

Community

Lecture (1)

- **What is community?**

A group of people living in the same place or having particular characteristics in common (such as geography, interests, experiences, concerns, or values).

- **What is Community Medicine?**

A **science** and art of

promoting health

preventing diseases and

prolonging life by range of **interventions**

(**promotive, preventive, curative, rehabilitative** تاهيلية and **palliative** مسكنة)PPPCR

in close partnership or association with

health care delivery **system** and

with active **community participation** and

**inter-sectoral coordination**

- **Objective of Community Medicine**

- 1) **prevention of disease**

- 2) **promotion of health.**

- **Providers of services in community medicine**

( The provider of services in community medicine, at least in the US, can be a )

- 1) **Physician**

- 2) **advanced practice nurse**

- 3) **physician's assistant**

- **The practice of Community Medicine requires a multidisciplinary approach**

- **The core subjects in Community Medicine are:**

- 1) Public health nutrition.

- 2) health-care delivery system including primary health care.

- 3) Epidemiology

- 4) Biostatistics

- 5) Social, behavioural, environmental, and management sciences.

- 

The following are included in the study of community medicine;

The Knowledge of	Termed As
Population to be served	Demography
Patterns of Health and disease	Epidemiology
Collection, compilation and analysis of data	Biostatistics
Behavioral factors and their effect on Health	Behavioral sciences
Control and prevention of diseases	Preventive Medicine
The food people eat	Nutrition
Environmental factors and their effects on Health	Environmental Health
Delivery of Health Care	Health Administration and Planning

- **Demography** : the knowledge of population to be served
- **Epidemiology** : knowledge of patterns of health and diseases
- **Nutrition** : the knowledge of the food people eat
- **Behavioral sciences** : the knowledge of behavioral factors and their effect of health
- **Environmental health** : the knowledge of environmental factors and their effect on health
- **Biostatistics** : the science of collection , compilation and analysis of data
- **Preventive medicine** : the knowledge of control and prevention of disease
- **Health administration and planning** : the knowledge of delivery of health care

- **What is health ? according to WHO**

The state of complete physical , social , mental well being and not merely the absence of disease or infirmity

**Recent definition :**

**Dynamic state** of complete physical , mental , social and spiritual well being and not merely the absence of disease or infirmity

- Some notes on health :
  - **Health cannot be defined as a state** because it is everchanging.
  - Therefore, health is defined as a dynamic state or condition of the human organism that **is multidimensional in nature** (i.e. physical, mental, emotional, social, spiritual, and environmental).

## Dimensions of Health



## P M S S E E

### PHYSICAL ;

- **Definition:** a state at which every cell and every organ is functioning at optimum level and in perfect harmony with the rest of the body .
- **It includes :**
  - perfect body functioning
- physical fitness
- ADL (activities of daily living )

### MENTAL :

- **Definition :** a state of balance between the individual and surrounding world / Ability to think clearly , reason objectively .
- **It includes:**
  - Being Free from internal conflict
  - Being Aware about himself
  - Having a good self control
  - Coping with stress

### SOCIAL

- **Definition :** ability to have satisfying **relationships**

### SPIRITIAL

- **Definition :** feeling **as a part of** a greater spectrum of existence
- **It focuses on :**
  - Self
  - Consciousness
  - Intuition الحدس

### EMOTIONAL

- **Definition :** self-efficacy and self-esteem

### ENVIRONMENTAL

- **Definition :** **appreciation** of the external environment and **one's role** in caring for it .

- Health results from a person interactions with and adaptations to his, her environment.
  - A person health is dynamic in part because of the many different **factors** that determines one health.
- **Health** status is determined by interaction of **five domains**:
    - 1) genetic makeup,
    - 2) social circumstances (e.g. education, income, poverty),
    - 3) environmental conditions (toxic and microbial conditions),
    - 4) behavioural choices (diet, physical activity, substance use and abuse)
    - 5) the availability of quality medical care.
- **Spectrum of health** :
 

Positive health → better health → freedom from disease → unrecognized disease → mild disease → severe disease → death

    - This concept of health **emphasizes that** health of an individual is a **dynamic phenomenon** and a process of **continuous change** , subject to repeated fine **variations**
    - Transition from optimum health to ill health is often **gradual** , and where one state ends and other begins is a matter of judgment .
- **Define determinants of health** :
 

Factors influencing health
- **Social determinants of health** : [SDOH]
    - **Definition [WHO ]**: the **conditions** in which people are born, grow, work, live, and age, and the wider set of **forces and systems** shaping the conditions of daily life".
    - **Domains of SDOH** :
      - 1) Economic stability
        - ◆ goal : Help people earn **steady** incomes that allow them to meet their health needs.
        - ◆ People with steady employment → are less likely to live in poverty → and more likely to be healthy.

- 2) Education access and quality
  - ◆ Goal : Increase educational opportunities and help children and adolescents do well in school.
  - ◆ People with higher levels of education → are more likely to be healthier → and live longer.
  
- 3) Healthcare access and quality
  - ◆ Goal : Increase access to comprehensive, high-quality health care services.
  - ◆ People without insurance → are less likely to have a primary care provider, and they may not be able to afford the health care services and medications they need.
  - ◆ Strategies to increase insurance coverage rates are critical for making sure more people get important health care services, like preventive care and treatment for chronic illnesses.
  
- 4) Neighborhood and Built Environment
  - ◆ Goal: Create neighborhoods and environments that promote health and safety.
  - ◆ Many people in the United States live in neighborhoods with high rates of violence, unsafe air or water, and other health and safety risks.
  - ◆ Racial/ethnic minorities and people with low incomes → are more likely to live in places with these risks. In addition, some people are exposed to things at work that can harm their health, like secondhand smoke or loud noises.
  
- 5) Social and community context
  - ◆ Goal : Increase social and community support
  - ◆ People's relationships and interactions with family, friends, co-workers, and community members can have a major impact on their health and well-being.
  - ◆ Healthy People 2030 focuses on helping people get the social support they need in the places where they live, work, learn, and play.

- **Primary health care [PHC] :**

- **Declaration of Alma-Ata International Conference:**
  - International Conference on Primary Health Care

- 6-12 September 1978.
- [purpose ] : expressing the need for urgent action by all governments, all health and development workers, and the world community **to protect and promote the health of all the people** of the world
- Was mentioned in Alma ata declaration :

- Health is a fundamental human right and that the attainment of the highest possible level of health is a most important worldwide social goal.
- The existing gross inequality in the health status of the people particularly between developed and developing countries is politically, socially and economically unacceptable
- people have the right and duty to participate individually and collectively in the planning and implementation of their health care
- Government have a responsibility for the health of their people **which can be fulfilled only by [how ??]** the provision of adequate health and social measures
- All government should formulate national policies, strategies and plans of action to launch and sustain primary health care.
- All countries should cooperate in a spirit of partnership and service to ensure PHC for all people.
- An acceptable level of health for all the people of the world by the year 2000 can be attained [how ??? ]  
through a further and better use of the **world's resources**

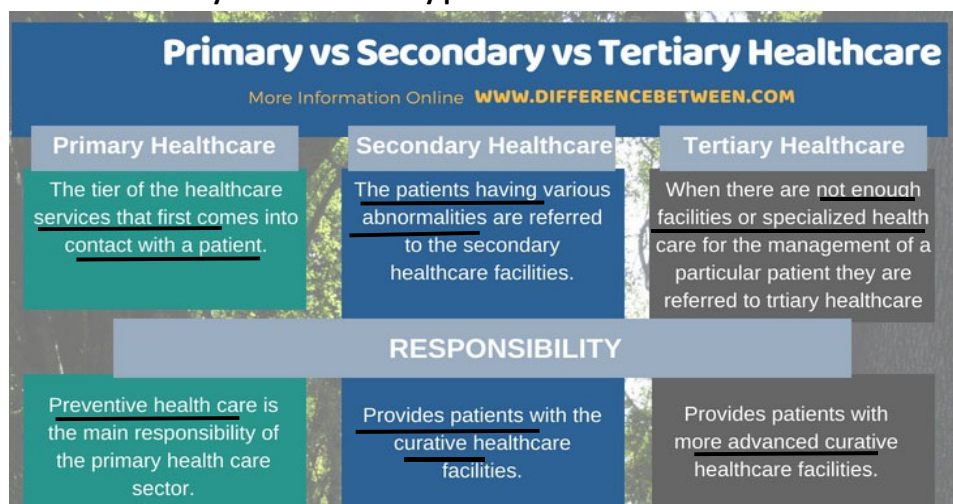
- Primary health care (PHC), **gained global prominence** with ? the 1978 Alma Ata Declaration.
- [what is the key **health system** strategy for attaining **optimal health** ? PHC ]
- When was Its strategic role reaffirmed ?  
30 years later in the **2008** World Health Organization (**WHO**) **World Health Report**.

- **Health for all** [ this concept was introduced in Alma Ata ] :

- **Definition :**  
"the attainment by all citizens of the world by the year **2000** of a level of health that will permit them to **lead a socially and economically productive life**"

- **Levels of care :**

**Primary**  
**Secondary**  
**tertiary**



lecture (2) :

- **primary health care :**

- **definition :** **essential** health care that is socially appropriate , **universally accessible** , scientifically sound **first level care** provided by trained workforce supported by referral system in a way that ; gives priority to those most in need ; maximizes community + individual self – reliance and participation and involves collaboration with other sectors
- it includes :
  - 1) health promotion
  - 2) illness prevention
  - 3) care of sick
  - 4) advocacy
  - 5) community development

another time →

- **Primary healthcare is:**

- Essential healthcare (E)
- Make universally accessible to individuals (U)
- Acceptable to them (A)
- Through their full participation (P)
- At a cost the community and country can afford (C).

- Primary healthcare (PHC) is, for most people, the first point of contact with the healthcare system, **usually through a *family physician***.
- In PHC :
  - short-term health issues are **resolved**,
  - where the majority of chronic health conditions are **managed**,
  - where health promotion and education efforts are undertaken
  - where patients in need of more specialized services are connected with care.
- **Function of primary health care :**
  - 1) Provide care [ continuous and comprehensive care ]
  - 2) Provide best possible health and social services in the light of economic considerations
  - 3) Refer to specialists , hospital services
  - 4) Co-ordinate health services for the patient
  - 5) Guide patient [ within the network of **social welfare** and **public health services** ]

- **Principles for PHC :**
  - 1) Social equity
  - 2) Nation – wide coverage
  - 3) Self- reliance
  - 4) Inter-sectoral coordination
  - 5) People’s involvement in the planning and implementation of health programs
  
- **Core activities for PHC :**
  - These were defined nationally or locally
  - Proposed in Alma Ata declaration [ 1978 ]
  - Include :
    - 1) Identifying and controlling prevailing health problems
    - 2) Prevention and control of endemic disease
    - 3) Immunization
    - 4) Appropriate treatment of common disease and injuries
    - 5) Provision of essential drugs
    - 6) Food supply and proper nutrition
    - 7) Provision of safe water and basic sanitation
    - 8) Maternal and child health care , including family planning
    - 9) Health education
    - 10) Promotion of mental health
  
- **Elements of primary health care :**
  - 1) **Prevention of disease**  
-prevention and control of locally endemic disease
  - 2) **Treatment**  
-appropriate treatment of common disease and injuries
  - 3) **Drug availability**  
-basic laboratory services and provision of essential drugs
  - 4) **Immunization**  
-immunization against the major infectious disease
  - 5) **Nutrition**  
-promotion of food supply and proper nutrition
  - 6) **Water and sanitation**  
-adequate supply of safe water and basic sanitation
  - 7) **Maternal and child health**  
-including family planning
  - 8) **Education**  
-education concerning prevailing health problems and the methods of preventing and controlling them



**9) Training of health guides , health workers and health assistants**

**10) Referral services**

I asked the doctor about these 3 points in slide 22 [ she said that we can consider them as services or functions provided through PHC ]

mental health

Physical handicaps

Health and social care for elderly

- **Basic requirements for PHC :**

**1) Accountability**

-it implies the feasibility of regular review of financial records by certified public accountants

**2) Acceptability**

-acceptability of care depends on variety of **factors** :

a) satisfactory communication between health care providers and the patients

b) whether the patient trust this care

c) whether the patient believe in the confidentiality سرية and privacy of information shared with the providers

**3) Availability**

-availability of medical care means that : care can be obtained whenever people need

**4) Appropriateness**

-whether the service is needed at all in relation to essential human needs, priorities and policies

-the service has to be properly selected and carried out by trained personnel in the proper way

**5) Affordability**

-cost should be within the means and resources of the individual and the country

**6) Assessability**

-means that the medical care can be readily evaluated

**7) Adequacy**

-sufficient volume of care to meet the need and demand of a community

-the service proportionate to requirement

**8) Accessibility**

-reachable

-convenient services

-geographic , economic , cultural accessibility

**9) Completeness**

-completeness of care requires :

Adequate attention to all aspects of medical problems including :

- Diagnosis
- Early detection
- Treatment
- Follow up measures
- Prevention
- Rehabilitation

**10) Comprehensiveness**

-comprehensiveness of care means : care is provided for all types of health problems

**11) Continuity**

-continuity of care requires that the **management of patient's care** over time be coordinated among providers

- PHC is rooted in contemporary conceptualizations of health as a **bio-psycho-social phenomenon** and not simply the absence of disease.

- Medical model vs PHC

<b>Medical model</b>	<b>PHC</b>
<b>Treatment</b>	<b>Health promotion</b>
<b>Illness</b>	<b>Health</b>
<b>Cure</b>	<b>Prevention , care , cure</b>
<b>Episodic care</b>	<b>Continuous care</b>
<b>Specific problem</b>	<b>Comprehensive care</b>
<b>Individual practitioners</b>	<b>Teams of practitioners</b>
<b>Health sector alone</b>	<b>Intersectoral collaboration</b>
<b>Professional dominance</b>	<b>Community participation</b>
<b>Passive reception</b>	<b>Joint responsibility</b>

### Lecture (3)

- PHC team
- **What is a team ?**

A group of people who make different contribution towards the achievement of common goal

- **Composition of PHC team :**
- Family health services, which are administered by Family Health Service Authorities (FHSAs), and include the **four practitioner services**:
  - GP (general practitioners )
  - Dental practitioners
  - Pharmacists
  - Opticians
- Community health services, which include:
  - Community doctors
  - Dentists
  - Nurses, midwives, and health visitors
  - Other allied professions such as chiropody تقويم العظام and physiotherapy
- Counseling social workers, psychologists, and psycho-therapists.
- Administrative
- Reception of clients/ for making appointments
- Secretarial / clerical work العمل المكتبي
- **Essential characteristics of teamwork :**
  - The members of a team share a common purpose which binds them together and guides their actions.
  - Each member of the team has a clear understanding of his own functions and recognizes common interests.
  - The team works by pooling knowledge skills, and resources: **and all members share the responsibility for outcome.**
- **Current health status and health care in Jordan according to population and family health survey :**

Health status has **improved** significantly during the past quarter century. Some important **indexes** to go with that are:

- 1) Life expectancy at birth increased from 49 years in 1965 to 66 years in 1990 to 72 in 2004 to 73 (71.6 males and 74.4 females) in 2012  
**73.5 (72.8 males and 74.2 females) in 2017 [ past paper question ]**  
Ranging from 57 in developing countries to 78 years in developed countries).
- 2) Infant mortality decreased from 130 in 1960 to 35 per 1000 live births in 1992 to 22 in 2002 to 19 in 2007 to 17 in 2012  
**Stayed 17 per 1000 live births in 2017. [ past paper question ]**
  - Infant mortality: The probability of dying between birth and the first birthday.
- 3) Total fertility rate dropped from 7 to 5.6 to 3.7 to 3.6 to 3.5 to **2.7** on 1988 and 1994 and 2002, 2007, 2012, **2017** respectively
- 4) SmallPox was eradicated on 1979 , Measles, polio prevalence rates were decreased a lot

- **Summary and update of PHC provision in Jordan :**

- A country in demographic and fertility transition
- Jordan's demographics will change dramatically – This will pose great challenges for the country (resources and services).
  - The country's population is growing rapidly, doubling over the last 20 years and likely to double again by 2029. However, it is undergoing a demographic transition moves from high fertility and mortality, to low fertility and mortality
- The fertility rate :
  - is the average number of children borne by one woman while being of child-bearing age.
- Fertility declines in Jordan have contributed to slowing the population growth rate
- Latest 2.4% increased in population growth rate in 2017 due to increased in immigrants.
- The **urban population** increased
- Results of the 1994 census تعداد indicate that the **age structure of the population** has changed considerably since 1979 – the result of changes in fertility, mortality, and migration dynamics.
- The Ministry of Health (**MOH**), through its Maternal and Child Health Centers (**MCH**), provided optional and predominantly free family planning services as an unofficial and indirect intervention in the population policy.
- The efforts made by the **Jordan Association of Family Planning and Protection (JAFPP)**, as well as by some voluntary nongovernmental organizations, were invaluable in this regard.
- **Challenges :** [ population growth rate ]

While low infant mortality rates and high life expectancy - are among the best in the region

the **population growth rate** continues to be a major development constraint especially when analyzed in light of the **quantity and quality of services to be provided** to accommodate this rapid increase in population.

- **Primary Health Care Initiatives Project:**
  - 1) 380 PHC clinics
  - 2) Renovation and provision of furniture and specialized medical equipment.
  - 3) Clinical training of service providers.
  - 4) Establishment of performance improvement review systems.
  - 5) Improvement of the management information system
- **Primary Health Care in Jordan**

It follows that for a community like JORDAN were:

  - The population is small and highly urbanized.
  - Highly qualified medical personnel are abundant.
  - Intermediately qualified paramedical staff are scarce
  - Piped water and safe waste disposal are almost universal
- **Three main reasons for PHC in Jordan 1986 MOH study visits are:**

Respiratory diseases  
Infectious and parasitic diseases  
Digestive diseases
- **Top 10 Causes of Death in Jordan center for disease control and prevention (CDC 2010) :**

Ischemic heart disease / cancer / stroke / diabetes / congenital abnormalities / chronic kidney disease / road injuries / lower -respiratory infection / pre-term birth complications / chronic obstructive pulmonary disease
- **Health education :**
  - **First line of Prevention**
  - Skeleton of primary health care services.
  - Essential for Health Promotion and Preventive Services.
  - Helping people to understand their behavior and how it may affect their health.
- **Main goal of health education is:**

To **improve the quality of life** individual and Community **in all aspects:** health, social, economic and political, taking in consideration that health is a state of complete physical, psychological and social well being and not the mere absence of diseases.
- **Health promotion**

- encompasses a variety of activities aiming at improving the health status of the individual and the community .
  - And if successful, it will affect the lives of people, so health promoters should be equipped with practical skills, and should understand the values and ethics implicit in their work.
- **Who is the health educator?**
    - Specialist : person who is especially trained to do health education work.
    - Any health worker who is concerned with helping people to improve their health knowledge and skills.
    - Any person in the Community can participate in health education process, like teacher, mothers... etc.
  - **Target groups for health education programs:**
    - 1) **Women**
      - women have the role of raising children and teaching them practices and concepts as the personal hygiene and nutrition. also women must be aware of the basics of preventive of health services. E.g. A.N.C., W.B.C, etc.
    - 2) **Children**
      - any concept learned in childhood will affect behavior in adult life
      - major subjects in health education for children are sanitation, nutrition, personal hygiene and environment.
    - 3) **Elderly**
  - **Health Education (HE) in Jordan :**
    - In Jordan, health education (HE) is an important pillar of the work of the Ministry of health.
    - Recently the HE division was promoted to a full directorate مديرية كاملة where qualified experts
      - 1) develop their HE plans, based on priorities, community needs, and information collected from different reports, surveys and studies.
      - 2) Their work also includes training of health workers and preparation of different HE media.
    - Each health directorate in the country **sets its own HE programmed separately** according to their needs and available resources in addition to the integrated HE resources in the primary health centers.
  - **Approaches of HE:**
    - Specialists in the field of health promotion identify five approaches that can be used individually or in combination to achieve the desired goal:
      - 1) Medical approach

-involves medical intervention to prevent ill health using a persuasive method and expects patients to comply with the recommended intervention.

2) Educational approach

-provides information and helps people to explore their values and make their own decisions.

3) The change in behavior approach

-involves changing people's attitudes so that they adopt healthy lifestyles as defined by the health promoters.

This approach can be applied using locally available methods and media such as leaflets and posters.

4) The individual- centered approach

-considered the individual to have a right to control his own health, so he should be helped to identify his concerns, and gain the knowledge he needs to make changes happen.

5) The change in society approach

-aims at changing the society rather than the individual by putting health on the political agenda at all levels, and by shaping the environment so that it becomes conducive to health.

- Unfortunately , the traditional health education approach used in Jordan , and many other countries, was aimed solely at changing people to fit the environment, and did little to make the environment a healthier place to live in.

- **Health education programs**

- **Current programs**

- Older Adults
- Parent Education
- Nutrition and Weight Management
- Fitness and Exercise
- Psychological Counseling
- Education and Support Groups
- Health Screenings
- Cancer
- Diabetes

- **Other programs for HE**

- Personal health and wellness
- Pregnancy and Childbirth
- Programs for Families
- Programs for Men

- Programs for Women
- Safety and CPR
- Sleep Disorders
- Special Programs
- Stress Busters

- Conclusions :
  - Health education is the **translation** of health **knowledge** into desirable individual and Community **behavioral patterns** by means of educational process.
  - Health education is the skeleton of PHC system –since no other activity can be performed without health education.
  - The needs and interests of individuals, families, groups, organizations and communities are at the heart of health education program.
  - **Health education is the responsibility of every person in the Community.**
  - Primary health care is the first point of contact between a community and its country's health system.
  - The World Bank estimates that **90% of all health needs** can be met at the primary health care level.
  - Investment in primary health care is a cost-effective investment – it helps reduce the need for more costly, complex care by preventing illness and promoting general health

Note

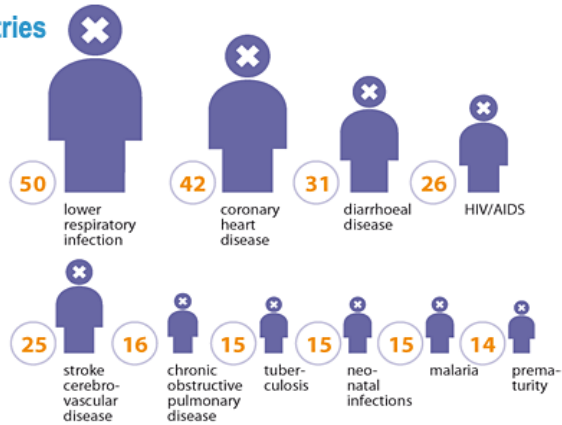
Go back to read Slides ( 23 – 28 ) [ they are not included here ]



■ Please note that there are a lot of percentages not mentioned in this file [ go back to the slides and have a look at them ]

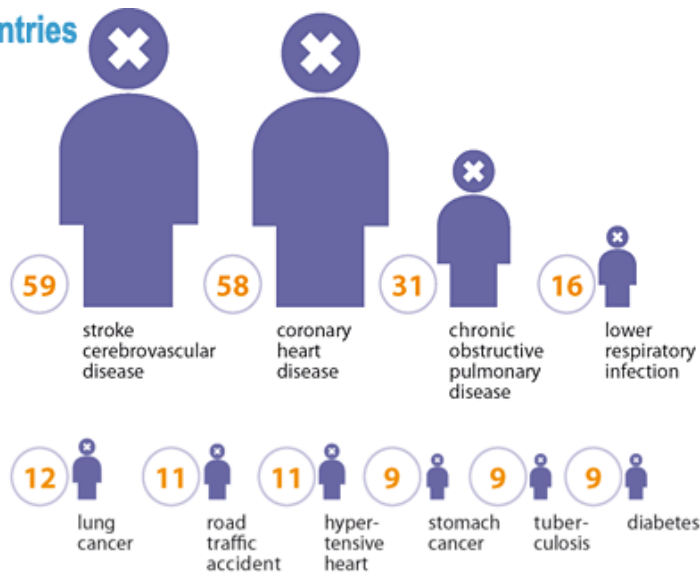
### Low-income countries

447 of 1000



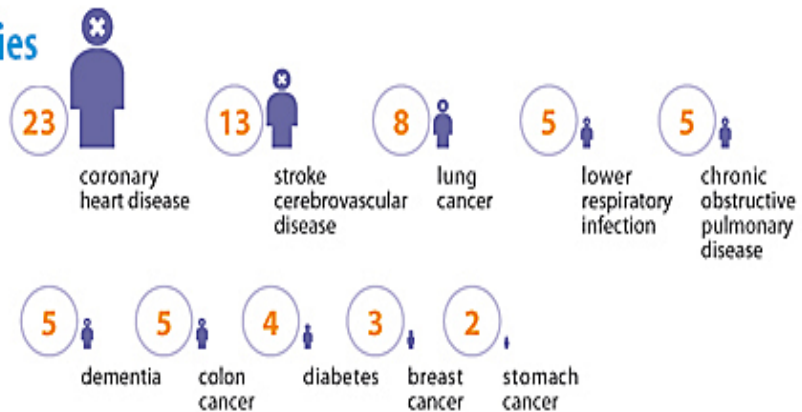
### Middle-income countries

415 of 1000



### High-income countries

138 of 1000



Lecture (4) :

- **Maternal and child health (MCH) :**
  - Maternal and child health care is one of the main components of (PHC) systems as declared at the Alma Ata Conference in 1978.
  
- **Definition of MCH care :**
  - the health service provided to mothers (women in their childbearing age) and children.
  - Maternal and child health (MCH) **programs focus** on health issues concerning women, children and families , SUCH AS:
    - access to recommended prenatal and well-child care,
    - newborn screening,
    - child immunizations,
    - child nutrition
    - services for children with special health care needs.
    - infant and maternal mortality prevention,
    - maternal and child mental health,
  
- **Targets for MCH :**
  - all women in their reproductive age groups, i.e., 15 - 49 years of age
  - children
  - school age population
  - adolescents
  
- Throughout the world, especially in the developing countries, there is an increasing concern and interest in maternal and child health care.
  
- **Objectives and Targets of Maternal Child Health Services**
  - 1) To reduce morbidity and mortality among mothers and children
    - through health promotion activities rather than curative interventions
  
  - 2) To reduce perinatal and neonatal morbidity and mortality.
  
  - 3) To reduce the incidence and prevalence of cervical cancer.
  
  - 4) To improve the health of women and children through :
    - expanded use of fertility regulation methods

- care during and after delivery
- adequate antenatal coverage

- 5) To reduce unplanned or unwanted pregnancies through :
  - sex education
  - the wider use of effective contraceptive
- 6) To reduce the incidence and prevalence of sexually transmitted infections (STIs), in order to reduce the transmission of HIV infection.
- 7) To reduce female genital mutilation and provide appropriate care for females who have already undergone genital mutilation
- 8) To reduce domestic and sexual violence and ensure proper management of the victims.
- 9) Promotion of reproductive health and the physical and psychosocial development of the child and adolescent within the family.
- 10) To increase political awareness on the need to develop comprehensive intersectoral population policies using all available resources

- **Justifications for the provision of MCH Care (Why)?**

- 1) Mothers and children make up over 1/2 of the whole population. Children < 15 years are 34.3% of the population. Women in reproductive age (15 – 49) constitute around 20%.
- 2) Maternal mortality is an adverse outcome of many pregnancies.
- 3) About 80 percent of maternal deaths in developing countries are due to direct obstetric causes.  
They result from obstetric complications of the pregnant state (pregnancy, labor, and puerperium), from intervention, omissions, incorrect treatment, or from a chain of events resulting from any of the above.  
\* **puerperium**: the period of about six weeks after childbirth during which the mother's reproductive organs return to their original non-pregnant condition
- 4) Most pregnant women in the developing world receive insufficient or no prenatal care and deliver without help from appropriately trained health care providers. More than 7 million newborn deaths are believed to result from maternal health problems and their mismanagement.
- 5) Poor maternal health hurts women's productivity, their families' welfare, and socio-economic development.
- 6) Large number of women suffers severe chronic illnesses that can be exacerbated by pregnancy and the mother's weakened immune system and levels of these illnesses are extremely high.
- 7) Many women suffer pregnancy-related disabilities like uterine prolapse long after delivery due to

- early marriage and childbearing
  - high fertility
- 8) Nutritional problems are severe among pregnant mothers and 60 to 70 percent of pregnant women in developing countries are estimated to be anemic.

Women with poor nutritional status are more likely to deliver a low-birth-weight infant.

- 9) Poorly timed unwanted pregnancies carry high risks of morbidity and mortality, as well as social and economic costs, particularly to the adolescent and many unwanted pregnancies end in unsafe abortion.
- 10) Miscarriage, induced abortion, and other factors, are causes for over 40 percent of the pregnancies in developing countries to result in complications, illnesses, or permanent disability for the mother or child. [ what are the causes the causes of ..... ? ]
- 11) Majority of perinatal deaths are associated with maternal complications/ poor management techniques during labour and delivery/ maternal health and nutritional status before and during pregnancy.
- 12) Ante partum hemorrhage, eclampsia (high blood pressure results in seizures during pregnancy), and other complications are associated with large number of perinatal deaths each year in developing countries plus considerable suffering and poor growth and development for those infants who survive.
- 13) The large majority of pregnancies that end in a maternal death also result in fetal or perinatal death. Among infants who survive the death of the mother, fewer than 10 percent live beyond their first birthday
- 14) Physiological changes that the mother and her child pass through

- **Assessing risk factors in pregnancy**

- **Definition of risk factor :**

Any condition [past or present] which is known to be associated with increased maternal and / or fetal morbidity

1) Medical conditions

- Hypertension
- diabetes mellitus
- anemia
- heart diseases
- epilepsy
- urinary tract infections
- problems related to drug usage and conditions treated

2) Obstetric history

- History of operative delivery.
- History of a stillbirth or neonatal death.
- Previous ante-partum hemorrhages.
- Previous post-partum hemorrhages.

- History of low birth weight infant
- 3) Epidemiological risk factors
  - Maternal age
  - Social circumstances
- 4) Complications arising in pregnancy
  - Hypertensive disorders.
  - Ante-partum hemorrhage.
  - Vaginal bleeding
  - Intrauterine growth restriction.
  - Pre-term labour.
  - Pre-term rupture of membranes.
- **High risk pregnant women are advised for more frequent antenatal visits.**

- **Reproductive health as PHC Service**

Reproductive health care in the context of primary health care should include:

- 1) family-planning counseling
  - 2) information, education and counseling, as appropriate, on human sexuality, reproductive health and responsible parenthood
  - 3) education and services for prenatal care, safe delivery, and post-natal care, especially breast-feeding, infant and women's health care; prevention and appropriate treatment of infertility.
  - 4) communications
  - 5) prevention of abortion and the management of the consequences of abortion; treatment of reproductive tract infections; sexually transmitted diseases and other reproductive health conditions;
- Referral for family-planning services and further diagnosis and treatment for complications of pregnancy, delivery and abortion, infertility, reproductive tract infections, breast cancer and cancers of the reproductive system, sexually transmitted diseases and HIV/AIDS should always be available, as required.
- **Some indicators of health status of women:**
    - 1) **Maternal Mortality Rate** /100,000 (15-49 years death duet Pregnancy , Labor and post partum period)The most sensitive indicator for maternal health
    - 2) Malnutrition among women in reproductive age group
    - 3) Teen-age pregnancy
    - 4) Low birth weight deliveries (<2.5kg.)
    - 5) Weight gains during pregnancy / Normal ( **8-11 Kg.**)
    - 6) women visited ANC clinics.

- 7) Labor attended by Medical Staff.
- 8) women receiving family Planning Services.

- **Maternal health and developing countries.**

- Most women do not have a good Access to the Health care and sexual Health education services.
- A woman in sub-Saharan Africa has a 1 in 16 chance of dying in pregnancy or childbirth, compared to a 1 in 4,000 risk in a developed country.
- Less than one percent of these deaths occur in developed countries, showing that they could be avoided if resources and services were available.

- **General considerations :**

- More than **150 million** women become pregnant in developing countries each year and an estimated **500,000** of them die from pregnancy-related causes.
- Maternal health problems are also the causes for more than **seven million** pregnancies to result in stillbirths or infant deaths within the first week of life.
- Far too many women still suffer and die from serious health issues during pregnancy and childbirth.
- In 2015, an estimated 303 000 women worldwide died in pregnancy and childbirth, with 99% of these deaths occurring in low income countries (WHO 2018)
- Reducing maternal mortality crucially depends upon ensuring that women have access to quality care before, during and after childbirth.
- Maternal death, of a woman in reproductive age, has a further impact by causing grave economic and social hardship for her family and community.

- **Global scenario-Maternal health**

- Each year, more than half million women die from causes related to pregnancy & childbirth.
- Around 10 million women annually suffer from complications of pregnancy.
- On average, each day~1500 women die from causes related to pregnancy & childbirth.
- **80% of maternal deaths could be avoided by access to essential maternity & basic health services. [memorize it ]**