



The Concepts of Health and Disease – A Study

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Abstract

Health and disease are cardinal concepts of the biomedical sciences and technologies. Though the models of health and disease may vary, these concepts play a defining role, indicating what should and what should not be the objects of medical concern. The concepts are ambiguous, operating both as explanatory and evaluator notions. They describe states of affairs, factual conditions, while at the same time judging them to be good or bad. Health and disease are normative as well as descriptive. This dual role is core to their ambiguity and is the focus of this paper. In this paper I shall examine first the concept of health; second, the concept of disease; and third, I will draw some general conclusions concerning the interplay of evaluation and explanation in the concepts of health and disease.

Key Words Health, Environment, Disease, Physical Health, Mental Health, Social Health etc.

Introduction

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Health is man's normal condition his birthright. It is the result of living in accordance with the natural laws pertaining to the body, mind and environment. Modern medical science is often accused for its preoccupation with the study of disease, and neglect of the study of health. It has encouraged people to rely on drug and tonics for the maintenance of health than teach them the natural way to health. In fact, our ignorance about health continues to be profound - there is no agreed definition of health, there are no yardsticks for measuring health. Promotion of health is basic to progress and development of the nation. Nothing could be of greater significance than the health of the people in terms of resources for socio-economic development.

Health was 'forgotten' when the covenant of the League of Nations was drafted after the First World War. The



word 'Health was inserted at the last moment. Health was again 'forgotten' when the charter of the United Nations was drafted at the end of the Second World War. The matter of health again had to be introduced ad hoc at the United Nation Conference at San Francisco in 1945. In modern concept health is not merely a previous possession. But also a 'resource' in which the total community, has a stake and which is desirable to maintain and promote.

THE CONCEPT OF HEALTH

In fact, there is no agreed definition of health. Many people define health in different ways. For a lay man, health is nothing but a sound mind in a sound body, in a sound family, in a sound environment. The World health Organization (WHO) (1948) has defined "Health is a state of complete physical, mental and social well-being and not merely in absence of disease or infirmity". In this definition WHO has projected three different dimensions of health-physical, social and mental – which are closely associated. Beside this, health may be defined as the State of an Organism in which all its functions and manifestations of Vital activity are in harmonious and dynamic interaction with the environment. The health Status of man is the outcome of the interplay between and the integration of two ecological universes, the internal environment of man and the external environment in which he exists. "The internal environment pertains to "each and every component parts, every tissues organs and Organ systems and their harmonious functioning within the: body system while the external environment comprises of three closely related

components – physical biological and social.

According to WHO concept, the health has four different dimension,' viz, physical, mental and social. So, the health can also be explained in all these ways.

Physical Health

The physical health of a person can be determined by "a good complexion, a clean skin, bright eyes, lustrous hair with a body well clothed with firm flesh, not too fat, a sweet breath, a good appetite, sound sleep, regular activity of bowels and bladder and smooth easy Co-ordinate bodily movements. All the Organs of the body are of unexceptional size and function 'normally' all the special senses are intact; the resting pulse rate, blood pressure and exercise tolerance, are all within the range of 'normality' for the individuals' age and Sex".

Mental Health

The mental health of a person can be determined by "self-satisfaction, self-confidence, no conflict within himself, happy, calm and cheerful personality, well adjustment with others, understanding, self-control and not dominated by fear, anger, love, jealousy, guilt or Worries".

Social Health

There is no agreed concept of social health. It is difficult to describe the meaning of 'Social Well-being'. In general, the concept of social health connotes such abilities as those of making friendship that are satisfying and lasting, of assuming responsibilities in accordance with one's capacities, of finding satisfaction, success and happiness in accomplishments of everyday tasks, of



living effectively with others and showing socially considerate behaviour.

Spiritual Health

There is another dimension of health, viz. Spiritual health; which is a recent concept in health. It is the "intangible something that transcends physiology and psychology", i.e. the spirit of man. Spiritual health is a highly controversial matter and suffice it to say that not everyone will be prepared to accept it as the fourth dimension of the health. The WHO definition of health is considered by many to be an idealistic goal rather than a realistic definition. As stated in definition the 'State' according to some people the health cannot be defined as a state at all. It must be seen as a process - a process of continuous adjustment to the changing demands of living and of the changing meanings. We give to life itself. Also there is no satisfactory definition of "Well-being". So to say, the WHO definition of health is also a controversial definition.

DETERMINANTS OF HEALTH

According to the ecological approach, health is -a state of dynamic equilibrium or adjustment between man and his-environment. One can think of this graphically as a balanced scale with the pan representing the agent and human host and the fulcrum, the environment and health as a state of equilibrium between the- disease agent and the human host. When this balance is disturbed for any reason, ill health results.

Individual and group health is determined by (a) human biology (b) environment (c) ways of living (d) economic status, and (e) health services.

A) Human Biology

The mental and physical traits of every individual depend upon the nature of its genes at the moment of conception. Many diseases have direct relation with the heredity. The State of health therefore depends partly on the genetic constitution of man. Thus from the genetic stand point, health may be defined as that "State of the individual which is based upon the absence from the genetic constitution of such genes as correspond to character that take the form of serious defect and derangement and to the absence of any aberration in respect of the total amount of chromosome material in the Karyotype or, stated in positive terms. From the presence in the genetic constitution of the genes that correspond to the normal characterization and to the presence of a normal Karyotype.

B) Environment

The health status of the individual depends upon the internal environment of the man himself as well as the external environment. When the internal environment refers to each and every component part of the body system, the external environment is the aggregation of all external conditions and circumstances which affect the development and life of an individual. The external environment includes physical, Biological and Social components as a whole.

C) Ways of living

The health of the individual depends upon the life style of the person. It comprises all the day to day activities of the individual. Personal hygiene



includes all those personal factors which influence; the health and Well-being of an individual.

D) Economic Status

Economic status is another important factor on which the health status depends. In countries with the lowest income level one finds higher mortality rates in comparison to the countries with the higher income level.

E) Health Services

This is the sum total of services available for the better health. It meant all those personal and community services, including medical care, directed towards the protection and promotion of the health of the community. So the health status is not only influenced by the physical and social environment, but also by the quality and availability of health services.

THE CONCEPT OF DISEASE

Like health, the concept of disease is also not well defined. Many people define it in different ways. With the progress of civilization from the ancient to modern man, the concept, of diseases also evolved by stages from super-natural and deistic origin to the natural and multifactorial causation. An adequate definition of disease is yet to be found. World Health Organization has not defined disease. The Oxford English Dictionary define disease as, "a condition of the body or; some part or organ of the body in which its functions are disturbed or deranged". Webster defines disease as "a discomfort, a condition in which bodily health is seriously attacked, deranged or impaired; a departure from the State of health, an alternation of human body

interrupting the performance of vital function". The chamber 20th Century Dictionary defines disease as "a disorder or want of health in mind or body. These definitions are considered inadequate because none of them give a criterion by which to decide when the disease state begins and ends. Disease is not a static entity; it is a process with a dramatic or insidious onset, a short or prolonged course and ending in recovery, death or disability.

NATURAL HISTORY OF DISEASE

While discussing about the concept of disease, it is very clear to all that the disease is nothing but a "process". The term "natural history of disease" is applied to the course of disease process in man. This natural history of disease comprises of two phase (a) Pre-pathogenesis phase and, (b) Pathogenesis phase.

Pre-Pathogenesis Phase

Man is always in the "midst of disease". The Pre-Pathogenesis period refers to the preliminary period of the disease. As man is always in the midst of the disease, potentially we are in the Pre-pathogenesis period of many disease like typhoid, fund ice and so on. The disease process starts when only the agent, host and environment interact. These three factors are referred to sometimes as ecological triad. Under optimal conditions, the interaction between these three results disease. At the beginning, the signs and symptoms of the disease may not be clear-cut, but it become clear as the disease advances.



Pathogenesis Period

This is the second phase of the disease in man. In this phase the clinical signs and symptoms in man alter. This period is named as "incubation period". In this period, the patient may remain apparently healthy and ambulant but never the less is not free from tissue and physiological changes. It is difficult to recognize these sub-clinical changes by the usual method of diagnosis. After this period, when the health equilibrium is disturbed, the signs and symptoms of disease begin to appear indicating that the patient is chronicity, disability or death.

THE DISEASE AGENT

The disease "agent" may be defined as a substance, living or non-living or a force, tangible or intangible, the excessive presence or relative lack of which is the immediate cause of a particular disease.

DISEASE DUE TO MULTIPLE FACTORS

The germ theory of disease dominated the thoughts and concern of physicians and public. Health workers for nearly three quarters of century. In late nineteenth century Pettenkofer of Munich (1819-1901) discovered the concept of disease due to multiple factors. This new theory overshadowed the Old "single-cause idea" of the disease occurrence. The causes of many diseases like cancer, heart diseases etc. cannot be explained under the germ theory. It cannot be prevented also by the isolation and other preventive method adapted by health workers. The realization began to dawn that- the "Single .cause idea" was an over-simplification and there are

other-factors in the etiology of disease- social, economic, cultural, genetic and psychological factors which are equally important.

- 1) **Biologic:** Bacteria, Viruses, Rickettsial, Fungi, Protozoa, Metazoa etc.
- 2) **Nutrient:** Proteins, Fats, Vitamins, Minerals, Water.
- 3) **Chemical :** Endogenous and Exogenous substances
- 4) **Physical:** Heat, Cold, Humidity, Pressure Radiation.
- 5) **Mechanical:** Chronic friction and other mechanical forces.
- 6) **Environmental:** Water, Air, Climate, Latitude, Longitude, Rainfall, Soil, Housing, Methods of disposal of Waste, Insects ' Rodents, "animals.
- 7) **Social:** Education, Occupation, Religion, Caste Diet, Addiction, Family life, Urbanization, Industrialization, Human activities - aggregation dispersal, Standard of living.
- 8) **Economic:** Income, Expenditure, Debts.
- 9) **Psychological:** Stress and Strain, Competition, Insecurity.
- 10) **Cultural:** Customs, Habits, Beliefs, Attitudes.
- 11) **Human behaviour:** Indulgence in Alcohol, Tobacco smoking and Drugs, Physical inactivity.
- 12) **Genetics:** Harmful genes in the constitution.

The study of all these factors forms the subject matter of Social medicine, which may be defined as "the study of social, economic, environmental, cultural, genetic and psychological factors which have a bearing on the health of



groups of individuals and the individuals within those groups and at the same time with practical measure within the social field that may -be taken to promote health, prevent disease and assist the recovery of the sick".

ENVIRONMENTAL POLLUTION AND HEALTH DISORDERS

Pollution of the environment from a wide range of human activities: uncontrolled disposal of human excreta and refuse; smoke from coal or oil burning; fumes from motor vehicles; industrial discharges, such as mercury and other chemicals or the products of nuclear fission, which poison cattle and fish and concentrate undesirable substances in human tissues; misuse or overuse of insecticides and fertilizers. Excessive noise causes deafness and in lesser degree destroys equanimity; the extrovert may be stimulated by the transistor radio, but for the introvert it is an intrusion into privacy which irritates and disturbs. Population explosion, beyond the capacity of the soil, results in malnutrition, overconsumption of food causes obesity, diabetes and dental decay. Association with the animal world gives rise to zoonotic diseases. The ill constructed house, overcrowded dwellings and mushroom growth around urban conglomerations cause infections to spread and contribute to mental stress. One does not have to go far to see relationship between environment and health - of body, mind and spirit, This Chapter succeeds in emphasizing that, to ensure his wellbeing, man has to produce an ecological balance between himself and his environment.

CONCLUSION

The concept of health and disease discuss a set of topics related to understanding of health and noticed the great interest dedicated to health by a majority of formulate an explanation of this fact in terms of the strong secular movement in the modern world but also in terms of the medical development and tried to compare a bio statistical theory of health and disease with a holistic one and noticed the essential differences and similarities between the two approaches and also initiated an assessment of the two conceptions, mainly from the medical practice and public health.

1. The health concept used in clinical practice is related to vital goals and not just to survival. Moreover, health is something over and above the absence of disease.
2. The health concept used in the context of general health promotion is much more naturally interpreted along the holistic lines than along the bio statistical lines.

The relation between the notions of health and happiness. The case that these notions are separate, but still related to each other. Health is a typical, but indeed not necessary, contributor to happiness.

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