# **INTRODUCTION TO COMMUNITY HEALTH**

## Defining the terms community and health

Whereas the word community refers to a specific group of people sharing common characteristics (geographical location, economic, social and economic resources, culture, language, etc), OR, a specific group of people living in a defined geographical area, who share common values, norms, culture and customs, and are arranged in a social structure according to relationships which the community has collectively developed over a period of time (members of a community gain their personal and social identity by sharing common beliefs, values, rituals, and norms which have been developed by the community in the past and may be modified in the future), OR, a group of people who share an interest (s), a neighbourhood, or a common set of circumstances—(they may or may not acknowledge membership of a particular community); the world health organization (WHO) defines health as *a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.* It goes further to state that health is a fundamental human right and that the attainment of the highest possible level of health is the most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector. In fact, health has been considered less as an abstract state and more as a means to an end. In this case, health is a resource for everyday life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities.

## Defining the term community health

WHO has defined community health as: *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*.

In Kenya, community health is the first level of health care provision in Kenya that is constituted of: (i) interventions focusing on building demand for existing health and related services, by improving community awareness and health seeking behaviors, and (ii) taking defined interventions and services (as defined in the Kenya Health Sector Strategic and Investment Plan; KHSSP) closer to the community and households.

Note that, community health can be measured using [geographical information systems](https://en.wikipedia.org/wiki/Geographic_information_system) (GIS), [demographic data](https://en.wikipedia.org/wiki/Demographic_data), and [social media](https://en.wikipedia.org/wiki/Social_media).

As a field of study, community health focuses on the maintenance, protection, and improvement of the health status of communities. Community health is, therefore, a [subset](https://en.wikipedia.org/wiki/Subset) of [public health](https://en.wikipedia.org/wiki/Public_health).

So far, we can now differentiate community health from other related terms such as environmental health, population health, and public health.

* Environmental health is the branch of public health that is concerned with monitoring or mitigating the factors in the environment that affect human health and disease.
* Population health is the health outcomes of a group of individuals, including the distribution of such outcomes within the group. Population health consists of three components: health outcomes, patterns of health determinants, and [policies and interventions](https://en.wikipedia.org/wiki/Population_health_policies_and_interventions).
* Public health is the health of the population as a whole, especially as the subject of government regulation and support.

**REVIEW QUESTIONS**

1. Define the terms community, health, and community health.
2. Differentiate community health from public health, population health, and environmental health.

**DETERMINANTS OF HEALTH AND DISEASE**

Our health and well-being is influenced by a number of environmental factors which can be categorized as follows:

Physical environment

* Built structures
* Roads and transportation infrastructure
* Vegetation
* Topography
* Soils
* Water, water bodies and water sources
* Sanitation, wastes and waste management

Climatic environment

* Climates
* Weather (rains, cold, snow, heat, sunny, fogs, smog, mists, etc)
* Natural disasters
* Climate change
* Ozone

Biological environment

* Micro-organisms
* Macro-organisms (plants and animals)

Chemical environment

* Chemicals, solvents, paints, acids, bases, compounds, etc.
* Heavy metals
* Radioactive substances

Social environment

Social determinants of health are the conditions in which people are born, grow, live, work, and age, including the health system. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels, which are themselves influenced by policy choices. The social determinants of health are mostly responsible for health inequities, which are the unfair and avoidable differences in health status seen within and between countries, regions, and communities.

Other social factors (accessibility and affordability of health care services, education, religion, etc.).

* Culture, cultural practices, and cultural beliefs
* Education
* Health services (availability, accessibility, and quality)
* Religion
* Politics (political goodwill and political stability)
* Media and internet
* Lifestyles, behaviors, and western influences
* Food security
* Communication network and infrastructure
* Sanitation
* Occupations and livelihoods

Economic environment

* Access to basic needs
* Access to education
* Access to livelihoods and employment
* Access to health care

Personal and individual environment

* Age
* Sex and gender
* Personality and behavior
* Genetics
* Disability
* Underlying health conditions including non-communicable diseases
* Personal hygiene
* Diet and nutrition
* Knowledge, attitudes, and practices on health

# **DYNAMICS OF DISEASE OCCURRENCE AND PREVENTION**

## Disease occurrence

Disease occurs as a result of disease causing pathogens; environmental agents such as chemicals, heavy metals, and radioactive substances; genetic causes, nutritional causes; suppressed immunity; old age; and injuries.

Diseases can, therefore, be grouped into two main categories, given the mode of occurrence. These are: communicable diseases, which can be transmitted from one organism to another; and non-communicable diseases, which cannot be transmitted from one organism to another.

Non-communicable diseases include some occupational-related health conditions, nutritional disorders and diseases, mental health disorders, genetic-inclined diseases, congenital disorders, old age diseases, pregnancy related conditions, accidents and injuries, etc.

Communicable diseases, on the other hand, which are also referred to as infectious diseases, fall under the following main categories:

*Nosocomial diseases* are hospital acquired infections that are transmissible from one person to another. Examples include, Hepatitis B, HIV, etc.

*Zoonotic diseases* are transmitted naturally from vertebrate animals to humans or from humans to vertebrate animals. More than 60% of human pathogens are zoonotic in origin. They include a wide variety of bacteria, viruses, fungi, protozoa, parasites, and other pathogens.

*Airborne diseases* e.g. COVID-19, Tuberculosis, etc. Airborne diseases are transmitted through air, by breathing contaminated air.

*Waterborne diseases* e.g. escherichia coli (E. Coli) infection, giardiasis caused by giardia spp., legionellosis caused by legionella spp., leptospirosis, cholera, diarrhoea, typhoid, paratyphoid, amebiasis, hepatitis A, rotavirus, poliomyelitis, salmonellosis, bacillary dysentery, balantidiasis, gastroenteritis, campylobacteriosis, and worms infestations, etc. Waterborne diseases are caused by drinking water that is contaminated by disease-causing pathogens. Note, most waterborne pathogens can also be acquired from ingesting contaminated food or drinks, from contact with animals or their environment, or through person-to-person transmission.

*Water-based diseases* e.g. schistosomiasis (bilharzia), drancunculiasis, paragonimiasis, etc. These diseases are transmitted by aquatic hosts, such as worms. They penetrate the skin while cleaning or bathing with contaminated water. The host organism develops to human parasite.

*Water-washed diseases* e.g. scabies, typhus, shigella, yaws, relapsing fever, impetigo, trachoma, conjunctivitis, skin ulcers, etc. Diseases result from lack of clean water for washing and cleaning. Water-washed diseases are therefore as a result of poor personal hygiene that results from an inadequate supply of clean water.

*Water-related insect vector-borne diseases* e.g. mosquito-borne diseases such as malaria, yellow fever, dengue fever, filariasis, fly-borne diseases etc; onchocerciasis (river-blindness); trypanosomiasis (sleeping sickness); leishmaniasis (kala-azar); loiasis. These diseases are spread by insects which form habitats on stagnant water sources.

*Food-borne diseases* include food-borne intoxications (food poisoning) and food-borne infections. There are over 200 diseases that are caused by eating food contaminated with bacteria, viruses, parasites, toxins, chemical substances, heavy metals, prions. Food-borne diseases occur at any stage of the food chain. They can result from several forms of environmental contamination including pollution of water, soil or air, as well as unsafe food storage and processing. Food-borne diseases encompass a wide range of illnesses from diarrhoea to cancers.

*Vector-borne diseases* result from a pathogen transmitted to humans and other animals by blood-feeding arthropods such as mosquitoes, ticks, and fleas. Examples of vector-borne diseases include dengue fever, West Nile virus, Lyme disease, and malaria. Vectors are living organisms that can transmit infectious pathogens between humans, or from animals to humans. Many of these vectors are bloodsucking insects which ingest disease-producing microorganisms during a blood meal from an infected host (human or animal) and later transmit it into a new host, after the pathogen has replicated. Often, once a vector becomes infectious, they are capable of transmitting the pathogen for the rest of their life during each subsequent bite and blood meal.

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| --- | --- | --- | --- |
| **Vector** | | **Disease caused** | **Type of pathogen** |
| **Mosquito** | Aedes | Chikungunya  Dengue  Lymphatic filariasis  Rift Valley fever  Yellow Fever  Zika | Virus  Virus  Parasite  Virus  Virus  Virus |
| Anopheles | Lymphatic filariasis  Malaria  O'nyong'nyong virus | Parasite  Parasite  Virus |
| Culex | Japanese encephalitis  Lymphatic filariasis  West Nile fever | Virus  Parasite  Virus |
| **Aquatic snails** | | Schistosomiasis (bilharziasis) | Parasite |
| **Culicoides flies** | | Oropouche fever | Virus |
| **Blackflies** | | Onchocerciasis (river blindness) | Parasite |
| **Fleas** | | Plague (transmitted from rats to humans)  Tungiasis | Bacteria  Ectoparasite |
| **Lice** | | Typhus  Louse-borne relapsing fever | Bacteria  Bacteria |
| **Sandflies** | | Leishmaniasis  Sandfly fever (phlebotomus fever) | Parasite  Virus |
| **Ticks** | | Crimean-Congo haemorrhagic fever  Lyme disease  Relapsing fever (borreliosis)  Rickettsial diseases (eg: spotted fever and Q fever)  Tick-borne encephalitis  Tularaemia | Virus  Bacteria  Bacteria  Bacteria  Virus  Bacteria |
| **Triatome bugs** | | Chagas disease (American trypanosomiasis) | Parasite |
| **Tsetse flies** | | Sleeping sickness (African trypanosomiasis) | Parasite |

Note the many ways in which communicable diseases are spread. These include: through direct contact; indirect contact; vehicle transmission; vectors; food; water; faecal-oral route; sexual contact; saliva, trans-placental; breast milk; air; animal bite; human bite.

To this point, it is important to understand the dynamics that take place in disease occurrence. WHO describes disease occurrence based on a disease's rate of spread as either endemic, outbreak, epidemic, or pandemic.

*Epidemics* are an unexpected increase in the number of disease cases in a specific geographical area. Yellow fever, smallpox, measles, and polio are good examples of epidemics. An epidemic disease does not necessarily have to be contagious. West Nile fever and the rapid increase in obesity rates are also considered epidemics. Epidemics can refer to a disease or other specific health-related behavior (e.g., smoking) with rates that are clearly above the expected occurrence in a community or region.

*Pandemics* refer to epidemics affecting several countries or continents, usually affecting a large proportion of the population. COVID-19 is a good example of a pandemic. The WHO declares a pandemic when a disease’s growth is exponential. This means the growth rate skyrockets, and each day cases grow more than the day prior. In being declared a pandemic, the virus has nothing to do with virology, population immunity, or disease severity. It means a virus covers a wide area, affecting several countries and populations. Pandemics cut across international boundaries, as opposed to regional epidemics. This wide geographical reach is what makes pandemics to cause large-scale social disruption, economic loss, and general hardship. It's important to note that a once-declared epidemic can progress into a pandemic status. While an epidemic is large, it is also generally contained, while a pandemic is international and out of control.

*Endemic diseases* are consistently present, but limited to a certain region. They differ from epidemics in which there is a sudden increase in the number of cases of a disease; and differ from pandemics in which a disease has crossed borders and spread over countries or continents. Examples of endemic diseases include malaria, an infectious disease consistently present in Central and South America, Africa, Asia, and Eastern Europe. In the United States, HIV and Hepatitis C considered endemic because of their prevalence ( the proportion of the population affected over a given period).

By definition, a disease is said to be endemic if the prevalence remains stable within a region and persists with fairly predictable rates of infection and spread. Endemic diseases do not have to be present at high levels. They can also be relatively rare. The defining feature is that the disease is always found in a region or population irrespective of whether there are a few cases or many. One such example is human rabies which is consistently at low levels in countries like Cote d'Ivoire. Until it is fully eradicated, it can be regarded as endemic as long as it continues to persist.

*Disease outbreaks* can simply be described as localized rather than generalized epidemics. WHO defines a disease outbreak as the occurrence of disease cases in excess of normal expectancy. The number of cases varies according to the disease-causing agent, and the size and type of previous and existing exposure to the agent. Disease outbreaks are usually caused by an infection, transmitted through person-to-person contact, animal-to-person contact, or from the environment or other media. Outbreaks may also occur following exposure to chemicals or radioactive material. A good example is Minamata disease which is caused by exposure to mercury. Also, the cause of a disease outbreak may be unknown, even after thorough investigation. These outbreaks may be due to a new or modified pathogen, a natural toxin, an initially undetected release of a chemical, or over-exposure to ionizing radiation from an unknown source. Nodding disease, observed in Southern Sudan, is an example of a disease for which the etiological agent remains a mystery.

*Causes of disease outbreaks*

Several factors contribute to the outbreak of infectious diseases. Spread can occur as a result of transmission from people, animals, or even the environment. For example:

* Weather conditions. For example, whooping cough occurs in spring, whereas measles tends to appear in the winter season.
* Exposure to chemicals, radioactive substances, heavy metals. For example, Minamata is a disease contracted after exposure to mercury.
* The social aftermath of natural disasters such as storms, floods, el ninos, cyclones, hurricanes, tsunamis, volcanoes, earthquakes, and droughts can lead to high disease transmission.The same can be seen in man-made disasters such as wars.
* Various environmental factors such as water supply, food, air quality, and environmental sanitation can catalyse the spread of infectious diseases.

Origin of a disease outbreak can sometimes be unknown. These kinds of diseases could be caused by a variety of factors, including:

* A new or newly modified pathogen
* Natural toxins
* Undetected chemical releases
* Unknown ionizing radiation over-exposure

## Disease outbreak investigation

When investigating a disease outbreak, it is necessary to follow these steps:

1. Identify the existence of the outbreak (Is the group of ill persons normal for the time of year, geographic area, etc.?)
2. Verify the diagnosis related to the outbreak
3. Create a [case definition](https://en.wikipedia.org/wiki/Case_definition) to define who and what is included as a case
4. Map the spread of the outbreak
5. Develop a hypothesis (What appears to be causing the outbreak?)
6. Study hypotheses (by collecting data and analyzing the data)
7. Refine the hypothesis and carry out further analysis
8. Develop and implement control and prevention actions
9. Release the findings to the public

## Disease prevention

Disease prevention targets the various stages of disease occurrence and the natural history of disease. Disease prevention activities undertaken before a disease occurs is referred to as health protection. Most of these prevention activities aim at promoting health, and are, therefore, considered as health promotion activities. Examples of these prevention activities include, health awareness campaigns; adoption of healthy lifestyle, proper nutrition and diet, exercises, and behaviors; disease surveillance; and distribution of free condoms, bed nets, face masks, and water treatment tablets; safe sex and abstinence; family planning; immunization and vaccination; environmental sanitation, control and management; etc. The prevention activities in this stage aim at preventing occurrence of a disease or injury.

The prevention activities that target a disease that has already occurred, aim at ensuring early detection and diagnosis for early treatment. These disease prevention activities include disease screening, counseling and testing; treatment of confirmed cases; use of supplements; use of condoms or abstinence in case of sexually transmitted infections; preventing oneself from contracting infectious and opportunistic diseases; etc. Prevention in this stage aims to minimize damage when it occurs.

Prevention of diseases can also take place during the rehabilitation stage to ensure that a disease does not recur and that a recovered patient is safe from contracting other diseases or health complications. Tertiary prevention covers follow-up medical, hospital care and rehabilitation.

This is how the natural history of disease looks like and the accompanying stages of disease prevention.

**Healthy individual Pre-clinical stage Clinical stage Recovery, Disability or Death**

**Primodial Prevention Primary Prevention Secondary Prevention Tertiary Prevention**

**REVIEW QUESTIONS**

1. List examples of communicable diseases.
2. List examples of non-communicable disease.
3. Discuss some of the diseases and health conditions that are likely to occur from workplaces.
4. Describe at least three nutritional disorders. How do they compare to nutritional diseases?
5. Discuss and give examples of diseases that occur due to old age.
6. Discuss at least two communicable diseases that are associated with lifestyle.
7. Discuss at least two non-communicable diseases that are associated with lifestyle.

# **PRIMARY HEALTH CARE**

## What is primary health care?

The world health organization (WHO) defines primary health care (PHC) as *the essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individual and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination*. PHC forms an integral part both of the country’s health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process. Therefore, primary health care is the health care that is available to all people at the first level of health care. According to World Health Organization (WHO), ‘Primary Health Care is a basic health care and is a whole society approach to healthy well-being, focused on the needs and priorities of individuals, families and communities.’

Primary health care should include at least: education concerning prevailing health problems and the methods of identifying, preventing, and controlling them; promotion of food supply and proper nutrition,’ an adequate supply of safe water, and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; promotion of mental health; and provision of essential drugs. Primary health care integrates at the community level all the factors required to improve the health status of a population. Primary health care, therefore, is both a philosophy of health care and an approach to providing health services. It addresses the determinants of health and ensures whole person care for health demands during the course of the natural life. It is developed with the concept that the people of the country receive at least the basic minimum health services that are essential for their good health and care.

Primary health care includes all activities that contribute to health at the interface between the community and the health system. Primary health care addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly. Since these services reflect and evolve from the economic conditions and social values of the country and its communities, they will vary by country and community, but will include at least: promotion of proper nutrition and an adequate supply of safe water; basic sanitation; maternal and child care, including family planning; immunization against the major infectious diseases, prevention and control of locally endemic diseases; education concerning prevailing health problems and the methods of preventing and controlling them; and appropriate treatment for common diseases and injuries.

Primary health care

1. reflects and evolves from the economic conditions and socio-cultural and political characteristics of the country and its communities and is based on the application of the relevant results of social, biomedical and health services research and public health experience;

2. addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly;

3. includes at least: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs;

4. involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors;

5. requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate;

6. should be sustained by integrated, functional and mutually supportive referral systems, leading to the progressive improvement of comprehensive health care for all, and giving priority to those most in need;

7. relies, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community.

## History of primary health care

Before 1978, globally, existing health services were failing to provide quality health care to the people. Different alternatives and ideas failed to establish a well-functioning health care system. Considering these issues, a joint WHO-UNICEF international conference was held in 1978 in Alma Ata (USSR), commonly known as Alma-Ata conference. The conference included participation from governments from 134 countries and other different agencies. As decided by the Health Assembly of the World Health Organization (WHO) and the Executive Board of the United Nations Children’s Fund (UNICEF), and at the invitation of the Government of the Union of Soviet Socialist Republics (USSR), the International Conference on Primary Health Care was held from 6 to 12 September 1978 in Alma-Ata, capital of the Kazakh Soviet Socialist Republic,

The objectives of the conference were:

1. To promote the concept of primary health care in all countries;
2. To exchange experience and information on the development of primary health care within the framework of comprehensive national health systems and services;
3. To evaluate the present health and health care situation throughout the world as it relates to, and can be improved by, primary health care;
4. To define the principles of primary health care as well as the operational means of overcoming practical problems in the development of primary health care;
5. To define the role of governments, national, and international organizations in technical cooperation and support for the development of primary health care;
6. To formulate recommendations for the development of primary health care.

The International Conference on Primary Health Care, which was jointly organized and sponsored by the World Health Organization and the United Nations Children’s Fund, was preceded by a number of national, regional, and international meetings on primary health care, held throughout the world in 1977 and 1978. The regional and international meetings included the meeting of the Committee of Experts on Primary Health Care in the African Region (Brazzaville, 1977), the Fourth Special Meeting of Ministers of Pan American Health Organization countries (Washington DC, September 1977), the Joint WHO/UNICEF meeting for countries in the Eastern Mediterranean Region (Alexandria, October 1977), the Conference on Primary Health Care for countries in the Western Pacific Region (Manila, November 1977), the Joint WHO/UNICEF meeting on Primary Health Care in the South-East Asia Region (New Delhi, November 1977), the Conference on Primary Health Care in Industrialized Nations (New York, December 1977), and the International Congress of Nongovernmental Organizations on Primary Health Care (Halifax, Canada, May 1978).

The Alma-Ata conference jointly called for a revolutionary approach to the health care. The conference declared ‘The existing gross inequality in the health status of people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable’. Thus, the Alma-Ata conference called for acceptance of WHO goal of ‘Health for All’ by 2000 AD. Further, it proclaimed PHC as a way to achieve ‘Health for All’. In this way, the concept of PHC came into existence globally in 1978 from the Alma-Ata Conference.

The conference considered the close interrelationship and interdependence of health and social and economic development, with health leading to and at the same time depending on a progressive improvement in conditions and quality of life. The conference stressed that primary health care is an integral part of the socioeconomic development process. Hence, activities of the health sector must be coordinated at national, intermediate, and community or local levels with those of other social and economic sectors, including education, agriculture, animal husbandry, household water, housing, public works, communications, and industry. Health activities should be undertaken concurrently with measures such as those for the improvement of nutrition, particularly of children and mothers; increase in production and employment, and a more equitable distribution of personal income; anti-poverty measures; and protection and improvement of the environment.

## Objectives of primary health care:

1. To increase the programs and services that affect the healthy growth and development of children and youth.
2. To boost participation of communities to improve the health of their community.
3. To develop community satisfaction with the primary health care system.
4. To support and advocate for healthy public policy within all sectors and levels of government.
5. To support and encourage the implementation of public health policies and direction.
6. To provide reasonable and timely access to primary health care services.
7. To apply the standards of accountability in professional practice.
8. To establish, within available resources, primary health care teams and networks.
9. To support the provision of comprehensive, integrated, and evidence-based primary health care services.

The five (5) principles of primary health care are:

1. Social equity
2. Nation-wide coverage/wider coverage
3. Self- reliance
4. Inter-sectoral coordination
5. People’s involvement (in planning and implementation of programs)

The four major pillars of primary health care are as follows:

1. Community participation
2. Inter-sectoral coordination
3. Appropriate technology
4. Support mechanism made available

Primary health care consists of an integrative group of health care professionals coordinating to provide basic health care services to a particular group of people or population. The primary health care outline is built on four key pillars. These pillars are reinforcement for the delivery of safe health care.

*Community participation:* Community participation is a process in which community members are engaged and participate in making decisions about their health. It is a social approach to point out the health care needs of the community members.

Community participation involves participation of the community members from identifying the health needs of the community, planning, organizing, decision making and implementation of health programs. It also ensures effective and strategic planning and evaluation of health care services. When there is lack of community participation, health programs cannot run smoothly and universal achievement by primary health care cannot be achieved.

Community participation in the recognition and solution of their health problems can be facilitated by support from groups such as local government agencies, local leaders, voluntary groups, youth and women’s groups, consumers’ groups, the Red Cross and similar societies, other nongovernmental organizations, and liberation movements, as well as by accountability to the people. In order to ensure that primary health care is an integral part of community and national development and does not develop as an isolated peripheral action, promotion, coordination, and support of the administration are required, not only at the local but also at the intermediate and central levels.

*Inter-sectoral coordination:* Inter-sectoral coordination plays a vital role in performing different functions in attaining health services. The involvement of specialized agency, private sectors, and public sectors is important to achieve improved health facilities. Inter-sectoral coordination will ensure different sectors collaborate and function interdependently to meet the health care needs of the people. It also refers to delivering health care services in an integrated way. Therefore, the departments like agriculture, animal husbandry, food, industry, education, housing, public works, communication, and other sectors need to be involved in achieving health for all.

*Appropriate technology:* Appropriate healthcare technologies are an important strategy for improving the availability and accessibility of healthcare services. It has been defined as ‘’technology that is scientifically sound, adaptable to local needs and acceptable to those who apply it and to whom it is applied and that can be maintained by people themselves in keeping with the principle of self-reliance with the resources the community and country can afford.’’ Appropriate technology refers to using cheaper, scientifically valid and acceptable equipment and techniques. It is also necessary to ensure that the technology is:

* Scientifically reliable and valid
* Adapted to local needs
* Acceptable to the community
* Accessible and affordable using local resources

*Support mechanism made available:* Support Mechanism is vital to health and quality of life. Support mechanism in primary health care is a well-known process focused to develop the quality of life. Support mechanism ensures that the people are getting personal, physical, mental, spiritual and instrumental support to meet the goals of primary health care which depends on adequate number and distribution of trained physicians, nurses, community health workers, allied health professions and others working as a health team and supported at the local and referral levels.

## Elements of primary health care

There are originally eight (8) elements (components) of primary health care. Later expanded to 12 elements. These 8 elements are also known as ‘essential health care’. These are:

1. **E**ducation about prevailing health problems and methods of preventing and controlling them
2. Prevention and control of **l**ocally endemic diseases
3. Provision of **e**ssential drugs
4. **M**aternal and child health care; including family planning
5. **E**xpanded immunization against major infectious diseases
6. Promotion of food supply and proper **n**utrition
7. Appropriate **t**reatment of common diseases and injury
8. Adequate supply of safe water and basic **s**anitation

## Why is primary health care important?

* Covers all health needs (promotion, preventive, treatment, rehabilitation, and palliative--from birth to the final days of life).
* Integrates promotive, preventive, curative, rehabilitative and palliative health care services.
* Focuses more on quality health service and cost-effectiveness.
* Focuses on “health for all”.
* Encourages new connection and community participation.
* Includes services that are readily accessible and available to the community.
* Is easily accessible by all as it includes services that are simple and efficient with respect to cost, techniques and organization.
* Promotes equity and equality.
* Improves safety, performance, and accountability.
* Advocates for health promotion and focuses on prevention, screening and early intervention of health disparities.
* Is an integral part of a country’s socio-economic development.

## Challenges of primary health care

* Poor staffing and shortage of health personnel
* Inadequate technology and equipment
* Poor condition of infrastructure/infrastructure gap, especially in the rural areas
* Focuses on curative health services rather than promotive and preventive health care services
* Challenging geographic distribution
* Poor quality of health care services
* Lack of financial support in health care programs
* Lack of community participation
* Poor distribution of health workers (health workers are concentrated in urban areas)
* Lack of inter-sectoral collaboration

## Mitigation measures for effective primary health care

* Encouraging community participation through rapport building, effective communication and sharing objectives and benefits of PHC.
* Developing quality assurance mechanisms through the development of various indicators and standards.
* Development of clinical guidelines including the implementation of Essential drugs list
* Allocating resources as per the need of the central, provincial/state and local level.
* Develop a planning process to define objectives and set targets by giving priority on those families and communities most at risk.
* Promoting problem-orientated research in health management system.
* Creating pathways to give health higher priority on the agenda of district development and collaboration of health departments to perform its role in health activities.
* Developing guidelines and framework that specify the roles and responsibilities of local governments.

**REVIEW QUESTIONS**

1. What other elements have been added to the 8 elements of PHC?
2. Discuss the successes and failures of PHC; challenges faced and recommendations for improvement.
3. Discuss the implementation of PHC in Kenya.