**Qn 1- Define clearly the meaning of the world public health?**

**The meaning of the word Public health if as follows:**

Public Health Science is the art of preventing disease, increasing longevity of life and promoting health through efforts and choices made by society, public and private organizations, the community and by individuals. Public Health Science deals with dangers to the public health of a population, whether small or large (i.e. populations of a continent) to improve the quality of health and the quality of life in through detecting and preventing disease and other physical and mental health conditions, promoting health behaviors, tracking cases and health indicators. Public Health Science uses a multi-disciplinary method incorporating epidemiology, biostatistics and health services.

Public health promotes and protects the health of people and the communities where they live, learn, work and play.

While a doctor treats people who are sick, those of us working in public health try to prevent people from getting sick or injured in the first place. We also promote wellness by encouraging healthy behaviors.

From conducting scientific research to educating about health, people in the field of public health work to assure the conditions in which people can be healthy. That can mean vaccinating children and adults to prevent the spread of disease. Or educating people about the risks of alcohol and tobacco. Public health sets safety standards to protect workers and develops school nutrition programs to ensure kids have access to healthy food.

Public health works to track disease outbreaks, prevent injuries and shed light on why some of us are more likely to suffer from poor health than others. The many facets of public health include speaking out for laws that promote smoke-free indoor air and seatbelts, spreading the word about ways to stay healthy and giving science-based solutions to problems.

**Qn 2-What is meant by the term evidence based public health?**

**The meaning of evidence based in public health is as follow;>**

Evidence-based public health is the development, implementation, and evaluation of effective programs and policies in public health through application of principles of scientific reasoning.

The definition has evolved to include a strong emphasis on community needs and preferences. Evidence Based Public health offers a process to help decision makers “determine the best intervention strategy to use to address the problem at hand for a particular population of interest and the local context. The State and local public health professionals use the process to evaluate and adapt current strategies or develop new ones with strong evidence of effectiveness.

The process helps state and local public health professionals make effective decisions based on the best available research to achieve desired outcomes.

2(**b) Briefly describe the steps involved in ―evidence based health care?**

**The following are the steps involve in evidence-based health care**:

* Asking the right question
* Searching for the evidence
* Appraising the evidence
* Acting on the evidence

**Asking the right question**

To find the answer to a problem you need to start with a question. Getting the question right can be as important as getting the answer right. If you ask an inappropriate question you could end up with an answer that is not relevant to your patient (one that is not applicable to them). Or you could waste time reviewing too much information because the question is too broad and unfocused.

**Searching for evidence**

Finding the evidence to answer your important, focused question is not straightforward. Usually you will be looking for a paper; one reporting a study conducted in a particular way. This will usually, but not always, be a [randomized controlled trial](https://en.wikipedia.org/wiki/Randomized_controlled_trial) Select the information databases or resources most likely to answer the type of question being asked; utilize keywords and concepts; combine multiple search terms and Boolean connectors.

**Appraising the evidence**

Do you believe everything you read in the newspaper? Do you believe everything you read in scientific journals? Almost everyone will say no to the first question. Some people will hesitate in answering the second. Unfortunately, you cannot rely 100% on papers written in even the most prestigious journals. Even if the contents of a paper are reliable, it is sometimes difficult to find the information you are looking for and to interpret it.

**Acting on the evidence**

If you have examined all the relevant up-to-date evidence that is relevant to your focused clinical question, there should be no one in the world who is more up to date or better informed on this question than you! (Don’t get too comfortable, new evidence comes along all the time and the answer may change quickly). You should be able to explain to your patient the overall balance of evidence considering both the benefits and harms of treatment and assist the patient make a choice in what is called the [shared decision-making](https://en.wikipedia.org/wiki/Shared_decision-making) process.

**Integrate the Evidence with One’s Clinical Expertise**…

Client preference to make the best clinical decision. Before integration, other considerations beyond applicability must be considered, such as biologic, socioeconomic, and epidemiologic issues.

**Evaluate the Outcomes of the EBP Practice Decision…**

change based on evident of the EBP decision. Was the expected outcome achieved? If not, why not? Was it due to non-adherence to treatment plan, different client prognostic factors, and/or providers not ready for the practice change? Was it because of skills, evidence interpretation, or in implementing the intervention?

**Disseminate the Outcome**

Disseminate evidence to colleagues within your organization, and beyond. Outcome dissemination can be done through intra- and inter-departmental in-services, journal clubs, online media, lectures, conferences, posters, and manuscripts

**2(C)**

**The various sources of data in evidence based in health care are as follow**:

**Surveys**

Surveys are an important means of collecting health and social science information from a sample of people in a standardized way to better understand a larger population. There are many methods used to conduct surveys, including questionnaires and in-depth interviews via phone, mail, email, and in-person.

Survey research allows researchers to collect empirical data in a relatively short period of time. Depending on the design and scope, surveys can collect data on a representative sample of people particularly when samples are randomized, or purposive nonprobability sampling is used.

Survey research, like all research approaches, can have drawbacks. It can be hard to get detailed information in a survey, and sometimes people choose not to answer difficult questions, or they cannot remember important details correctly or at all (recall bias). Surveys can have low response rates, and those who do not have access to the medium through which the surveys are distributed are excluded. For example, homeless people may be excluded from a survey conducted via mail, and those without health insurance who cannot afford to see a doctor may be excluded from surveys conducted by health care providers.

When designing surveys, it is important to design questions carefully so that they are clear and understandable to the respondent, produce results relevant to the purpose of the survey, and are not a ‘leading’ question, or questions that prompt a specific desired answer.

Information on a survey designed to collect health data might focus on patients, providers, or hospitals and doctor’s offices.

**Medical Records**

Medical records are used to track events and transactions between patients and health care providers. They offer information on diagnoses, procedures, lab tests, and other services. Medical records help us measure and analyze trends in health care use, patient characteristics, and quality of care.

Medical records are usually accurate and detailed because they come from health care providers. The data are automatically collected, including information that patients might not think to add or feel comfortable sharing through other data sources like surveys. But, because the information is written down in a specific context, it can be misinterpreted if taken out of context. And of course, medical records are (by definition) only available for people who can get medical care.

**Claims Data**

Claims data, also known as administrative data, are another sort of electronic record, but on a much bigger scale. [Claims](https://www.nlm.nih.gov/nichsr/stats_tutorial/glossary.html#Claim) databases collect information on millions of doctors’ appointments, bills, insurance information, and other patient-provider communications.

The good thing about claims data is that, like other medical records, they come directly from notes made by the health care provider, and the information is recorded at the time patient sees the doctor. Also, because of the large sample size of claims data, researchers can analyze groups of patients with rare illnesses and medical conditions. The downside to using claims data is there may be low validity due to certain illegal billing practices, like ordering unnecessary tests or billing for services that were not provided.

**Vital Records**

[Vital records](https://www.nlm.nih.gov/nichsr/stats_tutorial/glossary.html#VitalRecords) are collected by the [National Vital Statistics System](https://www.cdc.gov/nchs/nvss.htm), and are maintained by state and local governments. Vital records include births, deaths, marriages, divorces, and fetal deaths. They also record information about the cause of death, or details of the birth.

Vital records are useful because they offer very detailed information and include information about rare disorders that end in death. Unfortunately, because there are so many state and local governments collecting this information, records can be inconsistent. Also, vital records only provide information on diseases and illnesses that end in death.

**Surveillance**

[Public health surveillance](https://www.nlm.nih.gov/nichsr/stats_tutorial/glossary.html#PublicHealthSurveillance) is the ongoing systematic collection, analysis, and interpretation of data, closely integrated with the timely dissemination of these data to those responsible for preventing and controlling disease and injury.”[1](https://www.nlm.nih.gov/nichsr/stats_tutorial/section3/mod5_surveillance.html" \l "_ftn1) Surveillance activities are usually associated with the study of infectious diseases.

The [National Notifiable Diseases Surveillance System](http://wwwn.cdc.gov/nndss/) (NNDSS), function through the efforts of local and state health departments, working in tandem with a variety of health care providers (laboratories, hospitals, private providers), who are mandated by law to report cases of certain diseases. This allows local, state, and federal health agencies to detect individual cases, control outbreaks, and implement prevention and intervention strategies.

[Disease registries](https://www.nlm.nih.gov/nichsr/stats_tutorial/glossary.html#d) are another type of public health surveillance. Registries are systems that allow people to collect, store, retrieve, analyze, and disseminate information about people with a specific disease or condition. Disease registries let researchers estimate how large a health problem is, determine the incidence of the disease, study trends over time, and evaluate the effects of certain environmental exposures. Registries provide information to improve the quality and safety of care and allow for comparison of effective treatment.

Registries are kept by governments, hospitals, universities, non-profits, and private groups. They store data from hospital records, lab reports, and other sources. Because clinical data is sent securely to registries from the various points of care that a patient may receive, registries allow the possibility to track and better understand rare diseases.[3](https://www.nlm.nih.gov/nichsr/stats_tutorial/section3/mod5_surveillance.html" \l "_ftn3" \o ")

Surveillance data has a higher validity than surveys, because the data comes from lab tests, diagnoses, and other patient records. Registries also make this data easy to store and analyze. The downside to surveillance data is that, because diseases sometimes change definitions, it can be difficult to accurately track trends. Data can also be lacking if hospitals or doctors do not report it.

**Peer-reviewed literature**

Peer-reviewed journal articles have gone through an evaluation process in which journal editors and other expert scholars critically assess the quality and scientific merit of the article and its research. Articles that pass this process are published in the peer-reviewed literature. Peer-reviewed journals may include the research of scholars who have collected their own data using an experimental study design, survey, or various other study methodologies. They also present the work of researchers who have performed novel analyses of existing data sources, such as the ones described in this section.

**Qn 3- Explain the concept of primary health care and relate it to the three levels of disease**

**prevention**

The purpose of this essential public health operation (EPHO) is to prevent disease through actions at primary, secondary and tertiary levels. Most of these actions fall within the role of health professionals and health care providers in primary care, hospitals and community services environment.

There are three levels of prevention:

improving the overall health of the population (primary prevention)

improving (secondary prevention)

improving treatment and recovery (tertiary prevention).

Each of the three approaches has an important role to play in disease prevention and they work as follows:

Primary prevention: routine immunization programmes are established in some form in all countries, and in most cases are well developed and effective. However, arrangements for delivery of vaccine programmes are under-developed in some countries, especially for minority populations. Some Commonwealth of Independent States have seen an increase in vaccine preventable diseases following the breakdown of services available in the Soviet era.

secondary prevention: routine screening for major forms of cancer now exists in many countries, but not in all of them. Screening programmes are not always evidence-based and systemic health checks for noncommunicable diseases are not routine in most countries.

Tertiary prevention: lack of availability and affordability of treatment for early stage cancers is a limiting factor in some countries. Staff need training in evidence-based treatment and management approaches for noncommunicable diseases, and modern equipment.

As a result, a recommendation was made to ensure a balance in the three disease prevention approaches: primary (vaccination and health promotion), secondary (screening and early detection of disease) and tertiary (integrated patient-centered disease management).

**Qn 4-In your own capacity as a public health practitioner, what does the following key concept Mean?**

The concept of social epidemiology is as follows:

**4(A)-Social epidemiology**

Social epidemiology is a branch of epidemiology that focuses particularly on the effects of social structural factors on states of health? Social epidemiology assumes that the distribution of advantages and disadvantages in a society reflects the distribution of health and disease. It proposes to identify societal characteristics that affect the pattern of disease and health distribution in a society and to understand its mechanisms. The central and initial question of social epidemiology to be answered is what effect social factors have on individual and population health. However, the new focus on this theme using current epidemiological methods is a relatively recent phenomenon.

There are several significant concepts in the field of social epidemiology:

1) the bio-psychosocial paradigm,

2) the population perspective,

3) use of new statistical approaches such as multilevel analysis.

**4(B)Behavioral epidemiology**

[Behavioral epidemiology](https://www.omicsonline.org/instructionsforauthors-epidemiology-open-access.php) is the branch of epidemiology that is related with the [psychology](https://www.omicsonline.org/searchresult.php?keyword=psychology). In this we can study about the lifestyle and behaviors of people and how they affect their [health](https://www.omicsonline.org/searchresult.php?keyword=health) conditions. Behavioral disease conditions and disease re-occurrence depends on the behavior is the range of actions and mannerisms made by individuals in conjunction with themselves or their environment, which includes the other systems or organisms around as well as physical environment.

It is the response of the system or organism to various stimuli or inputs, whether internal or external, conscious or subconscious, overt or covert, and voluntary or involuntary.

**4(C) Quarantine**

Quarantine is used to separate and restrict the movement of well persons who may have been exposed to a communicable disease to see if they become ill. These people may have been exposed to a disease and do not know it, or they may have the disease but do not show symptoms. Quarantine can also help limit the spread of communicable disease.

**4(D) Eating disorder**

An eating disorder is a mental disorder defined by abnormal eating habits that negatively affect a person's physical or mental health. They include binge eating disorder, where people eat a large amount in a short period of time; anorexia nervosa, where people eat very little due to a fear of gaining weight and thus have a low body weight; bulimia nervosa, where people eat a lot and then try to rid themselves of the food; pica, where people eat nonfood items; rumination syndrome, where people regurgitate food; avoidant/restrictive food intake disorder (ARFID), where people have a lack of interest in food; and a group of other specified feeding or eating disorders.

1- Anxiety disorders, depression and substance abuse are common among people with eating disorders.

2- These disorders do not include obesity.

**Qn 5- Explain how the social environment can affect one’s health?**

**Here are the major social environmental factors that can affect your health: --**

**Education**

Your education level can influence how healthy you are. Education gives you the tools you need to make good decisions about your health. People with more education are more likely to live longer. They are more likely to participate in healthy activities like exercising and seeing their doctor regularly. They are less likely to participate in unhealthy activities, such as smoking. Education also tends to lead to higher-paying jobs. These often come with benefits, such as health insurance, healthier working conditions, and the opportunity to make connections with other people. All these things add up to better health.

**Income**

People with low incomes are more likely to live in a community of poverty. They are more likely to face situations that can lead to poor health. These can include unsafe housing, more challenges in getting healthy food, and less time for exercise or physical activity. Having a lower income also affects your ability to have affordable health insurance. This can affect how often, if ever, you go to the doctor. This can have a direct effect on your health.

**Housing**

Where you live has a significant impact on your health. People who are continually exposed to poor living conditions have a higher risk of developing health problems. Conditions such as pests, mold, structural problems, and toxins in the home can all affect your health. It is important that your home is safe and free from hazards like these. Housing can contribute to your health when it provides you with a safe place to be.

**Access to health care**

How easy it is for you to access health care is a big determinant of your health. If you have health insurance, you are more likely to visit your doctor on a regular basis. These trips can include screenings and preventive care that keep you from developing chronic disease. But not everyone has access to health insurance or easy access to care. Some people don’t have transportation to go to the doctor. Some can’t afford it, while others speak a different language. All these things can prevent them from getting health care they need. Not being able to get health care can have a huge impact on your health.

**Genetics**

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.

**QN (6). Your friend Kizito is** **a general manager in a nearby Hospital that has recently experienced high labor turnout and persistent strikes. He is seeking your advice on the best way to divert the crisis that is about to cripple healthcare services in the health in the hospital. As a health practitioner who has been in the industry for the last 10 years, kindly give him advice on the best way to approach the crisis.**

The advice to give to the general manager in a nearby Hospital that has recently experienced high labor turnout and persistent strikes are follows: --

Public health refers to all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases. Thus, public health is concerned with the total system and not only the eradication of a disease, but it also consists of management of resources.

A **health manager** is someone who spends a substantial proportion of their time managing areas of healthcare provision such as: Planning, organizing, leading, coordination, and monitoring.

**Planning**

Planning is forecasting and thinking about things that you want to happen in the future and then working out ways to get there**.** It will be your job to help develop the plans that determine the goals you pursue to improve the health of all the people in your community. As a first step you need to prepare plans, and this is best done together with community groups that share a common purpose.

**Organizing**

After a plan is developed it needs to be translated into action. As part of the implementation process, organizing the various administrative structures and community group members is crucial. Furthermore, you need to construct a set of formal relationships with different groups in the community. This process will help you in deciding how the plan will be carried out and who will do it.

**Leading**

Leading is directing, influencing and motivating a team. At the community level, the health delivery system includes various community groups, such as model households, volunteers and development workers. As a Health Extension Practitioner, you are a leader and you will play a leading role in working with these groups, to carry out the different activities involved in maintaining community health. You need also to create an environment that encourages your teams to do their best work, so their performance inspires other members of the community.

**Coordination**

To coordinate activities is to ensure that everything that needs to be done is done and that no two people are trying to do the same job. Coordination will help you to see whether the things that you and your team are doing are consistent with your overall plan. You may arrange meetings with your team as a coordination mechanism to discuss how jobs and responsibilities are progressing.

**Monitoring and control**

Monitoring and control will be an important part of your role as a Health Extension Practitioner, otherwise you won’t know how well you are doing as you try to achieve your goals and objectives. Monitoring is the regular observation and recording of activities. Controllingis ensuring that work has been accomplished according to plan. If your monitoring and control activities indicate that you aren’t being very effective, then you may have to change the way that you are working or ask for extra help from your supervisors.

**Staffing**

Staffing is the process of hiring eligible candidates in the [organization](https://www.toppr.com/guides/business-management-entrepreneurship/organizing/structure-of-organization/) or [company](https://www.toppr.com/guides/business-laws/companies-act-2013/meaning-and-features-of-a-company/) for specific positions. In management, the meaning of staffing is an operation of recruiting the employees by evaluating their skills, knowledge and then offering them specific job roles accordingly. Let us find out more about what is Staffing and what it entails along with its [functions](https://www.toppr.com/guides/maths/relations-and-functions/functions/) and characteristics.

**Coordination**

Definition of Coordination. Co-ordination is the unification, integration, synchronization of the efforts of group members to provide unity of action in the pursuit of common goals. Management seeks to achieve co-ordination through its basic functions of planning, organizing, staffing, directing and controlling.

**Qn 7-Define the following words as used in public health**

**The following words are defined as follows:**

**(I) Community-Based Prevention Marketing**

Community-Based Prevention Marketing (CBPM) is a community directed social change and marketing process that applies diverse social marketing strategies and techniques to the design, implementation, and evaluation of health promotion and disease prevention programs or policies. CBPM blends community organization principles and practices, behavioral theories, and social marketing into a synergistic framework for directing change. Community participation and control are central principles that guide program planning, implementation, and evaluation activities.

**(ii) Mobilizing for action through planning and partnerships**

Mobilization for Action through Planning and Partnerships is a community-wide strategic planning framework for improving public health. Mobilization for Action through Planning and Partnership helps communities prioritize their public health issues, identify resources for addressing them, and implement strategies relevant to their unique community contexts.

Mobilization for Action through Planning and Partnerships will help communities use broad-based partnerships, performance improvement, and strategic planning in public health practice.

This approach leads to the following:

Measurable improvements in the community’s health and quality of life.

Increased visibility of public health within the community.

Community advocates for public health and the local public health system.

Ability to anticipate and manage change effectively.

Stronger public health infrastructure, partnerships, and partnership.

**(iii) Planned Approach to Community Health**

Planned Approach to Community Health, is a cooperative program of technical assistance managed and supported by the Centers for Disease Control (CDC). Planned Approach to Community Health is designed to strengthen state and local health departments, capacities to plan, implement, and evaluate community- based health promotion activities targeted toward priority health problems.

The PATCH concept emerged in 1983 primarily as a Centre for Disease Control response to the shift in federal policy regarding categorical grants to states. One of those categorical grant programs was the Health Education-Risk Reduction (HERR) Grants Prog

Through this program, a modest amount of resources helped local, state, and federal health agencies take an organized, planned approach to community-based interventions. Agencies were urged to make maximum use of existing resources and to monitor and evaluate progress

**(iv) Community-based participatory research (CBPR)**

Community based participatory research is an inquiry, with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting change.” Sometimes the term is applied to community-based participatory efforts to implement health enhancement programs that do not include research components at all.

Community Based Participatory Research is a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community and has the aim of combining knowledge with action and achieving social change to improve health outcomes and eliminate health disparities

In another word Community-based participatory research (CBPR) is a partnership approach to research that equitably involves community members, organizational representatives, researchers, and others in all aspects of the research process, with all partners in the process contributing expertise and sharing in the decision-making and ownership. The aim of CBPR is to increase knowledge and understanding of a given phenomenon and to integrate the knowledge gained with interventions for policy or social change benefiting the community members.

**8(a) Define an organization?**

**The organization is defined as follows:t**

Organization is the process of identifying and grouping work to be performed, defining and delegating responsibility and authority and establishing relationships for the purpose of enabling people to work most effectively together in accomplishing objectives.” In the words of Allen, organization is an instrument for achieving organizational goals. The work of each and every person is defined, and authority and responsibility are fixed for accomplishing the same.

**(b) What are the basic principles of an organization?**

**The principles of an organization are as follows:**

**Specialization:**

The organization should be set up in such a way that every individual should be assigned a duty according to his skill and qualification. The person should continue the same work so that he specializes in his work. This helps in increasing production in the concern

**Co-ordination:**

The co-ordination of different activities is an important principle of the organization. There should be some agency to co-ordinate the activities of various departments. In the absence of co-ordination there is a possibility of setting up different goals by different departments. The aim of the concern can be achieved only if proper co-ordination is done for different activities.

**Authority and Responsibility:**

The authority flows downward in the line. Every individual is given authority to get the work done. Though authority can be delegated but responsibility lies with the man who has been given the work. If a superior delegate his authority to his subordinate, the superior is not absolved of his responsibility, though the subordinate becomes liable to his superior. The responsibility cannot be delegated under any circumstances.

**Unity of Command**:

There should be a unity of command in the organization. A person should be answerable to one boss only. If a person is under the control of more than one person, then there is a like-hood of confusion and conflict. He gets contradictory orders from different superiors. This principle creates a sense of responsibility to one person. The command should be from top to bottom for making the organization sound and clear. It also leads to consistency in directing, coordinating and controlling.

**Objective:**

The enterprise should set up certain aims for the achievement of which various departments should work. A common goal so devised for the business and the organization is set up to achieve that goal. In the absence of a common aim, various departments will set up their own goals and there is a possibility of conflicting objectives for different departments. So, there must be an objective for the organization.

**Span of Control:**

Span of control means how many subordinates can be supervised by a supervisor. The number of subordinates should be such that the supervisor should be able to control their work effectively. Moreover, the work to be supervised should be of the same nature. If the span of control is disproportionate, it is bound to affect the efficiency of the workers because of slow communication with the supervisors.

**Exception:**

This principle states that top management should interfere only when something goes wrong. If the things are done as per plans, then there is no need for the interference of top management. The management should leave routine things to be supervised by lower cadres. It is only the exceptional situations when attention of top management is drawn. This principle relieves top management of many botherations and routine things. Principle of exception allows top management to concentrate on planning and policy formulation. Important time of management is not wasted on avoidable supervision.

**Simplicity:**

The organizational structure should be simple so that it is easily understood by each person. The authority, responsibility and position of every person should be made clear so that there is no confusion about these things. A complex organizational structure will create doubts and conflicts among persons. There may also be over-lapping’s and duplication of efforts which may otherwise be avoided. It helps in smooth running of the organization.

**Continuity:**

The organization should be amendable according to the changing situations. Everyday there are changes in methods of production and marketing systems. The organization should be dynamic and not static. There should always be a possibility of making necessary adjustments.