Pharma Unit



Social Pharmacy Top 10 Most Repeated Questions & Answers

According to New Syllabus ER 2020-21

1st Year D. Pharmacy

1) Define health and explain various indicators of health? Ans.

WHO Definition of health: Health is a state of complete physical, mental, and social well-being and not merely an absence of disease or infirmity.

Types of indicators

a) Mortality indicators

Mortality means death rate. Determining mortality rate in different age group in a community indicates the health status of society, community, and a country. For example, infant mortality rate, child mortality rate, disease specific mortality rate, crude death rate, maternal mortality rate

- •Infant mortality rate: it means how many newborn babies (0 to 12 months) died out of 1000 newborn babies.
- •Child mortality rate: it means how many numbers of children (1 to 4 years) died out of 1000 children.
- •Disease specific mortality rate: This is the mortality rate due to disease such as cancer, diabetes, and cardiovascular disease.
- •Crude death rate: how many peoples died per 1000 population in one year.

 Mortality indicators determine the life expectancy of an individual person in particular community and country. If mortality rate in a particular community and a country is low than we can say that the health status of that country or society or community is good.

b) Morbidity indicators

Mobility indicators measure the occurrence of disease in a population in a particular country. These indicators include following points

➤ Incidence of disease: The number of new diseases in a particular population within specific period is called as incidence of disease. For example, incidents of corona are 5 per 100 persons in one year.

- ➤ Prevalence: The total number of individuals who have disease at a particular time divided by population at risk of having disease is called as prevalence. For example, 200 peoples are corona positive per 10000 population
- > Attendance rate at hospitals: How many individuals are coming in a hospital for treatment of disease.
- c) Disability indicator
 - Disability indicators are the indicators which measures how many individuals are present in a population who are not recovered from a particular disease. For example, in a population of 1 lakh 20 thousand individuals are not recovered from corona.
- d) Nutritional status indicator: Nutritional status indicator is used to check the health of an individual in population. This indicator measures the weight and height of newborn baby, weight and height of school children weight, height, and haemoglobin level of adults in a population.
- e) Healthcare service indicator: This indicator is used to check the availability of health services in particular population. This indicator measures number of doctors in population, number of hospital beds in a population, number of pharmacies in a population etc.
- f) Socioeconomic indicator: These indicators measure the growth of population, level of unemployment, literacy rate, mental health problem in a community. By measuring this health status of a community can be determined.
- g) Quality of life indicators: This indicator measures quality of life in a population. By measuring the quality-of-life health status country can be determined.
- h) Environmental indicator: These indicators measure environmental condition of a particular country by measuring water pollution, air pollution, noise pollution. By this the health status of country can be determine.

2) Explain different dimensions of health?

Ans.

Dimensions of health

- a) Physical health dimension: It means perfect functioning of body. it is the state in which every cell and organ are function properly. Some of the signs of good physical health in an individual are Normal weight, normal height, good appetite and clear breath etc. Many indicators are used to assess physical health such as normal blood pressure, normal pulse rate, normal respiratory rate, normal heart rate. All the sense organs such as eyes, nose, tongue and skin should be in normal condition and function properly.
- b) Mental health dimension: It refers to the mind of an individual person. The mental health is as important as physical health. Mental health can be defined as a state of balance between an individual and surrounding world.

Some of the characteristics of good mental health are -

- > A person should not have any internal disturbance.
- > A person should behave good with the society.
- > A person should adjust with the environment and the surrounding world.
- > A person should face his own problem and solve the problem intelligently.
- c) Social health dimension: Health is a function not only of medical care but of the overall development of the society. Social health means a state of harmony and integration within the individual between each individual and other members of society.
- d) Spiritual dimension: Spiritual health dimension is related to the soul or spirit of an individual person. According to medical science the body and souls are two separate entities, spiritual

- health dimension is the connecting link between physical and mental health. Some of the spiritual techniques are yoga, medication, etc.
- e) Emotional dimension: This dimension is related to emotion of an individual, if the emotions are hurt person may develop depression anxiety or other psychological disturbance which results into bad health of an individual.
- f) Vocational dimension: Vocation means occupation. If the occupation or any income source of an individual is disturbed than the health of an individual is also disturbed.

3) Define demography and write about demographic cycle? Ans.

Definition: Demography is the study of human populations which includes their size, composition and distribution across space and the process through which populations change. **Demographic cycle:** it has 5 stages

- a) First stage: It is also called as high stationary stage. It is characterised by high birth rate and high death rate which cancels each other
- b) Second stage: It is also called as early expanding stage. Here there is a decrease in death rate and the birth rate remains the same therefore the population expands
- c) Third stage: It is also called as low stationary stage. There is low birth rates and low death rates, so population becomes stationary
- d) Fourth stage: It is the declining stage. Here the population begins to decline as the birth rate is lower than the death rate
- e) Fifth stage: Population begins to decline as birth rate is lower than death rate. East European countries like Germany and Hungary are now in this stage

4) Define Family planning and classify family planning method? Ans.

Definition: Family planning means to plan and limit the size of the family in accordance with the social economic and health conditions so as to ensure that the family is happy both physically and mentally

Methods of family planning

- A) Temporary method
 - a) Natural method
 - Sexual abstinence method
 - > Coitus interrupts
 - > Safe Method
 - Basal body temperature method
 - > Cervical mucus method
 - Prolonged lactation method
 - > Vaginal washing method
 - b) Spacing method
 - Barrier contraceptives (mechanical methods)
 - > Condom
 - Diaphragm
 - > Intrauterine devices
 - Chemical methods

- > Foam tablets
- > Contraceptive pills and jellies
- > Soluble tablets
- > Oral contraceptives

B) Permanent methods (sterilization method)

- > Vasectomy (Male sterilization): In this method a piece of vas deferens of about 1cm length is removed
- > Tubectomy (Female sterilization): It is a surgical process that blocks the fallopian tubes, thereby preventing the egg released by the ovary from reaching the uterus.

5) Write a note on epidemiology?

Ans.

Definition: Epidemiology is defined as the detailed scientific study of the distribution and determinants of disease or disability in society. in epidemiological studies communicable, non-communicable and nutritional deficiencies are also included.

Epidemiology is derived from Greek word - Epi means among, Demo means people, Logos means study

Methods of epidemiology - There are 4 different types of method or studies which are present in epidemiology

- a. Quantitative studies: It includes basic measurement such as ratio, rate and proportion of mortality, morbidity, incidence and prevalence
- b. Descriptive studies: Study with occurrence and distribution of disease it deals with time place and person
- c. Analytical studies: It deals with the studies to determine the hypothetical consideration concerning with disease
- d. Experimental studies: It is carried out to provide a scientific proof and providing a measuring method

Uses of Epidemiology

- a) To make a community diagnosis Epidemiology helps to identify and describe health problems in a community (for example, the prevalence of anaemia, or the nutrition status of children).
- b) To monitor continuously over a period of time the change of health in a community. (For example, the effect of a vaccination programme, health education, nutritional supplementation).
- c) To practice surveillance for a specific disease in order to be able to act quickly and so cut short any outbreak (example cholera).
- d) To investigate an outbreak of a communicable disease, analyse the reasons for it, plan a feasible remedy and carry it out, and monitor the effects of the remedy on the outbreak.
- e) To plan effective health services. Effective services, interventions and remedies all depend on accurate community data.

6) Write about the role of pharmacist in public health? Ans.

Role of Pharmacist in public health

- a) Review prescriptions: The pharmacist should review and handle prescription in a professional manner and be able to check for the completeness and correctness of the prescription. Also, if any clarification or correction is required in prescription the pharmacist should directly contact to prescribers/doctors.
- b) Dispensing of prescription and non-prescription medicines: The pharmacist should be able to dispense various prescription drugs and medicines which is required to patient according to Drugs and cosmetic act. Also, the non-prescription drugs i.e., over the counter drugs should also be dispensed by the pharmacist very carefully.
- c) Provide patient counselling: The pharmacist should be able to counsel the patient about the drugs and medicine which is used by the patient. Pharmacists should also give knowledge to the patient about their disease and the effect of their drug. Pharmacies should also give knowledge to the patient about how to use their medicine effectively.
- d) Hospital pharmacy management: Pharmacist should be able to manage the drug distribution system in the hospital as per the policies of hospital pharmacy. Pharmacist should also check the requirement of medicines and drugs in the hospital pharmacy. Pharmacist should be able to take different challenges which are required to manage the hospital pharmacy.
- e) Expertise on medications: The pharmacist should be able to provide an expert opinion on medication to health care professionals Such as doctors and nurses on safe and effective Use of medication.
- f) Proficiency on pharmaceutical formulation: Pharmacist should be able to describe the chemistry, characteristic, types, advantage, and disadvantage of a drug used by the public
- g) Deliver health care programmes: Pharmacies should arrange various healthcare programmes which include awareness about drugs, awareness about disease, awareness about public health, Awareness about hygiene, etc.
- h) Recording incidents of a disease in their community: Pharmacist should be able to record the incidents of a disease occurring in their community. For example, Covid 19, Dengue, malaria, or any infectious disease.
- i) Identifying adverse reaction of a drug: Pharmacy should be able to identify any adverse reaction or side effect of a drug which occurs to any patient in their surroundings.

7) Explain about immunization?

Ans.

Definition: Immunization, or immunization, is the process by which an individual's immune system becomes fortified against an infectious agent (known as the immunogenic). Immunization can be achieved in an active or passive manner: vaccination is an active form of immunization.

Types of Immunization

A. Active immunization: Active immunization can occur naturally when a person comes in contact with, for example, a microbe. The immune system will eventually create antibodies and other defences against the microbe. The next time, the immune response against this microbe can be very efficient; this is the case in many of the childhood infections that a person only contracts once, but then is immune.

- B. Passive immunization: Passive immunization is where pre-synthesized elements of the immune system are transferred to a person so that the body does not need to produce these elements itself. Currently, antibodies can be used for passive immunization. This method of immunization begins to work very quickly, but it is short-lasting because the antibodies are naturally broken down, and if there are no B cells to produce more antibodies, they will disappear.
- C. Efficient Immunization:

A method for efficient vaccination approach, via vaccinating a small fraction of the population called acquaintance immunization, has been developed by Cohen et al. (2003). An alternative method based on identifying and vaccinating spreaders has been developed by Liu et al. (2021).

8) Explain about Pharmacoeconomics?

Ans.

Definition: Pharmacoeconomics is the branch of health economics that evaluates the cost and outcomes of pharmaceutical products and services. It involves the study of the economic impact of drug therapy and helps in determining the best therapeutic options by analyzing their costs and benefits.

Importance of Pharmacoeconomics

- a) Optimized Resource Allocation: It helps in the efficient use of limited healthcare resources by ensuring cost-effective treatments are provided.
- b) Decision-Making Tool: Pharmacoeconomics aids healthcare professionals, policymakers, and insurance companies in making informed decisions about drug coverage and formulary inclusion.
- c) Improved Patient Care: By analysing the cost-effectiveness of therapies, it ensures that patients receive affordable and effective treatments.
- d) Policy Development: It supports the development of health policies that ensure equitable access to essential medicines.
- e) Supports Generic Drugs: It highlights the economic advantages of generic drugs, making medications affordable to a larger population.

Methods of Pharmacoeconomic Analysis:

- a) Cost-Minimization Analysis (CMA): Used when two or more interventions have equivalent outcomes. Focuses only on comparing costs.
- b) Cost-Effectiveness Analysis (CEA): Compares the cost of interventions with their health outcomes, measured in natural units (e.g., life-years gained, blood pressure reduced). Example: Comparing two antihypertensive drugs based on cost per mmHg reduction in blood pressure.
- c) Cost-Utility Analysis (CUA): A specific type of CEA where outcomes are measured in terms of quality-adjusted life years (QALYs). Useful for analyzing interventions that impact both quality and quantity of life.
- d) Cost-Benefit Analysis (CBA): Compares costs and benefits of interventions in monetary terms. Helps in determining whether the benefits of a treatment outweigh its costs.
- e) Cost-Consequence Analysis (CCA): Lists all costs and outcomes without aggregating them into a single metric, allowing decision-makers to prioritize based on specific needs.

9) Write a note on balanced diet? Ans.

Definition: A balanced diet comprises vital nutrients like carbohydrates, fats, vitamins, minerals, proteins, and fiber. Sufficient and nutritious food that ensures good health is included in a balanced diet. A healthy and balanced diet helps to reduce the risk of diseases and improves overall health.

- ➤ A diet that contains adequate amounts of all the necessary nutrients required for healthy growth and activity.
- > A balanced diet contains enough fiber and various nutrients to ensure good health.
- Food should also provide the appropriate amount of energy and adequate amounts of water.
- > A balanced diet should be both adequate and wholesome.

Importance of a balanced diet:

- > It is essential for a healthy body and a healthy mind.
- > A balanced diet is important to maintain health and sensible body weight.
- > No single food will provide all nutrients; it is essential for a balanced diet that it must contain enough nutrients such as carbohydrates, fat, vitamins, and minerals.
- > Vitamins and minerals in the diet are vital to boost immunity and healthy development.
- > A healthy diet can protect the human body against certain types of diseases.
- > Healthy diets can also contribute to adequate body weight.
- Better mood and energy levels.
- Improved memory and brain health.

10) Write about causative agent, symptoms, transmission and prevention and treatment of AIDS?

Ans.

- A. Causative agent: Acquired immunodeficiency syndrome (AIDS) is a chronic lifethreatening condition caused by the human immunodeficiency virus (HIV).
- B. Symptoms: The symptoms of HIV usually differ from person to person and in some cases, a patient infected with the HIV infection may not experience any symptoms at all. The common signs and symptoms of HIV includes Fever, Chills, Headache, Joint pains, Sore throat, Muscle aches, upset stomach, red rashes on the skin, tiredness and weakness, sweating during the night, Swollen or enlarged Glands These symptoms can last from a few days to several weeks. A person with HIV often experiences no symptoms, feels healthy, and appears healthy.
- C. Mode of transmission: Most people who get HIV get it through anal or vaginal sex, or sharing infected needles, syringes, or other drug injection equipment, it can also transmit by blood transfusion
- **D.Prevention:** Early diagnosis and assessment, HV testing and treatment, never shared needles and use sterile needles, HIV infected mothers should feed their baby a formula milk, abstinence
- **E. Treatment:** Although there is no cure for AIDS, medications have been highly effective in fighting HIV and its complications. Drug treatments help reduce the HIV virus in your body, keep your immune system as healthy as possible and decrease the complications you may develop. The drug includes Abacavir, Didanosine, Emtricitabine, Lamivudine, Stavudine, Tenofovir, Zidovudine

Extra Questions

- 1) Write about causative agent, symptoms, transmission and prevention and treatment of Tuberculosis?
- 2) Define social pharmacy and give its scope?
- 3) Write the importance of water and fiber in diet?
- 4) Write the role of pharmacist in National health?
- 5) Explain nutraceuticals?
- 6) Write about causative agent, symptoms, transmission and prevention and treatment of tuberculosis, malaria
- 7) Write about gram staining methods of bacteria?
- 8) Draw the diagram of typical bacterial cell and name the component of it?
- 9) Write about causative agent, symptoms, transmission and prevention and treatment of typhoid fever and chicken pox?





All The Best For Your Exam

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Very Imp Note:

- > Please Read All the chapters very carefully before Social Pharmacy Exam.
- > These questions are only for the reference purpose.