latour's influential book, *Science in Action,* first published in 1987, in which he develops an interesting analysis of how scientific facts are constructed. He was much concerned with examining the black boxes before they were closed that is, 'science in the making'. This he sees as involving a whole series of uncertainties, controversies and alliances between actors – a term he uses to embrace things as well as people. Latour's analysis to examine how the industry contributes to the construction of scientific facts about new drugs; how it helps to ensure they are judged safe and effective by drug approval agencies, so closing the black box for many people; and consequently, how once launched onto the market companies are in a relatively powerful position to keep the box closed and to encourage a drug's use, often well beyond its useful boundaries. A common criticism of writers such as Latour is that they do not pay enough attention to issues of power. The point is not that power has no part in the analysis; indeed, Latour's language is redolent of power with his reference to trials of strength. Busfield draws on two sets of ideas about power: first, Light's (1995) notion of countervailing powers; and second, Mann's (1993) discussion of sources of power. Applying Latour's analysis to the development of pharmaceuticals, it is helpful to consider two stages in the making of scientific facts about drugs. The first, pre-approval stage is the formal approval necessary for a drug's release into the market. The second is that of post-approval evaluation. The first aims to establish a drug's safety and effectiveness in order to secure approval; the second involves a refinement of the assessment, relating to questions such as: For what conditions more precisely is it useful? What are its side effects if used long term? What is its value in treating less serious cases? (Busfield, 2003).

Whilst the boundaries of sociological endeavour are potentially extensive, the discipline has always been selective in its concerns. The absence of attention to the pharmaceutical industry is regrettable, not least because, in alliance with medicine, the industry is shaping the ways in which society responds to a very broad range of problems. It is contributing to an extension of the territory of medical problems and the tendency to respond to problems by pill taking as if the problem will be solved by magic. This response often fails to grapple with the sources of these problems. As many writers have noted drugs provide an individualized solution to problems that often have social and structural origins, which are not tackled by pharmaceutical remedies. It is true that with time a fuller evaluation of a drug takes place. Yet there is little sign that this is leading to a more cautious approach to pharmaceutical use. Health services based on considerations of welfare and professionalism and a commitment to patients' interests become the means of generating large profits for a highly commercial industry that uses scientific fact making as a tool to serve its own interests as much, if not more, than the interests of health service users (ibid.). Sociology takes a great interest in understanding this.

14.6 SUMMING UP

Recent years have witnessed a rising interest in pharmaceuticals and society, a trend which in part reflects the growing power and influence of the pharmaceutical industry over all our lives, as patients, consumers and citizens. Hardly, a day goes by, without some story or other in the media about pharmaceutical products and practices. On the one hand, newspaper headlines boast new breakthrough 'wonder drugs'. On the other hand, stories of drug crises or controversies are regularly seen in the media, thereby stirring fear and fascination in the public mind as to the power of pharmaceuticals and the industry that markets and manufactures them. Clearly, pharmaceuticals have an important role to play in the alleviation of human suffering and the saving of lives.

14.7 QUESTIONS

1. Discuss the historical significance of the Indian pharmaceutical industries.

2. Is there any relation between the pharmaceutical industry and society? If yes, critically explain the nexus between the two to support your answer.

3. Write a note on the sociological understandings of the pharmaceutical industry.

14.8 RECOMMENDED READINGS AND REFERENCES

Abraham, J. (2008). Sociology of pharmaceutical development and regulation: a realist empirical research programme. *Sociology of Health and Illness,* 30: 869-885
doi:10.1111/j.1467-9566.2008.01101.x

Abraham, J. (2010). Pharmaceuticalization of Society in Context: Theoretical, Empirical and Health Dimensions. *Sage Publications*
doi: 101177/0038038510369368

Busfield, J. (2006). Pills, Power, People: Sociological Understandings of the Pharmaceutical Industry. *Sage Publications*, 40: 297-314
doi: 10.1177/0038038506062034

Tylor, D. (2016). The Pharmaceutical Industry and the Future of Drug Development. *Research Gate*
doi: 10.1039/9781782622345-00001

****

The Centre for Distance and Online Education was established in 2011 with the aim of disseminating knowledge and imparting quality education through open and distance learning mode. The Centre offers various post-graduate, undergraduate, diploma and certificate programmes in emerging areas of science and technology, social sciences, management and humanities with flexible system to cater to the needs of the learners who otherwise cannot avail the regular mode of education. The basic focus of the centre is to prepare human resources of the region and the country by making them skilled and employable.

CENTRE FOR DISTANCE AND ONLINE EDUCATION
TEZPUR UNIVERSITY
(A Central University)
Tezpur, Assam - 784028
INDIA

Visit us at: www.tezu.ernet.in/tu_codl