SHAMBHUNATH INSTITUTE OF PHARMACY

1stSessional Examination 2019-2020 D.Pharm First Year Health Education and Community Pharmacy

Time: 1:30 hrs. M.M 20

Paper Code: 214112

Roll No:

Note: Attempt any **five** questions.

(5x4=20)

- 1. Discuss in detail determinants of health.
- 2. Define Health with their types.
- 3. Short note on:
 - i) Concept of diseases
 - ii) Concept of health
- **4.** Discuss in detail health indicators.
- **5.** Give the detail of natural history of diseases.
- **6.** Discuss in detail disease agents.

ANSWERS

Ans 1. The determinants of health include:

It social and economic environment, the physical environment, and the person's individual characteristics and behaviors.

Many factors combine together to affect the health of individuals and communities. Whether people are healthy or not, is determined by their circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health, whereas the more commonly considered factors such as access and use of health care services often have less of an impact.

These determinants or things that make people healthy or not—include the above factors, and many others. Income and social status - higher income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater the differences in health.

<u>Education</u>-Low education levels are linked with poor health, more stress and lower self-confidence.

<u>Physical environment</u> – Safe water and clean air, healthy workplaces, safe houses, communities and roads all contribute to good health. Employment and working conditions – people in employment are healthier, particularly those who have more control over their working conditions

<u>Social support networks</u> – Greater support from families, friends and communities is linked to better health. Culture - customs and traditions, and the beliefs of the family and community all affect health.

<u>Genetics</u> - Inheritance plays a part in determining lifespan, healthiness and the likelihood of developing certain illnesses. Personal behavior and coping skills – balanced eating, keeping active, smoking, drinking, and how we deal with life's stresses and challenges all affect health.

Ans 2. Health is a state of physical, mental and social well-being in which disease and infirmity are absent.

Types-

Mental and physical health are the two most commonly discussed types of health. We also talk about "spiritual health," "emotional health," and "financial health," among others. These have also been linked to lower stress levels and mental and physical wellbeing.

Physical health:

In a person who experiences physical health, bodily functions are working at peak performance, due not only to a lack of disease, but also to regular exercise, balanced nutrition, and adequate rest. We receive treatment, when necessary, to maintain the balance.

Mental health:

Mental health refers to a person's emotional, social, and psychological wellbeing. Mental health is as important as physical health to a full, active lifestyle.

It is harder to define mental health than physical health, because, in many cases, diagnosis depends on the individual's perception of their experience. With improvements in testing, however, some signs of some types of mental illness are now becoming "visible" in CT scans and genetic testing.

Mental health is not only the absence of depression, anxiety, or another disorder.

Socialhealth:

SocialHealth is commonly defined as your ability to form meaningful relationships with other people and interact in healthy, positive ways. The way you connect to the people around you, adapt to different social situations, and experience a sense of belonging all contribute to your social health

Spiritual health:

Spiritual health is achieved when you feel at peace with life. It is when you are able to find hope and comfort in even the hardest of times.

Ans.3. (I) Concept of diseases -

A disease is a particular abnormal condition that negatively affects the structure or function of part or all of an organism, and that is not due to any external injury. Diseases are often construed as medical conditions that are associated with specific symptoms and signs.

A disease may be caused by external factors such as pathogens or by internal dysfunctions. For example, internal dysfunctions of the immune system can produce a variety of different diseases,

including various forms of immunodeficiency, hypersensitivity, allergies and autoimmune disorders.

(II) Concept of health-

Mental and physical healths are the two most commonly discussed types of health. We also talk about "spiritual health," "emotional health," and "financial health," among others. These have also been linked to lower stress levels and mental and physical wellbeing.

Ans 4. Health indicators-

A health indicator is a measure designed to summarize information about a given priority topic in population health or health system performance. Health indicators provide comparable and actionable information across different geographic, organizational or administrative boundaries and/or can track progress over time like, a common example of a health indicator is life expectancy. A government might have a system for collecting information on each citizen's age at the time of death. This data about age at death can be used to support statements about the national life expectancy, in which case life expectancy would be a "health indicator". Life expectancy may be one of many "health indicators" which collectively researchers would use to describe the health of the population of the country.

Health Indicators

- Crude death rate
- Life expectancy
- Infant mortality rate
- Maternal mortality rate
- Proportional mortality rate

Morbidity indicators

- Prevalence
- Incidence
- Others

Health status

Incidence counts of any of the following in a population may be health indicators:^[3]

- Low birth weight
- Obesity
- Arthritis
- Diabetes
- Asthma
- High blood pressure
- Cancer incidence
- Chronic pain
- Oral health
- Depression
- hospital visits due to injury
- reports of waterborne diseases or food borne illness

Disability indicators

- Disability adjusted life years (DALY)
- Others: Activities of daily living (ADL), Musculoskeletal disability (MSD) score etc.

Nutritional indicators

- Proportion of low birth weight
- Prevalence of anaemia
- Proportion of overweight individuals
- Prevalence of underweight among under-fives
- Prevalence of stunting among under-fives
- Prevalence of acute malnutrition among under-fives

Social and mental health indicators

- Alcohol related indicators
- Injury rates

Health system indicators

- Healthcare delivery related
- Health policy indicators

Health Determinant

- Smoking habits
- alcohol consumption habits
- Physical exercise habits
- Breastfeeding

Ans.5. Natural history of diseases-

The natural history of disease is the course a disease takes in individual people from its pathological onset ("inception") until its eventual resolution through complete recovery or death. The inception of a disease is not a firmly defined concept. The natural history of a disease is sometimes said to start at the moment of exposure to causal agents. Knowledge of the natural history of disease ranks alongside causal understanding in importance for disease prevention and control. Natural history of disease is one of the major elements of descriptive epidemiology.

Followings are the **five** periods of **disease** include the incubation, prodromal, illness, decline, and convalescence periods. The incubation period occurs in an acute **disease** after the initial entry of the pathogen into the host (patient).

The Genesis of Epidemics and the Natural History of Disease: an Introduction to the Science of Epidemiology based upon the Study of Epidemics of Malaria, Influenza, and Plague.

Ans.6. Disease agents-

The term **disease** causative **agent** usually refers to the biological pathogen that causes a **disease**, such as a virus, parasite, fungus, or bacterium. Technically, the term can also refer to a toxin or toxic chemical that causes illness. The following points highlight the five main types of disease agents that causes diseases in humans.

a. Biological Infectious Agents-

These are also called pathogens (Gr. pathos means disease; genesis means producing). These are those micro-organisms which when successfully infect the human body, multiply and produce toxins in incubation period which interfere with the normal functioning of the body and cause a disease. These include bacteria, viruses, rickettsias, fungi, protozoans, helminths etc. Out of these, protozoans are one-celled protists, while helminths are multicellular animals.

b.Chemical agents –

which may be endogenous e.g., urea, uric acid, hormones, enzymes etc.; or exogenous e.g. pollutants like gases, dust, metals, fumes; and allergens like spores, pollens etc.

- c. Nutritive agents e.g., minerals, carbohydrates, proteins, fats, vitamins and water.
- d. Physical agents e.g., heat (stroke), cold (frost bite), radiations, sound (impaired hearing), etc.
- e. Mechanical Agents: These include injuries, fractures, sprains, dislocations, etc.