**Community Health Notes for Medical Paramedics**

**Community health** is a major field of study within the medical and clinical sciences which focuses on the maintenance, protection and improvement of the health status of population groups and communities as opposed to the health of individual patients.

 It is a distinct field of study that may be taught within a separate school of public health or environmental health.

It is a discipline which concerns itself with the study and improvement of the health characteristics of biological communities.

 While the term community can be broadly defined, community health tends to focus on geographical areas rather than people with shared characteristics.

Community health may be studied within three broad categories:

 • Primary healthcare which refers to interventions that focus on the individual or family such as hand-washing, immunization, circumcision, personal dietary choices, and lifestyle improvement.

 • Secondary healthcare refers to those activities which focus on the environment such as draining puddles of water near the house, clearing bushes, and spraying insecticides to control vectors like mosquitoes

. • Tertiary healthcare on the other hand refers to those interventions that take place in a hospital setting, such as intravenous rehydration or surgery.

The term **community health** refers to the health status of a defined group of people, or community, and the actions and conditions that protect and improve the health of the community.

Those individuals who make up a community live in a somewhat localized area under the same general regulations, norms, values, and organizations. For example, the health status of the people living in a particular town, and the actions taken to protect and improve the health of these residents, would constitute community health.

 In the past, most individuals could be identified with a community in either a geographical or an organizational sense. Today, however, with expanding global economies, rapid transportation, and instant communication, communities alone no longer have the resources to control or look after all the needs of their residents or constituents

**Factors that Affect Community Health.**

 There are four categories of factors that affect the health of a community or population. Because these factors will vary in separate communities, the health status of individual communities will be different. The factors are  1. Physical factors—geography (parasitic diseases), environment (availability of natural resources), community size (overcrowding), and industrial development (pollution). 2. Social and cultural factors—beliefs, traditions, and prejudices (smoking in public places, availability of ethnic foods, racial disparities), economy (employee health care benefits), politics (government participation), religion (beliefs about medical treatment), social norms (drinking on a college campus), and socioeconomic status (number of people below poverty level). 3. Community organization—available health agencies (local health department, voluntary health agencies), and the ability to organize to problem solve (lobby city council).

**HEALTH PROMOTION**

The three strategies by which community health practice is carried out are health promotion, health protection, and the provision of health services and other resources. Figure 3 presents a representation of these strategies, their processes, their objectives, and anticipated benefits for a community or population.

supported by schools, workplaces, public and private recreation and fitness organizations, commercial and semipublic recreation, and commercial entertainment. As with all health- promotion programming, appropriate evaluation helps to monitor progress, appropriate implementation of plans, and outcomes achieved.

**HEALTH PROTECTION**

Community and population health protection revolve around environmental health and safety. Community health personnel work to identify environmental risks and problems so they can take the necessary actions to protect the community or population. Such protective measures include the control of unintentional and intentional injuries; the control of vectors; the assurance that the air, water, and food are safe to consume; the proper disposal of wastes; and the safety of residential, occupational, and other environments. These protective measures are often the result of educational programs, including self-defense classes; policy development, such as the Safe Drinking Water Act or the Clean Air Act; environmental changes,  such as restricting access to dangerous areas; and community planning, as in the case of preparing for natural disasters or upgrading water purification systems.

**HEALTH SERVICES AND OTHER RESOURCES**

The organization and deployment of the services and resources necessary to plan, implement, and evaluate community and population health strategies constitutes the third general strategy in community and population health. Today's communities differ from those of the past in several ways. Even though community members are better educated, more mobile, and more independent than in the past, communities are less autonomous and more dependent on those outside the community for support. The organizations that can assist communities and populations are classified into governmental, quasi-governmental, and nongovernmental groups. Such organizations can also be classified by the different levels (world, national, state/province, and local) at which they operate. Governmental health agencies are funded primarily by tax dollars, managed by government officials, and have specific responsibilities that are outlined by the governmental bodies that oversee them

Primary health-care (PHC) has basic essential elements and objectives that help to attain better health services for all.

*Primary health care elements* **Essential Elements of Primary Health Care (PHC):** There are 8 elements of primary-health care (PHC). That listed below- 1. **E** – Education concerning prevailing health problems and the methods of identifying, preventing and controlling them. 2. **L** – Locally endemic disease prevention and control. 3. **E** – Expanded programme of **immunization** against major infectious diseases. 4. **M** – Maternal and child health care including family planning. 5. **E** – Essential drugs arrangement. 6. **N** – Nutritional food supplement, an adequate supply of safe and basic nutrition. 7. **T** – Treatment of communicable and non-communicable disease and promotion of mental health. 8. **S** – Safe water and sanitation.

**Extended Elements in 21st Century:**

1. Expended options of immunizations.
2. Reproductive health needs.
3. Provision of essential technologies for health.
4. **Health** promotion.
5. Prevention and control of non-communicable diseases.
6. Food safety and provision of selected food supplements.

**Principles of Primary Health Care (PHC):** Behind these elements lies a series of basic objectives that should be formulated in national policies in order to launch and sustain primary health-care (PHC) as part of a comprehensive health system and coordination with other sectors.

1. Improvement in the level of health care of the **community**.
2. Favorable population growth structure.
3. Reduction in the prevalence of preventable, communicable and other disease.
4. Reduction in morbidity and mortality rates especially among infants and children.
5. Extension of essential health services with priority given to the undeserved sectors.
6. Improvement in basic sanitation.
7. Development of the capability of the community aimed at self-reliance.
8. Maximizing the contribution of the other sectors for the social and economic development of the community.
9. Equitable distribution of **health care** – according to this principle, prima 4444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444444ry care and other services to meet the main health problems in a community must be provided equally to all individuals irrespective of their gender, age, and caste, urban/rural and social class. 10 participation-comprehensive healthcare relies on adequate number and distribution of trained physicians, nurses, allied health professions, community health workers and others working as a health team and supported at the local and referral levels.
* Primary Health Care (PHC) is the health care that is available to all the 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 of society approach to healthy well-being, focused on needs and priorities of individuals, families and communities.’
* Primary Health Care (PHC) is a new approach to health care which **integrates** at the community level **all the factors required for improving the health status of the population.**
* Primary health care is both a philosophy of health care and an approach to providing health services.
* It addresses the expansive determining factor 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.
* 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 government from 134 countries and other different agencies.
* The 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.**
* Furthermore, it proclaimed **Primary Health Care (PHC) as a way to achieve ‘Health for All’.**
* In this way, the **concept of Primary Health Care (PHC) came into existence**globally**in 1978 from the Alma-Ata Conference**.
* To increase the programs and services that affect the healthy growth and development of children and youth.
* To boost participation of the community with government and community sectors to improve the health of their community.
* To develop community satisfaction with the primary health care system.
* To support and advocate for healthy public policy within all sectors and levels of government.
* To support and encourage the implementation of provincial public health policies and direction.
* To provide reasonable and timely access to primary health care services.
* To apply the standards of accountability in professional practice.
* To establish, within available resources, primary health care teams and networks.
* To support the provision of comprehensive, integrated, and evidence-based primary health care services.
* social equity
* Nation-wide coverage/wider coverage
* Self- reliance
* Intersectoral coordination
* People’s involvement (in planning and implementation of programs)
* social equity
* Nation-wide coverage/wider coverage
* Self- reliance
* Intersectoral coordination
* People’s involvement (in planning and implementation of programs)

**FIG: PILLARS OF PRIMARY HEALTH CARE**



* 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.

**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

**1. Community Participation**

* Community participation is a process in which community people are engaged and participated in making decisions about their own health.
* It is a social approach to point out the health care needs of the community people.
* Community participation involves participation of the community people 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.
* In lack of community participation, the health programs cannot run smoothly and universal achievement by primary health care cannot be achieved.

2. **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.
* Intersectoral coordination will ensure different sectors to 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.

**3. 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 people
* Accessible and affordable by the local resources

**4. 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 includes that the people are getting personal, physical, mental, spiritual and instrumental support to meet goals of primary health care.
* Primary health care 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/Components of PHC:**

There are eight (8) elements of Primary Health Care

* These 8 elements are also known as ‘essential health care’. They are:



## ****Why is Primary Health Care (PHC) Important?****

* Primary Health Care focuses more on quality health service and cost-effectiveness.
* Primary Health Care focuses on “Health for all”
* Primary Health Care**integrates preventive, promotive, curative, rehabilitative and palliative health care services.**
* Primary Health Care encourages new connection and community participation.
* It includes services that are readily accessible and available to the community.
* Primary Health Care can be easily accessible by all as it includes services that are simple and efficient with respect to cost, techniques and organization.
* Primary Health Care promotes equity and equality.
* Primary Health Care improves safety, performance, and accountability.
* Primary Health Care advocates on health promotion and focuses on prevention, screening and early intervention of health disparities.
* Primary Health Care is also perceived as an integral part of country’s socio-economic

## ****What are the Challenges for Implementation of PHC?****

* Poor staffing and shortage of health personnel
* Inadequate technology and equipment
* Poor condition of infrastructure/infrastructure gap, especially in the rural areas
* Concentrated focus on curative health services rather than preventive and promotive 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 concentrated on the urban areas.
* Lack of intersectoral collaboration
* 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.
* Develop guidelines and framework that specify the roles and responsibilities of the provincial states.

COMMUNITY BASED REHABILITATION

CBR is **a strategy that focuses on providing equal opportunities to persons with disabilities so they can participate in community life**. In doing this, CBR enhances quality of life.

Community Based Rehabilitation (CBR) is a community development strategy that aims at enhancing the lives of persons with disabilities (PWDs) within their community. Community-based rehabilitation (CBR) was initiated by WHO following the Declaration of Alma-Ata in 1978 in an effort to enhance the quality of life for people with disabilities and their families; meet their basic needs; and ensure their inclusion and participation. While initially a strategy to increase access to rehabilitation services in resource-constrained settings, CBR is now a multi-sectoral approach working to improve the equalization of opportunities and social inclusion of people with disabilities while combating the perpetual cycle of poverty and disability. CBR is implemented through the combined efforts of people with disabilities, their families and communities, and relevant government and non-government health, education, vocational, social and other services(WHO).

It emphasizes utilization of locally available resources including beneficiaries, the families of PWDs and the community. According to the UN Convention on the Rights of Persons with Disabilities, comprehensive rehabilitation services focusing on health, employment, education and social services are needed to enable PWDs/CWDs attain and maintain maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life (UN, 2006).

**COMPONENTS OF CBR**

There are five key components which show the different sectors of the CBR strategy as a component of community development. They are **health, education, livelihood, social and empowerment**.

**In communities where professional services are not accessible or available, CBR workers should be trained to provide primary rehabilitation therapy in the following areas of rehabilitation:**

* Medical.
* Eye care service.
* Hearing services.
* Physiotherapy.
* Occupational therapy.
* Orientation and mobility training.
* Speech therapy.

### The Community-based rehabilitation guidelines:

* Provide guidance on how to develop and strengthen CBR programmes;
* Promote CBR as a strategy for community-based development involving people with disabilities;
* Support stakeholders to meet the basic needs and enhance the quality of life of people with disabilities and their families;
* Encourage the empowerment of people with disabilities and their families.

# THE 4 STAGES OF COMPLETE REHABILITATION

If you’re injured and keen to make a complete recovery after an injury, adhering to a proper rehabilitation framework and schedule is critical.

Without effective treatment which follows a proven series of processes and exercises your injury and recovery process can take a lot longer.

Although the methods for injury rehabilitation will vary according to each case, the general framework for recovery is relatively consistent and based on our professional experience and latest research findings. In order to get you on the track to the best recovery possible, we’ve laid out the recommended steps to a successful rehabilitation.

## 1. Rest And Protect The Injury

The first stage of recovery is all about minimising further damage and letting the body begin the healing process. The body’s first reaction to injury is inflammation and pain. The better you can regulate inflammation, control pain, and protect the injured body part to avoid any further damage, we have begun the recovery process.

This phase will likely include appropriate rest and may include using ice or cold packs, with some sort of protective cast, sling or tape to safeguard the injury. Pain management with analgesic medication and/or anti-inflammatories may also be considered.

## 2. Recover Your Motion

Following injury or surgery,  factors such as swelling and pain can make it difficult to move the injured body part like you used to.

Careful soft tissue and joint mobilisation training as prescribed by your physiotherapist is an important part of your rehabilitation to recover early stage range of motion. Stretching too far or start activity too early, can slow or even reverse the healing process. Using specific flexibility training suited to your injury, can help get your range of motion back, and avoid the lasting effect that decreased range of motion can have on your body’s function.

## 3. Recover Your Strength

Most people are shocked to discover how their injury and the ensuing recovery period can result in muscle weakness and a loss of endurance. Objective measures of muscle weakness and wasting are commonly noted after injury and surgery within 4-6 weeks. Minimising muscle loss and strength deficits are important rehabilitation goals set in your physiotherapy programme.

When sports injuries prevent participation in training and game time for an extended period of time, maintaining cardiovascular endurance is important. Exercises like stationary cycling, pool exercises or gentle exercise may be recommended.

The keys to maximising recovery are performing exercises that minimise aggravation,  maintaining good form and proper technique, and strengthening local, regional and central muscles groups.

## 4. Recover Your Function

The last step in rehabilitation is recovering sport-specific function and return to play. This phase of injury rehabilitation can include restoring coordination and balance, improving speed, agility, and sport-specific skills progressing from simple to complex.

## The Right Treatment For You

Now that you are more familiar with the framework of a proper recovery process, you’ll need to know exactly how to apply it to your injury. This is where accurate diagnosis and implementing a proper treatment plan comes in.

The best treatment plans are custom suited to each client. A careful diagnosis and treatment plan should also take into account your lifestyle, habits and any factors that might contribute to your injury or impact your activity moving forward.

For a proper diagnosis and complete treatment plan, you’re best to turn to physiotherapists, who are the rehabilitation experts.Relying solely on pictures or descriptions of exercises can be misleading. Physiotherapists are professionals in sports injuries and [orthopedic rehabilitation](https://morleyphysio.com.au/treatments/orthorthopaedic-rehabilitation/) and are specifically trained to get you moving again and maximising performance levels after injury.

There are six different levels of health care facilities. The first five are managed on the county level, the sixth level by the national government. In this system the patients may move from one level to the next by using a referral letter.

**LEVEL 1 – Community Facilities**They are run by certified medical clinical officers.

Some of the services:

* + Treatment of minor ailments like diarrhoea
	+ Tuberculosis (TB) screening, home visits, contact tracing of TB patients and tracing of TB defaulters
	+ Screening of malnutrition
	+ Malaria rapid test
	+ Blood pressure and blood sugar testing
	+ HIV testing
	+ Health talks with pregnant women and observations of signs of danger
	+ Issuance of referral letters to other facilities

**LEVEL 2 – Health Dispensaries**

These facilities are run by clinical officers:

The dispensaries in the cities act like a health centre (see level 3), with the difference that the dispensary does not have in-patient facilities.

These are some of the services you will expect in a dispensary:

* + Outpatient services
	+ VCT services
	+ Tuberculosis services
	+ Laboratory Services
	+ Well baby Clinics
	+ Antenatal and Postnatal services
	+ Pharmacy
	+ Counselling services
	+ Curative treatment
	+ They issue referral letters to other facilities

**LEVEL 3 – Health Centres**

These are small hospitals with minimal facilities, yet they offer services like the big hospitals. They are run by at least one doctor, clinical officers and nurses.

These are some of the services they offer:

* + Maternity in-patient services with a ward
	+ Curative services
	+ Laboratory services
	+ Dental
	+ Counselling
	+ Pharmacy
	+ TB Clinics
	+ Diabetes & hypertension clinics
	+ Comprehensive care clinics for patients living with HIV
	+ Baby well clinics
	+ Antenatal and postnatal services
	+ They issue referral letters to other facilities

**LEVEL 4 – County Hospitals**

* + These are hospitals that offer holistic services and are ran by a director who is a medic and at best a doctor by profession
	+ In many counties there’s just one hospital but in larger cities like Nairobi there are two
	+ They have in principle the same services as the Level 3 hospitals, plus X-Ray services They issue referral letters to other facilities

**LEVEL 5 – County Referral Hospitals**

These are the county referral hospitals formerly the provincial hospitals. They are run by Chief Executive Officers who are  medic by profession and have over 100 beds capacity for their in-patient. They are also do research about health.

In Nairobi Mama Lucy Hospital and Mbagathi Hospital both double up as county referral hospitals and Level 4 hospitals.

Services include what other hospitals offer, plus

* + - Ultrasound
		- CT-Scan
		- Surgery
		- Pharmacy
		- Physiotherapy
		- Orthopaedics
		- Occupational Therapy
		- They issue referral letters to other facilities

**LEVEL 6 – National Referral Hospitals**

In Kenya there are three Teaching and Research referral hospitals: Mathari Hospital, Kenyatta National Hospital, Moi Teaching and Referral Hospital and the National Spinal Injury Referral Hospital. Their range of services is the same as of on Level 5, but they offer specialised treatments to patients and are not only accessed by Kenyans but do serve East Africa and Central Africa.

* + Mathari Teaching and Referral Hospital offers specialised mental services.
	+ [Kenyatta National Hospital](https://knh.or.ke/) and Moi Teaching and Referral hospital offer specialised consultations in curative care.
	+ National Spinal Injury Referral offers specialised services in orthopaedic and spinal injuries.
	The national government manages these three hospitals.

**Health Care Management by the National Government**

* + The national government is tasked with financing counties for all sectors including the health department to operate effectively and smoothly.
	+ The National Government is also in charge of Kenya Medical Supplies Agency (KEMSA), National Hospital Insurance Fund (NHIF), National Quality Control Laboratory (NQCL) and National blood Transfusion Services.
	+ However, the Health Cabinet Secretary at the national level is the executive head of the sector in the country, deputised by the Principal Secretary as the ministry’s accounting officer, then the Director of Medical Services.
	+ The Director of Medical Services plays a key role in the sector by coordinating and overseeing six Health departments including Preventive and Promotive Health, Curative and Rehabilitation Services, Standards and Quality Assurance and Regulations.
	+ Other departments are Health Sector Coordination and inter-governmental control, Administrative Services and Policy, Planning and Health Financing.
	+ The Health ministry, according to the Constitution, is tasked with coming up with appropriate measures to ensure the sector functions effectively.
	+ The ministry is linked to Parliament through the National Assembly and Senate’s departmental committees on Health.
	+ The two committees oversight the ministry and also push its agendas in the House for adoption and enactment after the Presidents signs them into law.

**Health Care Management by the Counties**

* + At the county level, the Health docket is under the Chief Executive Committee (CEC) member, equivalent to a minister, appointed by the governor.
	+ The Health CEC is answerable to the governor and the County Assembly through its County Executive Health Committee composed of Members of County Assembly (MCAs).
	+ The Health CEC ensures there is effectiveness and proper coordination in the sector in the manner the County Health Management Team, the County Hospital Management Team, the Sub-County Health Management Team, the Primary Care Facility Management Team and the Community Unit discharge their duties.
	+ Apart from the public health facilities falling under the county and national governments management, there are also private hospitals run by individuals or organisations and faith-based hospitals in Kenya’s Health sector. Read more on the [Health Sector Structure](http://www.health.go.ke/) in Kenya