HEALTH AND SOCIETY

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HEALTH AND SOCIETY

Unit - I

Concept of Health: Definition of Health, Dimensions of Health, Right to Health, Responsibility for Health, HealthCare.

Unit - II

Social Dimensions of Sickness Behavior: Informal Sickness Behavior, Formal Sickness Behavior; the Sick Role, Social Correlates of SicknessBehavior.

Unit - III

The Hospital and Physician in Society: Hospital as a Social Institution, Doctor Patient Interaction in HealthCare, Functions of a Physician.

Unit - IV

Concepts of Community and Public health: Community Health, Public Health, Public Health in India.

Unit - V

Health Policy and Planning in India: Health System in India, Health Planning in India.

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Lesson 1.1 - Concept of Health

Structure

- 1.1 Definition of Health
 - ▶ Health in different cultures
 - ▶ Health and well-being
 - Health and wellness
- 1.2 Dimensions of Health
 - Physical dimension
 - Mental dimension
 - Social dimension
 - Spiritual dimension
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 - Other dimensions
- 1.3 Right to Health
 - > International conventions on health as a human right
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- 1.4 Responsibility for Health
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- 1.5 Healthcare
 - Healthcare systems
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- 1.7 Self-Assessment Questions
- 1.8 References

Learning Objectives

- 1. Understanding the meanings and definitions of health in various contexts and milieus
- 2. Understanding the role of the World Health Organisation
- 3. Understanding the differences between health, well-being and wellness
- 4. Understanding the various dimensions of health
- 5. Analysing the right to health and its status around the world
- 6. Understanding the responsibility of various parties towards upkeep of health
- 7. Understanding the meaning of healthcare, including healthcare systems, levels, etc.

1.1 Definition of health

Health is an integral part of an individual's well-being. Social and financial well-being is rendered ineffective is a person is not able to enjoy the fruits of their labour because of ill-health. Governments, policy makers, and various national and international organisations around the world spend an immense amount of money and logistics into the control and curbing of infectious diseases, as well on ensuring that the current good health of people are maintained. A healthy society is needed not just for the prevention of future pandemics and epidemics, but also for the maintenance of a stable economy, a functioning of a well-organised state as well as to enable to enjoy the benefits of being a contributing member of society. As the COVID19 pandemic has shown, any large-scale infection that claims many lives will directly have an impact on the labour levels and economy of the country. This in turn directly affects the distribution of goods and services, as well as the causes imbalance in the structure of a society. This is why health and medicine ceases to be a purely individual matter, and becomes a matter of social significance.

The World Health Organisation defines health as 'a state of complete physical, mental and social well-being and not merely the absence of disease of infirmity.' This definition points out to the various aspects of health, which includes social as well as mental well-being. Physical diseases and sickness may keep a person from functioning and contributing in an optimal manner to society. However, the mere lack of any physically debilitating condition does not mean that an individual



is free from any restriction to be a full-fledged part of the community. Mental well-being assures the ability of a person to be well-adjusted and to work in tandem with other members of society to attain social as well as individual goals. Social well-being refers to the accessibility of public health services, sanitary and hygienic living and working conditions, and structural accommodations that can allow for contingencies arising out of a medical emergency. This definition of health also places health as a social and state responsibility, thus moving it away from solely from an individual. While every individual has a responsibility to maintain and take care of one's health, health is also a shared responsibility in the sense that societies should ensure that its members have a safe and hygienic environment to grow up in, and that states should provide for the remedial measures of any unfavourable health conditions.

Study Box 1

The World Health Organisation was formed in 1948, as an agency of the United Nations. It is headquartered in Geneva. It is the primary global organisation that co-ordinates health and medical activities between countries. Among its primary objectives are the provision of universal healthcare for all aspects of a person's health such as pregnancy, diseases, vaccination, etc., increasing accessibility to public health facilities, etc. The WHO has been instrumental in co-ordinating a universal response to pandemics and infectious diseases. The eradication of small pox, the drastic lowering rates of polio and tuberculosis, the control of the EBOLA epidemic, and the distribution of vaccines for COVID19 are some of the achievements which have been possible due to the WHO's working with national governments. WHO works with a network of scientists, doctors and other medical staff and other personnel in spreading awareness about diseases, hygiene and sanitation, diet and nutrition, narcotic abuses, mental health, and other aspects of an individual's well-being. Tedros Adhanom Ghebreyesus, from Ethiopia, has been serving as the director general of WHO since 2017.

Learning Activity **1.1** *Visit the WHO's website, and read the Preamble. Make a list of the concrete steps and policy enactments that have been made to achieve the various points in the Preamble (except the first point).*

In a more local and immediate context, India is a storehouse of the wealth of medical sciences. Ancient Indian literature provides a unique

understanding of wealth. The earliest writings on health and medicine can be seen in the Atharvaveda, written almost 5000 years ago. However, it was with the advent of Sushruta and Charaka, who wrote Sushruta Samhita and *Charaka Samhita* respectively that the science of life, also called *ayurveda*, originated in India. Ayurveda maintains that good health is dependent on a person's lifestyle, environment, as well as on the three humors (similar to the Greek system of medicine), or the tridoshas, the balance of which is necessary to keep oneself healthy. Ayurveda uses herbal and natural remedies in treatments and prevention of diseases. Yoga also originated in India, and both these systems of medicine and healthcare focus on the positive association between an individual and their surroundings. Hygiene was also an important part of ancient Indian systems of medicine, with strict instructions given regarding brushing of the teeth, use of oils in bathing, etc. Even though early practice of ayurveda laid stress on the spiritual and religious aspects of medicines, latter practices saw a distinction being drawn between the two. However, contradictory to modern biomedical meanings of health, Ayurveda considered that health includes both physiological and psychological components.





Figure 1: Sushrutha

Figure 2: Charaka

Thus, we see that the ancient Indian understanding of health is not much different from WHO's definition which is taken as a standard meaning of health today across the world. A further definition of health has been proposed by Mc.Cartney, et al., (2019), which states that health is ' a structural, functional and emotional state that is compatible with effective life as an individual and as a member of society'. Keeping these in mind, it is possible to deliberate upon what are considered to be three essential definitions of health: the absence of a disease; a state of an individual that allows them to perform their role in society; and a state of balance between an individual and their social and physical environment.¹

Let us see in detail the implications of these definitions:

- Health is a state of being diseased. Being diseased means that an individual's abnormality in health can be detected only by a person whose opinion in this matter is seen as valid and legitimate, i.e., a medical professional. However, there are nuances to this diagnosis. It is common for two doctors themselves to have different opinion on a diagnosis. Furthermore, owing to technological progress, diseases that were not diagnosed earlier might be detected at a later stage. Added to this is the complication of new and emerging diseases, and the question of codification of abnormalities.
- Being healthy implies that an individual should be able to participate in all aspects of social life, in accordance with their role. However, there are many situations where a person is seemingly health from the outside, but is unable to contribute to society or even to adhere to social norms and mores. During ancient times, such individuals may have been branded as being possessed by spirits or being influenced by supernatural forces. But since the advent of the 20th century, research has shed light on mental health illnesses and learning and developmental disorders, which would affect the ability of a person to contribute to society in a conventional sense.
- While focusing on the social aspect of a disease, we draw further from the second point regarding the ability to contribute to society in an optimal manner. Once it is established that a person has a disease or a syndrome that would prevent them from executing their social roles fully, what is needed next is to find a state of balance between their individual condition and their social responsibilities. This would extent from measures to taken to recuperate (such as hospitalisation) to alternate mode of education to harness different abilities (such as special schools and occupation therapy). This measures to find an equilibrium also removes the essentialising feature of the disease from an individual's identity; rather, the infirmity becomes merely one aspect of the individual's life and activities.

- Health should also be understood not only in the diagnostic and remedial sense, but also in the preventive sense of the term. For example, a person who has been diagnosed with a respiratory disease may be brought back to the condition of 'good health' with adequate treatment. However, it is also important to keep in mind that this respiratory disease could perhaps have been prevented by observing healthy habits such as not smoking, and by adhering to environmental cleanliness, such as regulating air pollution.
- Finally, there is the role of the patient themselves in defining health. Modern medicine is slowly moving away from the notion that only the doctor is equipped to make judgements on a person's health. Increasingly, medical practices, diagnoses and treatments are built around a dialogue between the doctor, the patient, and perhaps even their family and friends. In such a scenario, the different value systems of the society also come into play while constructing a definition of health. For example, in Western societies, a person diagnosed with clinical depression may have the means and the support required to consult a psychologists, whereas in most South Asian societies, such support maybe less forthcoming (either due to societal judgements, or due to a different understanding of mental health).

Thus, any definition of health would have to take into account the nuances of social and cultural change. Research of philosophers such as Michel Foucault and Georges Canguilhelm also point to how definitions of health change over the course of centuries due to actions from states and the medical body as a whole. Thus, while any definition of health can be broken down into complicated parts, what is of utmost importance for sociologists is the relationship between a diseased person and society.

Health and Well-Being

Often, the terms well-being and health are used synonymously or even in tandem. What does 'well-being' mean, and how is it different from 'health'? Certain scholars describe well-being as a mix of components such as standard of life, level of living and quality of life (Park, 2015). However, according to the Centre for Disease Control and Prevention, well-being is a subjective term indicating that an individual is happy with their life and social situation. This understanding includes both physical health and mental health, along with other determinants, such as economic and social well-being, job satisfaction, feeling of productivity, etc.

Health and Wellness

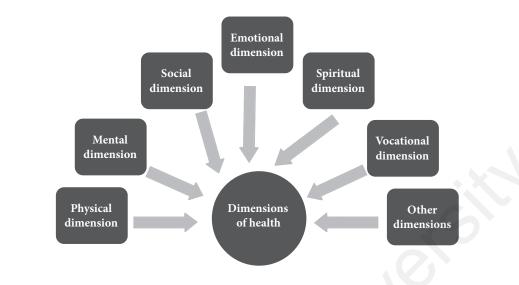
The differences between health and wellness arise out of a criticism of the definition of health given by WHO, because it was deemed to be beyond the scope of practical attainment (Stoewen, 2015). The National Wellness Institute defines wellness as 'an active process through which people become aware of, and make choices toward, a more successful existence' (in Stoewen, 2015). Wellness is related to alleviating stress and in living a holistic life. While health describes mainly a state of being, wellness is applicable for a larger period of time, with lifestyle being a component of it.

With these nuances in mind, let us look at the various dimensions of health.

1.2 Dimensions of Health

Though health is often assessed in the physical aspect, this can only be one part of the overall understanding of an individual's well-being. For a more holistic understanding of health and wellness, various factors have to be taken into account. Thus, in contemporary times, the various dimensions of health can be listed as follows:

- i. Physical
- ii. Mental
- iii. Social
- iv. Emotional
- v. Spiritual
- vi. Vocational



i. Physical Dimension

This is the most visible dimension of health, and it refers to the state of a 'normal' functioning of the body. The physical aspect refers to no visible skin problems, the optimal functioning of the organs and cells in the body, and the body's ability to perform all the tasks and functions expected of it. Evaluation of the physical dimension of health is most often performed by the self and medical personnel by

- > Self- inspection of the body, organs, and their functioning
- Conducting medical tests to asses respiratory, digestive and neurological functions
- > Assessment of agility and mobility by fitness tests and exercises
- Evaluation of nutrition and dietary habits
- Use of laboratory tests to check for any abnormalities in bloods or tissues

Thus, this aspect of health puts stress on healthy diet, avoidance of habits such as smoking, drinking, etc., and participating in exercises and fitness.

ii. Mental Dimension

As mentioned above, it was only in the beginning of 20th century that western biomedicine started enquiring into the relationship between physical and mental health. Till then, physical and mental health were not considered to have an influence on each other. However, recent advancements in science have shown how certain mental conditions may aggravate physical sickness also. Thus there is a need to understand how a mentally healthy person differs from one who is suffering from a mental illness. The traits of a mentally healthy person is described as follows

- Such a person is able to form good relationships with the self and with others in a conflict manner, thus allowing for co-operation and living without hostilities
- During an encounter with a negative situation, they are able to assess the possible ways of resolution in an objective manner, without resorting to anxiety
- The person is aware of their goals and the steps needed to be taken to attain those goals
- > They have a good sense of self-esteem

Mental health is also deeply connected to childhood experiences, behavioural patterns and emotional health. While excessive dependence on others is also seen sometimes as a debilitating factor, individuals are expected to form relationships with those around them in a mutually helpful manner.

A scientific understanding of mental health is still in its nascent stages, and because of this, there is still a lot of confusion regarding this. Furthermore, the cultural complexities in understanding and handling healthcare has posed challenges in arriving at a universal method of diagnosis and treatment. Most mental health assessments are done at the initiative of the patient themselves, where a medical personnel may administer a questionnaire or conduct an interview. In some cases, medical tests may be prescribed. Medications are usually administered to alter the chemical make-up of the brain, since this has a direct impact on a person's mental health. Along with this, counselling or therapy sessions are also prescribed. Of late, art and music therapy are used to help with mental health illnesses. In some cases, hospitalisations also occur. Practices such as lobotomy and electro-convulsive therapy which were popular in the 20th century are not in vogue anymore.

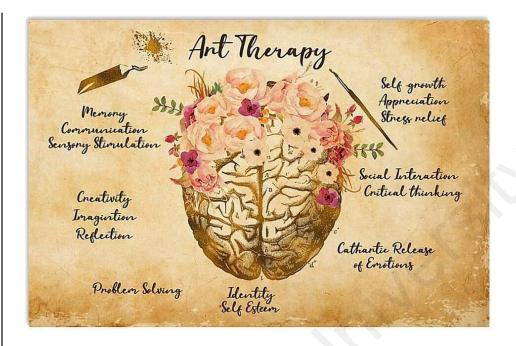


Figure 3: The benefits of art therapy

iii. Social Dimension

Social dimension has been defined as the 'quantity and quality of an individual's interpersonal ties and the extent of involvement with the community' (Park, 2015). This relates to how an individual associates and relates to others in society. An individual is to see themselves as being an integral part of the society they belong to, and should possess social skills that enable to function and contribute in an expected manner. The social dimension includes conducive environments, both material (financial resources, standard of living, etc.) as well as human (interpersonal relationships).

The social dimension is often assessed by observing and inquiring into an individuals' integration and assimilation into society. Many schools have activities that focus on training the child to behave as a part of society, and not merely by prioritising themselves. Such activities impact future understanding of roles and duties. For example, in Japan, the cultural learning enables a child to think of themselves as having responsible citizenship duties. This is reflected in the whole society's importance on maintaining public hygiene and courtesy to others.

iv. Spiritual Dimension

Spiritual dimension is a relatively new aspect in understanding health and wellness. In this aspect, an individual seeks to understand the meaning of life, and tries to co-ordinate their life paths with a broader vision



and meaning they discern from their existence. With life experiences, an individual may also gradually develop a perspective with which they look at the world; this is called a 'world view'. Spiritual dimension also includes the tolerance for others' beliefs and worldviews, and an ability to appreciate the multiplicity of existences in the world. However, this being a relatively new dimension of health, is still being investigated and understood.

A major example of the focus on the spiritual aspect of health can be seen in the New Age movements of the late 20th century in the West. Disillusioned by the western paradigms of healthcare, many young people sought to integrate eastern spiritual practices in their wellness regimen, leading to the popularity, among others, of yoga. Eastern religious rituals were also followed for the spiritual meanings they hold. Even today, the consumption of *ayahuasca*, a traditional ritual drink of the Meso-American tribes, by Western population is seen to be a part of the spiritual quest in the broader goal of attaining overall good health.

v. Emotional Dimension

Park (2015) describes that while mental health pertains to 'knowing and cognition', emotional health relates to 'feeling'. Emotional health means that an individual is aware of their own feelings and seeks ways in which to control and regulate them. By doing this and by negating their own negative emotions, an individual may be able to relate better with themselves as well as with others. It is also possible in such a scenario to form trustworthy relationships with others.

Earlier, emotional health was seen as not related to physical health. However, research has pointed out that emotional distress causes physical hurt, including developing ulcers, headaches, etc. What used to be considered solely psychosomatic disorders are now being explored within the realm of emotional health now. Practitioners suggest that meditation, forming deep social bonds, mindful behaviour and regulation in use of intoxicating substances may allow one to retain a good emotional health.

vi. Vocational Dimension

This aspect of health pertains to the career and job of an environment. For most people, their job forms as important part of their lives, and so deriving some sort of satisfaction from their jobs is a part of healthcare. Apart from generating income, an ideal job would enable a person to attain self-actualisation. Many people, when faced with retirement, have trouble adjusting to their new reality; it is not uncommon to hear older people mention a lack of purpose in their post-retirement lives. This highlights the importance of vocational dimension in health.

Perhaps the most famous illustration of vocational health was highlighted by the psychologist Abraha m Maslow in 1943. Writing about the 'hierarchy of needs', he wrote that every human being has two sets of needs: deficiency needs (which have to be met to lead a physically healthy and safe life, i.e., physiological needs, safety, love and be longing, etc.), and growth needs (which will make an individual fulfilled, i.e., self-esteem and self-actualisation). This is also called Maslow's theory of motivation, and plays a crucial role in determining the way a workplace has structured itself to provide for the health of its employees.

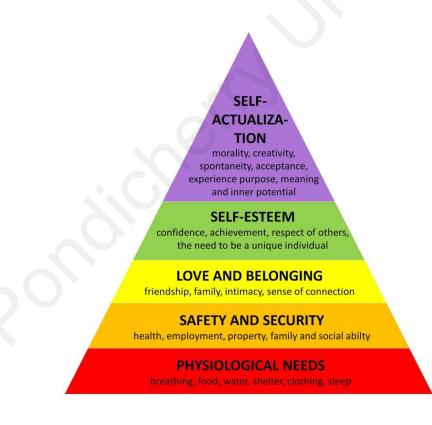


Figure 4: Maslow's Hierarchy of Needs

Individuals seek vocational health by exploring a variety of career options before settling on one. The responsibility for good vocational health also depends on the employers, which provide for growth as well as work-life balance, as well as on the state, which makes policies that ensure a healthy work environment. Closely related to emotional and vocational dimension of health is the intellectual dimension. In this aspect, a person is to develop oneself intellectually by consuming media such as books, films, art, etc., which would aid in personal growth. This enables a person to be kept abreast of contemporary events, as well as the complexities of the world. Paying attention to one's intellectual health not only aids in a better vocational health, but also helps us to empathise and be sensitive to others' thinking and ways of living, thus contributing to emotional wellness. This also enables a person to understand their own creativity and unique perspectives, and will lead to betterment of skills such as problem-solving, innovation, etc.

vii. Other Dimensions

Environmental dimension: This is an aspect that has gained much attention in recent years, due to global warming and climate change. It is evident that the environment and nature affect health drastically. Heatwaves affect a majority of the population every year, and cause severe health conditions. Added to this is the chronic conditions of pollution such as air and water pollutions, which lead to the ingestion of harmful chemicals by humans, leading to poisoning, cancer, etc. Furthermore, environmental disaster such as oil spills (e.g., British Petroleum oil spill in the Gulf of Mexico, 2010), nuclear accidents (e.g., Chernobyl disaster, 1986; Fukushima disaster, 2011), and industrial accidents (e.g., Bhopal gas tragedy, 1984) led to environmental damage that not only affect multiple species, but cause negative health conditions even after decades.



Figure 5: The Effects of Bhopal gas tragedy is seen even after 30 years

- Financial dimension: This refers to financial security, such as being aware of one's resources, savings and ability to manage them. While in a direct way, good financial resources enable an individual to access good health services, in an indirect way, it also leads to the living of a healthy lifestyle, by the consumption of health food products, more scope for physical activities, etc.
- Cultural dimension: A person's perception and reception of disease and healthcare is determined to a large extent by their cultural surroundings. This is not only related to the awareness of a disease, but also to the opportunities to access healthcare without stigma, in a supportive environment. For example, control of HIV/AIDS in many societies is very difficult due to the sensitive nature of the syndrome, and the attending cultural bias and prejudices.

Learning Activity 1.2: Interview a few people close to you (such as family and friends). Ask them what they calculate when they articulate about health. Make a list of such dimensions that they mention, and compare with the dimensions mentioned above. In addition, describe how these dimensions change across gender, age, social class, etc.

1.3 Right to Health

The notion of health as a fundamental human right is a relatively new one. The Preamble to the Constitution of the World Health Organisation mentions that 'the highest attainable standard of health as a fundamental right of every human being'.

Everyone has the right to a standard of living adequate for the health and This addition to the Preamble sets out health as a mandatory feature of policy formation in the member countries, though many countries are far from implementing the legal and structural framework for the execution of this. This was the first time in world history that health was laid down indubitably as an essential human right.

The guiding international document on human right is the Universal Declaration of Human rights, which was adopted by the United Nations General Assembly in 1948, in Paris. Among various articles which lay out the basic human rights that every individual is entitled to, regardless of social class, race, age, gender, etc., such as a right to life, to be free from slavery and bondage, privacy, freedom of speech, religion, right to nationality, work, etc., is an article regarding the right to health.

Article 25 of Universal Declaration of Human Rights, 1948

- 1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
- 2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

According to a factsheet prepared by the UDHR and WHO, there are various aspects to the right of health. They are as follows:

- It is an inclusive right; this means that sanitation, nutrition, housing, safe working conditions, and gender equality are all part of this right
- It comes with the freedom to choose the medical treatment, and the freedoms to be free from experimentation and non-consensual treatments
- It includes the entitlements of access to health education, medicines, and community-level participation in policy making
- No discrimination is to be shown on the basis of race, gender, ethnicity, etc.
- ▶ Good and accessible health services are to be maintained

The International Covenant on Economic, Social and Cultural Rights is considered to be the main document in the protection of right to health. It states that every signatory state should 'recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health'.

According to the Right to Health factsheet of the WHO and the UNHCHR, 115 nations have imbibed healthcare as an essential right in their constitution. In particular, the factsheet pays attention to marginalised groups while talking about healthcare, since they are more vulnerable to disruptive medical conditions as well as lack of access to treatment. In particular, women, children, intersex people, migrants, people with disabilities, and people living with HIV/AIDS may be more prone to adverse health conditions, due to structural, social and cultural conditions, which prevent them from accessing healthcare immediately and easily.



Figure 6: A rally demanding health as a human right

Many other international conventions and declarations have also placed the right to health as an indispensable part of human rights. Some of them are as follows:

- The International Labour Union prioritises occupational health and safety. It pays attention to the working conditions, and this is reflected in the ILO's functional principles, and has been further reiterated by the Occupational Safety and Health Convention (No. 155), 1981, and the Promotional Framework for Occupational Safety and Health Convention (No. 197), 2006. The ILO also observes April 28 every year as the World Day for Safety and Health at Work.
- The Food and Agriculture Organisation lays down its goal as one which aims at achieving 'food security for all and make sure that people have regular access to enough high-quality food to lead active, healthy lives'. Apart from taking on the duty to provide nutritious food leading to a healthy life, ILO has also recently promoted a One Health approach to agrifood systems, which places health in an interconnected network of humans, nature, animals and other members of the ecosystem.
- Under the Geneva Convention, during periods of conflict, the health and the accessibility of medical treatments to civilians should not

be hindered. With respect to this, some of the guidelines laid down are: doctors and physicians should not be used during wartime for any other service; medical confidentiality should be maintained; hospitals and medical personnel are not to be attacked; personnel belonging to the Red Cross, Red Crescent, etc., should be respected and granted safety to perform their duties.

- The Preamble of the World Medical Association Declaration on the Protection and Integrity of Medical Personnel in Armed Conflicts and Other Situations of Violence (2011) also mentioned healthcare and medical assistance as human right even in times of emergencies and conflicts.
- ➤ The UN Declaration on the Rights of Indigenous People (2007), among other rights, in Article 31 recognises the rights of indigenous communities from around the world to 'maintain, control, protect and develop their....medicines, knowledge of the properties of flora and fauna.' Article 24 also talks about the right of the indigenous people to continue their traditional health and medical practices, and reiterates their right to healthcare.
- United Nations International Convention on the Elimination of All Forms of Racial Discrimination (1965) and UNESCO's Declaration on Race and Racial Prejudice (1978) also specify access to healthcare and public health services to all people, irrespective of which race they belong to.
- ➤ The United Nations Convention on the Elimination of All Forms of Discrimination against Women (1979) specifies that women should have access to healthcare, health education, and safe working environment. Furthermore, it stresses on the importance of healthcare in rural areas.
- The United Nations Convention on the Rights of the Child (1989) mentions in Article 24 that all children have the right to enjoy the highest quality of health. This includes access to nutritional food, preventive healthcare, as well as ability of mothers to breastfeed their new-borns.
- Similarly, the United Nations Convention on the Rights of Persons with Disabilities (2006) mentions in Article 25 about healthcare and disabled people in detail. Specifically, disabled people are to access sexual and reproductive health, early diagnosis and treatment to avoid further disability, and easy access to health services.

With regard to India specifically, the Directive Principles of State Policy put the onus on the State to provide for healthcare and medical services to the citizens. Though not directly mentioned in the Fundamental Rights, right to health forms a crucial aspect of Article 21, which deals with right to life with dignity. Two famous cases that dealt with the question of right to health has been Paschim Bangal Khet Mazdoor Samiti and other Vs. State of West Bengal case of 1996, and the Parmanand Katara Vs Union Of India of 1989, which held the right of the patient to avail treatment in a welfare state.

Recently, in the state of Rajasthan, the government has introduced a bill to codify health a human right; however, the protests against the bill show the complexities of such an action and also s hed light on how best to proceed with the codification.

A 2013 study revealed that 73 UN nations provide health as a basic right, while 24 nations have set their aspirations to reach this goal. However, in practicality, only 27 nations have made public health truly accessible to its citizens. However, this study also notes a positive trend that many countries have been modifying their constitutions to reflect an increasing support for easy access to healthcare and medical care. Egged on by WHO and UDHR, these countries are steadily passing legislating which will make healthcare less expensive and more readily available. Countries such as Sweden, Norway, Canada, Finland, Cuba, etc., are known for their robust public health institutions. The National Health Services of the United Kingdom is also hailed as a standard in provision of public health.

A good standard of health is an essential part of the calculating of the Human Development Index. When considered within these parameters, a few countries out-perform others. These are countries where healthcare is seen as a fundamental right, and where the state has put in place a system of public infrastructure of good quality that provides free or subsidised treatments to the population.

According to the Legattum Prosperity Index, the countries with the best performing healthcare sectors are mostly in Western Europe.



LPI 2020 Ranking	Country
1.	Denmark
2.	Norway
3.	Switzerland
4.	Sweden
5.	Finland
101.	India
165.	Yemen
166.	Central African Republic
167.	South Sudan

Thus, from the above data, we can see that India, in spite of the Constitutional aspirations to provide for free and accessible healthcare, and in spite of being a signatory to many international conventions guaranteeing the right to health, has a long way to go in terms of codifying this and implementing policies towards that end. However the fact that healthcare is enshrined in the Constitution as a Directive Principle of State Policy serves as a guide for future action to be taken in this regard.

Learning Activity 1.3: sing the list given above, gather information about the state of public health infrastructure in the top-performing countries. Compare and contrast with India's public health infrastructure.

Learning Activity 1.4: How are marginalised populations affected by a lack of healthcare? Using the discussion above as a reference point, collect sources on the COVID19 pandemic, and the complex ways it impacted sections of population who were also vulnerable to social inequities.

1.4 Responsibility of Health

Health is a collaborative act. Not one factor or individual can be solely held responsible for the maintenance of the health of the community. Depending on the nature of the disease, the responsibility for preventing that can also be diffused across various sections of society. Increasingly, around the world, and in India specifically, lifestyle diseases are on the rise. These refer to diseases and syndromes arising out of obesity and consumption of alcohol, tobacco, unhealthy food, etc. While individual responsibility is high in preventing such negative health conditions, it is pertinent to question the structures that are in place which hinder people from accessing remedial healthcare. In the case of other diseases and medical conditions such as chronic illness, malnutrition, etc., the onus

falls on the state. Thus, the responsibility for health is spread across the society.

International Responsibility

International organisations and consortiums such as the United Nations and its organs and agencies, and other regional alliances play an important role in the provision of healthcare. The UNICEF, International Monetary Fund, World Bank, WHO, etc., are specially equipped to play an active role in coordinating between countries in their actions to provide healthcare. Developed countries also help lesser developed countries in establishing public health infrastructure and also in training medical personnel, provision of vaccines, etc.

With ever increasing globalisation comes the greater role for international co-operation in the medical sector as well. This was best exemplified during the COVID19 crisis. Vaccine development in one country affected the supply in others. COVAX (led by WHO, GAVI, Coalition for Epidemic Preparedness Innovations and UNICEF) was a large network which aided in procuring and distributing vaccines especially in less developed nations. Similarly, during war and natural disasters, nations send medical missions to help the affected countries.

In the 21st century, perhaps one of the main examples of international co-operation in the field of medicine and healthcare is to be seen in the context of climate change. Though most of the emissions responsible for global warmings are from a few developed nations, it is mostly developing and underdeveloped nations that suffer the impact, socially, medically, and ecologically. In such a scenario it is important for developed countries to assume the responsibility for global health to a large extent and take steps to maintain an equilibrium in the state of healthcare around the world.

Apart from this, organisations like Doctors without Borders and Red Cross have international personnel who volunteer their services across nations. Eradicating small pox, control of HIV/AIDS, and curbing tuberculosis are examples of occasions which have been successful due to global co-operation. India also plays an important role in the manufacture and distribution of generic medicines to low-income countries. Thus, while different nation-states may have different levels of attainment of health goals, it is necessary for them to co-operate with each other to



State Responsibility

...that the health and strength of workers, men and women and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocation unsuited to their age or strength.

...that childhood and youth are protected against exploitation and against moral and material abandonment.

The State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablements, and in other cases of underserved want.

The State shall make provision for securing just and humane conditions of work and maternity relief.

The State shall regard the raising of the level of nutrition and standard of living of its people and the improvement of public health as among its primary duties.

Part IV of the Constitution of India

In India, the state's responsibility to health has been reflected in the Directive Principles of State Policy, as shown above. By signing various declarations as mentioned in the previous sections, as well as the Alma Alta Declaration (1978), India has signalled that the State shall endeavour to provide good healthcare facilities for the citizens. Initiatives such as the Ayushman Bharath (National Health Protection Mission) as part of fulfilling this responsibility. The later units shall show how India specifically established healthcare services as part of its responsibility.

According to UNHCHR and WHO, there are three obligations that a state has to fulfil as part of its responsibility to grant health to its citizens. They are

The Obligation to Respect: The State should not limit access to any medical service or treatment, and should avoid any discriminatory health practices. It should also not withhold any information related to health.

- The Obligation to Protect: The State should protect the health of the citizenry from any third parties. This is where the regulation and licensing of medicines and food products come in. The State should ensure that privatisation does not interfere in the access to public health.
- The Obligation to Fulfil: The State has to introduce legislations, policy measures, budgets and judiciary modifications to fulfil its responsibility to health. This includes introduction of National Health Plans, and ensuring a judicial body that protects the rights of the individual to healthcare.

In order to keep the states accountable in fulfilling this responsibility, the WHO Factsheet recommends the following measures:

- Accountability and monitoring at national level using administrative, policy and political and judicial mechanisms, and establishment of national human rights institutions.
- Accontability at regional level, where nations belonging to a particular region hold each other accountable.
- > International monitoring through UN bodies, etc.

Community Responsibility

Contemporary trends seek to demedicalise health by making it more preventive and lifestyle-oriented than merely therapeutic. In this respect, communities have a responsibility in the maintenance of health of its members. According to Parks (2015), the three ways in which a community can participate actively in the healthcare of its members is through

- ▶ Facilities such as infrastructure and logistical support
- > Planning, management and evaluation
- > Proper use of existing healthcare facilities

Furthermore, communities have a responsibility in maintaining hygienic surroundings, and making sure that there is no scope for spread of transmittable diseases. This is evident especially in the Indian context during monsoons, where localities with uncovered and clogged drains are prone to infections such as malaria and dengue, as opposed to neighbourhoods which are well-maintained. Though civic agencies have an active role to play in community medicine, it is the duty of the



members of the community to hold the grassroot-level civic bodies accountable for this.

Another example for the importance of community participation in healthcare was seen during the COVID19 pandemic and small pox vaccination campaigns. In the latter case, it was seen that involvement of community leaders were crucial in the administering of the small pox vaccines across Indian villages, as opposed to the leadership of the medical personnel alone. Community leaders are more in tune with the cultural and social nuances of healthcare, and as such they are able to play a big role in the success of such campaigns.



Figure 7 ASHA workers during COVID19 pandemic

Similarly, during the COVID19 epidemic, ASHA workers were responsible for spreading awareness about the coronavirus, as well for identifying the symptoms and alerting the patients to the local health machinery. ASHA workers were honoured by WHO for their role in this community participation.



Figure 8: Smallpox immunization campaign

At the international level also, COVID19 sparked debates about the need for 'herd immunity'. The discourse around vaccine hesitancy also pointed that those who were healthy enough to get vaccines owe a responsibility to their community and to each other to protect those with immunities too weak to get a vaccine.

In a country like India, where social divisions such as caste, class and gender still impact medical trends, community participation across these categories are vital for a healthy society. As Parks (2015) mentions, there has been a shift in perspective from 'healthcare for the people' to 'healthcare by the people'. Thus, it is indispensable that healthcare transcend these social categories and work for the welfare of all, since a society is only as healthy as its least healthiest member.

Individual Responsibility

The most recent conversations around healthcare revolve around the individual's role in spread of disease. Parks (2015) calls this 'self-care in health'. In terms of modern medicine, there is a lot of stress laid on the individual to maintain a healthy lifestyle. This approach puts the onus on the individual to maintain a healthy physical and mental life. Many lifestyle diseases can be prevented by physical activities, healthy diet, avoidance of tobacco and alcohol, etc., and the responsibility lies with individuals. Medical literature in popular culture also prioritises this individualised notion of health by publishing articles on diet and exercise regimens.

Of late, individual responsibility in healthcare was seen in the context of vaccination. A lot of people in western countries, especially in the USA protested their government's vaccine mandates. Their argument



was that mandatory vaccination was a blot on their individual autonomy in making medical decisions. However, this is where the relationship between the individual and the community comes into play. An individual is also a part of the community, and as such they have an obligation to others to do what they can to prevent the spread of disease.



Figure 9: Checking sugar levels at home

Modern technology further helps the individual to take increasing responsibility for their health. It is possible to check oxygen levels, blood pressure and sugar levels using medical instruments at home. This gives more agency and the scope for the individual to monitor and control their medical choices and lifestyle patterns.

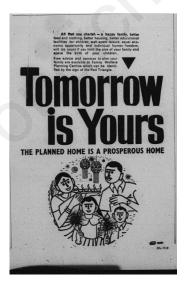


Figure 10: Family planning propaganda poster

According to Webber, et al., assuming individual responsibility for health has two dimensions:

 For the current generation: Individual control of health and attempts to prevent diseases imply that there is less burden on the hospitals

and health infrastructure, thus allowing these structures to focus more on those who are unable to take care of their own health.

 For the future generation: Since the health of children are determined by the parents' choices, parents have a responsibility to make the right choices for their offspring in terms of diet, vaccinations, etc.

For individual responsibility to be successful, there has to be awareness of the power of the self in medicine. A system of education should be put in place which gives awareness to the population. For example, the National Programme for Family Planning (1952) spread awareness to people about the risks associated with having many children. This enabled individuals to make the choice to restrict the number of offspring they have. The responsibility of the individual in healthcare will be seen further in our discussion on the sick role.

The individual and community responsibilities for healthcare are closely intertwined. According to the Alma Alta Declaration 'The people have the right and duty to participate individually and collectively in the planning and implementation of their health care'. Thus, as sociologists, we should keep in mind that any conversation around responsibilities of individual and community is not fruitful if there is no cogence between the two. Individuals have to be aware of their role in a community, that they are a part of a larger whole and that their actions and decisions have an impact on their community as a whole. Similarly, communities should make medical decisions based on the notion of 'the whole is larger than the sum of its parts', and make conditions for the individuals to live their best possible medical lives.

1.5 Healthcare

According to Parks (2015), 'healthcare is a multitude of services provided to individuals or communities by agents of the health services or professions, for the purpose of promoting, maintaining, monitoring or restoring health' (pg. 890).

According to Thomas (2002), healthcare includes 'formal, institutionalised care, along with "alternative" therapies, self-care and any other activities designed to prevent the onset of disease, treat illness, improve the quality of life, and/or preserve health' (page 25). Another definition given by Thomas (2002) is that healthcare is 'any action taken with the intent of restoring, maintaining or enhancing health status' (page 28).

Good health depends on a variety of determinants, such as nutrition, medical assistance, hygiene, lifestyle choices, environment, etc. Thus it seems very narrow to associate health with only 'medical care'; hence the need for a term which encompasses all aspects of good health, that is, healthcare. While medical care refers to services and practices involving the medical community and infrastructure (hospitals, doctors, nurses, etc.), healthcare refers to all aspects of preventive and therapeutic systems that aid in the living of a healthy life. When understood in this manner, medical care is only a part of healthcare.

Healthcare Systems

A health system consists of all the organizations, institutions, resources and people whose primary purpose is to improve health.1,2 This includes efforts to influence determinants of health as well as more direct health-improvement activities. The health system delivers preventive, promotive, curative and rehabilitative interventions through a combination of public health actions and the pyramid of health care facilities that deliver personal health care — by both State and non-State actors. The actions of the health system should be responsive and financially fair, while treating people respectably. A health system needs staff, funds, information, supplies, transport, communications and overall guidance and direction to function. Strengthening health systems thus means addressing key constraints in each of these areas.

World Health Organisation

Health systems are the network of organisations, institutions and personnel who deliver healthcare services to the community. They

differ from one country to another based on the financial factors, cultural scenario, etc. However, largely, the components of a healthcare system as given the WHO are:

- Service delivery
- Health workforce
- ▶ Health information systems

Figure 11 Table sourced from The Responsibilities of the Healthy: A 'Manifesto' For Self-Care

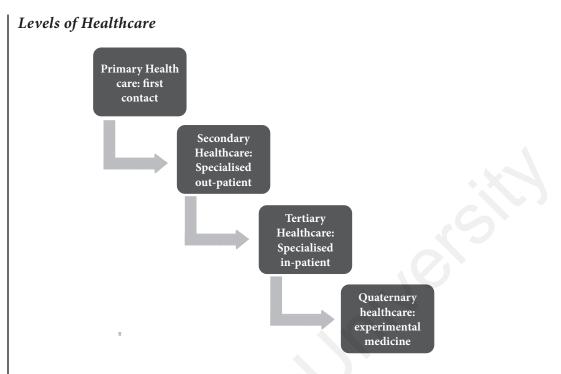
- Access to essential medicines
- ▹ Financing
- Leadership/ Governance

Thus, apart from hospitals, governments (in terms of policy making and legislations), insurance companies, auxiliary healthcare practitioners and institutions (such physiotherapists, chiropractors, medical laboratories, etc.) drug companies and pharmaceuticals, banks providing medical loans, data providers and digital records, etc., form a part of the necessary healthcare system in today's world.

Functions of Healthcare Institutions

The most evident function of healthcare system and institutions are to provide access to good health and medical care to the community. However, due to the complexity of modern societies, the functions go far beyond this scope. Below are some of the functions of the healthcare systems:

- Curing sickness and creating conditions ideal for optimal healthcare, such as sanitation, pollution-free environment, clean drinking water, nutritious and healthy food, etc.
- > Training and education of healthcare personnel
- > Research into new medicines, diseases and treatments
- Community services such as free health camps, vaccination drives, etc.
- Job-creation and contribution to economy
- Maintaining balance in society by absorbing the deviance arising out of sudden catastrophe and disease breakouts



The levels of healthcare provision are as follows:

Primary care level: This is the first step in contact between individuals and the community with the larger healthcare system. At this level, the most basic healthcare is provided. Since this is the most basic step, it is also in a position to be more attuned to a community's health needs and can monitor any developments of diseases or outbreaks in a community.

According to the WHO, primary care consists of three components: integrated health services, multisectoral policy and action, and empowerment of individuals and communities to make healthrelated decisions. The Declaration of Astana (2018) was about the vitality of primary healthcare. However, this crucial part of healthcare is being overlooked nowadays in favour of more disease-centric approaches. In many countries, there is severe underfunding of primary healthcare services.





Figure 12: Primary health care

In India, primary healthcare is important because it is the first level of connection with the larger national health plans and goals. These primary practitioners are able to navigate cultural and social complexities to provide healthcare. With this importance in mind, both National Health Policy (2017) of India and the Ayushman Bharath programme focused on the primary health centres. It was envisaged that more than 1 lakh Health and Wellness Centres are to be established, and universal health coverage is also provided. The Primary Health Centres also offer free medicines and diagnostic services.

In urban areas, outside of the state mechanisms, primary care may extent to general practitioners and family doctors. Usually, they are the practitioners whom an individual approaches when faced with a negative health condition. It is upon the recommendation of the primary practitioner that further medical advice and action are sought.

Secondary Care Level: This is the intermediary level of healthcare. Those diseases that cannot be treated at the primary level are referred to the secondary care levels. This is often provided by regional hospitals, with outpatient consultation and emergency care. In some countries like India, mobile teams of medical personnel

from regional hospitals may offer support to the primary healthcare providers.

According to some sources, secondary care refers to the specialists, such as cardiologists, oncologists, etc. Usually the primary physician refers a secondary specialist after looking at the medical problems. Secondary healthcare may also include physiotherapists, psychiatrists, scheduled surgeries, regular dialysis, etc.

In some cases, it is possible to see secondary and primary healthcare working together, albeit intermittently. For example, as mentioned above, secondary healthcare specialists may routinely visit the primary centres for consultation purposes and to provide expert opinions.

➤ Tertiary Care Level: This mostly takes place in highly specialized environments, with in patient services. Patients requiring complicated medical tests and diagnoses and surgery and referred to such specialized centres. These may be regional or national level hospitals, and often those based on medical research as well.

Examples include centres that provide care regarding oncology, burn treatment, orthosurgery, neonatal health, etc.

Since tertiary healthcare centres are highly specialized, they are rarer than primary and secondary levels. They may be seen only in urban areas, requiring people to travel long distances to reach them. Furthermore, the medical fees may also be high in tertiary centres as opposed to the earlier two.

Quaternary Centres: These are places that act as an extension of the tertiary centres, and are found at the national or international levels. They are highly specialized, and focused on nuanced research. They may offer experimental treatment to patients. The patients in such centres may be in for a long period of stay. Due to the novelty and rareness of many diseases and conditions which are referred to quaternary centres, these places may also report high rates of mortality.

What is most important across the various healthcare levels is the maintenance of a robust referral system. There should be a clear line of communication across medical personnel who is part of the patient's medical history. This will enable transparency and continuity of treatment, and makes the task easy for both patients and doctors in case of returning visits. In India, the National Digital Health Mission (2020) has been established with this as one of the main aims. Apart from providing easy access to doctors and medical care, it also maintains medical records for easy consultation and sharing information.

1.6 Summary

- Definition of health- WHO definition- health in ancient systems of medicine- implications of definitions of health- health and wellbeing- health and wellness
- Dimensions of health- physical-mental-social-spiritual-emotionalvocational-environmental-financial- cultural dimensions
- Right to health- United Nations and the Right to Health- Universal Declaration of Human Rights- other international organs and treaties in respect of right to health- right to health in India-Directive Principles of State Policy- Human Development Index
- Responsibility of health- international- state- communityindividual responsibility
- Healthcare- definition of healthcare- meaning of healthcarehealthcare system- functions of healthcare institutions-levels of healthcare

1.7 Self-Assessment Questions

- 1. What is health? How is health defined by the World Health Organisation? Explain the meaning of health in that definition.
- 2. How has the meaning of health changed over the years across different medical systems?
- 3. What are the various dimensions of health? Explain with examples.
- 4. How has the right to health been articulated by various national and international bodies?
- 5. What is meant by responsibility of health? Who are the key players in responsibility to health? Explain in detail how each of these players act out their responsibility.
- 6. Explain the term healthcare.
- 7. What are healthcare systems? With a diagram, show the different levels of healthcare systems and its components.

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Lesson 2.1 - Social Dimensions of Sickness Behaviour

Structure

- 2.1 Informal sickness behaviour
 - Disease, illness and sickness
 - Informal sickness behaviour
- 2.2 Formal sickness behaviour
 - Becoming a patient
- 2.3 The sick role
 - > The physician in the sick role
 - ▶ Functional responsibility of Parsons' theory
- 2.4 Social correlates of sickness behaviour
 - Biosocial correlates
 - Sociocultural correlates
- 2.5 Summary
- 2.6 Self-Assessment Questions
- 2.7 References

Objectives

- 1. Understanding the meanings and differences of disease, illness and sickness
- 2. Understanding sickness behaviour and various perspectives of sickness behaviour
- 3. Understanding informal sickness behaviour and the ways by which it is attained
- 4. Understanding formal sickness behaviour, its means and its relationship with sick role
- 5. Critically analysing Parsons' sick-role theory and its advantages and drawbacks
- 6. Understanding the process by which an individual enters into the role of a patient

7. Looking at various social correlates and factors and analysing their influence on perception of disease as well as health-seeking behaviour

2.1 Informal Sickness Behaviour

Disease, Illness and Sickness

Various sources attribute differential meanings to illness and sickness behaviour, with the former being described as more social, and the latter as biological. For example, according to Encylopedia of Mental Health (2016), sickness behaviour is 'a reflection of immune activation and is commonly associated with depression, the chronic fatigue syndrome, and certain types of cancer such as pancreatic cancer. Thus fatigue, sleep disturbance, hypepralgesia, anorexia, and loss of libido are frequently associated with these conditions and often resemble infectious disease symptions such as influenza, hence the term 'sickness behaviour'.

According to Thomas (2002), sickness behaviour 'might be broadly defined to include the utilization of formal health services, as well as the informal health behaviour characterizing a population, in response to some acknowledged symptom or symptoms'.

At this point, it is pertinent to discuss the various discussions on the various meanings of sickness and illness. According to Konsman (2021), the point of departure for understanding the concept of sickness is the French scholar, Georges Canguilhelm's *The Normal and the Pathological*. In this book, Canguilhelm argued that rather than construct a general idea of what disease is, it is necessary to 'determine what are the vital phenomena with regard to which men call themselves sick' (in Konsman, 2021). A few years after this, George Engel proposed that infection may lead to a state of 'a general sense of malaise, fatigue, restlessness, uneasiness, or vague anxiety' (in Konsman,, 2021). But he later agued that while disease is objective in nature, in the definition of sickness, sociological and psychological factors come into play, especially in the viewpoints that both the self and the others take of sickness.

According to Christopher Boorse (in Konsman, 2021), disease is analysed in biological terms, as opposed to illness which warrants 'special treatment and diminished moral responsibility'. Marshall Marinker (in Konsman, 2021) writes that while pathological and physical factors had to be taken into consideration for disease, illness was the personal experience, and its social manifestation was sickness. According to Bjorn Hoffman (in Konsman, 2021), disease is a negative state of the body as determined by a medical personnel, while illness is determined by the person themselves based on the their experience of the body and sickness is perceived by society.

Konsman (2021) also mentions that Parsons had used the terms 'sickness' and 'illness' synonymously. David Mechanic (in Konsman, 2021) used Parsons work to introduce the term 'illness behaviour' to indicate the ways by which an individual interprets symptoms and seeks relief from societal and institutional structures. It must also be noted that the term 'sickness behaviour' was first proposed by Benjamin Hart, a veterinarian, thus bringing into question the experience of disease among animals. However, this is beyond the scope of our current discussion.

Based on the above discussion, Konsman in 2021 proposed that there are three ways to understand sickness behaviour, which he also calls illness behaviour.

- Social Perspective: This was first studied and articulated by Talcott Parsons. It will be examined in the upcoming sections in detail. Apart from Parsons, other sociologists and physicians have also studied the social aspects of sickness. For example, Issy Pilowsky in the late 1960s wrote about 'abnormal illness', which is a condition that arises when the patient does not agree with the doctor's diagnosis and proposed treatment. Alexander Segall also proposed that a distinction has to be made between physican and psychological conditions of sickness. Angelo Alonzo proposed that a 'situational-adoption perspective' has to be taken to understand disease and illness. Thus, since Parsons' own groundbreaking work on the sick role, sociologists and doctors have proposed integrating information and perspectives from various disciplines to understand illness and sickness.
- Biological Perspective: In this perspective, the sickness behaviour is essentialised to biological response to ill-health, especially infection. For example, Benjamin Hart proposed that infectious diseases cause both animals and humans to reduce their food intake, and suffer from fever and behavioural depression. Another biological response was also the tendency to stay put in order to reserve energy to build a fever. Hart called this an 'evolved disease fighting strategy'. This was further picked up by Robert Dantzer, who wrote that all these

behavioural changes such as reduced appetite, lack of movement, etc. showed a change in motivation. Thus, he attributed that motivation and the lack of it as an intergral part of sickness behaviour.

Psychological Perspective: This has been influenced by the sociological understandings of sickness behaviour. In the case of patients diagnosed with cancer, they may resort to what is called 'protective buffering', that is, eliminating any thought or dialogue related to cancer. The psychological perspective also takes into account anxiety and depression in persons diagnosed with disease, and the decreased motivation to perform tasks and sullen moods and feelings.

According to Cockerham and Richey (1997, in Thomas, 2002), 'help-seeking behaviour is that part of the illness process that involves efforts to access formal medical service providers, especially physicians, when one is ill or otherwise has been defined as sick. Help-seeking may also involve turning to more informal sources of care.'

Sickness behaviour is thus a relatively recent development, undoubtedly accelerated with Parsons' contributions. In recent times, where society has been heavily medicalised, the importance of studying sickness behaviour cannot be overstated. Social aspects influence sickness behaviour to the extent that many decisions taken by patients in their access to medical resources are influenced by social categories. Thus students of sociology must look at the study of sickness behaviour in detail.

Learning Activity 2.1 Interview someone in your immediate social circle and try to articulate what health, sickness and disease means to them by way of personal experience.

Informal Sickness Behaviour:

Though sickness behaviour usually refers to the patients' dependence on formal institutions to restore health, the relatively recent development of such formal institutions have meant that for the longest time, people have demonstrated informal means of sickness behaviour. This may refer to self-care, which are actions taken by an individual to prevent any disease or to restore their health. Self-care is usually initiated by the patient themselves. However, due to the rise of chronic illness such as obesity, high blood pressure, etc., medical institutions also encourage patients to take care of themselves. In the 20th century, self-care was

which gave

Notes

encouraged by magazines about healthcare, for example, which gave recipes for low cholesterol dishes, or suggested exercise regimens. With the advent of the internet, more resources are available with which to schedule a self-care routine by oneself. In fact, today self-care has been articulated to include various aspects of mental and physical health.

According to the World Health Organisation, 'Self-care is the ability of individuals, families and communities to promote health, prevent disease, maintain health and cope with illness and disability with or without the support of a health worker'Billions of people around the world do not have access to institutionalised medical care. In such a scenario, it is crucial that individuals be encouraged to take responsibility to take care of their own healthcare needs, by way of lifestyle changes, maintaining sanitation and hygiene, self-medication, etc.

Increasingly, self-care is becoming part of recommended treatment for mental health issues. Even at the prevention stage of mental conditions such anxiety, depression, etc., more and more people are focussing on making healthcare choices such meditation, keeping a diary, etc. as part of their self-care. These activities are conducted as a part of daily life and not just in the event of sickness.

Research has also pointed out that self-care can also extend beyond individual into actions that engage other people. For example, Verbrugge and Ascione (1987, in Thomas, 2002) write that in addition to self-medication as a response to onset of disease, some individuals engage more deeply with their own networks of friends and neighbours to seek advice. This also includes the seeking of support in case of mental health issues. Women have especially been observed to approach their informal networks to seek medical advice for both themselves and their families.



Figure 13: A meeting of Alcoholics Anonymous in the 1950s

Sickness and disease also prompt people to seek memberships in new networks. Support groups like Alcoholics Anonymous have existed for a long time to encourage people to quit their negative habits. The onset of the internet has also led to online communities where people seek support in each other, for example, cancer message boards and chat groups of new mothers. It is not just the sick who seek community in such places; often the care-givers also seek support in a community of those in similar positions, for example, people whose immediate family members are dying of a chronic disease may seek emotional support in the company of people in a similar situation.

The other role of informal sickness behaviour is to seek nonmedical institutionalised care through networks of family and friends. Individuals may use referrals to seek entry into places that offer a different kind of support during sickness, such as spiritual healing, as well as into more institutionalised one such as registered midwives, prenatal maternal care, etc. In India, the practice of hiring a home-nurse when a member of the family is bedridden, or looking for a nurse to look after a new born and the mother are common practices. Even though there are specific organisations which hire people out for these purposes, many people choose to rely on their immediate social networks to find such services.



Figure 14: Faith healing in Progress

Informal sickness is behaviour is mostly seen among people and communities whose access to formal means of healthcare is restricted or those who have historically been excluded from or mistreated in formal healthcare. For example, in the case of African Americans, it has been seen that while a combination of informal and formal medical care has been used in case of physical illness, when it comes to emotional well-being, most people prefer to rely solely on informal networks (Neighbors and Jackson, 1984).

2.2 Formal Sickness Behaviour

In sociology, sickness behaviour was first theorised by Talcott Parsons when he first wrote about the sick role. Parsons was an American sociologist whose contributions are important for a functionalist understanding of society. From a functionalist perspective, all aspects and parts of society have a role to play in maintaining the balance of society. If any of these parts do not function well, it may lead to an imbalance, which has to be rectified. According to Parsons, illness is something that has the potential to disrupt the balance of the society. Illness causes not only discomfort to the individual, but also causes imbalance in the society by affecting the individual's ability to function properly. Sickness and disease are unavoidable, and every society has to face its share of ill-health; there is no sure-shot way of avoiding disease all together. However, what is important to sociologists, and especially to functionalists is that society has the adequate mechanism to absorb the shocks that are posed by illness.

Healthcare systems are a major way in which societies adapt to its members becoming sick. Hospitals, insurance companies, and statefunded healthcare all contribute to formal healthcare. In addition to these institutions, there are also modes of behaviour and structural adjustments made when an individual is sick, such as availing a sick leave from work, consulting a doctor, or quarantining oneself in order to prevent contagion, etc. We will see the latter part of formal sickness behaviour in detail when we discuss Parsons' Sick Role.

From a functionalist perspective, an individual is called healthy, when they are able to carry out their social roles and duties. Any state of health that impedes a person's ability to work, have good relations with family and society, go to school, etc. is considered to be sickness. The benefit of this understanding of sickness is that it allows not just for physical sickness, but also mental and emotional health. A state of sickness prevents the individual from attaining not just their personal goals, but also that of the society. A sick student may not be able to consistently attend school; a worker who is sick and on continuous leave may hinder the productivity of the entire factory; a father is sick may not be able to

perform his parental duties, etc. Thus, sickness is stops the functioning of society as a whole.

Perhaps no better example for the impact of sickness of society can be given from recent memory than the COVID19 pandemic. All over the world, countries imposed lockdowns and put a halt on international travel. While many people could continue to work from home, a majority of people, especially blue-collar workers, were rendered unemployed and without a means of income. Inability to travel meant that many tourism and travel sectors were affected. Global trade also took a hit; the world's manufacturing hubs closed down to control the contagion, and export and import also were affected. Even the trade of essentials such as foodgrains were impacted.

The sudden lockdowns not only impacted the economic and commercial sector, but also social life. Many children who could not avail online education had to drop out or take a break in their education. There are many studies showing that women had to perform more duties (domestic labour and occupation) during this time because social conventions and norms. Many avenues for socialisation stopped, leaving people to form networks online or not at all. Governments also had difficulty performing administrative tasks with skeletal staff. Hospitals were overwhelmed with patients and in some cases, could not even provide for the most basic facilities. The other fallout was this that every sickness which was not coronavirus-related was given less priority, and so many people had to reschedule surgeries, etc. Thus, all aspects of social life were severely impeded by disease and sickness.

In the above example, and in a modern capitalist society, importance is given to the economic productivity of a person. The ability to come into work and perform their task is crucial. Someone who is sick is not able to perform this task properly, and cannot participate in the labourforce. That is why there are stringent measures placed to check that a person does not take on the sick role without any valid reasons. If a person is sick, then all attempts are made to rehabilitate that individual as soon as possible into their previous position.

However, apart from the individual's roles and obligations in the sick role (which will be discussed later), there are also institutional and formal aspects of sickness behaviour. Some aspects of formal sickness behaviour are as follows:

- Institutions should prioritise the restoration of health and bring back social functioning of the individual
- The relationship between the individual and the formal institutions which provide care must be clearly specified
- Full information on the sickness should be given to the patient, so that further interruptions to the role is minimised
- ▶ There should be encouragement and motivation for others to remain healthy and fully functional
- ▶ It should allow a means of regaining health for those who are sick
- The formal sickness behaviour reduces the dysfunction to society by absorbing the disruption
- It allows of a readjustment so that society and the social system can function without much disruption
- > Social and biological spread of the disease should be contained
- When the patient is completely ready and out of their sickness, society should be able to reintegrate them and return to a state of equilibrium

In the formal sickness behaviour, a difference is drawn between 'illness' and 'sickness'. A person's illness is considered to be sickness only when it officially certified by a physician. In spite of the person's experience of it, and their social network's testimonies of ill-health, the official certification of sickness has to come from a trained physician. This certification is necessary for availing the sick role, and a certification of complete cure is necessary for re-entry back into society. For absence from school, employment, etc., this certification is mandatory. It is also necessary to access therapy, admission in a medical institution, acquiring and consuming drugs, running diagnostic tests, etc. In case of cure also, it is not enough if the patient 'feels better' or their family thinks that 'they can function properly'. The only valid certification of good health also has to come from a medical personnel. For example, it was mandatory to show certificates of vaccination as well as negative result of COVID tests to be able to travel; many educational institutions and workplaces also made it mandatory to show these documents attesting that a person was not currently suffering from the disease. Many jobs require new employees to submit fitness certificates as well.

However, in this context, we should pay attention to the problems associated with this. There are many diseases which are not outwardly

visible, and the diagnoses of which is still not universal. For example, mental illnesses such as depression, anxiety, etc. are severely debilitating, but they are not easily detected. This is results in many individuals getting a delayed validation (or sometimes not at all) for their inability to perform their duties. Similarly, there are many disorders and chronic conditions for which there is no permanent cure. For example, diabetes is often a life-long condition, and so there is no clear way in which a doctor can give a completely clean bill of health; but in most cases, a diabetic patient can perform their duties, with necessary precautions.

Another problem of such an official validation of sickness is the question of accessibility. In many countries and societies, healthcare is not easily available to everybody. In a country like India where public health is overburdened, and private healthcare is expensive, many people would not consult a doctor and are unable to get a medical certificate. Similarly, in places where many people rely on informal networks of care or self-medication, validations of sickness and recovery are hard to come by. Increasingly, many people are moving away from a traditional-doctor patient relationship (where the patient is in complete obedience to the doctor), and thus this formal sickness behaviour is limited in such cases. Another drawback as mentioned above is in the case of mental illness and chronic conditions, which are very common today. In such a situation, there has to be rethinking of the idea of the formal sickness behaviour.

When discussing formal sickness behaviour, sociologists also write about 'death role'. This refers to a 'pattern of obligations, responsibilities and privileges as appropriate for someone who is identified as terminally ill' (Thomas 2002). A patient for whom recovery seems impossible is expected to completely adhere to the instructions of the doctors, and to make minimal demands. Curative care is replaced by palliative care, and the physician also shows lesser and lesser involvement. In the current set-up, a terminally ill patient is not an ideal patient from the point of view of the physician, who would see death a failure. This makes many doctors hesitant to take in terminally ill patients. Adequate training and institutional arrangements must be made to enable the formal sickness behaviour of a terminally ill person as well.



Becoming a Patient

How does a patient become one? We have looked at formal sickness behaviour as one in which a patient adheres to institutional and clinical advice. However, often, a patient comes to this stage of seeking formal care after a series of self-reflection and actions. They are as follows:

- Symptom recognition: An individual is assumed to start out with good health. They should pay close attention to their health and their bodies, and be able to recognise any abnormality in functioning, such as high body temperature, dizziness, excessive appetite or thirst, change in complexion, aches, etc. This recognition can only by the individual themselves, except in case of infants and children, who too nevertheless articulate their discomfort in different various (by crying, lack of sleep, etc.) However, it must be noted that symptom recognition is also related to social and cultural aspects. For example, in cultures where expressions of emotions are not considered good manners, patients may tend to restrict any expression of pain, as opposed to those where expressiveness in encouraged. Similarly, women may dismiss stomach aches as regular menstrual cramps, even if the aches are caused by other factors. Another important thing to keep in mind is that an overwhelming amount of medical data on the internet is based on an able and Caucasian body. This makes it difficult to understand some symptoms correctly, such as scarring, blood clots, lesions, etc.
- Symptom evaluation: Once a person recognises a symptom, the next step is to evaluate it. Past experiences, if any, are to be compared with to see if it speaks to a particular experience, or if it's a normal sign of aging. This evaluation process, like the recognition stage, also contains cultural dimensions. Women are more likely to evaluate the pain; similarly some religious groups may attribute disease and ill-health as a comeuppance for transgression, etc. Thus, it is seen that even symptoms do no exist on a solely objective plain, but has significance attached to it. This also further influences the differences in mode of treatment of the disease.

Take the first step and see what could be causing your	
	en learn about possible next steps.
For	Me
Gender	Male Female
Age	Choose one
Zip code	Optional
Email	Optional
	Stay informed with the latest health news and features from WebMD. Get our Men's Health Newsletter delivered right to your inbox. By clicking Submit, I agree to the WebMD Privacy Policy.
	Submit

Figure 15: Online sources such as WebMD is used a source of information

- Information search: Once the symptom is evaluated and found to be an anomaly, there is a search for more information on it. Either the affected person, or someone close to them may look for similar kind of experiences from others, so as to get more information about the causes of this pain. An external search may also be conducted, in the form of looking through literature and asking others about it. In today's world, this is facilitated by the internet, where websites such as WebMD and forums on Reddit enable individuals to enter their symptoms and avail information on them. Thus, at this stage also, questions of accessibility and awareness implies that socioeconomic background of the affected party plays a role in seeking health information.
- Informal help-seeking: The individual, once they establish that the symptom is something out of the ordinary, may first resort to informal help-seeking. They may self-medicate using over-thecounter medicines (for which doctor's prescription is not required) or choose to home remedies. For example, it is a common practice in Indian households to first treat cold or sore throat with a decoction of spices and herbs. They may also approach their immediate family members or neighbours for any steps to overcome the symptoms.

Like mentioned above, religious healing may also take place. Again, it is common to see individuals make spiritual appeals in churches and temples, when faced with adverse health conditions. Thus, the social and religious standing of the individual determines this care-seeking behaviour- the more integrated a person is with their community, the more chances of seeking informal help from there; if the individual comes from a society where folk and noninstitutionalised healing is common, the latter's services are more likely to be used.

- Formal help-seeking: At this stage, the individual becomes a formal patient. They approach a formal medical institution such as a hospital or a physician and subjects to their care. The formal sick role is adopted, and the rules regarding withdrawal from society and prioritising one's recovery are followed. However, this choice of formal healthcare is once again not objectively made. Apart from the questions of how marginalised groups may or may not be able to access formal healthcare, the emotional and social background of the individual may determine this step. For example, for many individuals, visiting a psychiatrist (who may prescribe medicines) to cope with mental distress is less favourable than going to a therapist (who does not prescribe medicines). Similarly, some individuals may not find the strict diet and medication regimen of formal healthcare attractive or convenient, and so will avoid this step.
- Identifying the source of care: Once the decision to seek formal care has been made, particular care provider has to be chosen. In a country like India, with multiple systems of medicine, an individual has a variety of options to choose from if they want to seek formal healthcare. In many countries, the insurance agency will make the decision because they are already partnered with select healthcare providers. Similarly, in many countries, since healthcare is statefunded, the choice is restricted. However, even within these systems, the individual has to make the decision regarding which specialist to consult first. For example, for a person with continuous headaches, the choice has to be made to see a general physician, a neurologist or an ENT specialist. This choice may be influenced by the information they have discovered at the earlier stages. Here too, we see the social and cultural background of the individual determining the choice. People who have access to traditional

systems of healing may first resort to practitioners of that system; women in conservative countries may prefer to consult a female gynaecologist; people belonging to communities that distance themselves away from biomedicine may seek help in nature-based remedies, etc.

- Sick role adoption: This stage occurs once the decision to seek formal healthcare has been made, and the physician has deemed that the symptoms do indicate a disease or a health condition. As mentioned above, the individual is then certified to be 'sick', thus necessitating the adoption of the sick role. At this stage also, the individual may easily slip into the sick role, or may resist the label of being 'sick'. They may not accept the diagnosis and may prefer to go for a second opinion. In some cases, even if the diagnosis is accepted, the individual may not defer to the doctor's advice and may resist the course of the treatment itself. New information, evidence given by new symptoms, etc., usually factor in this hesitance. The social background of the patient also influences the adoption of the sick role. For example, in some cultures, male patients may be hesitant to subject themselves to the care of a female doctor; members of certain communities may feel that their health concerns are not understood by the physician (who may come from another social group), and so they may be hesitant to obey the instructions of the latter, etc.
- Medical compliance: The individual who has adopted the sick role \triangleright now has the obligation to follow the orders of the doctors or the medical institution. This is called medical compliance. In this stage, the patient has to follow strict diet regimens, exercises, etc., as well as consume medicines on time, subject themselves to injections, be admitted to a hospital, undergo surgery, etc. Keeping in mind the unpleasant nature of many of these medical orders, some patients may not willingly comply. However, the sick role demands that the patients subject themselves to these medical advices and procedures to get well soon. As long as the patient is in the hospital, the doctor and other medical staff have the control over the curative process. For example, if a patient is admitted in a hospital, their diet is regulated, they are made to take the medicines on time, etc. However, once outside the constant control and surveillance of the medical establishment, the patient may exert more agency in taking (or not taking) the medicines, etc. They may also seek other forms

of healthcare outside of the formal institutions. Compliance is also determined by the socio-economic background. For example, a person who does not have the privilege of availing sick leaves from work may not be able to take the necessary rest possible; without adequate social support, it may impossible to follow a necessary diet; cultural values determine the nature of food intake, etc.

Post-treatment: Even after the disease is completely cured, an \triangleright individual has certain roles to perform. They are encouraged to avoid past behaviour which may have exacerbated the sickness (such as unhealthy diet, abnormal posture, etc.) and to follow the continuation of medication if any. Once again, the social determinants of postcure behaviour are many. The occupation of the former patient may demand unhealthy modes of living and working; the economic status may determine access to, or lack thereof, medicines and healthy diet; family support system may determine the amount of recovery and rest time available. Post-care behaviour of the patient is important not only for their individual health but also for the healthcare system as a large. Repeat admissions for the same disease or syndrome is a strain on resources. For example, if an alcoholic who has been given rehabilitative treatment is admitted back in a deaddiction centre after relapse, it is a drain on scarce resources.

Thus, the behaviour of the individual before and after entering the healthcare system is contingent on many factors, especially socio-cultural and economic ones. Let us now see Parson's Sick Role theory in detail.

Learning Activity 2.2 List out various ways in which informal and formal sickness behaviour manifests itself in your social circle.

2.3 The Sick Role

It is now necessary to look at the sick-role theory of Talcott Parsons. Talcott Parsons was an American sociologist whose contributions to functionalistic perspective of society. He also contributed to the understanding of 'general theory of action'. He is considered to be one of the pioneers of the institutional development of sociology in the United States.

In his book *The Social Structure*, first published in 1951, Parsons dedicates an entire chapter to the medical system and the role it plays in the smooth functioning of the society. Looking through the perspective of functionalism, Parsons writes about the ways in which sickness and

disease deprives the individual an opportunity to contribute to the society and thus causes an imbalance. Even though he mentions the fields of alternative medicine and even concepts that have a huge bearing within the alternative medical treatment processes, such as psycho-somatic diseases, Parsons restricts his analysis to the biomedical system, which benefits this study, for the scope it offers in comparing the patient's idea of resistance to it. Parsons understands sickness as a socially undesirable state that needs to be rectified as soon as possible.

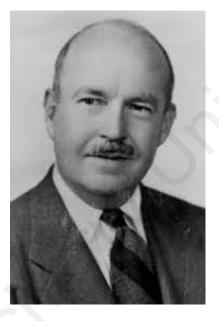


Figure 16: Talcott Parsons

The idea of control is also evident in the writings of Parsons, with him clearly stating that 'modern medical practice is organized about the application of scientific knowledge to the problems of illness and health, to the control of "disease".

Parsons interest in medicine is to the limit of demonstrating the functional aspects of healthcare. In this, he has devised the sick-role theory, which sets out the duties of a patient and the doctor in a scenario where the former is dependent upon the latter for treatment. Combining this with the biopower of Michel Foucault, it is possible to understand what kind of resistances patients are involved in, as they choose alternative medical treatment. These resistances are not only against the power of the state in setting down and deciding for the citizens what good health is, but also against a medical set-up that lays down the rules of interaction between the players.



The four characteristics of the sick role as given by Parsons are:

- i. The sick person is subject to 'exemption from normal social role responsibilities'.
- ii. The sick person cannot be expected to get better by merely willing it so. He or she must be 'taken care of'.
- iii. The sick person should not be comfortable in confining himself or herself to the sick role and should have an 'obligation to get well'.
- iv. The last feature of the sick role is the one that bears importance for our study. The sick person should 'seek technically competent help, namely, in the most usual case, that of a physician and to co-operate with him in the process of trying to get well.' Parsons himself had highlighted the importance of this feature, in the perception of a person as being sick and in need of treatment- 'It is here, of course, that the role of the sick person as a patient becomes articulated with that of the physician in a complementary role structure.'

The agency of the patient is described in an explanation of the last point, where Parsons describes the patient as making a choice among physicians. The tendency of patients to consult a doctor first and then in the case of dissatisfaction, to consult another is pointed out by Parsons, using a term 'shopping around'. This is a pattern of behaviour that Parsons much expects to be seen in patients. The submission of the patient to the doctor, because of the knowledge of the latter in comparison to the ignorance of the former in matters relating to health and medicine, as Parsons elucidates, is rejected to a certain extent in the studies on alternative healing practices, which are common in many societies.

The role and the agency of the patient in Parsons' sick role is shortly described. The position of the patient is considered to be a vulnerable one by Parsons due to the combined factors of the patient's irresponsibility in the causing of his sickness and in her lack of technical and medical knowledge, by which to understand her position better, and most of all, the 'anxiety' and the 'frustration' at the breakdown of a normal routine of living. All these factors make the patient easy prey to exploitation. The important theme of this description is that by the absolving the patient of any responsibility in her personal healthcare, Parsons is also denying the scope of any agency on her side.

Parsons also mentions the non-biomedical treatment that patients resort to alternative medical treatments, in spite of their educational status. He acknowledges the vast amount of medical practices that function outside of the spaces of institutional biomedicine. He writes, 'The world over, the rational approach to health though applies science is the exception rather than the rule, and in our society there is, even today, a very large volume of "superstition" and other non- or irrational beliefs and practices in the health field. This is not to say that the medical profession either has a monopoly of rational knowledge and techniques, or is free of the other type of elements, but the volumes of such phenomena outside the framework of regular medical practice is a rough measure of this factor.... It can by no means be taken for granted as the course which "reasonable men", i.e., the normal citizen of our citizen of our society will "naturally" adopt." While this above statement reveals Parsons' tendency to doubt the validity of non-biomedical systems, it must be noted to his credit that Parsons does acknowledge that such systems are being accepted by a vast majority of people, thus contradicting a majority public opinion that alternative (and as described in this source 'quack') healing such as homeopathy and aromatherapy are the decisions of 'crazy' people.

The Physician in the Sick Role

The role of the physician, according to Parsons, revolves around knowledge- knowledge of the sickness, its causes and its treatments, as well as the intimate knowledge regrarding the patient's lifestyle, to which perhaps no one else is privy to.

This kind of knowledge puts the position of a doctor in a hierarchically higher position than that of the patient. This kind of hierarchical arrangement has been dealt by Foucault, with his concept of medical gaze. Medical gaze is a term that Foucault uses to depict the relationship between the patient and the doctor. In understanding this concept, the relationship and the mutually dependent nature of knowledge and power is also to be made clear. Social hierarchies are made clear and formulated by the control of knowledge. Those who can control the knowledge are the ones who usually hold power and more often than not, they are also the ones who create future knowledge. Applying this relationship to doctor-patient relationship, the doctor has more information about the patient, than the other way around. The establishment of modern hospitals, with their control of the settings and the environment in which disease is controlled and observed, makes it easier for doctors to gain such information. Record keeping also aids in this affirmation of hierarchies



based on knowledge. Some writers even apply these hierarchies to the outward symbols, such as the white and the blue uniforms of the doctors and the patients respectively.

Parsons also describes the importance of emotions in biomedical treatment. The level of technical skill and training required for a doctor is also crucial in determining his or her emotional attachment to the patient and the suffering. However, for Parsons, "with these qualifications it would be much like any other high level technical job". While the increasing technologies of medicine today gives the physician and the patient to better understand what the sickness is and how to deal with it, it also leads to an emotionally disappointing phase for the latter if there is no scope for the treatment. "More' is definitely known than before, but hope has been destroyed… These inherent frustrations of the technical expert acquire special significance because of the magnitude and character of the interests at stake. The patient and his family have the deepest emotional involvements in what the physician can and cannot do, and in the way his diagnosis and prognosis will define the situation for them'.

An important responsibility of the physician's role in the construction of the sick role is that *"to do everything possible' to forward the complete, early and painless recovery of his patients*". However, this responsibility, and the failure of this could lead to a strain in the patient and physician, and the delivery of their roles.

The role of modern technology in the alienation of the patient from the curative systems is a main reason for many patients to choose alternative medicine over biomedicine. In this respect, Parsons also describes the role of biomedicine in the way in which the interpersonal relations in the hospital is structured. However, for Parsons, the main focus is on

'injury' of the body... It is noteworthy how many people have really severe anxieties about the insertion of a hypodermic needle even when this has become such a commonplace in our society. Obviously the problem of securing consent to surgical procedure and many types of diagnostic procedures- such as the use of a gastroscope or a bronchoscope- is not to be too easily taken for a granted. The essential point in all this is that there are no simple matters of weighing a rationally understood "need" against an equally rationally assessed "cost" in the form of discomforst or inconvenience, but very complex non- and irrational reactions are inevitably involved with the typical, not only the "abnormal" patient. The fact that these elements are organized and controlled does not make them unproblematical. On the contrary, in the light of the *potentialities* of disturbance, the fact of successful control presents important sociological problems.

Functional Responsibility of Parsons' Theory

The proposition (is) that one principal set of functional significances of the combination universalism, functional specificity, and affective neutrality, is to enable the physician to "penetrate' sufficiently into the private affairs, or the 'particular nexus' of his patients to perform his function. By defining ihs role in this way, it is possible to overcome or minimize resistances which might well otherwise prove fatal to the possibility of doing the job at all.

Since Parsons looked at the medical system as one, where all the elements, with a particular set of pattern variables, worked in order to run effectively, emotional detachment and a strict professional conduct as being necessary.

Parsons downplays the agency of the patient in her own treatment and considers the physician to be the only one who is capable of taking an informed decision for the welfare of the patient. Any resistance that the patient may put up against the advice of the patient is considered to be against her own welfare.

The sick person is peculiarly vulnerable to exploitation and at the same time peculiatrly handicapped in arriving at a rationally objective appraisal of his situation. In addition, the physician is a technically competent person whose competence and specific judgements and measures cannot be competently judged by the layman. The latter must therefore take these judgements and measures "on authority".

Though it is unclear what Parsons means by 'pseudoscience', he clearly alludes to non-conventional treatments in medical care and the results of 'optimism' on the cure of a patient.

It is suggestive that pseudoscience is the functional equivalent of

magic in the modern medical field. The health situation is a classic one of the combination of uncertainty and strong emotional interests which produce a situation of strain and is very frequently a prominent focus of magic. But the fact that the basic cultural tradition of modern medicine is science precludes outright magic, which is explicitly non-scientific. The result is a "bias".

However, Parsons does not rule out the probability of these 'nonscientific' medical systems to bring a positive change in the treatment.

It may be safely inferred that there is an important element of posistive emotional significance in this. The basic function of magic, according to Malinowski, is to bolster the self-confidence of actors in situations where energy and skill do make a difference but where because of uncertainty factors, outcomes cannot be guaranteed....on the side of the patent it may be argues that *belief* in the possibility of recovery is an important factor in it.

It is difficult to arrive at universal theory of sickness behaviour because of the diversity of experiences of diseases and ill-health. Parsons' theory has been based on a biomedical system. More and more people move away from relying solely on biomedicine for their healthcare needs. In alternative and traditional healing systems, the patient may enjoy more agency than in a strictly biomedical one. This agency may also extended to the patient if they are educated, urban, etc. Social and cultural factors also determine the choices around healthcare and experience of the disease itself. Thus, while Parsons' work signifies the first attempt to sociologically understand the role of the sick person in a society, it is also important to look at critically, for its inapplicability across all systems of medicine. Sociologists then have a responsibility to account for the differences in sickness behaviour based on social categories, as we will see in the next section.

Learning Activity 2.3 Write a short essay on the last time you were sick, and how you adhered to or detracted from Parsons' idea of sick-role

2.4 Social Correlates of Sickness Behaviour

Sociologists of medicine have long observed the relationship between social factors and sickness behaviour. Anthropologists have also done so, especially in the context of cultural meanings of health, disease, and modes of treatment. However in this section, we shall look at the more sociological correlates such as age, gender, etc., and the role they play in the variations of sickness behaviours. These sociological indicators can be divided into biosocial (age, sex, race and ethnicity) and sociocultural (marital status, income, education, occupation and employment, religion).

1. Age: It is a kind of truism to suggest that formal health seeking behaviour increases with age. Except in the case of women during the pregnancy, most cases of hospitalisations are from the older age groups, as opposed to young people. Exception to this can be seen in the case of infants and neonates also, where many are particularly vulnerable to disease and infection. In India, hospitalisation rates among the those aged 50 and above are much higher than the rest.

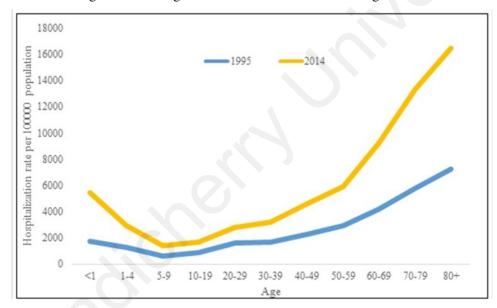


Figure 17: Rate of hospitalisation in India from 1995 and 2014

It is also necessary to factor in the variations of diseases of each age group. For example, while infants may be admitted due to infectious diseases, older people may be hospitalised due to non-communicable and chronic conditions. Similarly, hospitalisations arising from accidents and abuse of substances and alcohol may be seen more in early adulthood and middle-age.

Another factor to be taken into consideration is the availability of home care and hospices. Due to joint family being the prevalent mode nowadays, many elderly people choose to live in senior homes or seek hospice care. However, this choice is also mediated by economic, social and cultural considerations. The kind of care sought is also different across ages. While younger people may want to rely on outpatient services so as to avoid skipping on work, etc., older people may find the inpatient services more comfortable. Older people are also more likely to seek care from specialists and secondary and tertiary care, as opposed to general physicians and primary care. Similarly, diagnostic tests and surgeries are also different for different age groups. While middle-aged people may be subject to surgeries, a person who is very old may be considered too much in a risky position to go through such procedures. Similarly, older people are far more likely to be prescribed a larger amount of drugs than those in a younger cohort.

2. Sex: The data on the correlation of sex and care-seeking behaviour shows different results in the west and in countries like India. In western nations, women are more likely to seek care, especially in terms of primary care and physician appointments. Rates of hospital admission are almost the same, though women are heavily represented in the obstetric sections. As the ages go up, men are more likely to undergo medical procedures. However, in terms of hospice care, there is a larger number of older women in such establishments, which may also be due to the fact that an older alive man may be under the care of his wife.

In India, however, social conditions such as poverty, patriarchal norms, etc. hinder women's access to formal healthcare. Women may resort to informal healthcare though social networks, folk healing, etc., but in terms of formal care, men are by far represented more. The below table shows the differences in expenditure by men and women in India on healthcare.

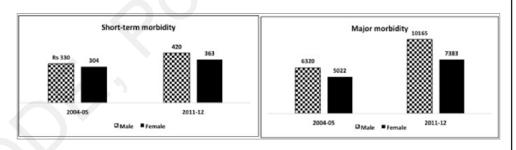


Figure 7: Differences in healthcare expenditure among women and men

Women in countries like India may have less means to formal care due to lack of financial independence, lack of property ownership, less contribution to household income, etc. Furthermore, social norms also dictate that the health and nutrition needs of men come first, which may

lead to many women prioritising the medical needs of the male members of their families above their own.

3. Race and Ethnicity: In the United States, the difference in caste accounted for differential health behaviour as well. More number of Black, Asian and Hispanic Americans were likely to be discharged from hospitals as opposed to white Americans. However, more white Americans were represented in nursing home, and they were also far more likely to consult physicians. They were overrepresented in the use of specialists. Many reasons factor into these differences. While income and lifestyle are major factors, there is also the nature of care which each person receives. Black Americans are subjected to more invasive procedures than white Americans, on the racist misconception that the former have a high pain tolerance. Similarly, diagnostic tools are also engineered towards the white population, though this is gradually changing now.

In India, such differences in healthcare access can be seen in the case of caste differences. Studies have pointed out how individuals belonging to the Dalit community faces health inequities in addition to, and perhaps as reflection of other social inequalities. Most disadvantaged were Dalit women, who were less likely to seek care outside of their immediate areas and primary level. In terms of antenatal care also, Dalit women were less likely to use the benefits from antenatal care programmes. There also other factors which hinder the health-seeking behaviour of people from Dalit communities. For example, the inability to travel long distances to reach secondary or tertiary health services impact their ability to seek higher medical care. There are also reports of discrimination on caste-grounds in hospitals.

4. Marital status: More married people are likely to seek formal health care as their spouse may encourage them to do so. Disease progression is also low in the case of married people. In case of elderly people, more number of unmarried people (especially widowed people) are seen in nursing homes. Unmarried people are also expected to lead more unhealthy lives. In India, notions of gender roles within marriage, mediated by patriarchy, inform the healthcare available to people. Unmarried women were less likely to receive diagnostic care. 5. Income: In countries with socialised healthcare, people in lower income categories were seen to report higher rates of hospitalisation, thus showing their less healthy status. However, in countries like India, where healthcare is expensive and public healthcare is limited, income levels may show a different kind of relationship to formal sickness behaviour. Those in the lower economic classes may opt for public healthcare rather than private. They may also be restricted in their ability to seek treatment in geographical areas far from their own. There are also reports that both public and private healthcare providers in poor neighbourhoods may not be as competent as their counterparts in more wealthy places. This may be a result of underfunding, lack of efficient and skilled personnel, lack of amenities, etc. But this means that those with lower socio-economic status may receive less than optimal care.

It is also seen that doctors may not communicate with the patients from lower economic status in the same way that they do with middle- or upper-class patients. This hinders the decisionmaking ability of the poor, and further contributes to their lack of understanding of the medical process and procedures.

- 6. Occupation: People in higher levels of employment are seen to access more formal healthcare as opposed to those in the lower levels. This may be because they are more aware of health conditions and the steps required to rectify them. However, those in the lower levels of employment may be exposed to more hazardous work environment which may necessitate more urgent and emergency care. The factor of insurance also plays an important role in this: if the employer covers insurance, then it is more likely than a person would seek formal healthcare than someone who does not have health coverage. In India, the informal sector employs a vast number of people, and so their access to healthcare is restricted to public health care. However, as we will see in the following chapters, employment in India also provides unique access to medical care, as seen in the case of ESI, railway hospitals, etc.
- 7. Education: People with less literacy are seen to be accessing less formal healthcare. In fact, much like income and occupation, those with higher rates of education are more likely to look for formal and institutionalised healthcare as opposed to those without much

education. Another crucial factor is that for health literacy. Health literacy is defined as 'the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others' Studies have pointed out that mere education levels do not account for a good health literacy (Rathnakar, 2013). Younger people are more health literate than older ones. In fact, health literacy was seen among people who interact frequently with a family physician, and thus are able to follow medical language and conversation easily.

8. Religion: Beliefs and values may determine the mode of healthseeking behaviour. In India, because of the abundance of traditional medicine, the choice of medicine system may be guided by religious factors as well. Furthermore, religion also mediates the compliance with diet, consumption of medication, etc. Religious healing also becomes a crucial part of informal health-seeking behaviour.

Thus, it is seen that experience of disease, healthcare and sickness is no way objective. There are as many social and cultural determinants and factors behind a person's perception of sickness, pain, and choice to seek formal care. Sociologists have to pay attention to these factors while studying medicine, and thus are in a position to contribute to the nuances in understanding medicine in society, apart from a reductionist perspective.

Learning Activity 2.4 From news reports of the past 3 years, try to write a short note on how the above social correlates determined the experiences of COVID19.

2.5 Summary

- Meanings of disease- sickness- illness- perspectives to understand sickness behaviour: social, biological, psychological
- Informal sickness behaviour- self-care- informal networks- noninstitutional care- religious healing
- ➢ Formal sickness behaviour- healthcare systems usage- sick rolesickness in a functionalist perspective- aspects of formal sickness behaviour-validation and certification of sickness-becoming a patient: symptom recognition- symptom evaluation-information search- informal and formal help-seeking- identifying source of care- sick role adoption- medical compliance- post-treatment role

- Sick role- role of physician- functionalism in sick role theory
- Social correlates of sickness behaviour- age- sex- race and castemarital status- education- income- occupation- religion

2.6 Self-Assessment Questions

- 1. Explain the terms health, disease, sickness and illness. How are they different from each other?
- 2 What is informal sickness behaviour? How do people employ informal sickness behaviour?
- 3. What are the ways in which a person can adopt formal sickness behaviour?
- 4. Explain the problems associated with the doctor's certification of sickness.
- 5. Explain Parsons' sick role in detail with relevant criticisms.
- 6. What are the social correlates of sickness behaviour. Explain with reference to India.

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Lesson 3.1 - The Hospital and Physician in Society

Structure

- 3.1 Hospital as a social institution
 - ▹ Hospitals in history
 - ▹ Hospitals in India
 - ▶ Hospitals and society
 - ▶ Functions of a hospital
 - > Problems in hospital-patient interaction
- 3.2 Doctor-patient interaction in healthcare
 - Professionalisation of the physician
 - Models of doctor-patient interaction
 - > Changing dynamic of interaction patterns
 - > Doctor-patient interactions in the future
- 3.3 Functions of a physician
- 3.4 Summary
- 3.5 Self-Assessment Questions
- 3.6 References
- 3.7 Sources of images

Learning Objectives

- 1. Analysing the importance of the hospital as a social institution
- 2. Understanding the historical evolution and various roles of hospitals in India and in the west
- 3. Understanding the significance and functions of hospitals in society
- 4. Discerning the problems in hospital-patient interaction
- 5. Understanding the nuances of the relationship between doctor and patient, including the various model of such interactions
- 6. Tracking the professionalisation of the role of the physician
- 7. Understanding the changing dynamics in doctor-patient interaction patterns and the possible trajectories in the future
- 8. Analysing the functions of a physician

3.1 Hospital as a Social Institution

A hospital is a residential establishment which provides short-term and long-term medical care consisting of observational, diagnostic, therapeutic and rehabilitative services for persons suffering or suspected to be suffering from a disease of injury and for parturients. It may or may not also provide services for ambulatory patients on an out-patient basis.

World Health Organisation, 1963

Hospitals are the most evident and visible institutions in the healthcare system. According to the WHO, hospitals complement other parts of the health system. Hospitals regulate and divert the necessary resources for the care of the sick and the diseased in society. It is a meeting point of patients, medical personnel, pharmaceuticals, as well as other allied services and products which help in the diagnosis and cure of diseases, as well as rehabilitation of sick people.

Hospitals are important social institutions. In pre-modern times, the duty of care was performed by members of the family. However, with increasing urbanisation and industrialisation, there is increasing specialisation of all responsibilities and tasks in society, including healthcare. It is not uncommon to see people being admitted in hospitals because their immediate family cannot take constant care of them. In this respect, hospitals are also important because often they make a landmark in people's lives. Births and deaths often take place in hospitals and mark important milestones. Medical personnel also offer services which comfort and console sick people. In some cases, where hospitals are run by religious bodies, the spiritual callings become an important aspect of the services of the hospital. According to the functionalist perspective of Talcott Parsons, hospitals serve to prevent the disruptive aspect of sickness and disease from affecting other parts of society.

All institutions are interconnected to the societies they are a part of. Hospitals both shape and are shaped by the values of the surrounding community and society. As such, they do not exist in isolation from the rest of society. When medical trends in society change, hospitals also enlarge

their scope of activities. The same can be seen in cases of specific cultural phenomena as well. For example, in western countries, after a long bout of aggressive separation of mid-wife and maternity services, more and more hospitals are now engaging the services of doulas and midwives to go out into the community and check on pregnant women and the progress of their pregnancies. Hospitals also perform important outreach functions and keep in touch with the communities they are located in. Apart from that, hospitals also perform important referral functions.



Figure 19: A Certified midwife attending to an expectant mother in India

Similarly, in western countries, hospice care is common for older people and for those with terminal illnesses. In a hospice, not only is immediate medical attention given, but other aspects of one's life are also taken care of. When a person nears the end of their life, questions of spiritual nature may tend to take prominence in their minds. Palliative care provides emotional and spiritual support for those at the end of their lives. Hospice care is different palliative care in that in a hospice, all treatments are ended, and a patient is made as comfortable as possible. In a hospice, nurses, doctors, social workers and other emotional and spiritual workers work together to make the final days of an individual as comfortable as possible.



Figure 20: Palliative care

According to the Centre for Disease Control and Prevention, there are many types of hospitals:

- Community hospital: These are the hospitals that provide primary care for the immediate community. Usually medical infirmaries within schools and prisons are not included in this because they are not open to the public.
- Registered hospital: This category is relative to the regulatory system of the United States and is different from hospitals in India. However, for the sake of understanding, these may be understood as stand-alone hospitals which provide medical services to the public, often outside of the state infrastructure, and thus on a paid basis.
- Short-stay hospital: These are hospitals which offer services such as maternity, eye, eat, etc.
- Special hospital: These hospitals provide treatments for specific diseases. The treatments here include both surgery and nonsurgical procedures.

Learning Activity 3.1 Visit a hospital or use your recollections from a hospital visit. Mention the various personnel and services that are associated with hospital, and their role in society as part of the healthcare system.

Hospitals in History:

As mentioned above, hospitals as social sites have not always had the same meaning, structure and function as they have now As Michel Foucault has focused on, the hospital in the modern sense of the term originated in France in the 19th century. They arose when Napoleon instituted specialised places for the treatment of his soldiers.

Before that during the Ancient Ages, churches performed the functions of care, by looking after widows, destitute women, the disabled, and children. In India also, Buddhist monasteries were sites of healing as well. This tradition continued into the Middle Ages, when monasteries had special wards for the recuperation and the comfort of the sick. Cities also started establishing special institutions for contagious diseases such as leprosy. Thus the sick were recognised as having special needs, which deemed it necessary for them to be separated from mainstream society.

In the 18th century, medical education spread in many parts of Europe, outside of monasteries and in specialised institutions. This also implied the growing secularisation of healthcare away from religious factors. In the US, the 18th century also say the establishment of isolation chambers and almshouses. However, the intention behind the alms-houses were not the care of the sick, but rather that poor and destitute people would have a place to go to. But slowly, hospitals as medical centres began to be opened, but it was considered that only poor people would visit hospitals. At this stage, hospitals were seen as unhygienic places where diseases and infections festered. Middle- and upper-class families often had the doctor visit them at home. This was a privilege that only a few could afford.

However, as mentioned above, with industrialisation, it became slowly difficult for doctors to attend to their patients at home. New improvements in medical technology and use of anti-biotics and sterilisation methods also changed the image of hospitals as unhygienic places. This necessitated the professionalisation of the medical service. In this shift from the home to the hospital, the profession of nursing played a crucial role. Religious organisations and denominations established hospitals, but the care of the patients was done by trained personnel.

Around the beginning of the 20^{th} century, the state also started funding and establishing hospitals. This enabled a lot more people to avail cheap or free healthcare. Around the same time, hospitals also started integrating scientific and technological advancements into their functioning, such as the use of x-ray machines, making their laboratories and surgery rooms aseptic, etc.

Let us see the stages in the development of the hospital as an institution in detail, as given by William Cockerham (2016).

Hospitals as Centres of Religious Practice

Though Greek and Roman history show that medical treatment was given to those who needed it, there were no institutions equivalent to the modern-day hospital. It was during the rise of Christianity in the Roman Empire that hospitals began too. According to Cockerham, hospitals and its origins were closely tied to the rise of Christianity itself. The Christian goal of salvation meant that service for the needy became a crucial part of the religious organisation. Thus, many healing centres were originally set up near churches and monasteries, thus manifesting the Christian theological understanding that there was a religious duty to attend to needs to the sick. Many of these hospitals were established with the direct support of the Roman Catholic church, which direct its clergy to take initiatives in this regard. Furthermore, during the crusades of the Middle Ages, that is, from 1096-1291, when Christian armies were on the move towards the Holy Land (in what is modern day Israel), hospitals were established along the route to provide for the needs of the heavily mobilised forces. There was even a special order called the Hospitaller Knights (Buklijas 2008), whose duty was to take care of the sick. However, this is not to say that secular forces did not found their own hospitals; members of royal family, wealthy traders and rich benefactors also helped in the establishment of hospitals, away and outside from the religious systems. This was prominently seen in wealthy Italian towns, where the wealthy families were spearheading rapid urbanisation. Access to medical care within the city itself meant that the workers did not have to leave the bounds of the area to get better, thus ensuring a continuous supply of labour for entrepreneurial activities. Thus, Western Europe had a network of hospitals by the end of the 15th century.

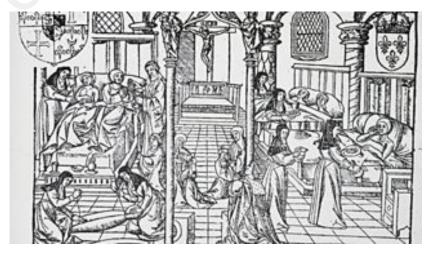


Figure 21: An Illustration showing the hospital Hotel Dieu (Hostel of God) in Paris in Medieval Europe.

However, we should not assume that these hospitals were the same as the hospitals today. Even though they were sites were sick and poor people were tended to, the actual caregiving was performed by members of the clergy and the holy order, rather than any trained medical professionals. The caregiving was mostly in form of nursing activities. Charity was the driving force behind these hospitals, and in this regard, able as well as disabled poor were given food, shelter and other basic amenities of life. In addition, they were also involved in the religious activities of such places, including in prayers.

However, this religious nature slowly started changing during the Renaissance era. The Renaissance saw an awakening of the intellectual and cultural forces in Europe, led by a scientific temper. Leonardo da Vinci was among the many whose works in this time period led to a new understanding of the human body and diseases. It was also in this period that Martin Luther's actions led to the reformation of the Catholic church, and the rise of various other Christian denominations in Western Europe. As a result of these factors, medical institutions started losing their religious nature, and more and more hospitals came under the control of secular bodies. However, it can be argued that the Church has influenced the institution of the modern hospital in the following ways:

- The idea of service is now a crucial feature of the ethics of medical personnel
- Hospitals are not to discriminate any one, but rather, should provide treatment for all those who are sick and needy
- Patients reside within the hospital space in order to provide attention and care consistently
- Hospitals as Poorhouses

The gradual removal of hospitals from the administrative control of the clergy and its transfer to more secular forces led to a period of slow growth of European hospital systems. Even though the patients were taken care of by the monastic order and nuns, they were controlled by the municipal bodies.

Thus, hospitals were left to be relatively autonomous, with no greater regulatory body to answer to. This led to a decline in hospital management, in form of misuse of funds, lack of patient care, neglecting the facilities, etc. In fact, in England, owing to the royal family's shift away from Catholicism and the closure of many monastic orders, many hospitals had to forgo their personnel and financial resources, meaning that they eventually had to close down. This meant that sick people (who did not have resources to have a physician at their beck and call) were left destitute. Thus, it became evident that hospitals had played an important role in the treatment of the sick and their successful return to society.

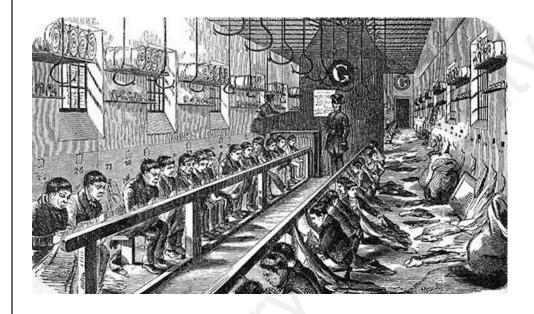


Figure 22: Poorhouse in 19th century England

By the end of the 16th century, poverty levels had risen up due to lack of employment and exploitative land holding patterns. There were many vagrants in Europe, and they kept roaming the cities and countries in search of a minimum of means to a livelihood. As many of these vagrants were disabled or sick, it became crucial to provide some sort of welfare measure for them. But this time, it was not the church or the religious organisations which were entrusted with this responsibility of welfare, but rather, the communities or the local government. Poorhouses were opened, were vagrants could go for rudimentary care facilities. However, they were not like hospitals, but places which offered boarding and warm food. Those were able to work were expected to pay the low fees, thus showing that these poorhouses served both able and disabled people. Cockerham calls these poor houses 'social warehouses, where invalids, the aged, orphans, and the mentally defective could be sent and thus removed from the mainstream of society'. A similar trend was seen in the budding stages of hospital care in the US also, where people who were not able to function in the public realm could stay at hospitals, which doubled up as poorhouses providing food and shelter to the vagrants.



Workhouses in the UK were established by the Royal Commission into the Operation of the Poor Laws in 1832 and abolished in 1930. However, these poorhouses, often used synonymously workhouses, were infamous for their lack of sanitation, and were even once criticised by none other than Florence Nightingale herself. A very interesting example of a poorhouse was given by George Orwell in his 1931 essay, *The Spike*, in which he writes about his time as a vagrant in the English countryside, and his stay at a workhouse.

Hospitals as Deathhouses

Physicians first started associating themselves with hospitals in the 14th century, but this was on a voluntary basis, as the actual caregiving functions were performed by the monastic order. During the Renaissance, physicians realised that hospitals were full of sick people whose bodies could be used in medical research. By the 17th century, doctors had established a monopoly over hospitals and over medical knowledge at large. Though their expertise was initially in the fields of medical research and advising, gradually they shifted to the role of directors of medical care of the patients as well. Thus, by the beginning of the 19th century, hospitals had become exclusive medical in nature, with medical research and training of new doctors being a part of it.

It is important to note at this juncture also, hospitals were eyed with suspicion by the general public because of the high rates of mortality within these buildings. Even though hospitals were acknowledged as primarily medical centres, the treatments available were still at the rudimentary stages and so positive results were not common. The high death rates in hospitals could be understood as arising from the ghastly conditions in these spaces. There was no proper ventilation and sanitary conditions were bad. Foul odour emanated from the bathrooms and latrines, and the sick were treated in the presence of others, thus making cross-infection very common. Bloodletting and releasing pus by making abscesses on the skin were common practices, but there were no mechanism to ensure the sanitary disposal of body fluids. The dead were not removed immediately, and often the doctors and other medical personnel also moved from one patient to another without sanitising themselves, resulting in spread of germs. Washing hands was not a common practice. Hospitals were seen as a breeding ground of diseases owing to miasma (bad airs), against which Florence Nightingale recommended the building of balconies.



Figure 23: Florence Nightingale recommended handwashing and ventilation in hospitals

The 'Great Sanitary Awakening' of the 19th century transformed the hospitals spaces. There was the acknowledgment that not just the dirty hospitals, but also the filthy living and working environment of the common people were causing disease and sickness. In addition to the cleaning up of the cities and neighbourhoods, hospitals also started focussing on the hygiene aspect of healthcare, aided by the new theories and inventions of Louis Pasteur and Joseph Lister.

Hospitals as Centres of Medical Technology

Towards the end of the 19th century, the reputation of hospitals started changing. They became known as places where patients of all classes could go to attain the highest possible level of healthcare, and be treated for their diseases. According to Cockerham, there were three reasons for this transformation of the image of hospitals where poor people went to die to places that provided good healthcare:

➤ The development of the scientific temper meant that medical researchers and practitioners stressed on proper method and techniques to develop their knowledge. This was a move away from the earlier theoretical understanding of the underlying causes of ill-health. Human anatomy was better understood, and medical students were expected to perform anatomical studies as well. Bacteriology as a discipline started gaining traction, and the role of germs in the causation of diseases became known. Ether started being used as an anaesthetic, which led to surgeries being performed in

a painless fashion. There were also new medical equipments which could not be used in the patients' houses by individual doctors. So doctors started recommending even their well-off clients to visit the hospitals. Thus apart from the poor patient, who depended on charity, now a new private patient emerged, that is, someone who paid for the services of a hospital.



Figure 24: W T G Morton using ether as an anesthetic in dental surgery for the first time in 1846

- The use of antiseptics in hospitals also was a major factor in the transformation of hospitals. As mentioned above, hospitals in the late 18th and early 19th centuries were not maintained according to standards of hygiene we see today. Towards the end of the 19th century, all this changed and frequent sterilisation of hospital spaces and equipment as a practice took hold. The use of disposable syringes, surgical gloves and masks became an ubiquitous feature of hospitals. They reduced the number of patient deaths arising due to infection, but also reduced the recovery time.
- Two kind of hospital personnel were now introduced who changed the institution of the hospital. They were the laboratory technician and the professionally trained nurse. They were the support staff for the physician in the primary role as caregivers. While the physicians could not keep an overall eye on the patients at all times, the nurses could do so. The laboratory technicians were crucial in the diagnosis of diseases through medical tests.

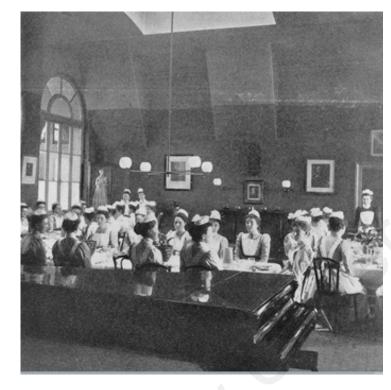


Figure 25: Young nurses at the Nightingale Home and Training School for Nurses

In addition, the 20th century saw the tremendous leaps made in healthcare technology. New equipments and instruments are used which have made hospitals the providers of sophisticated healthcare. Added to this is the role of hospitals as research centres. By the direct observation of patients, young doctors are trained in their vocation. The research in hospitals also lead to development of new vaccines and treatment regimens. Hospitals are also closely integrated with the commercial research sector, thus making them the first places where any medical technology can be safely checked for its usefulness. For example, the smallpox vaccine has eradicated the disease and prevented the need for hospitalisation for the same. Similarly, due to technological advancements, surgeries, including cardiac surgeries, can be minimally invasive. Machines are used in the monitoring of vitals such as blood pressure, and imaging is used in looking at the inner organs to understand their functions. Thus, hospitals increasingly employ cutting-edge technology to aid in healthcare, and are now trusted and essential institutions in contemporary societies.

Learning Activity 3.2 Research and write a note on the parallel developments of hospitals and medical systems in the eastern traditions and the western traditions. Compare especially the points on religious institutions and the birth of the community-oriented healthcare system.



Hospitals in India

Historical sources regarding the existence of a healthcare system, including that of hospitals, in ancient India is difficult to be obtained because of a dearth of inscriptions or manuscripts from this time period. What little knowledge we do possess about this period indicates that Emperor Ashoka had established hospitals as part of his Buddhist faith. He established hospitals not only for humans but also for animals. A systemic practice of medicine was not unknown in India, owing to the works of Sushrutha and Charaka in the fields of ayurveda. As mention in the earlier chapter, their treatises contained detailed information regarding medicines, diseases and symptoms, medical instruments, diet and exercise regimens, etc. Accounts of Arabian and Chinese travellers to ancient India also mention the existence of a system to take of the sick and diseased.

However, this saw a decline during the conquest of India by the invading armies from Central Asia. The new rulers brought in their own systems of medicine, and thus during the medieval period, India saw the simultaneous practice of ayurveda and unani. This continued till the 16th century, when European forces, notably the British started establishing their rule.

Biomedicine was introduced in India during the advent of the colonialism by European nations. The Portuguese established a hospital in Goain the 16th century, where Jesuits priests trained Allopathy, or biomedicine had a steady growth during the British rule. The policies enacted by the colonial rulers had the effect of pushing indigenous systems of medicine to the background. Missionaries were most crucial in the establishment of biomedical hospitals all over India, a signal of the connection between healthcare and Christianity, that was seen in Europe also.



Figure 26: Plague hospital in Bombay, 1920s, established by the British

It was 1822 that the East India Company first established a medical school in Calcutta. By the end of the 19th century, there were four medical colleges in India. By this time, the community also perceived hospitals as more than plaves where the terminally ill could go to spend their last days. Public health committees were established and medical centres originally intended for the treatment of army personnel were now repurposed for offering treatments to civilians also. A number of committees were constituted during and in the years preceding the World War II, which focussed on the provision of state healthcare. This will be covered in detail in the following chapters.



Figure 27: A 1878 photo of Medical College Hospital in Calcutta

In the post-independence years, there was an urgent need for increase of state-funded medical care because of the increase in population. Immediately before independence, the patient to bed ratio was 0.2%. In 1996, this was calculated at 0.75 beds per 1000 people. In 2017, the World Bank calculated the hospital bed ratio of 0.5 per 1000 people. In 2020, the Human Development Report showed that India ranked at a dismal 155 out of 167, with only 5 hospital beds for 10000 people.

In spite of the efforts by government over the decades, India's state healthcare is not at the optimum level for its populations needs. This can be attributed to two reasons:

- Lack of financial and other resources to build a healthcare system to cater to the vast majority of the population
- Increasing privatisation, which has undoubtedly to the establishment of many state-of-the-art hospitals in India

More about hospitals and healthcare in a national context will be covered in the unit about public health in India.

Learning Activity 3.3 Explore the role of specific hospitals in history, using fiction and literature as a source. For example, St. Bartholomew's Hospital in London was made famous through Sherlock Holmes novels. How many such hospitals and medical institutions have been popularised through literature?

Hospitals and Society

The sociologist Erving Goffman wrote that hospitals are 'total institutions'. He was writing predominantly about mental asylums, but this nomenclature can be taken to understand hospitals as whole. In a total institution, a person is cut off from the general community for a long period of time and their life is regulated by strict regimens, with little privacy. We can also use the concept of panopticon, as described by Michel Foucault, to understand the constant surveillance that is seen in hospitals. Patients who are admitted in a hospital for a long period of time form relationships that are dependent on the hospital structure, and undergo 'institutionalisation'. This will also make reintegration into a hospital upon discharge quite difficult.

For example, if a person is admitted to a hospital for a long period of time, extending from days to months, that person may be used to a routine which they may not be able to follow outside of the hospital. First of all, there is no privacy in a hospital, as most hospitals do not encourage the locking of individual room doors. In fact, in many hospitals, many patients may be separated from each other only by a curtain in an open ward. The patient is always accessible to the doctors and nurses at all times. The body of the patient is also subject to constant scrutiny and checks. Diet is controlled by the hospital, and the patient may be forced to adhere to certain regulations in terms of time, quantity and quality of food. The patient may form a relationship of adherence with the physician. If the period within a hospital is lengthy, it is not unusual to see people form friendships with other inmates.

Functions of a Hospital

The following are the functions of a hospital:

 The primary function of a hospital it to offer healthcare services of diagnosis, treatment and cure, rehabilitation, as well as provision of emergency care. This function includes both in-patient services such as surgery, as well as out-patient services such as prescription of drug regimen, etc.

Apart from the treatment of diseases, hospitals have a major role to play in educating the society about healthcare and diseases. For example, many hospitals conduct awareness camps, where free medical tests, dental and eye checks, etc., are offered to the community free of cost. These outreach activities help in spreading awareness among the community about health disorders. Nowadays, it also seen that hospitals sponsor public information broadcast about certain medicines on television, which inform the general public on basic aspects of healthcare and educate them about what symptoms to look out for in a disease. Thus, hospitals function to prevent the spread of disease and encourage healthy habits among the population.



Figure 28: Rural health camps help people in villages

Hospitals are often the first places where diseases are spotted. For example, during the AIDS epidemic in the United States in the 1970s and 80s, the doctors at hospitals around that country first raised the alarm about the new disease which were killing young people. Similarly, when COVID19 first started spreading in China, Chinese doctors there raised the red-flag about this new disease being caused by a mystery virus. Hospitals have a responsibility to inform the authorities. Only when hospitals do this part diligently can the state then embark on controlling the spread of new diseases.

Apart from identification of new diseases, hospitals also have a duty to monitor the spread of diseases. Often, hospitals are integrated into a centralised network which keeps tabs on the rate of new infections and reports of new diseases. This has been seen most recently in the case of COVID19.

- Hospitals are also crucial elements in the record-keeping aspect of public healthcare. Birth and death rates are maintained by hospitals and this information is then passed on along to the state.
- Hospitals provide support to individual medical practitioners. Often, small clinics and family doctors with private practice do not own the equipment necessary for sophisticated medical tests. In such cases, they may refer the patient to a hospital. Similarly, hospitals also provide the necessary infrastructure for surgeries.
- Hospitals also function as medical colleges. They are centres of education and research. Doctors, nurses, paramedical professionals are trained in hospitals. The doctors who also have the responsibility of teaching also engage in medical research, which is crucial for disseminating knowledge. Access to patients and first-hand experience in diseases and treatments make hospitals indispensable in the training of new medical personnel.



Figure 29: Students in a Medical College

Hospitals also contribute to the local economy. Certain places are known for the medical services it offers and thus becomes hubs of medical tourism. India, for example, is known for its inexpensive and well-rounded medical care, and this draws in patients from foreign countries. Allied businesses also sprout up supporting this medical tourism, including services that cater to the food, housing and language needs of the visiting population. This contributes to the national and local economy, as well as offers jobs to the general public.

Doctors and administrators of hospitals often play a role in policymaking. As people in a position to see in person the dynamics of healthcare and sickness in society, they are also in a position to determine the direction of public policy, medical rules, and steps to be taken to control outbreaks.

Problems in Hospital-Patient Interaction

Even though the priority of the hospital is on the betterment of the patient, by necessity the hospital structure is organised so as to facilitate the most convenience for its personnel in their duty to take care of the maximum number of people. This organisation leads to a standardisation of the practices within a hospital, but it leads to the patients becoming what Goffman calls 'non-persons'.

Depersonalisation in healthcare is another problem in a healthcare institution. A patient may not get enough time to spend with the doctor, and thus many of the ailments may go undescribed. The history of medical practice shows that the subjective experiences of pain are not taken seriously when described by certain patients. Fore example, research has shown that when Black women in American and British hospitals seek aid in maternity wards, their account of pain and discomfort are not given as much attention as white women's are. Depersonalisation affects treatments because of its psychosocial effects, and is an indicatory of the overall efficacy of the organisation set-up.

Patients also report alienation from others and their own psychological selves in hospitals (Cockerham, 2015). The body of the patient is made to feel like an object exterior to one's psyche. The patient also very rarely, if at all, has a chance to exert agency and make any decision regarding the treatment or their bodies. Further, the architecture of hospitals is constructed in such a way as to remain sterile, both literally and metaphorically. Hence, the combined effect of drab walls, bright lights and the constant feeling of being subjected to surveillance may make the patient feel like less than adequate in this setting.

Recent reports of abuse in hospitals, especially mental health institutions, have led policy-makers and activists to also look at the working conditions of medical personnel. Many medical personnel are overworked and lack good working conditions, and this leads to a cycle of mistreatment of patients.



What is necessary is a shift from doctor-centred to patient-centred care. The features of patient-centred care are

- > There is collaboration between the patient and the doctor in care
- The patient's physical and emotional well-being are taken into consideration
- Culture, values and financial conditions of the patient and their family is respected
- The family or support system of the patient is to be accompany the patient, be it in the doctor's office or in the hospital
- All information regarding the treatment is revealed to the patient, so that they can be active participants in the decision-making process



Patient-Centered Care

Figure 30: Patient-centred care

A patient-centred model would lead to the attainment of not just optimum health care read at population levels, but also at the level of individual well-being.

Learning Activity 3.4 Using popular TV shows as a reference point, write a note on how are hospitals depicted in contemporary popular culture.

3.2 Doctor-Patient Interaction in Healthcare

The role of the physician has changed over the years. As seen in our discussion of the evolution of hospitals through the ages, the earliest physicians were the monks and nuns in European monasteries, and the mendicants and herbalists in all parts of the world. There was no professionalisation of the role of physicians till institutional training began in earnest in Europe in the 19th century. Aspiring doctors from all parts of the world went to France and Germany, where new advancements and technology were changing the way medical training was imparted. Gradually, countries like the United Kingdom and USA also saw the growth of medical education, producing a whole generation of professional doctors, starting from late 19th-early 20th centuries.

According to the American Medical Association, 'a physician is an individual who has received a "Doctor of Medicine" or an "Doctor of Osteopathic Medicine" degree or an equivalent degree following successful completion of a prescribed course of study from a school of medicine or osteopathic medicine'.

Professionalisation of the Physician

According to William Goode (1956, in Thomas (2003)), a profession has to two fundamental elements:

- Training for a long period of time in specialised and abstract body of knowledge
- Commitment to service

Considered in this manner, the institutional education of physicians are the main factors in the professionalisation of the doctor role. Even though doctors are only cog in the complicated machinery of healthcare, they wield the most power, because they are in a position to do the primary duties of diagnosis and treatment. They also have the power and responsibility to order tests and call upon the services of allied healthcare personnel, and can dictate the structure and functioning of the hospital set-up. Since doctors are at the top of the hierarchy of medical personnel, there are severe gatekeeping conditions for the profession. The training is academically rigorous; legislations and regulations serve to monitor and ensure that physician follow the standards of behaviour in their occupational capacity; licensing and constant evaluation develops professional standards.





Figure 31: Crest of the Army Medical Corps, India

The symbol of modern medicine is the caduceus or the Staff of Hermes, depicted by a stick with two entwining snakes around it. However, some organisations (e.g., World Health Organisation, Indian Army Medical Corps, etc.) use the Rod of Asclepius, which is a stick with only snake. Both of them are derived from ancient Greek mythology.

Models of Doctor-Patient Interaction:

While Talcott Parsons' idea of the sick-role is the predominant theory in sociology regarding the role of a doctor and a patient in a hospital setting, there are other models of behaviour also which were studied by other scholars. (Parsons' contribution will be examined in detail in a following chapter). According to Cockerham (2016), the contributions of Thomas Szasz and Marc Hollander, and David Hayes- Bautista also helps us understand the complex interrelationships between the doctor and the patient.

In 1956, Hollander and Szasz theorised that the severity of the patients' disease or conditions determines the model of interaction between the themselves and the doctor. In this regard, three models have been suggested by them²:

The activity-passivity model: This occurs when the patient's condition is so serious that they are completely unable to participate in treatment process. For example, in case of emergency care or in case the patient has lost consciousness, they cannot respond to the doctor. In such a scenario, the patient's situation is precarious, and so the doctor makes all the efforts and actively makes decisions to prolong the life of the patient, but stabilizing their condition. The dynamic in this scenario is skewed in favour of the doctor as the patient is helpless and unable to contribute to the interaction. For example,

if a patient has entered a coma state, the doctor may direct him to be put on a ventilator. Similarly, if a person has been brought to an emergency ward of a hospital because they have met with a vehicular accident and lost a limb, they may not be in a state to make any decisions regarding saving their own life; in this case, the doctor has the sole authority and role to make decisions and direct the course of treatment.

- The guidance-co-operation model: This model is seen in cases where the patient suffers from an infectious disease. The patient is aware of their condition and its circumstances. Thus they are able to co-operate with the instructions and guidance of the physician. However, it is the doctor who makes all the decision regarding the treatment regimen. For example, in the case of COVID19, if a person tested positive for the coronavirus, they had to immediately defer to the instructions of the doctor, and follow quarantine guidelines, take the appropriate medicines, etc. Even though it was the doctor who guided the entire treatment, the patient, by dint of their awareness of situation, was able to participate in the treatment by obeying the directions of the doctor.
- The mutual-participation model: This model of doctor-patient behaviour arises when the patient suffers from a chronic condition. In this scenario, the patient is aware of their situation, and also has a role as a full participant in the treatment. They will strictly adhere to the doctor's instructions, and will also make changes in diet, alcohol and tobacco consumption, medicine ingestion, etc. For example, if a patient is regularly consulting a doctor for obesity, apart from passively taking medicines for it, they may also actively make some lifestyle changes in consultation with the doctor, such as exercising or eating less fatty food.

	MODEL	PHYSICIAN'S ROLE	PATIENT'S ROLE	CLINICAL APPLICATION OF MODEL	PROTOTYPE OF MODEL
1.	ACTIVITY- PASSIVITY	DOES SOME- THING TO PATIENT	RECIPIENT (UN- ABLE TO RESPOND OR INERT)	ANESTHESIA, E.C.T., ACUTE TRAUMA, COMA, DELIRIUM, ETC.	PARENT-INFANT
2.	GUIDANCE- COOPERATION	TELLS PATIENT WHAT TO DO	COOPERATOR (OBEYS)	ACUTE INFEC- TIOUS PROC- ESSES, ETC.	PARENT-CHILD (ADOLESCENT)
3.	MUTUAL PAR- TICIPATION	HELPS PATIENT TO HELP HIMSELF	PARTICIPANT IN "PARTNERSHIP" (USES EXPERT HELP)	MOST CHRONIC ILLNESSES, PSYCHO- ANALYSIS, ETC.	ADULT-ADULT

The Hippocratic Oath

The Hippocratic Oath is an oath taken by doctors. It is widely believed to have been written by the ancient Greek doctor Hippocrates ('Father of Medicine') or his disciple. It is a part of the ancient medical Greek texts called *Hippocratic Corpus*. The oath is an avowal to adhere to the stringent ethical behaviour and code of conduct. The ancient oath included prayers to the various divinities of ancient Greece. The modern version of the Oath, below, was written in 1964 by Louis Lasagna, is the text which is used in many medical schools today.

Modern Text of the Hippocratic Oath, by Louis Lasagna

I swear to fulfill, to the best of my ability and judgment, this covenant:

I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of overtreatment and therapeutic nihilism.

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.

I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.

I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.

I will prevent disease whenever I can, for prevention is preferable to cure.

I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.

If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.

Oath Source: https://www.pbs.org/wgbh/nova/doctors/oath_modern.html

Figure 32: Szasz-Hollander Model

The Hayes-Bautista model argues that the doctor-patient interaction depends on the intention of the patient to alter the course of the treatment as given by the doctor. The patients may go against the doctor's advice, for example, by refusing to take a medicine or by taking a higher dose that advised. The patient may also communicate to the doctor that the course of treatment is not effective. In such a scenario, the doctor has to reiterate his dominance either by trying to convince the patient that the treatment is slow, but effective or that the treatment would be ineffective without compliance from the patient. Thus, in this model, the interaction is marked by constant negotiations between the doctor and the patient.

Another category of doctor-patient interactions has been given by Emanuel and Emanuel (1992). The four models suggested are as follows:

Paternalistic/ parental/ priestly model: In this model, the doctor assumes the role of a guardian for the patient. Once the diagnosis is done on the basis of tests, the patient is given information, and is encouraged to take the course of treatment that is considered to be the best by the doctor. In some cases, the doctor may also exert his authority to insist that the patient follow a particular course of treatment. The health of the patient is prioritised over the individual decision-making capacity of the patient as the objective. The doctor expects that the restoration to good health will make the patient grateful to the doctor, even though the former may not have agreed to the course of the treatment.

Informative/ scientific/ engineering/ consumer model: In this case, the doctor provides all the information regarding the disease to the patient, including the details of the disease, possibly therapies and treatments, and the risks and benefits attached to the same. The patient selects the best course of treatment, in adherence to their values, and the doctor then continues along this selected treatment regimen. Here, the two factors that come into play are the patient's values and the facts of the medical condition as given by the doctor. Control is given to the physician within the limits of the doctor's expertise.

- Interpretive model: In this model, the focus is on the patient's values, and the course of the treatment is engineered in such a way as to attain these values within available medical option. The difference between informative and interpretive models is that in the latter, the doctor helps the patient to articulate their values, by having discussions of goals, aspirations and priorities. The doctor acts like a counsellor, helping the patient to find their own values and to arrive at an optimum medical decision.
- Deliberative model: In this model, the doctor as to help the patient to choose the best values which are attainable in a clinical setting. Here, the doctor has to educate the patient on the values which are represented through the available options, and then the choice is accordingly made. The doctor-patient relationship goes beyond a professionally bound one; the doctor also assumes the role of a teacher or a friend, and helps the patient to morally develop and choose the best course of treatment which would be emblematic of this moral development.

Each of the above models depend on the roles of the doctors and patients in a clinical setting. As the patient seeks to exercise more autonomy, the nature of the interaction also changes. In the next section, we will see how the participation of the patient in medical decision-making has been changing, and how this affects the physician in contemporary times.

Changing Dynamics of Interaction Patterns:

Increasingly, patients have more and more access to medical literature, especially with advent of websites such as WebMD. It is also becoming possible for a lay-person to look up medical terms on the internet, thus making slowly breaking down the barriers that keep them away from any conversation around the treatment. Educated people are now expected to ask more questions about the treatment regimen, thus reducing the role of the doctor as the sole decision-maker. Even if a doctor

wants to retain their authority in a situation by keeping information away from the patient or their family, other factors such as insurance, laws, medical leave policies, etc, may force the dissemination of information and the inclusion of the patient in the treatment-related decisions.

Another important caveat in a successful doctor-patient interaction is the communication itself. According to Cassel (1985, in Cockerham (2015)), an efficient communication has to

- ▶ Reduce uncertainty
- Provide a basis for action
- Strengthen the doctor-patient relationship

Clear and efficient communication means that doctor should answer the patient's question regarding any discomfort, disease and the course of the medicines. Conversely, the patient also a responsibility to be honest with the doctor. Since the clinical circumstance is more often than not controlled by the doctor, the flow and nature of communication is determined the tone that the doctor sets.

Negative modes of interaction may be seen when the doctor and the patient come from different social backgrounds. Cockerham draws attention to the following cases:

- Social class: Doctors, who are statistically more likely to belong to upper- or middle-classes, are reported to show differential attitudes to patients based on their class backgrounds. While patients from more privileged backgrounds can be expected to have their condition or medical terms explained to them, patients from working class background are often left in ignorance and mistreated by the medical system. In India, there are reports of poor patients not being given the adequate care that they deserve and need. Similar disparity in communication and treatment can also be seen in case of caste, race, ethnicity, etc.
- Gender: Disparities are often reported when a woman patient is treated by a male doctor. Often, a woman's pain is not taken seriously, and in many cases may lead to the death of the patient as well. This problem is compounded in the case of people who do not belong to the binary division of gender. All over the world, people belonging to the LGBTQ+ community have reported that they face discrimination in the healthcare access sector, either due to lack of

access, or due to the subpar treatment they receive at the hands of medical personnel.

Women doctors: There are complications arising in the doctorpatient relationship when the doctor is a woman. Since the stereotypical view of a doctor is that of a man, a woman doctor may have to face challenges right from her training days, to the clinical setting where the patient may be averse to 'taking orders' from a woman. Furthermore, since most cultures socialise the girl child to be caring and soft in her mannerisms, the same qualities may be expected from a female doctor, as opposed to the authoritativeness of a male doctor. Patients may also expect female doctors to be more patient in their explanations. These disparities in patient expectations are not feasible in an ideal clinical setting.



Figure 33: In many cultures, women prefer to be treated by female doctors

Cultural Backgrounds: When the doctor and the patient are from different cultural backgrounds, there is a lot of scope for miscommunication. Complexities in doctor-patient relationships may arise due to the cultural differences in understanding death, gender roles and isolation, rights of the family, etc. Since culture also includes knowledge systems, the doctor and the patient may not even share the same universe as regards the understanding of the disease and illness. This may be paramount in countries and societies with high rates of in-migration, where the patient and the doctor may not even speak the same language.

People with disabilities also experience complicated doctorpatient relationships. Sometimes they may not be able to access adequate healthcare, or their medical distress may not be understood or taken seriously by the doctor. The doctor-patient relationship may also be complicated when the patient fails to comply with the instructions of the doctor. For example, if the patient does not follow up on the treatment, or skips the medicines, then doctor may be forced to take drastic steps in communication. Cockerham (2015) reports that patients who are advised to quit consumption of alcohol will often continue to consume it.

Doctor-Patient Interactions in the Future

In the modern times, the doctor-patient relations are mediated by a variety of factors external to the consulting room. They are

- ➤ The role of the state: Because of reducing government funding in healthcare, more and more patients are turning to private healthcare providers, where the patient is a customer. Thus, the comfort and the demands of the patients dominate the flow of communication between the doctor and the patient.
- ➢ Insurance companies: The course of the treatment, hospitalisation and the costs associated with it and how much of it will be reimbursed by the insurance firm influence the doctor-patient interaction.
- Commercial healthcare products: The availability of health supplements easily has changed the way that patients view medicine. Healthcare has become largely consumerist in nature, and as mentioned above the traditional doctor-patient relationship transitions slowly into a service-provider- customer relationship.
- Nature of disease: The prevalence of chronic diseases as opposed to infectious diseases has meant that more and more patients now have a sustained and long-term relationship with their doctors. In such a scenario, it becomes important for both the doctor and the patient to make accommodations in their interaction so as to have an optimal result and unhostile consultative experience.
- Domestic medical appliances: With many medical monitoring devices being easily available to be used at home, doctors also encourage patients to take responsibility for constant surveillance of their health. Many patients are taught how to administer insulin injections by themselves, reading sugar levels, etc., thus making them almost equal participants in the treatment process.
- Internet medicine: Perhaps nothing has changed the dynamics of the doctor-patient relationship more than the proliferation of

internet medicine. At the click of a few buttons, patients are able to understand about their diseases and the possible therapeutic routes available to them. It has also made access to multiple healthcare personnel easy. If the doctor is withholding of any information, then the patient can look up on the internet to get that information as well, and question their doctor armed with this information. Technology also helps in monitoring aspects of health and wellness. For examples, there are apps which track menstruation cycles, exercises and calories burnt, aids in guided meditation, etc. While the problem of digital divide is real, and only those belonging to the privileged groups are able to use technology in this way, it has surely made patients more active participants in their own healthcare, and has had an impact on the doctor-patient interaction.

3.3 Functions of a Physician:

According to the Danish Health and Medicines Authority, there are seven functions to a physician's role. They are as follows:

- Medical expert: In this role, the doctor has to execute diagnostic and therapeutic functions. This is where the doctor has to call upon his training to make decisions based on scientific knowledge. They also take initiative to propose changes to medical practices based on their medical skill. Sometimes, doctors may be called to take on the role of leaders of society during times of medical crisis; they may be called on to guide public policy as well as advising political bodies. For example, during COVID19 pandemic, Anthony Fauci (of the US), Tedros Ghebreyesus and Soumya Swaminathan (of the WHO) became household-names because of their constant appearances of television to guide the public on the latest developments and behaviour to be followed to curb the spread of the infection.
- ii. Communicator: This function entails the communication of information to multiple parties, including patients, other medical personnel, the agencies of the state, etc. Communication may be oral, or in the written form (including diagrams and visuals). For example, doctors often have to be bearers of bad news to patients, and this has to be done in a sensitive manner. Good 'bedside manners' are an expected trait in a doctor. Using social media to spread medical awareness and draw attention to specific issues, being able to communicate clearly across different departments in

a hospital are all included within this role.

- iii. Collaborator: A doctor has to work with people within the discipline (other doctors, hospital administrators, patients, etc.) as well from other disciplines (law, government, activists, etc.) in the attainment of general goals. For example, the primary collaboration is with the patient towards the goal of a positive medical result. Doctors must also collaborate and co-operate with other parts of the healthcare system in activities such as obtaining test results, procuring drugs, etc., and also establish networks both at a local and international level with others in the field.
- iv. Manager/administrator/organiser: Doctors also occupy roles of supervisors of other peoples' performances, and managers of healthcare systems. Doctors have to manage their own time and schedules (such as organising shifts, showing leadership in their teams, etc.). They should also take on administrative responsibilities in the hospitals in respect of allotting resources, and in dividing workload among the staff.

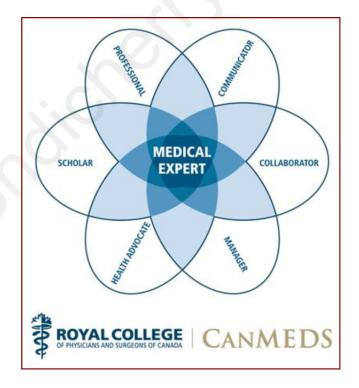


Figure 34: Functions of a doctor

v. Health advocate: In this capacity, doctors have to take action both at everyday and individual level (taking care of patients, etc.) as well as the societal and long-term level (by disseminating healthcare

information to public). Again, the primary duty here is to the patient (by guiding the health practices of the patient and giving the best possible advice); apart from that, the doctor has to ensure that the hospital does not become a site of disease spread. There is a societal responsibility also to inform the general public about healthcare and medicine, for example, doctors may often write in newspapers and appear in TV shows to educate in simple terms the seriousness of a disease or to explain the developments in vaccines.

- vi. Scholar/researcher/teacher: Doctors have to be updated about the latest developments in healthcare and medicine. They also have a responsibility to report and study any new diseases they encounter and inform the general public as well as specialist populations about these. At an individual level, the doctor has to regularly follow medicine-related academic journals and news. They may also teach at medical schools. Some doctors may also initiate public health projects and work with other organisations in evaluating and accentuating the knowledge on medical care.
- vii. Professional: Doctors have to maintain the highest level of professional ethics by following the Hippocratic Oath as well by adhering to regulation and laws. The doctor has to encourage his subordinates, including younger doctors, so that they would be encouraged to perform their tasks properly. No doctor should go against the law of the country or bring their personal judgements in the provision of healthcare to patients. For example, in India, in spite of being legally allowed, there are reports of many physicians refusing to perform an abortion within the legal limits. On the other hands, doctors have also been caught taking part in female infanticide. These actions clearly break the law as well as go against the professional code of conduct of doctors.

Thus, the role of a doctor extends from identifying and offering the best curative course of treatment to a patient to being a team-player in the hospital to social dissemination of information. According to Flexner (1910, in Williams, et. Al, 1983), the role of the physician was changing from individual and curative to social and preventative. Perhaps this is truer now than ever before. Physicians ought to have an understanding about their impact on patients, their families, on societies and on the national and international structure as a whole and need to perform within the codes of behaviour expected from them. In this manner, the influence exerted by a physician by dint of their education and the profession can be used for positive social change and in the attainment of a maximum possible good health of the community.

Learning Activity 3.5: Read the book The Spirit Catches You and You Fall Down by Anne Fadiman. Write a review of the book based on how the culture, gender and the legal systems played a role in the experience of disease in the Laotian community of California.

3.4 Summary

- Hospital as a social institution hospices-palliative care community hospital-registered hospital - short-stay hospital - special hospital
- Hospitals in history-hospitals as centres of religious practicehospitals as poorhouses- hospitals as deathhouses- hospitals as centres of medical technology
- Hospitals in India- ancient India- colonial India- post-Independence era
- Hospitals and society- functions of society- problems in hospitalpatient interaction- patient centred care
- Doctor-patient interaction in healthcare- professionalisation of the physician- models of doctor-patient interaction: activity-passivity model- guidance-cooperation model- mutual participation model-Hayes- Bautista model- Paternalistic model- informative modelinterpretive model- deliberative model
- Changing dynamics of interaction patterns based on class, gender, gender of the doctors, and cultural backgrounds- doctor-patient interaction in the future: role of state, insurance companies, commercial healthcare products, nature of disease, domestic medical appliances, internet medicine
- Functions of a physician- medical expert-communicatorcollaborator- manager- health advocate- scholar- professional

3.5 Self-Assessment Questions

- 1. What is a hospital? Explain the role of the hospital in a society and the functions it performs.
- 2. Explain the historical evolution of the institution of hospitals.
- 3. What are some issues in hospital-patient interaction?

- 4. Write a note on patient-centred care.
- 5. Explain the different models of doctor-patient interaction.
- 6. How do social background and demographic features influence doctor-patient interactions?
- 7. Write about the role of external agencies in determining the future trajectory of doctor-patient interactions?
- 8. What are the various role of a physician in society.

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Lesson 4.1 - Concepts of Community and Public Health

Structure

- 4.1 Community health
 - ▹ Medicine
 - ▹ Community health
 - Social determinants of health
 - ▶ Features of a community health worker
 - > Primary healthcare
- 4.2 Public health
 - > Preventive medicine and public health
 - ▹ Epidemiology
 - > Epidemiological indicators of health
 - ▶ Role of public health
 - Principles of public health
 - ▶ Activities of public health
 - ▶ History of public health
- 4.3 Public health in India
 - ▶ History of public health in India: colonial period
 - ▶ History of public health in India: post-Independence
 - > Challenges facing public health in India
 - ▶ Way forward for public health in India
- 4.4 Summary
- 4.5 Self-Assessment Questions
- 4.6 References
- 4.7 Sources of images

Learning Objectives

- 1. Understanding the meanings of and evaluating medicine, and community health
- 2. Understanding the various social determinants of health in relation

to community health

- 3. Analysing the features of a community health worker
- 4. Learning the significance of primary healthcare, principles of primary healthcare
- 5. Understanding the meaning and definitions of public health, and preventive medicine and role, activities and principles of public health
- 6. Understanding the meaning and importance of epidemiology, its uses and indicators
- 7. Tracking the historical development of public health in the west
- 8. Understanding the evolution of public health in India both in colonial period as well as post-independence
- 9. Understanding the miasma theory and germ theory of diseases
- 10. Evaluating the importance of vaccines and sanitation in public health
- 11. Assessing Millennium Development Goals and Sustainable Development Goals in the context of public health
- 12. Assessing the challenges and potential of public health in India

4.1 Community Health

Medicine

According to Henry Sigerist, 'medicine, by providing health and preventing illness endeavours to keep individuals adjusted to their environment as useful and contented members of society; or by restoring health and rehabilitating the former patient, it endeavours to readjust individuals to their environment.' Thus, it is clear that medicine not only tries to restore a person's health and treats any disease, but it also rehabilitates a person to the function that they were playing in society earlier. Thus, medicine is not just curative, but preventive as well.

Community health

According to Parsons, a community is 'a collectivity, the members of which share a common territorial area as their base of operation.' For Tonnies, a community is 'an organic, natural kind of social group whose members are bound together by a sense of belonging created out of everyday contacts covering the whole range of human activities.' Sociologically, a community is a group of people who generally reside in a common geographic territory and interact with each other. They share the same values and beliefs. A community is characterised by 'we-feeling', that is, there is a sense of belonging with each other.

According to the World Health Organisation, community health is 'environmental, social, and economic resources to sustain emotional and physical well-being among people in ways that advance their aspirations and satisfy their needs in their unique environment'.

Clendon and Munns (2019) defined community health as that which is 'characterised by the presence of strong social capital, engaged and empowered community members, a dynamic and healthy physical, social and spiritual environment, accessible, affordable and equitable services and resources, and a system of governance that is inclusive and responsive to community members in addressing the social determinants of health'.

Community health is a subset of public health, where the focus is on the health concerns of people who live in a particular geographic area. Initially, this started when medical institutions such as hospitals and colleges started paying attention to and became involved in the heath needs of the community they are located in. The medical practices involved in this community responsibility are epidemiological, diagnostic, preventive and curative in nature. The underlying principle is that all the factors that determine a community's health is found in the community itself, be it natural or artificial factors.

Community medicine in the United States began when medical colleges started engaging with their neighbouring communities. Often, this kind of engagement was not positive, as seen in the case of the Tuskegee experiments, where syphilis in Black men were left untreated in order to study its progress. However, barring such instances, most examples of community medicine point to the initiatives that hospitals take to increase the participation of its immediate neighbours. Many big hospitals and medical schools have community health wings which provide easy, and often free, access to medical care.

In the modern world, community healthcare can mean either the role of non-medical members of the community in healthcare, or the interaction of medical personnel with the community and the participation of the community in the healthcare. Members of the community are encouraged to take their health into their own hands, and to articulate what good health means to them when located in specific meanings determined by culture and their shared values. Community health in this sense include preventive health, promotive health, curative health and rehabilitative health.

Social Determinants of Health

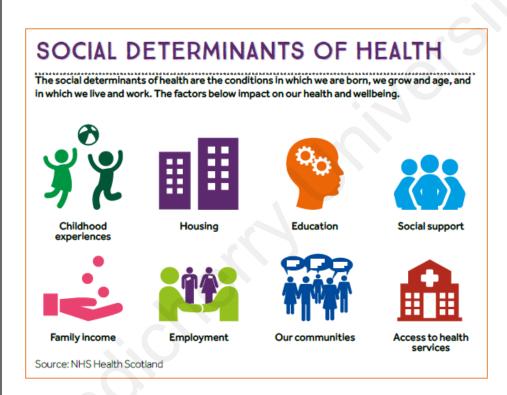


Figure 35: Social determinants of health

Even though individuals are subject to biological factors in their experience of health and disease, there are many social aspects also to this. Where a person is in the social rung, their place and hours of employment, economic status, etc., determine their access to healthcare. Family, societal as well as cultural values and experiences also determine a person's health status. For example, if a person has been given nutritional food right from childhood, it is possible that they enjoy good health later in life too. However, a child who is subject to frequent malnutrition may have to suffer from a weak constitution through their life. This interaction between biology and socio-economic-cultural factors give rise to what are called social determinants of health.



According to the WHO, social determinants of health are

- 1. The social gradient: This refers to the social strata an individual belongs to. Those at the wealthier sections of society enjoy better access to health, as opposed to those in impoverished situations. Similarly, in India, gender, caste, etc., determine access to healthcare.
- 2. Stress: The effects of mental health is multifarious. Stress can arise from work, personal and family sources. Apart from the mental distress it causes, stress can also result in physical ill-health such as heart diseases, headaches, insomnia, etc.
- 3. Early life and childhood experiences: As mentioned above, childhood experiences determine the course of adult health. Apart from the example of nutrition given above, access to vaccines in infancy and childhood protect the child from maladies such as polio, measles, etc.
- 4. Social exclusion: Members of a group who are socially excluded may suffer from inadequate care. For example, members of the tribal community may not have enough access to institutional care as the rest of the society do. Similarly, groups of travelling mendicants, people at from historically oppressed castes, etc., may not be able to access healthcare. Exclusion is also seen in the case of disabled people.
- 5. Work: Conditions of employment play a huge role in health and illness. The timings and durations of working takes a toll on the body, for example, those who work late hours in the night may see their circadian rhythm being disrupted. The pollutants or toxic substances to which a person may be exposed to in the course of work leads to health conditions, such as cancer among coal miners, burns in steel mills, etc. In today's world, excessive use of computers has resulted in more and more young people suffering from posture and ache-related issues.
- 6. Unemployment: Apart from the obvious result of unemployment that a person with no access to income may lead a less healthy life (due to absence of nutritious food, medicines, etc.), unemployment also restricts access to healthcare in many cases. In some countries, insurance is tied to the employment status of people, so losing a job also means losing out health coverage.
- 7. Social support: The existence of a strong social system is a vital part of a healthy life. Humans are, by nature, social animals, and we need

to associate with others to feel that sense of belonging and care. In a more concrete sense, a good social support system means better ways of coping in case of mental and physical illness.

- 8. Addiction: There is a change in discourse around addiction as a health condition, instead of a moral failing. Within such a perspective, addiction, like any other health condition, has its causes in certain social circumstances as well. Addiction also leads to other medical conditions such cancer, loss of organ function, brain damage, etc.
- 9. Food: A nutritious diet is an integral part of good health. Food must not just be available easily, but also be in good quality, without adulteration and excessive chemicals.
- 10. Transport: Access to quick medical transport like ambulances are vital. In case of accidents or natural calamities, the difference between life and death could be determined by the availability of quick transportation to the nearest medical centre.

Features of a Community Health Worker

The features of a good community health worker are:

- Ability to advocate for the community, both for its people as well as its environments
- Ability to mobilise the members of the community to participate in healthcare building activities
- Promotion of healthcare in communities by preventive, curative and rehabilitative care
- ▶ Finding ways to establish equitable access in healthcare
- Bringing attention to policy makers on the healthcare needs of a community

Primary Health Care

In community health, primary health care is the first step. The institutional and structural basis of healthcare systems of India have been described in a following chapter. At this stage, we will see the basic principles of primary healthcare which are general and universal in nature.

Primary healthcare principles guide the healthworkers to be in tune with the needs of the community. Healthcare should be socially just and equitable. According to Alma Ata declaration of 1978, primary health care is defined thus: 'Essential healthcare based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participating and at a cost that the community and the country can afford to maintain at every state of their development in the spirit of self-reliance and self-determination. It is the first level of contact with individuals, the family and community with the national health systems bringing healthcare as close as possible to where live and work and constitutes the first element of a continuing care process'.

The principle of primary healthcare are

- > Accessible health care for all sections of society
- Appropriate technology which enhances the efficiency of healthcare service and which are socially and ethically acceptable.
- Emphasis on health promotion where community members and healthcare members work together to enable the community to access different aspects of medical care
- Intersectoral collaboration between people involved in health, education, transportation, planning, environmental planning, and administration is necessary for community health. Communication across sectors encourage people to find common solutions and reduces waste of resources also.
- Cultural safety and sensitivity require that practitioners of community medicine be sensitive to the local cultural values and ethos. Since medical practice involves many sensitive aspects of the human body, etc., there is much scope for cultural misunderstanding and embarrassments which are to be avoided.
- Community participation is the principal core of primary healthcare. The community knows its health needs and drawbacks and thus healthcare workers should work together with them, rather than look down on them, in the attainment of a common goal.

Community health is an essential part of the modern healthcare delivery system. Even with increasing globalisation and modernisation, the most basic of healthcare starts from the community level. Volunteer

health agencies, state bodies, as well as private health sector are invested in the communities they are located in. Neglect of community health can lead to results with wide consequences. For example, if a community lacks access to healthy food, heart syndromes and obesity may be a common problem. In cities, it is now possible to see children being engaged in growing kitchen gardens in an attempt to make them fresh vegetables, instead of junk food. If children do not have access to vaccines, it may lead to outbreak of infectious diseases among rest of the population too. This was the case in Minnesota, where a measles outbreak in a particular community spread to the larger population. Members of the community are more aware of their problems, and are also capable of adapting existing medical systems to their locally acceptable value systems. Their participation is necessary in community health. Thus, community health is necessary in multiple aspects of administrative policy making, such as town planning, environmental planning, health planning, education, etc. More about the state of community health and primary health care in India is discussed in Unit V.

Learning Activity 4.1: Write a note on the community health infrastructure in your community.

4.2 Public Health

According to the American Public Health Association, 'public health promotes and protects the health of the people and the communities where they live, learn, work and play'.

The classical definition of public health has been given by CEA Winslow, according to whom public health is 'the science and art of preventing disease, prolonging life and promoting physical health and efficiency through organised community efforts for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organisation of medical and nursing services for the early diagnosis and preventive treatment of diseases and the development of social machinery which will ensure to every individual, in the community, a standard of living adequate for maintenance of health'.



From the above definition, we can delineate certain features of public health:

- > Prevention of disease, and not merely curing them
- Involvement of the community
- Focus on sanitation and hygiene
- Control of infectious diseases
- Spreading awareness
- Participation of the health systems to ensure good health not just of individuals, but also community

Another definition of public health was given by Institute of Medicine, which says that 'public health is a mission for the fulfilment of society's interest in assuring the conditions in which people can be health, through organised community efforts aimed at the prevention of disease and the promotion of health, using activities undertaken within the formal structure of government as well as the associated efforts of private and voluntary organisations and individuals'.

While medical care seeks to treat a patient from a disease once they are afflicted, public health tries to prevent the conditions of the disease itself, so that communities can lead healthy lives. There are various aspects of public health, such epidemiologists, health educators, researchers, workplace inspectors, sanitation officers, nutrition experts, and of course, public sector doctors, nurses and other medical personnel. Public health, like social medicine and community health marks a shift from the individual experience of health and sickness to a collective one.

Preventive Medicine and Public Health

Preventive medicine and public health interconnected; their difference lies in the approaches they take. For example, preventive medicine focuses on individualised care; when this is extended to the community as a whole and the administrative and social machinery as mobilised for the prevention, control or management of a disease, then we can say that it has ventured into the territory of public health.

For example, parents taking their child to a doctor to be vaccinated against childhood diseases or a couple who seeks advice on family planning may be considered to be individualised preventive care. However, if the government or voluntary agencies spread awareness, make institutional

arrangements such as free family planning camps and vaccination camps, targeted at an entire community, then it may be called public health.

Epidemiology

Before we go into the history of public health, we need to understand about epidemiology.

The Centre for Disease Control and Prevention defines epidemiology as 'the study (scientific, systematic, and date-driven) of the distribution (frequency, pattern) and determinants (causes, risk factors) of health-related states and events (not just diseases) in specified populations (neighbourhood, school, city, state, country, global)'. Thus this is a branch of medicine that looks at how certain diseases or health conditions spread across certain communities. There is a distinction drawn between medical and social epidemiology.

The former is predominantly focussed only on communicable diseases, whereas the latter look at all aspects of a health problem that affects a community. Social epidemiology includes the fields of sociology, medicine, demography, statistics, biology, economics, and psychology. Social epidemiologists look at how the spread and prevalence of certain medical conditions are related to the social factors.

Ancient medicine systems such as ayurveda and Greek medicine factored in the social and living conditions of a patient during the care process; however, this was sidelined during the phase in which biomedicine was gradually institutionalised. Though there were instances where social conditions were closely tied to the experience of ill-health, social epidemiology became an integral part of medical sciences only in the 20th century.



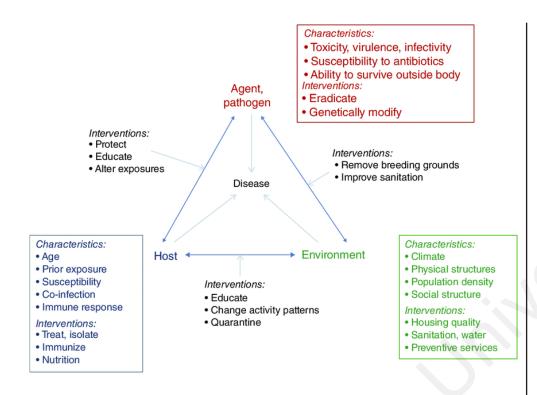


Figure 36: Epidemiological triad

A variety of lifestyle disease started cropping up and posing major public health risks, such as non-communicable diseases which had their origin outside of biological factors. Obesity, diabetes (brought about by lifestyles), as well as conditions like asthma and other breathing difficulties (as a result of environmental pollution) required that medical personnel and scientists look for sources other than medical causes to account for illhealth. Many of these chronic conditions were seen to be influenced by the social and economic conditions of the people. Thus, social epidemiology includes the following:

- Bio-psychosocial perspective
- Population perspective
- Use of new statistical approaches
- > Theory pertaining to sociology of medicine

Another important factor in the rise of social epidemiology was the notion that geography and space influenced health among populations. For example, people living in close quarters with inadequate ventilation and sanitation facilities could see a higher rate of infectious diseases; those living near zones where industrial effluents were released were more likely to be stricken with pollution-related diseases, etc. Social epidemiology considers that a community is more than a sum of its members. The social health of a population cannot be adequately understood merely by looking at the individual health of its members. There were factors also at play. Social epidemiologists place importance on the social attributes of a population in understanding health. For example, a society's attitude towards women, aged people, etc., may determine the course and the experience of a disease. Similarly, factors such income level, education, occupation, etc., also influence the spread of disease and access of care.

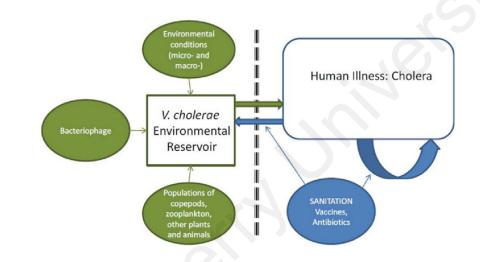


Figure 37: Mapping epidemiology of cholera

The uses of epidemiology are as follows:

- ▶ In healthcare management:
 - ▶ For making a community diagnosis
 - ▶ For the planning and evaluation of health services
 - For formulating health policies
- ▶ In understanding disease process
 - ▶ For studying the natural history of diseases
 - > For investigating into the causes and the conditions of diseases
 - > For tracking the past trends in the rise and fall of diseases
 - ▶ To identify the syndromes associated with a disease
- In public health practice
 - > To investigate into epidemics, pandemics, etc.
 - ▶ For the surveillance of diseases
 - For making projections and predicting the future trends of the disease

- For formulating the need for, and designing programmes targeting mass screening of population for diseases
- ▶ For formulating medical education curricula
- ▶ In clinical and individual practice
 - > To form a basis for clinical research
 - To understand the effectiveness of the different treatment regimens
 - ► For assessing prognosis
 - ▶ For assessing the effectiveness of the diagnostic procedure
 - ▶ For guiding clinical decisions

Epidemiological Indicators of Health

The indicators of health show the status of health in a society. These are as follows:

- i. Health status indicators (measures of mortality and morbidity)
 - Crude mortality rate
 - Specific mortality rate (age, gender, cause, etc.)
 - Special mortality rate (infant mortality rate, maternal mortality rate, neonatal mortality rate, etc.)
 - > Morbidity indicators (both prevalence and incidence)
- ii. Measures of healthcare
 - ▶ Health infrastructure
 - > Human resources in health
 - Health finance
 - ▶ Indicators of accessibility and utilisation
- iii. Indicators of quality of life
 - Disability days
 - ▹ Bed days
 - ▶ Limited activity days
 - > Days requiring aids for daily functioning
- iv. Demographic indicators
 - ➢ Fertility measures
 - > Measures of population distributions

v. Human development indicators and their relation to health

- ▶ Income and economic means
- ▶ Education and literacy
- Sanitation and water supply, etc.
- Child development

- Environmental factors
- > Availability of nutritional food, etc.
- vi. Summary Measures of Population Health
 - Experiences: Healthy Life Expectance, Active Life Expectancy, Disability Free Life Expectance, Quality Adjusted Life Expectance
 - ▷ Gaps: Years of Potential Life Lost; Disability Adjusted Life Years

	IABLE 1		
Indicators used in infectious disease epidemiology			ду
	Indicator	Definition	COVID-19
-	Serial interval (also: generation time)	The length of time between the identical state of infection (often onset of symptoms) in two successive cases in a chain of infections	The mean serial interval for COVID-19 cases in mainland China (outside Hubei province), was calculated as 4 days (23).
	Incubation period	The time between infection and development of symptoms	In COVID-19, the median incu- bation period is 5–6 days (range 1–14 days) (24, 25).
	Pre-infectious period (often: latent period)	The time during which a person is already infected, but not yet infectious (independently of symptoms)	It was estimated that patients were infectious 2–3 days be- fore the onset of symptoms (1). The end of the infectious period is still not foreseeable (26).
	Infectious period	The time during which a person is infected and infectious (inde- pendently of symptoms)	
	Duration of infec- tiousness	The length of time during which a patient is able to infect other individuals	

Figure 38: Medical epidemiological indicators of COVID19

With this background of epidemiology in mind, now let us take a look at public health in detail.

Role of Public Health

The following are the roles of public health:

- i. Assessment of health status and health needs: In order to assess the health needs of a community, public health is necessary. By use of both quantitative and qualitative techniques, information is gathered, which gives insights on the existing health status of the community, as well as the lacuna that is to be filled.
- ii. Development of health policies: Public health specialists are in close contact with social realities of health and medicine and so they are in a position to influence policy. They are on the main policy making bodies and influence national and local action pertaining to healthcare and medicine.
- iii. Assuring the availability and quality of health services: Public health gives a good idea about the existing healthcare system of the community. By dint of its obligations towards a collective instead of an individual, public health practices involve the periodic assessment and stock-taking of what services and amenities are available to the people. These are not restricted to medical services, but also other related factors such as access to safe water, nutritious food, etc.

Principles of Public Health

The following are the principles of public health:

- i. Health is collective responsibility
- ii. The state has a major role in protection of health
- iii. Health of the population, and not just of the individual
- iv. While curative medicine is important, preventive medicine is given more attention than it would normally be
- v. Consideration of socio-economic determinants of health
- vi. Public health is multidisciplinary; sociologists, anthropologists, medical professionals, economists, biologists, sanitation specialists, etc., all work together to maintain public health
- vii. Use of both quantitative and qualitative information
- viii. Participation of the population who is the target of the public health programmes

Activities of Public Health

The following are the main activities of public health:

- i. Protection of environment, food and water
- ii. Promoting healthy behaviour through awareness, education, information and communication
- iii. Analysing the needs and making diagnosis to assess the health of the population
- iv. Formulation of health policies
- v. Working with other sectors of healthcare systems such as personal medical care, private care, other institutional initiatives taken regarding health, etc.
- vi. Keeping a watch on rise of epidemics, and preventing them by proper surveillance of the rise of the conditions of their origin. If an epidemic is detected, public health personnel have a responsibility to warn the rest of the country and global medical community about it.
- vii. Protecting and promoting the health of workers, and ensuring workplace safety.
- viii. Responding to disasters, both natural and man-made.
- ix. Involving the community and mobilising community resources in controlling medical emergencies.

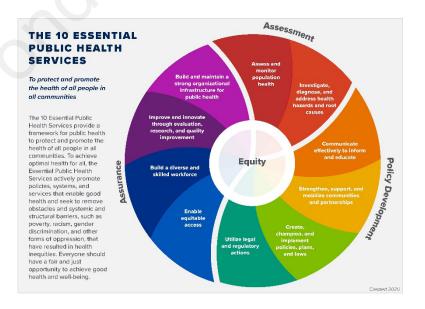


Figure 39: The duties of public health

- x. Research into and suggestion of solutions for medical problems facing the community as a whole.
- xi. Ensuring that the most vulnerable sections of society (vulnerable in terms of socio-economic and geographic position, social status, women, children, etc.) are able to access medical care and are aware of various health programmes available to them.
- xii. Building a diverse pool of medical service personnel.
- xiii. Using existing laws and policies, as well influencing the creation of new ones to improve the standard of healthcare for the communities.
- xiv. Ensuring accessibility and availability of quality and accountable medical and health care.

History of Public Health

Public health has been manifested in various forms since antiquity. Diseases have been around since human beings have, and have affected societies in many ways too. Different theories about the origin of disease and ill-health have resulted in different ways by which societies try to understand and control the spread of disease among its members. Scientific advancements over the centuries have left its impact on public health also. Thus, the nature of public health has evolved, along with the changes in science, medical research, and social changes such as increasing urbanisation and industrialisation, and structural changes such as that brought about by town planning, sanitation, etc. Let us now look at the evolution of public health from different historical periods:

1. Ancient Period: In the ancient period, people started settling down because of agricultural practices, thus resulting in new health hazards. In the early societies, shamanism, mysticism and divinational beliefs co-existed along with knowledge of herbs and midwifery. Some cultures also associated cleanliness with religion and hence took care to implement basic infrastructure aimed at the same. Just like ayurveda in India, there are written evidences from Egypt, such as the Kahoun Papyrus, which contain knowledge of medicine and veterinary sciences. The books of Moses also contain rules for personal and community health and hygiene. In ancient Greece, and later in Roman civilisation, there was a thriving medical practice, along with a city infrastructure that stressed hygienic living, such as proper supply of water, sanitation and sewage, etc.

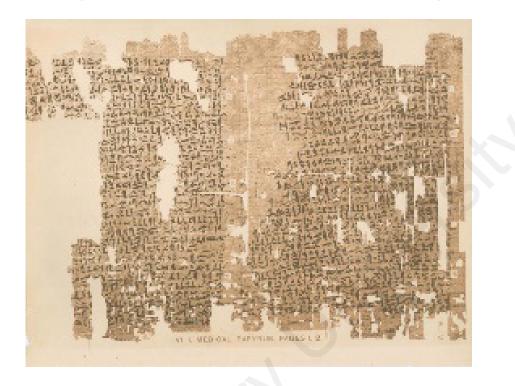


Figure 40: Kahoun scroll from ancient Egypt

Medieval Period: As mentioned in earlier chapters, monasteries were 2. houses of healing and medicine in medieval Europe. However, in the 12th and 13th centuries, the secular practice of medicine started. In the 14th century, leprosy was a major public health problem. France alone had 2000 leprosaria during this period. Rapid urbanisation also posed a severe health risk during this period, characterised by lack of sewage system and garbage collection. Vectors of diseases such as lice and rats were aplenty. During the first attempts to provide safe drinking water to people began, with access to pipes. The history of medicine in Europe in the 14th century would be incomplete with a mention of the Black Death, or bubonic plague, which killed around 24-50 million people between 1346 and 1350. During this time, the state took measures to control the spread of the plague. For example, in Venice, ships coming from places with the plague were kept waiting in the harbour for 40 days (this is where the word quarantine comes from); in parts of Russia, movement in towns were restricted and public funerals were banned. Everywhere, people were ordered to isolate if they showed symptoms of the plague. However, this could not be implemented due to lack of personnel.

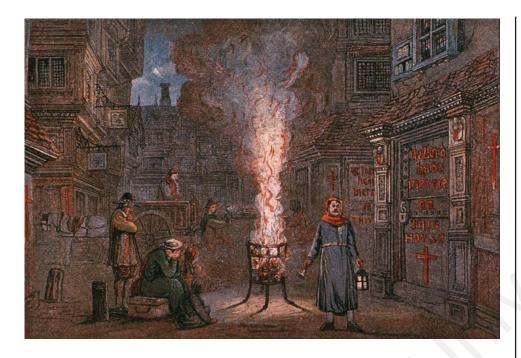


Figure 41: Town crier asking people to bring their dead for mass burial during bubonic plague in medieval Europe

- 3. The Renaissance: During the Renaissance, many advancements in medical history took place. Overall, however, hygiene was scarce, leading to many diseases, again especially in urban areas. In the 15th-16th centuries, Fracastorus and Paracelsus introduced the ideas of contagion theory of medicine, and 'infection and disinfection'. These ideas replaced Galen's miasma theory of ill-health which had prevailed so far (miasma= bad air). In the 17th century, in England, the practice of publishing the death statistics started; thus, it was possible to look at the causes of deaths. During the 16th and 17th centuries, though agricultural productivity resulted in more nutritious food being produced, the poor in urban areas still lived in very unhygienic conditions. This resulted in the first practice of record keeping of data, which would not be out of place in studies such as demography and epidemiology today.
 - 18th century: Bernadino Ramazzini published *Diseases of Workers* in 1700, which was a epidemiological work in that it looked at the occupations hazards of certain industries, and the risk of the disease they pose. Other studies by Percivall Pott and George Baker also looked at the diseases among those who worked as chimney sweeps and in the cider industry, respectively. Similarly, even though scurvy

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had been a problem for centuries, the 18th century voyage by James Lind proved consequential because he was able to isolate the cases of scurvy, in what is now considered to be the first epidemiological investigation.

A major breakthrough in the 18th century was discovery of the use of cowpox in the vaccination against small pox by Edward Jenner. This was in addition to the practice of variolation which was introduced to Europe by Lady Montagu in 1721. However, it was Jenner's discovery that marked a milestone in public health. By the beginning of the 19th century, vaccination against small pox became a popular practice in Europe and the Americans. It was this vaccine that brought about an achievement that is yet to be topped in medical history: the complete eradication of small pox globally in the 20th century.



Figure 42: Edward Jenner administering the smallpox vaccine in 1796

5. 19th century: In the 18th century, the collection of health statistics by Pierre Charles Alexandre Louis earned him the title 'founder of modern epidemiology'. Influenced by him, William Farr in England, in the 19th century, analysed mortality rates in Liverpool, which resulted in the passing of the Liverpool Sanitary Act, 1846. He also wrote that overcrowding also had an impact on sickness and death rates. Also in the 19th century, Edwin Chadwick proposed the 'sanitary idea' which would provide adequate resources for the regulation of water supply and drainage, thus helping fight the cholera epidemic which was then plaguing England.

In the United States, diseases such as small pox and measles were brought by the European settler colonisers. During the civil war also, more soldiers died due to unsanitary conditions, measles, and diarrhoea, than from actual combats. It was Lemuel Shattuck whose reports on vital statistics, which became a model for countries around the world. Florence Nightingale also encouraged the use of statistics in treatments. The Chadwick Report and the Shattuck Report on both sides of the Atlantic promoted the role of state in healthcare, and determined public infrastructure.

Miasma Theory and Germ Theory

These two theories are critical in understanding the evolution of public health.

Miasma theory has its origins in ancient Greek and Roman medicine, where it was believed that diseases originated from 'infectious mists or noxious vapours', which were spewed from unclean and filthy urban areas. The miasma theory also influenced the Sanitary movement, which aimed at reduction of urban filth in order to reduce diseases.

Though germ theory existed in a form in medieval ages (as seen in the isolation of lepers), it was the invention of the microscope by Antony von Leeuwenhoek in the 17th century that gave it more impetus. The idea that microbes were responsible for diseases was further validated by the works of Snow and Budd, when they proved that it was contagious germs and not 'bad air' that caused the cholera and typhoid outbreaks.

Johann Peter Franck, in the late 18th and early 19th centuries, wrote *A Complete System of Medical Police*, which expounded on the role of government in bringing about health reform, through regulation of marriages, pregnancy, dental and obstetrics, etc. In the 19th century, a cholera outbreak in London prompted John Snow to investigate its causes; found that the disease was spreading among those who used a particular water pump, which he concluded was contaminated. Once this pump was removed, the reports of cholera also vanished. He also later discerned that unsanitary conditions in the River Thames, and the water supply companies resulted in the cholera epidemic. Similar studies were conducted in Bristol in the case of typhoid by William Budd. Their work also influenced the germ theory of medicine. Their findings indicated a new trajectory in public health, where the analysis of the distribution of disease was crucial for analysing the spread of disease. The later works of Robert Koch and Louis Pasteur also led to what is called the 'Bacteriological Revolution'. Their contributions, along with those of Joseph Lister and Ferdinand Cohn were critical in the construction of public health. However, it must be noted that environmental factors in public health has much to do with the miasma theory, especially when looked at from the perspective of sanitation, hygienic housing, etc.

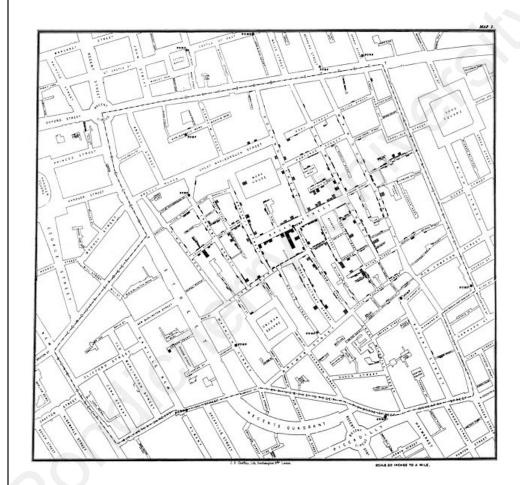


Figure 43: John Snow's mapping of cholera in London, 1854

6. 20th century: Public health as an integral part of the state apparatus grew in the late 19th and early 20th centuries. The local and central state authorities were involved in supply of safe water, sanitation and hygiene, regulation of quality of food, etc. In the 20th century, the nature of diseases also changed, bringing about a more individualistic approach to curative systems, in the form of medicines and drugs. However, the 20th century also saw major milestones in public health, as seen in the control of HIV/AIDS epidemic in the United States in the late 1980s and early 1990s; the control over the use of tobacco products; and the measures taken

to control Spanish flu pandemic, which in itself was a globalised medicine due to its spreading across countries in the aftermath of the World War I. But perhaps the most important achievement has been the total eradication of small pox around the world, which has been possible due to the co-operation of state agencies, international organisations and public health officials at all levels, in addition to community participation.

7. Public health today: In the contemporary world, public health has received an impetus in various forms and from many directions. Almost all the member nations of the United Nations and the World Health Organisation have reiterated the importance of public health. The Millennium Development Goals of 2000 also prioritised health and reduction of disease. Specifically, it focussed on reduction of hunger and poverty; reduction of child mortality; improving maternal health; reduction of prevalence of malaria, HIV/AIDS, tuberculosis, and other pathogen-induced diseases; ensuring access to safe drinking water; provision of affordable medicines in developing countries. Many of the goals have been attained to various extents, demonstrating the usefulness of public health.



Figure 44: Millennium Development Goals

The Millennium Development Goals have been replaced by the Sustainable Development Goals, adopted in 2015, which are a set of 17 interconnected goals, most of which are to be achieved by 2030. SDG 3 is specifically on health and well-being. The main targets under this are:

Reduction of global maternal mortality to less than 70 deaths per 100000 live births

- Reduce global neonatal mortality to 12 per 1000 live births and mortality rate of children under 5 to 25 per 1000 love births
- Ending epidemics of tuberculosis, AIDS, malaria, and other tropical diseases, as well controlling the spread of waterborne diseases and hepatitis
- Promoting mental well-being as well as using preventive measures to control non-communicable diseases
- Establish strong measures to reduce substance abuse and alcohol usage
- > Reduce the number of deaths from road traffic accidents
- > Increase accessibility to sexual and reproductive health
- Increasing the number of people under health coverage and reduce risk of poverty arising out of medical expenditure
- Reduce the number of deaths arising from environmental causes such as contamination and pollution



Figure 45: Chart showing the relationship between SDG3 (health) with other SDGs

Further, discourse on herd immunity (majority of the population being immune either through mass vaccination or through natural immunity from prior infection) has gained attention, especially in the face of vaccine hesitancy. Attention is also given to lifestyle diseases that affect only some parts of population, based on their economic means (such as malnutrition or obesity). Disability is also firmly entrenched in public health, especially in planning infrastructure. Thus, all medical organisations-state, private, global and volunteer- construct a New Public Health, based on experiences and lessons from the past. There is a shift to preventive measure, in additional to clinical ones. There are of course, many challenges facing public health, but the end goal remains the attainment of maximum possible good health and well-being for the society and the world at large.

Learning Activity 4.2: From history, choose any epidemic or pandemic. Write a short note on it epidemiology, focussing on the social characteristics.

4.3 Public Health in India

History of Public Health in India: Colonial Period

In India, public health in the modern sense of the term started only during the British rule, that is, from the 18th century onwards. New systems of surveillance of diseases and epidemiology were initiated in this period, and new personnel were appointed for the sake of maintaining public health. Control of diseases and regulation of bodies were as much as colonial function as was administrative and economic control.

The evolution of medical institutions has been dealt with elsewhere. The chief medical officer of the Indian Medical Department was the Director-General of the Indian Medical Services, who got his orders from the Medical Board. There was also a Sanitary Commissioner, who was responsible for sanitation, vital statistics and vaccination. Other officers were Public Health Commissioner and the Statistical Officer, Inspector General of Civil Hospitals, Civil Surgeon, and their deputies.

Some important public health measures during the British period are as follows:

- Mental health: Asylums for mentally challenged people were established in 1858. Later Mental Hospitals were established in provincial capitals.
- Sanitation: The Royal Commission for Sanitation was established in 1859, which reported on the sanitary status of the Army. It recommended that a Commission of Public Health be established in each presidency. Sanitary police force under the military was

formed, and so were civil sanitary boards. In 1879, the sanitary department and the vaccination department were merged to form a central sanitary department. There were also sanitary engineers in the provinces.

- Vaccination: In 1802, a Superintendent General of Vaccination was appointed. In the 19th century, the main target of vaccination was smallpox. In 1880-81, the vaccination rate stood at 2.7%, which increased to 3.5% two decades later.
- Vital Statistics: The Birth and Death Registration Act of 1873 made the vaccination department responsible for the maintenance of vital statistics such as births and deaths.
- Plague Control: Plague outbreaks took place in India in Kutch (1812), Punjab (1828-1929), Rajputana (1836). But the official records point to the plague outbreak of 1896 in Bombay, which spread to the coastal cities of Bombay, Pune, Calcutta and Karachi. It also spread other provinces of India. By the end of 1903, around 3 million people had lost their lives to the plague. In 1896, the Plague Commission was appointed under Professor Frasor. The report of the commission, submitted in 1904, observed on the highly infectious and fatal nature of the malady, and suggested that infected places should be sterilised and evacuated, mass movement should be regulated, and that sanitation should be improved.

In 1897, the Epidemic Diseases Act was passed, which granted authorities the power to enact necessary measures to control epidemics in their areas. The most common methods were isolation and quarantining, sometimes of people who embarked from ships. A Plague Research Committee was formed which suggested that it was bad sanitary conditions which led to the spread of plague. Anti-plague vaccine was also administered, as were Lusting's serums. Five different plague committees were set up to take stock of the measures made to control the epidemic.

Leprosy: Leprosy or Hansen's disease was a major public health risk in India. Carter suggested that lepers be isolated, and also encouraged the establishment of Leper Asylums. In 1889, Leprosy Bill was passed; a Leprosy Commission was also constituted to study the epidemiology of the disease. The commission suggested that limits be placed on the ways by which lepers would engage in social relationships with traders who in turn have contact with

large sections of society, and improvement of sanitation. All India Leprosy Act was passed in 1898.



Figure 46: Inoculation against cholera during British rule

- Cholera: Cholera committee was set up in later half of 19th century, which discovered that incidence of cholera was high during fairs and in places frequented by pilgrims and travellers. Once again, improving sanitation both in civil and military areas were recommended.
- Malaria: Malaria incidence increased in the 19th century following the establishment of many irrigation channels by the British without allowing for safe drainage. It was Ross who first showed the life cycle of the malarial parasite called plasmodia. Further research in the early 20th century showed that lack of sanitation and poor record keeping hampered any efforts to deal with malaria. In later years, quinine was suggested for treatments, which continued till the latter half of the 20th century.
- Other diseases such as kala-azar and beri beri, tuberculosis, etc. caused significant challenges to the British in the case of public health in India.

History of Public Health in India: Post-Independence

India was a member of the World Health Organisation from its starting stages and in the post-independence period, edged on by global organisations and its own colonial history and experiences, the Indian government introduced many public health policies and measures. Most of these measures were targeted at health indicators like maternal and infant mortality, but also on improving healthcare services available to people through the state institutions and medical personnel. The recommendations of the 1946 Bhore Committee was crucial in the development of a robust primary healthcare system in India.

Indian government over many decades introduced National Health Programmes to combat specific diseases. The Central Government launched many programmes aimed at particular diseases, such as tuberculosis, malaria, etc. Other issues given importance in national programmes are family welfare, diarrheal diseases and vector-borne diseases, supply of safe drinking water, leprosy, cancer, mental health, etc.



Figure 47: Logo of National TB Elimination Programme

In 1985, Universal Immunisation Programme was started. It offers vaccines against TB, diphtheria, pertussis, polio, tetanus, measles, encephalitis, pneumonia, rubella, hepatitis B, etc. It is one of the largest healthcare programmes in the world and is an integral part of the National Health Mission. Almost 3 crore pregnant women and infants are the targets of this programme, and has reduced mortality from diseases significantly. In 2014, polio was eliminated and in 2015, maternal and neonatal tetanus was eliminated.

In 2014, the government of India started the Swacch Bharat Mission, which focussed on public sanitation. Since open defecation is a common practice in rural India, this mission focussed on providing and constructing toilets in the households. It also aims at managing solid and liquid waste. The most recent example of a public health emergency has been the COVID19 pandemic. The large scale lockdowns impacted the nation's economy. Like most other developing nations, India's public healthcare system also was not prepared to face the onslaught brought about by the pandemic. Many people suffered from a lack of universal health coverage. Parts of the country also saw a severe shortage of medical supplies and medicines. However, the vaccine rollout in phases and according to age and medical status meant that India has one of the highest number of vaccinated people in the world. After this pandemic, NITI Aayog aims to increase spending on healthcare sector by 2.5% by 2025. The introduction of the PM-JAY also shows the importance given to universal healthcare in India.

Other aspects of public health in contemporary India are as follows:

- Availability of cheap antibiotics has resulted in a shift in focus from sanitation to drug availability
- The changes in nature of diseases from communicable and infectious to non-communicable diseases has changed the nature of public health as well. While the former is community-oriented, the latter is individualistic in nature, thus the onus of healthcare has moved from public health personnel to medical doctors.
- Public health institutions also face the problem of lack of funding where voters may demand that taxpayer's money be used in medical care, as opposed to provision of public health facilities.
- Major development of healthcare is seen in the primary and tertiary levels, as opposed to the primary levels.

Challenges Facing Public Health in India

In spite of many strides made by science and the state along with other healthcare service providers, public health in India faces many challenges. A few of them are as follows:

- Communicable diseases such as tuberculosis, as various endemic diseases such as malaria, HIV/AIDS, neglected tropical diseases (a collection of 20 diseases that are mostly vector-borne, such as sleeping sickness, filariasis, mycetoma, yaws, trachoma, etc.) are still prevalent.
- Vector borne diseases such as malaria, dengue and encephalitis are also a major risk.

- Antimicrobial resistance is prevalent in India due to the easy access and unrestrained consumption of antibiotics in India. Already, the ill-effects of this is seen in the lack of efficacy of primary tuberculosis treatments. This is something that public health in India has to tackle with.
- Non-communicable diseases such as cancer, heart and pulmonary diseases, etc. are rising.
- Consumption of alcohol and tobacco also pose public health challenges.
- Infant mortality rate though reducing rapidly, is still high as compared to the global average.
- Owing to modernisation, industrialisation and urbanisation, there are a new set of diseases being caused by environmental factors. In addition, the disparity between the rich and the poor also is manifested in the disparity of healthcare and prevalence of diseases among them.

Way Forward for Public Health in India

In spite of the challenges, there is potential for India to provide and establish a well-serving public health sector.

- Attention in terms of financial and resource investment is to be given to primary care. Since this is the first interface between the community and the healthcare machinery, a well-functioning primary health sector will go a long way in promoting good health.
- Existing health infrastructure, especially that in the public sector is to be improved. Better human resources and personnel are to be brought in (both medical and non-medical personnel), better technology should also be introduced. By holding public medical institutions accountable, and their performance assessed, the most vulnerable sections of the society, who are also more prone to suffer from the consequences of ill-health, will benefit.
- Healthcare personnel density is to be increased. India has a very low proportion of healthcare workforce to total population. There should be proper training, timely and scheduled recruitments and constant upgradation of the skills of the existing staff in the medical systems.

- Research should be encouraged by efficient monitoring, assessment and evaluation. Evidence-based research is to be encouraged so as to develop our indigenous medical industry.
- All planning of medical and healthcare should be entrenched in the principles of equity. All sections of society should have access to healthcare. Cost should not be a barrier to attain quality healthcare.
- Technology can be used to provide better public healthcare. Telemedicine, video-conferencing, use of mobile apps, etc. provide people with a chance to interact directly with the larger medical network. Technology and internet can also be harnessed to spread awareness, store medical records, set reminders about vaccines, medical appointments, etc.
- Even though the state is formulator of policies and laws, it alone cannot deliver healthcare. There has to be co-operation with private sector, co-operative groups, community and civil leaders, voluntary agencies, corporates, etc. to enhance the delivery of public health.

In spite of the pitfalls of public health in India, one should not undermine the role it had to play in our nation's history. With measures for family planning and the eradication of smallpox, India has not only affected her medical trajectory, but also that of the whole world. Guided by WHO and UNICEF in the early stages, India is now a major player in the field of global public health as well, as seen in the COVAX initiative which sources vaccines for the developing countries. While it is true that a lot more is left to do in this field, the potential for development is there. The details regarding public health institutions are described in the next chapter.

Learning Activity 4.3: Read The Plague by Albert Camus, and a write note comparing the narrative of the novel with your lived experience during COVID19 pandemic.

4.4 Summary

- Community health- medicine-social determinants of health: social gradient, stress, childhood experiences, social exclusion, work, unemployment, social support, addiction, food, transport- features of community health worker
- > Primary healthcare- principles of primary healthcare
- > Public health- preventive medicine and public health

- Epidemiology- social epidemiology- uses of epidemiology: healthcare management, disease process, public health practice, clinical practice- epidemiological indicators of health: health status, healthcare measures, quality of life indicators, demographic indicators, human development indicators, summary measures
- Role of public health: health status, health policies, quality of health services- principles of public health- activities of public health
- History of public health: ancient period, medieval period, Renaissance, -20th centuries, public health today
- Millennium Development Goals and Sustainable Development Goals
- Public health in India- public health in colonial period- public health in post-independence India
- Challenges facing public health in India- way forward for public health in India

4.5 Self-Assessment Questions

- 1. What are the social determinants of health?
- 2. What is community health? What are the features of community health?
- 3. Explain primary healthcare and its principles.
- 4. What is public health? What is the relationship between community health, preventive medicine, and public health?
- 5. Write a note on epidemiology.
- 6. In what ways does epidemiology impact healthcare?
- 7. List out and explain epidemiological indicators of health.
- 8. What is the role of public health?
- 9. What are the principles of public health?
- 10. How did MDG and SDG articulate public health? What are some of the targets set in the goals vis-à-vis public health?
- 11. Write in detail about the evolution of public health in the west, with special attention on vaccines and sanitation.
- 12. How did the British enforce public health in India?
- 13. What are some major public health initiatives in independent India? What are their achievements?
- 14. Write a note on the drawbacks of public health in contemporary India. How can they be rectified?

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Lesson 5.1 - Health Policy and Planning in India

Structure

- 5.1 Health system in India
 - ▶ Historical development of health systems in India
 - > Component of Health Systems in India
 - > Primary and rural healthcare
 - ▹ Hospitals
 - Private Sector in healthcare
 - Indigenous healthcare
 - Voluntary health agencies
 - National health programes
 - Health insurance
- 5.2 Health planning in India
 - > Components of a health plan
 - Planning cycle
 - Health Committees in India
 - National health policies
 - National Health Mission
 - Ayushman Bharat
 - Digital health and telemedicine
 - Planning Commission and NITI Aayog
 - Structure of health governance in India
- 5.3 Summary
- 5.4 Self-Assessment Questions
- 5.5 References
- 5.6 Sources of images

Learning Objectives

- 1. Understanding the health system in India and its various components in detail
- 2. Tracking the historical development of health systems in India
- 3. Analysing in depth the components of healthcare systems such as primary healthcare, private hospitals, insurance, etc.
- 4. Understanding India's role in global medical tourism
- 5. Assessing the various traditional and alternative systems of healing in India, and their role in health systems, and AYUSH
- 6. Assessing the importance of National Health Programmes in the control of diseases
- 7. Analysing the role of insurance in healthcare
- 8. Examining the role and importance of healthcare planning in India
- 9. Tracking the various health committees in India and their role in health policy formulation
- 10. Assessing the various national health policies, National Health Mission, and Ayushman Bharath, as well as role of NITI Aayog and the health administrative infrastructure in India
- 11. Examining the role of digital heath and telemedicine in contemporary India

5.1 Health System in India

As seen in the above chapters, health systems refer to the various institutions, personnel and other organisations that provide healthcare to an individual. A person may be disposed to access any aspect of the health system when they so desire. In this chapter, we will see about the various health systems in India and proceed to look at the various policies pertaining to healthcare in India.

India's quasi-federal structure of governance has divided many subjects into the State and Central list, and some which can be decided by both into the Concurrent list. While some aspects of health care such as administering hospitals, and public health come in the State list, there are others such as family planning and adulteration which are in the Concurrent list. However, the Central government also formulates healthcare related decisions, through the release of documents such as the National Policies and other healthcare-related guidelines. Furthermore,



the Central government is also responsible for co-ordinating action on eradication of malaria, tuberculosis, etc. It can also dictate policy for the control of infectious diseases, as was seen during the COVID19 pandemic, where a national lockdown was put in place, and the roll-out and distribution of vaccines were co-ordinated by the Centre.



Figure 48: Stamp to bring awareness regarding malaria in India

Health system in India is not decided only by the government and the state. Private practitioners of medicine abound in number, and also in the diversity of healthcare services they offer. Biomedical hospitals and clinics are common enough, as are traditional systems of healing such as ayurveda, siddha, unani, and other non-biomedical systems such as homeopathy. The government in an attempt to both regularise as well as spread the practice of these systems of medicine had instituted a department (since 2014, a Ministry) called AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa Rigpa and Homeopathy). Apart from this, India also has state-funded health centres at various levels, and catering to various sections of society, such primary health centres, and first referral units. There are also medical colleges, and medical centres run by state agencies such as the defense forces and state industries. All this is of course, in addition to private for-profit and not-for-profit organisations.

Historical Development of Health Systems in India

As mentioned in an earlier chapter, in ancient India, Buddhist monasteries (*viharas*) were sites of medical education and healing. However, the development of health system as we know it today had its advent with India's encounter with colonialism. The first hospital was established in Goa by the Portuguese in the early 16th century, called the Royal Hospital.

In 1664, the French established their first hospital, followed by the British in 1668. Medical colleges were also established around this same time. The slow spread of the British rule meant that various medical boards were established for the purpose of primarily looking after British troops and employees of the East India Company. In 1785, medical departments, which included both military as well as civil services, were established. In 1857, after the First War of Indian Independence, many aspects of civil rule were transferred to the British Crown. In 1868, the gradual development of the civil medical services took place, with the appointment of the Public Health Commissioner and the Statistical Officer in 1869. In 1896, the medical services in the separate presidencies of Bombay, Madras and Calcutta were integrated to form the Indian Medical Services. Thus, medical departments at this stage were controlled by the Centre.

It was only with the introduction of the Montagu-Chelmsford reforms of 1919 that provinces were able to exert their control over public health and sanitation. This was followed by further decentralisation in 1920-21, when the Municipality and Local Board Acts allowed for the enhancement of health systems at the provincial levels. The Central Advisory Board of Health was established in 1837, the secretary of which was the Public Health Commissioner. Their duty was the co-ordination of health-related actions across the country. In 1946, the influential Bhore Committee, officially the Health Survey and Development Committee, was appointed, which made the recommendations that would determine the future of healthcare organisation in India.

The early officer of the Indian Medical Services were European military surgeons. It was the establishment of the Calcutta Medical College in 1835 that led to the training of more and more Indians in the medical sciences. Indians so trained could be appointed as medical personnel both in the military and civil services.



Some sources say that the first hospital in India was the Madras General Hospital, established in 1679. The Calcutta Medical College was established in 1852 to provide medical education, followed by the Lahore Medical School in 1860. Many hospitals were established all around the country for the provision of healthcare to people, as well as to ensure the supply of medical instruments and drugs to the hospitals. Other major milestones in this period were the establishment of All India Institute of Hygiene and Public Health, Calcutta (1930) and the Rural Health Training Centre, Singur (1939). In spite of these measure, the poor of India had to often reply on traditional systems of medicines, or on the hospitals run by missionaries.

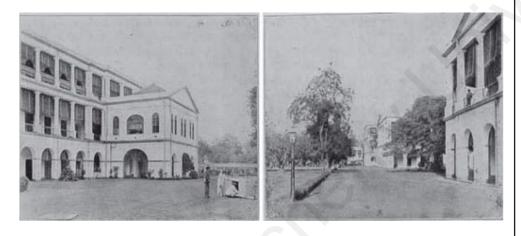


Figure 49: Madras General Hospital

In 1943, the Bhore Committee was constituted, which would go on to determine the structure and organisation of health systems in India for the upcoming decades. In accordance to the Keynesian economics that supported a welfare state where the state was responsible for many public welfare activities, the committee also recommended that the state in India should take a more active role in the provision of healthcare. The Bhore Committee and its recommendations will be seen in detail in the following section. However, the problem of underfunding seemed to scrouge the public health sector even from the beginning days.

At the time of independence in 1947, the private sector was most restricted to practices of allopathic and traditional medicine clinics. The immediate focus of the government was to control or eradicate diseases such as smallpox, polio, etc., for which they were supported by international organisations. Family planning was also given attention to.

In 1978, the Alma-Ata declaration was signed. This declaration was a turning point in the field of public health, in that it reiterated the importance of community control in the primary health care. Following this, however, India announced National Health Policy in 1983, which deviated from the recommendations of the Bhore Committee. In order to reduce government expenditure on healthcare, private parties were encouraged to invest and train healthcare personnel, as well as to provide cheap healthcare. There was a minimal state involvement at this stage.

However, in 1980s, following the liberalisation-privatisationglobalisation measures regarding the economy, and the structural adjustment policies that were adopted as part of a globally-integrating economy, coupled with a burgeoning middle-class, India saw the rise of private healthcare services such as multi-speciality hospitals, etc. Most of these hospitals were for-profit institutions, and were concentrated in urban areas. The National Health Policy of 2002 tried to address this rural-urban disparity in healthcare. This was followed by the announcement of the National Rural Health Mission, in 2005.

With this brief historical background in mind, let us now look at the various components of healthcare system in India.

Components of Health Systems in India

All the components of a healthcare system serve to provide different aspects of medical care to the individual. While not all of them provide medical care, these institutions work as different parts of the same structure that works towards the same end of healthcare. In India, the various components of healthcare are as given below. While some of them may work in tandem with each other, the rest may be exclusive in its operations.

- Primary health sector
 - ➢ Primary healthcare
 - Primary health centres and subcentres
- Hospitals and health centres
 - Community health centres, rural hospitals, district hospitals, specialist and teaching hospitals
- ▶ Health insurance schemes
 - ▶ Employees state insurance (ESI), and government health scheme

- ▶ Others
 - > Defence and railway medical institutions
- Private Sector
 - > Private hospitals, dispensaries, etc.
 - > Individual general physicians and clinics
- Indigenous systems of medicine
 - Ayurveda, homeopathy, siddha, unani, and other traditional methods of healing
- Voluntary health agencies
- National health programmes

Primary health sector	Private Sector	Indigenous systems of medicine	Others
 primary health centres rural and district hospitals, community health centres state insurance defence and railways health services 	 > general physicians and clinics > hospitals and dispensaries 	 ayurveda unani homeopathy siddha other traditional methods of healing 	 voluntary health agencies national health programmes

Primary Healthcare

In 1975, the Shrivastav Committee recommended a three-tier system of rural healthcare. In order to implement this, India announced a Rural Health Scheme, with the objective of 'placing people's health in people's hands'. Immediately after this, the Alma-Ata Declaration of 1978 also stressed on the importance of primary health care and community health. The National Health Policy of 1983 was announced by the Government of India in order to meet the World Health Organisation's goal of 'Health for All by 2000'. This included various plans and policies, aimed at improving health care in rural areas. Some of the steps taken were as follows:

- I. At the Village Level:
 - a. Village Health Guides: Village Health Guides Scheme was introduced in 1977, with the aim of including women in the community health. They are chosen from the community in

which they are to work, and they work to connect the community and the state's health infrastructure. After a period of training, they are given some basic medicines, which would help in the treatment of simple diseases. The priority is on sanitation and maternal and child healthcare, family planning, etc. To sum up, these are the first line of people with an awareness of what to do in case of a disease or sickness, whether it can be treated by simple and medicine which is available at hand, or whether they are to be referred to an advanced medical institution.

- b. Local Dais: Dais are midwives who are outside of the formal medical system, and are crucial in the provision of maternal healthcare in rural areas. Even today, in many rural areas, these midwives play an important role not only medically, but socially, because they perform many ritual and cultural functions after the birth of the child also. In order to ensure a system wherein the dais could be educated in maternal and natal health and sanitation, the government started providing training to dais in rural health centres. These dais are an important node not only in the network of providers of natal care, but also from the perspective of family planning as well. They educate women on the benefits of small family and hence encourage the practice of having lesser children.
- c. Anganwadi workers: Under the Integrated Child Development Scheme, anganwadi workers were to be trained in nutrition and child development. The recommended number of anganwadi workers were about 1 per 400-800 people. Apart from taking care of a child's nutritional needs, anganwadi workers (who are always women) maintain records of immunisation, growth, supplementary nutrition, education, etc. They are integral part in the provision for benefits to expecting and new mothers, young children, and adolescent girls. Anganwadi workers and village level health workers are the community's link with the state regarding the healthcare of young children.
- d. ASHA: Accredited Social Health Activist was a group of health workers created by the National Rural Health Mission. The aim of the creation of ASHA workers were to integrate various health activities, including those of vertical health programmes and family health. An ASHA worker was to be a woman, with some extent of

formal education. The proportion of was one ASHA worker per 1000 people, thought this number could be relaxed in remote areas. The ASHA worker is responsible for spreading awareness about hygiene and sanitation, health services, healthy and safe delivery and feeding habits, immunisation, and prevention of sexuallytransmitted diseases. ASHA workers also help the community to access health services; she will especially help pregnant women in accessing healthcare. ASHA workers were crucial in the control and surveillance of the spread of COVID19. ASHA workers also co-ordinate with anganwadi workers on providing integrated and holistic development needs to children, such as complementary nutrition, vaccination, etc.

- 2. Sub-centre Level: The sub-centre is the primary point of contact between the health care system and the grassroot population. They take care of medical activities such as family planning, childhood diseases, etc., which affects the community. As of 2020, there are 1,57,921 subcentres in India. At the sub-centre level, the personnel are a midwife (ANM) and a male assistant, with one SC for every 5000 people. Equipment is provided by the state. In order to regulate the activities of the sub-centres, the Indian Public Health Standards were introduced. These establish a standard of quality of health services to be provided at these sub-centres. These services include
 - > Maternal healthcare: ante- and intra- and postnatal healthcare
 - Child healthcare
 - ▶ Family planning and contraception
 - Abortion within the ambit of Medical Termination of Pregnancy Act
 - > Healthcare for teenagers and in schools
 - Monitoring water quality
 - Sanitation including toilets and garbage disposal
 - Awareness campaigns,
 - > Training of ASHA workers and other volunteer healthcare workers
 - Implementation of national health programmes aimed at creating awareness and controlling diseases such as HIV/AIDS, vectorborne diseases (malaria, dengue, kala-azar, etc.), leprosy
 - Surveillance of diseases, and recording births, deaths, etc.
 - > Encouraging the cultivation of medicinal herbs

3. Primary health centre level: It was the Bhore Committee of 1946 which recommended that primary health centres be established at locations so as to provide healthcare to a maximum number of people. The goal was to provide an integrated system of both preventive and therapeutic healthcare services. The importance of PHCs was reiterated in the Alma-Ata Declaration, when it set the goal of Health for All by 2000. Originally, in 1953, primary health centres were to be established in community development blocks. As of 1980, there were more than 5000 PHCs in India. In 2020, this has increased to 24918 in rural areas, and 5895 in urban areas. There has to be a PHC for every 30,000 people.

The objectives of the Primary Health Centres are:

- ▶ Comprehensive primary healthcare to community
- ➢ Good quality of care
- > To assess the needs of the community and to respond accordingly

The functions of the Primary Health Centres are in accordance with those set out in the Alma-Ata Declaration:

- 1. Medical care
- 2. Maternal and child healthcare and family planning
- 3. Sanitation and potable water
- 4. Control of endemic diseases
- 5. Record-keeping of vital statistics, such as births, deaths, etc.
- 6. Relevant National Health Programmes
- 7. Referral services
- 8. Training of medical personnel such health assistants, midwives, etc.
- 9. Laboratory functions

The Indian Public Health Standards for PHCs lay down that a minimum of necessary infrastructure, including beds, should be available. The other requirements are

- 1. Medical care: out-patient and in-patient; emergency and referral services
- 2. Maternal and child healthcare: antenatal care (food supplementation, checking health and blood of the pregnant woman, etc.); intranatal care (institutional delivery, referral services, etc.); postnatal care (homevisits to ensure health of mother, spreading awareness

about nutrition and breastfeeding, etc.); newborn and child care (immunisation, childhood diseases, etc.)

- 3. Family planning services including counselling and medical procedures
- 4. Medical termination of pregnancy within limits of the law
- 5. Nutrition education
- 6. Young adult and school health services
- 7. Surveillance and control of diseases
- 8. Records of vital statistics
- 9. Ensuring water quality
- 10. Encouraging the use of toilets
- 11. Training of various medical personnel such as ASHA workers, dais, AYUSH pharmacists, etc.
- 12. Provision of AYUSH services
- 13. Laboratory services and basic surgery services
- 14. Involvement and execution of national health programmes aimed at AIDS, tuberculosis, blindness, etc.
- 4. Community Health Centres: At the secondary level of healthcare system in India are Community Health Centres (which include First Referral Units and sub-district and district hospitals). Each CHC is a unit comprising of 4 PHCs. As od 2020, there are 5649 Community Health Centres in India.

The objectives of the Community Health Centres are:

- ▶ Expert and quality care to the community
- > To make sure that medical practices adhere to a universally approved standard of care

The Indian Public Health Standards also lay down the following services to be offered by CHCs:

- 1. Outpatient and inpatient services (AYUSH, obstetrics, medicine, etc.)
- 2. Opthalmology
- 3. Emergency and laboratory services
- 4. Implementation of National Health Programmes (including control of communicable diseases; control of deafness, diabetes and strokes;

mental health programme; deficiency diseases programme; health of the elderly and the rehabilitative health, etc.)

5. Healthcare supervision in schools, including screening for learning disabilities, and medical conditions.

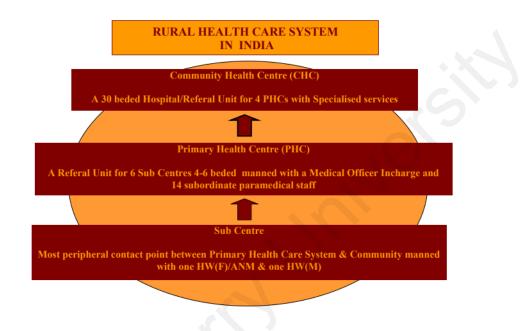


Figure 50: Rural Healthcare System in India

A CHC or a district hospital can be called a First Referral Unit (FRU), when it is equipped with a 24-hour blood bank, and provides emergency obstetric services and neonatal care.

Hospitals

In the three-tier system of healthcare, state-run hospitals occupy the secondary level of healthcare. Government hospitals are present at district, and tahsil or taluk levels of administration. Apart from that, the government also runs speciality hospitals as well as teaching hospitals or medical colleges. Government hospitals are under the state government and so the reach and extent of these services may differ from one state to another. However, they can be divided into two:

Rural hospitals: With the transformation rural dispensaries to PHCs, the existing PHCs are to be converted to into sub-divisional or sub-district hospitals, which will serve 5 lakh people each. In 2018, it was reported that there are 1255 SDHs in the country, with a total of 19810 rural hospitals. SD Hospitals also act as FRUs for their taluks and also offer specialised care.

- District hospitals: There are secondary level hospitals which provide both preventive and therapeutic care as well as promote good healthcare among the people in the district. Every district in India should ideally have a district hospital, which in turn forms a network with PHCs, CHCs, SD hospitals, etc. District hospitals also maintain close ties with medical colleges, thus forming a connection with tertiary care as well. District hospitals are equipped with surgeons, medical doctors, gynaecologists, and other specialists such as dentists and ophthalmologists. Based on the number of beds in a district hospital, they are divided into five grades (with Grade I having 500 beds, and Grade V having 100 beds). District hospitals also play a role in the maintenance of healthcare among the concerned population. As per data from 2018, there are 1003 district hospitals in India. The total number of urban hospitals are 3772.
- AYUSH hospitals: After the announcement of the National AYUSH Mission in 2014, many PHCs, CHCs, and District Hospitals also included AYUSH practices in their premises. Along with this, there was a proposal to set up AYUSH hospitals across the country, each with 50 beds. As of 2018, a total of 3744 state and 35 local body-run AYUSH hospitals are functional in India.



Figure 51: Armed Forces Medical College, Pune, established in 1948

Defence Medical Services: The Armed Forced Medical Services and Research INtergration Committee under Dr. BC Roy recommended that the medical forces of the Army, Navy and Air Force should be integrated under the Director General Armed Forces Medical Services. The Armed Forces Medical Services consists of Army Medical Corps, Army Dental Corps and Military Nursing Service. As of 2018, there were 112 Military Hospitals, 12 Air Force Hospitals and 9 Naval Hospitals in India.

Railway Employees' Hospitals: The Indian Railway Health Service is one of the most extensive health systems in the country. It is a network of 126 hospitals, and more than 600 polyclinics and dispensaries. This is in addition to more than 600 empanelled hospitals. It was in 1954 that E Somasekhar recommended an overall healthcare system for the Indian Railways, which was supported by HN Kunzru's Railway Accident Enquiry Committee of 1962. The IRHS offers four kinds of services:

- ▶ Industrial and occupational health services
- > Disaster management and railway accidents
- > Implementation of national health programmes
- > Upholding good standards in food and sanitation in railways.

With its well-developed network of hospitals, the patient to bed ratio at1:477 is well-above the WHO recommended ratio of 1:1000. This system also provides healthcare to employees and their families and also to retired employees. During COVID19 pandemic, since trains were not running during the lockdown in 2020, many trains were converted into medical wards for patients to recover from the coronavirus.

Employees State Insurance Corporation: ESIC under the Ministry of Labour and Employment, is part of an elaborate mechanism which offers insurance to more than 82 million people. Apart from providing insurance, ESIC also runs and operates hospital, medical colleges and dental colleges across the country. As of 2018, there are 151 hospitals under the ESI.



Figure 52: Train coaches being used as isolation wards during COVID19 pandemic

Private Sector:

India's healthcare sector is a mixed-model. In spite of governmental efforts, India's public health infrastructure is woefully insufficient to meet the needs of its people. Only 1% of GDP is allotted towards healthcare development, as opposed to 4% in Brazil and 2.9% in China, in 2017. The rate of increase in government expenditure on healthcare is not proportionate to the rate of increase of population, thus making it necessary for many to choose private healthcare in India. The vast majority of India's population use private healthcare systems in the hope availing better, albeit more expensive, healthcare. At the time of independence, less that 10% of people made use of private medical practice. The private healthcare sector accounts for 70% outpatient services, and 58% of inpatient services. Around 90% of medicines which are prescribed and consumed are from the private healthcare services. According to Statista, in 2019, there were 43,486 private hospitals in India, as opposed to 25,778 public hospitals. Some sources go as for as to say that 87% of medical services in India are offered by private sector, which also has expanded into teleconsultations.

While private hospitals and medical centres abound across the country, there is the problem of accessibility associated with it. Compared to the government expenditure on healthcare, private expenditure stands at 4.2% of GDP, out of which individual personal resources account for 82%, employers pay about 9% and insurance cover around 5-10%. Thus, the bulk of the spending on healthcare comes from personal resources. In the case of a developing country like India, it is often seen that individuals and families are not able to pay for the healthcare in these private institutions, which are more often than not for-profit establishments, without taking a loan or a mortgage on their land, house, or other possessions. It is estimated that around 55 million people drop into the poverty levels because of healthcare expenditure.

The private healthcare sector in India has three components:

- Private hospitals
- Private diagnostic services
- Private pharmacies

Private healthcare also includes super- and multi-speciality hospitals, consulting clinics (which may or may not be affiliated to a hospital), and private practitioners. Increased income allows for increased expenditure on healthcare services. There is also greater awareness about lifestyle related diseases and the ways to detect them. Private sector also invests in advanced medical equipment and laboratory services for diagnosis. India is also one of the leading manufacturers of generic drugs in the world, and so there are many pharmacies, which sell both brandname and generic medicines. Pharmacy chains are common in urban areas, thus showing their market penetration. There are also small and independent drug-sellers.

The advent on technology has led the private sector to embark on new methods of marketing. Diagnostic service providers offer to collect samples from home, for example, it is possible for the personnel to take blood sample at the patient's house. Many medicines are now being sold online, subject to regulations. Medical records such as blood test results, scans, x-rays, etc. are stored on cloud services, thus allowing for easy access and ease of transactions for both the medical personnel as well as the patient. Furthermore, Indian private hospitals offer world-class treatments at a globally competitive price range, which has led to India becoming a popular destination for medical tourism.

As much as there are benefits to private healthcare in terms of accessibility and quick attention to patients, as opposed to a heavilyburdened and understaffed and underfunded public hospital, there are certain problem with privatisation of healthcare as well. The excessive costs of a private hospital make it accessible only to the economically privileged sections of society. The differences in income means that most people would depend on public health services (with a patient to bed ratio of 0.4) rather than the private sector (where the patient to bed ratio is 2.93).

Medical Tourism in India

Medical tourism or health tourism is the practice of people travelling to another country for the explicit purpose of seeking medical treatment. It has also come to meet travels made by people travelling to seek nonbiomedical treatments such as spas, yoga and ayurveda regimens, etc. An individual may choose to travel for therapeutic reasons to another country on many grounds: the destination country has a medical treatments and advancements which are not available in the original country; less expensive means of treatment, etc.

India is major player in the field of medical tourism, standing at 10th rank globally. Almost 2 million people from more than 70 countries travelled to India in 2021 for medical purposes, according to government data. The government has also launched Heal in India initiative to promote medical tourism, and to tap in to the soft cultural power of India's various traditional systems of medicine.

Surgery	US (USD)	India (USD)
Bypass Surgery	130,000	10,000
Heart Valve Replacement	160,000	9,000
Angioplasty	57,000	11,000
Hip Replacement	43,000	9,000
Hysterectomy	20,000	3,000
Knee Replacement	40,000	8,500
Spinal Fusion	62,000	5,500

Figure 42: A 2014 table showing the price difference for medical procedures between India and the US

There is also the issue of location of private hospitals. They are located mostly in urban areas, leaving the rural people to depend on state medical infrastructure. This means that people have to travel to urban areas to access healthcare, which results in further expenditure, such as the cost of renting a place to stay, etc.

Another issue facing the private healthcare sector is India is that of standardisation of practice. Indian government has passed the Clinical Establishments (Registration and Regulation) Act, 2010, which sets the standards for medical institutions and hospitals. However the pricing models and the standard of care are not uniform across the country. It is also common knowledge that many private hospitals impose unnecessary therapeutic and diagnostic services on the patients in order to charge more for their services. Thus in order to ensure that patients derive the best possible care at the optimal expense, it is necessary to enhance the scope of public healthcare in India, as well as implement the provisions and rules of Clinical Establishments Act in a proper manner.

Indigenous Healthcare

For many people around the world, traditional medicine is the first resort of healthcare. According to the World Health Organisation, traditional medicine is the 'the total sum of the knowledge, skills and practices indigenous and different cultures have used over time to maintain health and prevent, diagnose and treat physical and mental illness'. As mentioned above, India is also the storehouse of a variety of traditional medicine systems such as ayurveda, unani, etc.

- Ayurveda: Literally meaning 'the science of life', ayurveda is a millennia-old system of medicine, which first originated in the *Atharvaveda*. The canonical texts of Sushrutha and Charaka have determined the course of this medicine system, and laid out the basic principles and tenets of its practice. This is supplemented by various other texts, among whch Vaghbhatta's *Ashtangahrdyam* is the most famous. In the ayurvedic scheme of understanding, the five elements of the universe (*panchbhutha*: air, water, fire, earth and ether) combine together to form the three humors (*tridoshas*: vata, pitta and kapha). Any imbalance in these three humors lead to the state of disease. A regimen of lifestyle changed, diet and medicine is then prescribed for the restoration of balance and thereby, of good health also. Most ayurvedic drugs are derived from herbs and plants, in the form of syrups, ointments, tablets, etc.
- Siddha: Similar to ayurveda in principle, siddha also includes other 96 factors which governs an individual's physical, moral and physiological well-being. Siddha also includes treatments for psychosomatic disorders. The medicines are derived from both plant and mineral sources.
- Unani: This system of medicine originated in Greece, and was introduced by Arabs in India. This also uses plant-based therapy, and has received much attention from the state in terms of research.
- Homeopathy: Though homeopathy has German origins, it has been increasingly popular in India. It functions on the principles of 'immunological memory' and 'memory of water'. There are various homeopathic institutions in India.
- Yoga: Like ayurveda, this is also a system of therapy that originated in ancient India. Yoga follows a routine of physical exercises (*asanas*) in otder to maintain the balance of the *tridoshas*.

- Sowa-Rigpa: Also called Amchi system, Sowa-Rigpa's origins are in ancient India and Tibet. The principles of pathology and pharmacology in Sowa-Rigpa can be understood on a similar line to the principles in ayurveda.
- Naturopathy: This also originated in Germany, and is often used in combination with other practices such hydrotherapy and homeopathy.



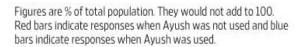


Figure 54: Samuel Hahnemann, Father of Homeopathy

Figure 55: A practitioner of Sowa-Rigpa

According to National Sample Survey Organisation data from 2016, about 335 million Indians believe in and use some of Indian Systems of Medicine. Even though traditional systems of medicine saw a downtick during medieval and colonial times, after independence, Indian government has been introducing policies which will both make ISM more accessible to people, as well regularise and standardise ISMs.

The government of Indian established the Department of Ayush under the Ministry of Health and Family Welfare, in 2003. This was later made into a separate Ministry of Ayush in 2014. There are a number of Ayush hospitals in the country, as well as private practitioners. As of 2015, the number of total hospitals providing Ayush care were 3598, whereas total dispensaries were 25723. Many Ayush services are also located along with the PHCs and CHCs. The state has also established many educational and research institutes for the development of Ayush systems, where treatments are also given, for example, National Institute of Ayurveda, Jaipur; National Institute of Homeopathy, Kolkata; National Institute of Sowa Rigpa, Ladakh; National Institute of Unani Medicine, Bangalore, etc. Owing to the increasing popularity of traditional systems of medicines, the World Health Organisation and India together established the Global Centre for Traditional Medicine in Jamnagar, Gujarat, in 2022. This centre is predominantly focused on research and innovation of technology.



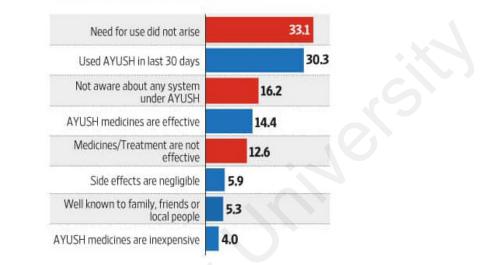


Figure 56: A 2016 table showing how Indians view Ayush

Voluntary Health Agencies

In any community, voluntary health agencies play an important role. Voluntary health agencies are those which have an independent source of funding, their own governing bodies, and which may or may not have employed labour, and which provide crucial health services. These agencies can operate in areas and realms where the formal institutions are restricted by the law. Furthermore, voluntary agencies can bypass bureaucratic hurdles and initiate measure on their own, which in turn benefits the community as a whole, as well as pave the way for future legislation. According to Park, voluntary health agencies are important for the following purposes:

- > They supplement and compliment the state's healthcare functions.
- By way of research and unconventional methods of functioning, voluntary agencies may the first to respond to a healthcare need.
- They spread awareness and provide medical education to members of the community.
- They may conduct experiments and demonstrate the impact of environmental hazards on public health.
- > They set a good standard of healthcare services.

 Voluntary agencies are crucial in formation of public opinion, which is translated into policy and legislation.

Some voluntary health agencies in India are Voluntary Health Association of India, Indian Red Cross Society, Indian Leprosy Association, Indian Council of Child Welfare, Bharat Sevak Samaj, Central Social Welfare Board, The Kasturba Memorial Fund, Family Planning Association of India, All India Blind Relief Society, etc.

There are also international bodies such as the World Health Organisation, United Nations Children's Fund (UNICEF), Food and Agricultural Organisation, UNAIDS, etc. which co-ordinate medical care activities across countries. There are also private-run international aid agencies such as the Rockefeller Foundation and Ford Foundation, which operate in the field of non-governmental health care. Some NGOs also operate specifically in one field, such as Goonj, which works on menstrual health and education among women; Humsafar Trust which tackles the transmission of HIV among homosexual and transgender communities, etc.

National Health Programmes

National Health Programmes are those that are implemented by the government in order to tackle specific diseases. India has received international support from various quarters in these programmes. National health programmes sometimes include the participation of private sector also. They offer targeted care and spread awareness, and are crucial in delivering healthcare to people who suffer from these inflictions. They are an integral part of both preventive and curative healthcare systems. Some important national health programmes since independence are:

- National Vector Borne Disease Control Programme against diseases such as malaria, lymphatic filariasis, kala-azar, Japanese encephalitis, dengue fever, chikungunya fever, etc.
- National Leprosy "Eradication" Programme
- National Tuberculoses Control Programme
- National AIDS Control Porgramme
- > National Programme for Control of Blindness
- Iodine Deficiency Disorders Programme
- National Health Mission

- National Cancer Control Programme
- District Mental Health Programme
- > Reproductive and Child Health Programme
- Janani Suraksha Yojana (for maternity benefits)
- Universal Immunisation Programme
- Intersectoral Co-ordination for Prevention and Control of Zoonotic Diseases
- > National Programme on Climate Change and Human Health
- Integrated Disease Surveillance Programme
- Antimicrobial Resistance Containment

Since Independence, India's progress in its delivery of healthcare systems has led to remarkable strides in the quality of life of its people. India's life expectancy in 2022 was 70.19 years, as opposed to just 32 years in 1947. Maternal mortality rate is 103 in 2017-19, and infant mortality is 28 deaths per 1000 live births. Small pox has been completely eradicated, and polio and leprosy has also been controlled. Various national and state level health programmes has achieved its goal of providing good healthcare to the people, both in rural and urban areas. The entry of private sector, even with the challenges it poses, has led to much needed investment in innovation and research. The addition of technology and digitisation has also led to more individuals taking responsibility for their own health, and working together with institutions in managaing the health, both of themselves and the community at large. Thus the various components of the health system together contributes to an overall development of the medical and healthcare scenario in India.

In the next section, we will see how the process of healthcare planning takes place, and some important milestones in the history of India's healthcare planning.

Health Insurance

Insurance is also an integral part of healthcare system. It ensures that people can access to medical services, without the risk of slipping into financial distress. As mentioned above, in India, private healthcare is expensive and beyond the reach of many people. In such a situation, insurance is crucial in making healthcare decisions. However, data from 2019-21 shows that only 41% of households in India have one member who is covered by health insurance. There are private agencies which provide insurance, but it is mostly the state which offers health insurance coverage to most Indians. Some of the important state health coverages in India are Rashtriya Swasthiya Bhima Yojana, Pradhan Mantri Jan Arogya, Ayushman Bharat Yojana, and Aam Aadmi Bhima Yojana.

However, health and medical coverage is sub-par in India, and is a sector that despite recent trends in upward growth, needs to be focussed on for the optimum delivery of healthcare services in the country.

Leaning Activity 5.1 Analyse the various systems of healthcare and make a chart showing their relationships and the particular contributions played by them in recent years.

5.2 Health Planning in India

'Health for All' as goal was publicised by the World Health Organisation. Every country takes steps achieve this goal. As a basic public right and an integral part of the rubric of human rights, health is a factor that governments and nation-states have a responsibility in planning and implementing. In India, health planning involves the processes of forming committees to enquire into the public health needs of the country, statistical analysis of health data, introducing policies and health programmes that establish institutional services and well as new legislations that impact all aspects of healthcare such as insurance, healthcare delivery, etc. National Health Planning has been defined by Park as 'the orderly process of defining community health problels, identifying unmet needs and surveying the resources to meet them, establishing priority goals that are realistic and feasible and projecting administrative action to accomplish the purpose of the proposed programme.'

Components of a Health Plan

In India, health planning takes place at central, state and local levels. For the sake of our discussion, we will look at health planning at central level. Health plan assesses the health needs of a population, by looking at data on nutrition, disease, immunisation, etc. Wherever there are deficiencies, a policy is enacted to implement changes in it. Thus the end goal is the achievement of the optimum state of health. A goal consists of both objectives and targets. Targets are specific in nature and relate to the factors within a problem, while objective looks at the problem itself. While both objective and target are short-term in nature, a goal is long-term. A health plan recommends the optimum use of resources such manpower and finance, for which proper planning and management must be devised. A schedule for the implementation of the plan is drawn up, within which period the specific programmes are to be implemented towards the attainment of the objectives. Procedures are the actual steps which will enable the maximum utilisation of resources. Policies are the general guiding signposts of drawing up a plan.

Planning Cycle

Step 1: Analysis: Data is collected and analysed so as to determine what aspect of healthcare is to be focused on. Different factors such as age and gender, fertility and mortality rates, epidemiology and rate of spread of diseases, healthcare system and availability of resources, social factors such as people's perceptions towards disease and cure, etc. are considered in this stage.

Step 2: Objectives and Goals: These are to be set out in a clear fashion so to avoid the mismanagement of funds and wastage of any other resources. There should be involvement of all levels of planning process (grassroots, state, centre, etc.) and there should be a clean line of communication so that proper co-ordination is also possible. Objectives set out the course of action and is a good way to determine the success of the plan.

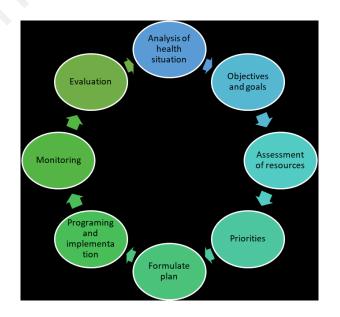


Figure 57: Health Planning Cycle

Step 3: Assessment of Resources: Money, manpower, skill, techniques, etc. are the resources that are used in a health plan. The available resources are assessed and the plan is drawn out within this availability. In case of a lacuna in indispensable resources, steps can be taken to bring them in too.

Step 4: Determining Priorities: The allotment of resources is to be done on a priority basis, after assessing which objective is more important to be attained first. Typically, priority will be given to control of disease and health of young people.

Step 5: Formulating Plans: In this step, the actual plan with all its details are drawn up. All details and aspects of the plan is to be included, including objectives and targets (outputs/results) and the resources (inputs) available to meet them. A time-period is also scheduled, and the plan should also allow for constant evaluation.

Step 6: Implementation: The plan is next implemented. All the details are executed according to the procedures laid out. Authority is fixed and parcelled out, and each person's responsibility and duty in relation to the larger plan is clearly defined. Human resource management comes into play here (in the form of hiring and training of individuals). This is the most crucial part of the plan and all steps has to be taken to perform this in the best possible manner.

Step 7: Monitoring: A plan once implemented has to monitored consistently so as to check the progress and activities of the project. All information is recorded and reported. When something is not going according to plan, then steps are taken to bring the activities back on track.

Step 8: Evaluation: In this final step of a planning process, the achieved outputs of the plans are evaluated and compared against the stated outputs. Based on the evaluation, any changes and new modifications can be brought while devising new plans and strategies.

Health Committees in India

 Sokhey Committee, 1938: As part of the National Planning Committee, which was set up in 1938 and chaired by Jawaharlal Nehru, Col. S. S. Sokhey submitted what must be the first committee report on national health. This committee's report focussed on the prevalence of malnutrition; diseases such as malaria, small pox, tuberculosis, etc.; inadequate sanitation facilities and

medical services. It recommended the use of traditional systems of medicine to enhance the medical care available to people, and the assumption of healthcare as a responsibility of the state.

- Bhore Committee, 1946: Chaired by Sir Joseph Bhore, this committee was the one most noted for its influence on public health decision-making in the first few decades of independence. This committee was officially called the Health Survey and Development Committee. The report clearly stated that healthcare is integral to the development of a nation, and that it calls for the development of the health of the entire nation. Among other, it recommended that
 - > All administrative parts of the healthcare system be integrated
 - Primary health centres be developed both as a short term project (in rural areas for immediate care), as well as a long term one (as hospitals and secondary level)
 - Medical education be altered in such a way to give rise to 'social physicians', by including community health in the curricula.
- iii. Mudaliar Committee, 1962: This committee came at the end of the Second Five Year Plan period. By then, there were demands for the Five Year Plans also to provide for the development of healthcare. Officially the 'Health Survey and Planning Committee', committee looked at the performance of the institutions established after the Bhore Committee. The highlights of this Committee's report are:
 - The functioning of PHCs were inadequate and needs to be strengthened; it also recommended that each PHC serve only a maximum of 40000 people, and that the quality of care be improved
 - Specialist services have to be provided at the district hospitals;
 regional level administrative posts were to be established
 - All India Health Services to be established on the lines of the Indian Administrative Service
 - The integration of health services which was recommended by Bhore Committee is to be implemented
- iv. Chadah Committee, 1963: Chaired by Dr. MS Chadah, who was the Director-General of Health Services, this committee specifically looked at malaria. By then the National Malaria

Eradication Programme was functional (since 1953). This Committee recommended that

- Basic health workers should conduct home visits for constant monitoring
- PHCs should be more involved in vigilance and general health services (at the district level) are to be involved in the maintenance phase of this programme
- v. Mukerji Committee, 1965: This Committee under the Chairmanship of the Secretary of Health was to evaluate the progress of the anti-malarial programmes which were being delivered through basic health workers. Since this was failing, this committee recommended that family planning and anti-malaria activities be delinked, and these recommendations were accepted.
- vi. The Special Committee to Review the Staffing Pattern and Financial Provision under Family Planning was appointed to inform the population control policies of the country. In 1951, India became the first country to adopt a policy to decrease population growth, through state-sponsored programmes. Though initially family planning was mostly delivered through voluntary agencies, the state gradually became involved by the conducting of camps, etc. The recommendations of this Committee were:
 - Since camps were not very successful in population degrowth, the technology of intrauterine contraceptive devices (IUCD) was to be tapped
 - Targets are to fixed, and some sort of compensation is to be given so that more people would be incentivised to take part in family planning
 - A family planning programme was to introduced in a vertical form, like the organisational structure of the malaria programme.
 - Private practitioners were to be involved for the fulfilment of sterilisation and insertion of IUCD procedures
- vii. Jungalwalla Committee, 1967: The Committee on Integration of Health Services under N. Jugalwalla was established to look at the problems plaguing the health services of the country. It set out with a definition of 'integrated health services' to include a unified approach towards healthcare and a hierarchical system of care under a single administrator. Its main recommendations

were:

- Integrated care through unified cadre and seniority
- ► Equal pay for equal work
- > Extra qualifications to be recognised
- Government doctors were not to be involved in private practice
- States were to implement their own set-up based on unique experiences and social reality
- viii. Jain Committee, 1967: This committee's report on Medical Care Services recommended, even though they were not taken seriously, that there should be:
 - Strengthening of care at PHC and DHC
 - Civil Surgeon or Chief Medical Officer being given charge of medical care at the district level.
- ix. Kartar Singh Committee, 1973: The Committee on Multipurpose Workers under Health and Family Planning was formed to look into the peripheral and supervisory working of the integrated health services; multipurpose health workers and their training; and introduction of mobile service units. Its recommendations were:
 - Female Health Workers to replace Auxiliary Nurse Midwives and Male Health Workers to replace the entire ambit of Vaccinator, Malaria Surveillance Workers, Basic Health Workers, Family Planning Health Assistants and Health Education Assistants.
 - Multipurpose workers to be introduced in areas where small pox was controlled.
 - One PHC per 50000 people, with 16 sub-centres covering 3000-3500 people; the sub-centres were to be staffed by one male and one female health worker; 4 male and female health workers were to be supervised by a male and female health supervisor respectively
 - Female health visitors were to be called female health supervisors
 - The doctor in the PHC was responsible for the supervisors and the health workers
- x. Hathi Committee, 1974: This was the Committee on Drugs and Pharmaceutical Industry, to look into the upcoming private drug

industry in India, and the role of public sector in it. It made recommendations on:

- Introduction of new technology and quality control in drug manufacture
- Pricing drugs and medicines
- Making structural arrangements to ensure favourable drug distribution
- xi. Shrivastav Committee, 1975: The Group on Medical Education and Support Manpower was established to look into medical education and training. Its main recommendations were:
 - Community members to be trained as para- and semiprofessional medical personnel for the purposes of simple health services
 - Establishment of separate multipurpose health workers and health assistants cadres
 - Referral Services Complex to be established as link between PHC and higher level medical colleges
 - Establishment of Medical and Health Education Commission to be established along the lines of the University Grants Commission
- xii. Rural Health Scheme, 1977: This scheme was part of the implementation of the recommendations of Shrivastav Committee. The main points are:
 - > It started the training of community health workers
 - Medical education was restructured such that the medical colleges could be geared towards the needs of the rural people
 - Many multipurpose workers were reoriented to focus on control of specific communicable diseases
- xiii. Mehta Committee, 1983: This committee, officially The Medical Education Review Committee, was established to look at workings of the medical education and the availability of medical personnel in India.
- xiv. Bajaj Committee, 1987: This committee was also established to look into medical education in India. It was formally called the Expert Committee for Health Manpower Planning, Production and Management.
- xv. Bajaj Committee, 1996: Expert Committee on Public Health System

was established in 1995. It defined public health as 'the science and art of preventing disease, prolonging life and promoting health and efficiency through organised community efforts'. This objective of this committee was to review existing public health infrastructure in India, with special focus on surveillance of epidemics and their control; role of local and state agencies in healthcare; status of PHCs in rural areas; effectiveness of healthcare policies and the working of the Health Management Information System. This report also observed the prevalence of traditional medicine practitioners in India. It also made recommendations and introduced an Action Plan for Strengthening of Public Health System, which included the establishment of regional public health schools, and a National Disease Surveillance Programme.

National Health Policies:

In the Constitution of India, while health is not mentioned as a Fundamental Right, it is mentioned in the Directive Principles of State Policy as something that the state should strive to provide. Following this and various social and political backgrounds of the time, the government of India has introduced three national policies on health.

- i. Primary Healthcare and Health for All, 1978 and National Health Policy, 1983: The Alma Ata Conference of 1978 introduced the importance of primary healthcare. It also put forth the goal of Health for All by 2000 AD. In this context, the first National Health Policy brought out by the working group was reflective of these goals. The main points of the first National Policy are:
 - Establishment of a decentralised system of health care, which would be low-cost, would make use of community and volunteer participation
 - Recommended the setting up of a country-wide network of epidemiological institutions to integrate health interventions
 - Targets based on demographic data
 - It posed a criticism of the western models of healthcare, especially its focus on cure and not on prevention; in turn, it recommended a healthcare system based on prevention and rehabilitation
 - > Private healthcare is to be prioritised especially in case of

curative treatments so that the government can focus on prevention

- ii. National Health Policy, 2002: This policy recommended that public investment for public health should be increased and that both curative and preventive care at primary level should also be increased. The main points of this policy are
 - ▶ Increase of health expenditure to 6% of GDP
 - All national health programmes to be brought under a single administration, thus requiring the reorientation of the administrators and the rural health workers
 - Primary Health System was revitalised, by the provision of essential drugs.
 - State governments were encouraged to hire medical personnel from Indian Systems of Medicines and Homeopathy, so as to increase the number of health care personnel.
 - A two-year posting in a rural area was recommended before granting of a medical degree to improve the experience of the doctors, as well as enable rural areas to access better healthcare.
 - It recommended the involvement of Panchayat bodies in healthcare, with the financial support of the Central Government.
 - > There was a need to improve the nurses-to-doctors ratio.
 - > It encouraged the focus on using essential drugs for treatment
 - It envisaged the setting up of urban primary health centres and trauma care centres in cities.
 - Traditional and folk media was to be used to bring about behaviour change and spread awareness.
 - Mental health and school health programmes, research were to be encouraged.
 - The number of people covered under insurance is to be increased.
 - ▶ Women's healthcare was prioritised.
 - Other recommendations included patent protection in line with TRIPS; making baseline etimates for blindness, malaria, etc.; implementation of code of ethics; establishment of a good standard for food products, etc.

- iii. National Health Policy, 2017: This policy aimed at universal access to healthcare and preventive and promotive health. The following are the main points of this policy:
 - Wellness is to be made affordable to all through universal health coverage
 - Private sector were considered to be partners and all related policy was to be patient-centric, in capacity building, spreading awareness, mental health, etc.
 - Free drugs, diagnostic services and emergency care were proposed in all public hospitals, with the acquiring of secondary and tertiary healthcare as an immediate measure to fill the gap in these levels; care was to be given through comprehensive packages such as geriatric or palliative
 - ▶ Health expenditure to be 2.5% of GDP
 - Numerical targets were set in the case of reduction of disease, performance, etc.
 - > AYUSH was to be fully tapped for its potential and mainstreamed
 - In case of child health, preventive care was given priority, especially in school health programmes
 - It proposed the establishment of the National Digital Health Authority so as to use digital developments in healthcare

National Health Mission

The National Health Mission was created in 2013, by subsuming the National Rural Health Mission (2005) and the National Urban Health Mission (2013). The main programmes under the NHRM are

- Health system strengthening
- ▶ Reproductive-maternal-neonatal-child and adolescent health
- ▶ Communicable and non-communicable diseases



Figure 58: Logo of National Health Mission

NHM aims at universal access to quality and affordable healthcare, and a healthcare system that is designed to and is responsive to the changing needs of the people. The states have been given the right to plan and implement specific strategies under the NHM. Special priority has also been given to the development of healthcare systems in the northeastern states. Other goals include

- Reduce maternal mortality rate to 1/1000 live births and infant mortality rate to 25/1000 live births; and total fertility rate to 2.1
- ▶ Reduce prevalence of anaemia in women
- Reduce the mortality rates due to communicable, non-communicable and emerging diseases, and injury
- Reduce out-of-pocket expenditure on healthcare by providing universal coverage
- ▶ Reduce incidence of malaria, tuberculosis, leprosy and microfilaria
- Eliminate kala-azar

Ayushman Bharat

Ayushman Bharath was launched in 2018 as part of the National Health Policy of 2017, by the government of India. The main aim was that of Universal Health Coverage. It is 'a comprehensive need-based health care service', with particular focus on improving preventive and ambulatory care at primary, secondary and tertiary levels. The two components of Ayushman Bharat are:

- 1. Health and Wellness Centres: More than 1 lakh HWCs were launched in the place of existing SCs and PHCs to deliver maternal and child health, non-communicable diseases and dispensing free drugs. They are at the primary level, at proximity to the community.
- 2. Pradhan Mantri Jan Arogya Yojana: PM-JAY is the largest health assurance scheme in the world, with more than 55 crore beneficiaries, who are eligible for this based on economic criteria. It subsumed both National Health Protection Scheme and Rashtriya Swasthya Bima Yojana (2008). The coverage is applied at the hospitals, for a limited period of hospital stay, and post-stay expenses including medicines and medical procedures, in both private and public sector. PM-JAY is being implemented by National Health Authority.

Digital Health and Telemedicine

In the current world, access to internet and setting up on digital networks means that healthcare services are both dependent on and facilitated by digital services. The Indian government has introduced many services which enables all stakeholders in the health systems to make use of information technology. Some of the measures are as follows:

- Electronic health records such as Metadate and Data Standards; health facilities being allotted National Identification Number; Hospital Information System (including eHospital and eSushrut); My Health Record
- National Digital Health Blueprint
- For telemedicine: National Medical College Network, National Telemedicine Network, Tele-Radiology, Tele-Evidence
- > mHealth: mCessation (to quit tobacco), mDiabetes
- > Aarogya Setu mobile for COVID19 tracing
- Ayushman Bharath Digital Mission: This integrates IT and healthcare to provide a holistic and comprehensive service in the care-seeker, by maintaining records, development of health apps, working with both centre and state health systems, as well as with private and public sectors, national portability, better management of health sector, etc.



Figure 59: Ayushman Bharat Digital Mission ecosystem

Planning Commission and NITI Aayog

The Planning Commission, over the course of its 12 plan periods, introduced many measures to improve healthcare in India. These mostly focussed on sanitation and water supply; medical education and research; functioning of PHCs; control of communicable diseases; family planning, etc. When the Planning Commission was replaced by the National Institution for Transforming India-NITI Aayog- in 2015, the latter emerged as a critical player in healthcare in India, especially as a policy formulator, and evaluator of health programmes.

Structure of Health Governance in India

The structure of the health governance in India is as follows:

- 1. Centre: Union Ministry of Health and Family Welfare, Directorate General of Health Services, Central Council of Health
- 2. State: State Ministry of Health, State Health Directorate
- 3. The various administrative bodies at the district and local levels like Panchayats and Blocks also are involved in health care

4. Apart from this, there are also other central institutions which deal with medicine and healthcare in the country, such as, Indian Council of Medical Research, AYUSH (seen above), All India Institute of Medical Sciences, etc.

Thus, by combination of various public and private players, which have each been guided by policy recommendations and the extensive studies by various commissions, India's health infrastructure has been designed. Throughout history, the policy-makers and service providers have responded to the demands of the time and formulated plans, which has resulted in India drastically improving its health indices. However, there is much to be desired, especially in terms of public health and accessibility. There is much need for intersectoral co-operation and creative policy formulation in order for India to provide quality healthcare to its population.

Learning Activity 5.2 Compare the demographic indicators like birthrate, death rate, infant, and maternal mortality rates in 1947 and the 2020s in India. Point to the improvements made in these rates and the programmes which have brought about these strides.

5.3 Summary

- Health system in India- historical development of health systems in India
- Components of health systems in India- primary health sector :village, dais, anganwadi workers, ASHA- subcentre level- PHC level- CHC level
- Hospitals: rural hospitals-district hospitals- AYUSH hospitals-Defence Medical Services- Railway Employees' Hospitals-Employees State Insurance Corporation
- Private Sector-medical tourism
- Indigenous healthcare- ayurveda-siddha- unani- homeopathyyoga- sowa rigpa- naturopathy
- Voluntary health agencies- National Health Programmes- health insurance

- Health planning in India- components of a health plan- planning cycle
- Health committees in India- Sokhey- Bhore- Mudaliar- Chadah-Mukherji- Jungalwalla- Jain- Kartar Singh- Hathi- Shrivastav-Mehta- Bajaj committees
- National Health Policies of 1983, 2002, 2017
- > National Health Mission- Ayushman Bharath
- > Digital health and telemedicine
- Planning commission and NITI Aayog- structure of health governance in India

5.4 Self-Assessment Questions

- 1. Write a note on the historical development of health systems in India.
- 2. What are the various components health systems in India? Demonstrate using a chart.
- 3. Write in detail about primary health care in India, till the district level.
- 4. How do specialised services and employers offer institutionalised healthcare? Explain with reference to defence and railways.
- 5. India is a leading destination for medical tourism. Do you agree with this statement? Justify your answers with valid points.
- 6. How has the private sector come to be a major player in healthcare? What are some of the challenges in depending on private sector for healthcare?
- 7. How has Indian government formulated policies related to indigenous, traditional and alternative forms of medicine?
- 8. What is the role of voluntary health agencies in providing healthcare?
- 9. How has the National Health Programmes led to the control of certain diseases and regulation of others? Explain with examples.
- 10. Explain in detail the process and components of a planning cycle
- 11. List and explain the important health committees in India and their recommendations.
- 12. Describe in detail about the functioning of National Rural Mission.
- 13. How does Ayushman Bharath revolutionise health services?
- Write a note on how internet, digital health and telemedicine is becoming a crucial factor is healthcare in the 20th century.
- 15. Write a note on the importance of internet and technology in healthcare during the COVID19 pandemic.

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