

Introduction to Public Health

Module # 2

Current Health status in developing and Developed countries.

DR. SHAIKH ABDUS SALAM

Dept. of Public Health
North south University

OBJECTIVES OF THE LECTURE

By the end of this lecture you will be able to:

- *Conceptualize*
 - *Determinants of health*
 - *IMR,MMR etc.*
 - *Current health status of Bangladesh & understand the major public health problems in Bangladesh.*
 - *Current health status of Developed world.*

Determinants of Health

The factors which influence health lie both within the individual and externally in the society in which he/she lives are collectively known as determinants of health.

Death of infants

- Disease/Medical Problem
 - Medical Professional
- Poverty, Infrastructure, Power Relation
 - Development Practitioner, Politicians
- Disease pattern, Health Services, Health Seeking Practice, Cultural Belief
 - Public Health Professional

Key health indicators

- Maternal mortality rate

The number of women who die as a result of pregnancy and child birth complications per 100,000 live births in a given year

- Neo natal mortality rate

The number of deaths to infants under 28 days of age in a given year per 1000 live births in that year

- Infant mortality rate

The number of deaths of infants under age 1 per 1000 live births in a given year

Key health indicators (contd.)

- Under 5 mortality rate (child mortality rate)

The probability that a new born baby will die before reaching age five, expressed as a number per 1000 live births

- Life expectancy at birth

The average number of years a newborn baby could expect to live if current mortality trends were to continue for the rest of the newborn's life

Key health indicators

Key Statistics in Bangladesh

- Maternal mortality rate (MMR) 170 per 100,000 live births
- Newborn mortality rate (NMR) 24 per 1,000 newborns
- Infant mortality rate (IMR) 33 per 1,000 infants (less than one years of age)
- Under 5 mortality rate (U5MR) 41 per 1,000 children (under five years of age)

Determinants of Health

- Health is multifactorial. The more important determinants are as follows:
- Biological, Behavioral, environmental, socio-economic, socio-cultural, Health system, Aging of the population, Sciences and technology, Information and communication, Gender, Equity and Social Justice and Human rights.

Determinants of health

- Types of determinants:
 - A. Positive Determinants or Healthy
 - B. Negative Determinants or Risky or Risk factors
 - And
 - 1) Internal Determinants
 - 2) External Determinants

MMR

- MMR# Maternal Mortality Rate:
- Number of deaths occurring in women owing to complications of pregnancy child birth and puerperium among the female population of a given geographic area in a given year per 1000(Now100 000) live births that occurred among the population of that area in that particular year.

IMR & MMR

- IMR# Infant Mortality Rate:
- Number of deaths in children under one year of age which occurred among then population of a given geographic area in a given year per 1000 live births that occurred among the population of that area in that particular year.

Major Public health Problems in Bangladesh

1. Population problem
2. Communicable Diseases problem
3. Non communicable Diseases problem
4. Nutritional problem
5. Drug addiction/dependence problem among the high risk group
6. Road/ traffic accident and other accidents e.g. drowning
7. Medical care problem
8. Environmental Sanitation problem

Major Public health Problems in Bangladesh

10.Violence against women

11.Violence against men (small extent)

12.Child abuse/ child labor

13.Unemployment problem

14.Food adulteration problem

15.Problem of Social violence (Anti-social activities)
e.g. hijacking, snatching etc.

Major Public health Problems in Bangladesh

Population problem: The problems arising due to Overpopulation in Bangladesh are:

1. Unemployment problem
2. Poverty problem
3. High dependency

Major Public health Problems in Bangladesh

- Communicable Diseases problem: High mortality

And high Morbidity due to following communicable diseases: Diarrheal diseases, TB, Typhoid, STIs

HIV/AIDS, Dengue fever, Malaria etc.

Enteric Fever

- Typhoid Fever: Source, Reservoir, Agent, Mode of Transmission, Risky people, HRG, Control and prevention.
- Paratyphoid fever

Major Public health Problems in Bangladesh

- Nutritional problems: Major nutritional problems in Bangladesh are:
 1. Protein Energy Malnutrition (PEM)
 2. Vitamin A deficiency disorders
 3. Iron & Iodine deficiency disorders
 4. Khesari dal Intoxication-- Neurolathyrism
 5. Disorders due to food adulteration

Major health Problems in Bangladesh

Medical Care problems:

1. Due to lack of proper Planning and lack of commitment among the Medical personnel ,PHC Services could not be Provided to the desired extent.
2. Poorly managed Health Care System in Bangladesh

Major health Problems in Bangladesh

Environmental Sanitation problems:

1. Lack of safe drinking water in many areas of the country
2. Primitive methods of excreta disposal.

- 21st Century Health Challenges: Can We All Become Healthy, Wealthy, and Wise?

-

Public Health Problems in Developed world

- Cancer
- Heart attack
- Stroke
- DM
- Senile mental health problems
- Health problems related to tobacco, marijuana, alcohol etc.
- Health problems related to fire arms, industries, etc
- Accidents and injuries
- Health problems related to sexual behaviour. etc

Public Health Problems in Bangladesh

- A number of challenges in health and nutrition remain. These are:
- Improving health care-seeking behavior such as education, awareness-raising and skills building in recognizing and treating pneumonia and obstetric emergencies.
- Rapid urbanization which creates conditions that make slum dwellers vulnerable to disease as a result of problems of sanitation, hygiene and the supply of clean water.

Public Health Problems in Bangladesh

- • The emergence of arsenic in tube well water, leading to arsenic poisoning.
- • The potential for HIV/AIDS to develop into a major problem.
- • Action on a range of fronts to reduce the number of deaths from accidents.

Public Health Problems in Bangladesh

- **Arsenicosis** The widespread incidence of arsenic contamination of water creates health problems for whole communities. Long-term exposure to low concentrations of arsenic in drinking ground water causes painful skin lesions and can result in cancers of the skin, lungs, bladder and kidneys. Tackling the problem means identifying who is suffering from arsenic poisoning (arsenicosis), monitoring water quality, helping communities to find alternative sources of safe water and enabling households to treat water themselves, to make it safe.

Public Health Problems in Bangladesh

- **HIV/AIDS** There are an estimated 13,000 adults living with HIV in Bangladesh. This is below 1 per 1,000 adults in the general population, and less than 1 per cent among vulnerable groups. But despite the low incidence, Bangladesh is considered a high-risk country for several reasons, including:
 - sustained high-risk sexual behaviour
 - very low use of condoms

Public Health Problems in Bangladesh

- • high levels of HIV/AIDS in the two neighbouring countries, India and Myanmar
 - the high proportion of young people, who constitute one third of the population — the highest in the region. There are signs that initiatives to change behaviour are having an impact. This is reflected in declining syphilis rates among female sex workers in some cities and brothels, and in declining needle and syringe sharing rates among intravenous drug users (IDUs). This work needs to be extended to cover more regions and more of the at risk population.

Public Health Problems in Bangladesh

Three NCDs-(non-communicable Diseases)

- **Cancer,**
- **Cardiovascular diseases and**
- **Diabetes mellitus-as major public health problems.**

Public Health Problems in Bangladesh

The communicable Diseases are:

TB, Malaria, Diarrheal Diseases, Dengue Fever,
STIs, Typhoid and Paratyphoid etc.

Violence against mothers in Bangladesh associated with health problems in young children

Almost half of Bangladeshi women with young children experience violence from their husbands, and their children appear to have a higher risk of recent respiratory infections and diarrhea.

Violence against mothers in Bangladesh associated with health problems in young children

- Despite substantial improvements in childhood survival in the previous decade, 77 per 1,000 children born in Bangladesh die before age 5, according to background information in the article. Diarrhea and acute respiratory infections are the leading causes of early childhood deaths.

Violence against mothers in Bangladesh associated with health problems in young children

- Violence against mothers by their husbands is a factor hypothesized to relate directly and indirectly to the poor health of young children via exposure to violence, the incapacitation of mothers and direct mistreatment and neglect of children,"

Violence against mothers in Bangladesh associated with health problems in young children

More than two of every five (42.4 percent) of the mothers had experienced intimate partner violence from their husband within the past year. Those who did were more likely to report that their children had acute respiratory infections (19.2 percent vs. 13.7 percent) or diarrhea (11.6 percent vs. 7.6 percent) within the past two weeks

Violence against mothers in Bangladesh associated with health problems in young children

- Importantly, because the present analyses were adjusted for potential confounders, these effects persist after consideration of socioeconomic status (e.g., poverty), household characteristics and environmental factors (e.g., sanitation),"

Violence against mothers in Bangladesh associated with health problems in young children

- Both direct and indirect mechanisms may be responsible for the elevated risk of illness among children exposed to intimate partner violence, they note. Trauma and anxiety are more common among children in violent households and could lead to suppression of the immune system over time.

Violence against mothers in Bangladesh associated with health problems in young children

- The children could also be experiencing direct physical harm from their fathers. "A growing body of work demonstrates that intimate partner violence occurs within a context of male-partner control, which can include interference in the ability of women to meet basic health needs for themselves and their children," the authors write. For example, women who are being abused may be less likely to have their children immunized or to breastfeed, both of which can compromise child health

Violence against mothers in Bangladesh associated with health problems in young children

- Associations of maternal experiences of intimate partner violence with two leading causes of childhood mortality strongly suggest that such abuse threatens not only the health of women but also that of their children. "Prevention of intimate partner violence perpetration by men may be critical to the improvement of maternal and child health."