

# **PUBLIC HEALTH IMPORTANCE AND ITS ISSUE**

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## **Abstract**

Father of Public Health – John Snow- public health defined as "Art of preventing disease and improving quality of life through organized efforts of society, communities and individuals. The 10th amendment gives powers to state relating to public health.

Acc to WHO – Public health to prevent disease, promote health, prolong life. Role of public to promote welfare of the entire population not individuals.

The five pillars of public health are:

1. Health education.
2. Biostatistics.
3. Environmental health.
4. Epidemiology.

5. Health service administration.

The 3 Ps of Public Health are:-

1. Health Promotion.
2. Prevention of ill-health.
3. Health Protection.

The police powers of public health are:-

1. Quarantine.
2. Enforce isolation.
3. Inspection laws to spread of disease.

The core functions of public health are:-

1. Assessment.
2. Policy development.
3. Assurance.

Public health to improve society: - "Social interaction is good for your brain health, promotes a sense of society and security".

Health and society degree, jobs and career paths:-

1. Cardiovascular Technician.
2. Anesthesia Technician.
3. Dental Hygiene.
4. Occupational therapy assistant.
5. Physical therapy assistant.
6. Surgical Technician.
7. Registered Health Information Technician.

Health and social care jobs:-

1. Counsellor.
2. Social Worker.
3. Youth Worker.
4. Community development worker.

Keywords:- 1. Public Health. 2. Society. 3. Welfare. 4. Service. 5. Technician.

Public health is “**the science and art of preventing disease, prolonging life, and promoting health through the organized efforts and informed choices of society, organizations, public and private communities, and individuals.**

Public health is **the science of protecting and improving the health of people and their communities.** This work is achieved by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing and responding to infectious diseases.

8 synonyms, antonyms, idiomatic expressions, and related words for public-health, like: **epidemiology**, hygiene, sanitation, health policy, food-safety, cyber security, hygienics and health.



## PURPOSES

The purpose of a public health intervention is to prevent and mitigate diseases, injuries and other health conditions. The overall goal is to improve the health of populations and increase life expectancy.

## CHARACTERISTICS AND COMPONENTS

Public health is a complex term, composed of many elements and different practices. It is a multi-faceted, interdisciplinary field. For example, epidemiology, biostatistics, social sciences and management of health services are all relevant. Other important sub-fields include environmental health, community health, health economics, public policy, mental health, health education, health politics, occupational safety, disability, gender issues in health, and sexual and reproductive health.

- Modern public health practice requires multidisciplinary teams of public health workers and professionals. Teams might include epidemiologists, biostatisticians, physician assistants, public health nurses, midwives, medical microbiologists, pharmacists, economists, sociologists, geneticists, data managers, environmental health officers (public health inspectors), bioethicists, gender experts, sexual and reproductive health specialists, physicians, and even veterinarians.

- The elements and priorities of public health have evolved over time, and are continuing to evolve. Different regions in the world can have different public health concerns at a given time.
- Common public health initiatives include promotion of hand-washing and breastfeeding, delivery of vaccinations, suicide prevention, smoking cessation, obesity education, increasing healthcare accessibility and distribution of condoms to control the spread of sexually transmitted diseases.

## **METHODS**

- Newspaper headlines from around the world about polio vaccine tests (13 April 1955)
- Public health aims are achieved through surveillance of cases and the promotion of healthy behaviours, communities and environments. Analysing the determinants of health of a population and the threats it faces is the basis for public health.
- Many diseases are preventable through simple, nonmedical methods. For example, research has shown that the simple act of hand-washing with soap can prevent the spread of many contagious diseases. In other cases, treating a disease or controlling a pathogen can be vital to preventing its spread to others, either during an outbreak of infectious disease or through contamination of food or water supplies. Public health communications programs, vaccination programs and distribution of condoms are examples of common preventive public health measures.
- Public health, together with primary care, secondary care, and tertiary care, is part of a country's overall health care system. Many interventions of public health interest are delivered outside of health facilities, such as food safety surveillance, distribution of condoms and needle-exchange programs for the prevention of transmissible diseases.
- Public health plays an important role in disease prevention efforts in both the developing world and in developed countries through local health systems and non-governmental organizations.
- Public health requires Geographic Information Systems (GIS) because risk, vulnerability and exposure involve geographic aspects

## **ADVANTAGES OF PUBLIC HEALTH SPENDING**

Increased healthcare spending aimed at improving quality of healthcare services results to a decrease in medical care expenses through increased and improved access to new technologies that provide for new treatment options and treatment for large number of individuals.

At local level, healthcare spending is beneficial because it creates employment for healthcare specialists, increases wages for health care workers, expands local tax revenues and increases demand for related goods and services.

As the health sector becomes a greater portion of GDP, employment and related activities in health sector also grow. The national Bureau of Labour Statistics reveal that health sector employed 6.3 million practitioners and technical workers in by November 2003 (US Department of Labour, 2004), and a further 3.2 million Americans were employed in health care support occupations. The health sector is therefore a significant source of employment for America workers.

Further statistics reveal that American hospitals account for over \$1.3 trillion in economic activity annually (Trend Watch, 2004) while by state, hospitals account for 4.1- 13.3 percent

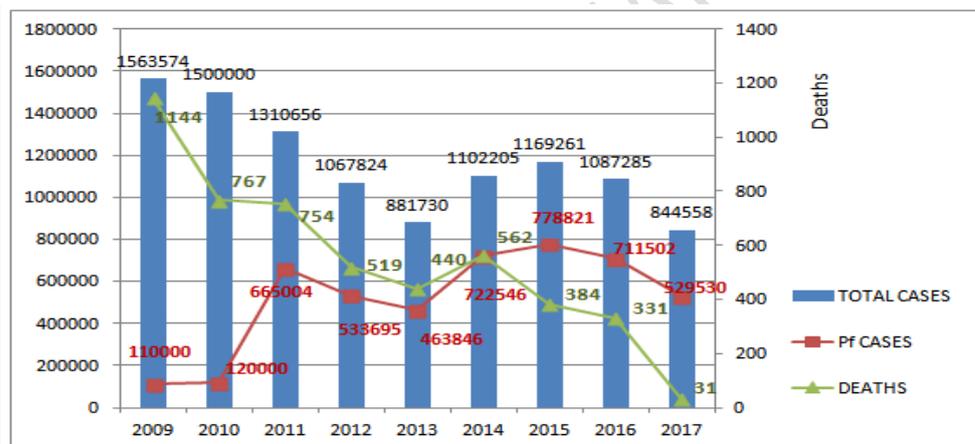
of employment. It is therefore evident that although healthcare costs are a significant burden to all levels of government, the spending represents a substantial economic asset and potential leverage for improving job growth and wages.

## DISADVANTAGES

Raising healthcare spending could lead to slow economic growth and employment. Raising healthcare spending has significant impact on federal budget. Many employees are interested in limiting their contribution to increasing healthcare costs by requiring their employees to increase their contributions or by providing different forms of coverage that potentially reduce available household income as more costs are shifted from employer to employee.

The overall economic growth for is 3.6 percent, while healthcare spending is estimated at 9.3 percent. A larger share of resources is therefore allocated on health care, negatively impacting on private and public sectors of economy. Furthermore, federal states and municipal governments are faced with the cost rising more rapidly than revenues, placing high scrutiny on all discretionary healthcare spending.

Companies faced by rising healthcare spending may be forced to cut other expenses, reduce wages, reduce health insurance benefits, or advocate for the employees to pay a greater share of costs. This leads to shifting of more costs to consumers, making them to choose between high value of health care and other goods and services



## PUBLIC HEALTH PROGRAMS

Three former directors of the Global Smallpox Eradication Program reading the news that smallpox had been globally eradicated, 1980

The World Health Organization (WHO) identifies core functions of public health programs including:

- providing leadership on matters critical to health and engaging in partnerships where joint action is needed;
- shaping a research agenda and stimulating the generation, translation and dissemination of valuable knowledge;
- setting norms and standards and promoting and monitoring their implementation;
- articulating ethical and evidence-based policy options;

- monitoring the health situation and assessing health trends.

In particular, public health surveillance programs can:

- serve as an early warning system for impending public health emergencies;
- document the impact of an intervention, or track progress towards specified goals; and
- monitor and clarify the epidemiology of health problems, allow priorities to be set, and inform health policy and strategies.
- diagnose, investigate, and monitor health problems and health hazards of the community

## **12 Common Public Health Issues and How They Can Be Prevented**

What's the goal of public health? Quite simply, it's to protect and improve the well-being of individuals and communities. How? By fighting disease and promoting healthy lifestyles. Public health addresses chronic conditions and emergency health threats ranging from heart disease and depression to infectious diseases and violent injuries.

Public health workers are vital to safeguarding a population's health. These individuals investigate, monitor, prevent, and treat health conditions that impact society. They conduct tasks such as disease research and response, community education and outreach, and injury prevention to meet specific health-related goals.

Public health programs vary in scope. A community-based program might seek to improve diabetes care services in a town experiencing high rates of obesity, while a state or national public health program might focus on a mental health condition disproportionately impacting a certain demographic group.

The need for robust public health programs and trained health professionals becomes evident when considering the scope and scale of these common public health issues:

- Cardiovascular disease
- Type 2 diabetes
- Hypertension
- Schizoaffective disorder
- Clinical depression
- Borderline personality disorders
- Opioid addiction
- CNS depressant abuse
- Prescription stimulant abuse
- Panic disorder
- Social anxiety
- Phobias
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### **Truncal Obesity Issues: The Wide Impact They Have on Health**

The prevalence of obesity in the U.S. population is skyrocketing, jumping from about 30% in 2000 to more than 40% in 2018, according to the U.S. Centers for Disease Control and

Prevention (CDC). Obesity contributes to numerous health conditions, including heart disease, diabetes, stroke, and cancer.

A community health program looking to lower obesity rates might work to:

- Educate residents about healthy eating
- Improve access to healthy foods
- Facilitate access to affordable healthcare resources

Meanwhile, a state public health agency might investigate rates of obesity among different ethnic groups to discover why cases are higher among certain populations, exploring factors such as income levels, living situations, and crime rates.

### **Public Health Issue #1: Cardiovascular Disease**

Cardiovascular diseases — primarily heart disease and stroke — are the leading global cause of death, according to the World Health Organization (WHO). Common heart diseases include coronary artery disease, arrhythmia, and cerebrovascular disease.

- High blood pressure
- Elevated glucose levels
- Raised lipid levels
- Dangers of eating energy-dense foods with high fat and sugar contents
- Health impacts of physical inactivity
- Cardiovascular risks related to smoking

### **Public Health Issue #2: Type 2 Diabetes**

Diabetes is another top cause of death worldwide. The condition occurs when the pancreas doesn't produce enough insulin (Type 1 diabetes) or when the body cannot process insulin (Type 2 diabetes). diabetes may cause damage to the:

- Heart
- Eyes
- Kidneys
- Nerves
- Blood vessels

Abdominal obesity is connected to a number of metabolic disorders including insulin sensitivity and glucose intolerance, two key factors in the development of diabetes. Obesity can also increase the risk of complications from diabetes such as diabetic neuropathy.

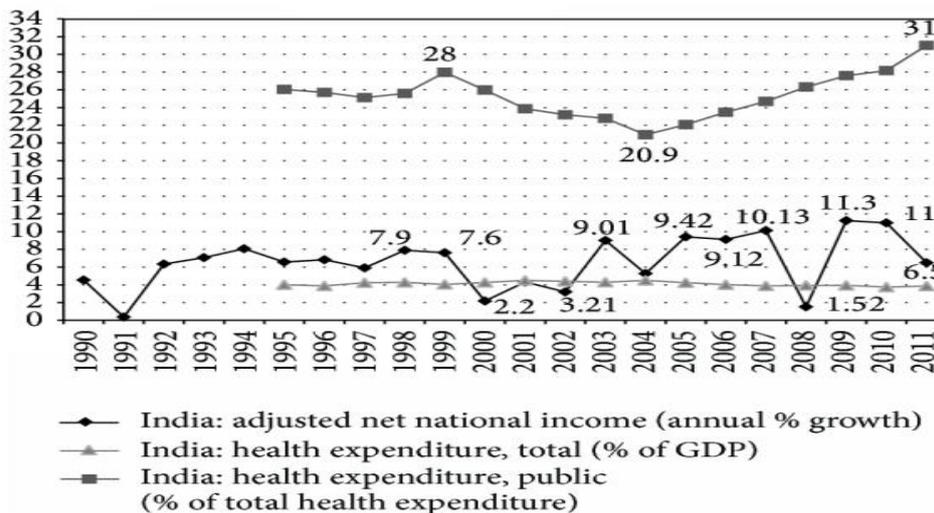
In addition to advising populations on the benefits of consuming nutrient-rich foods and getting regular exercise, public health programs can help reduce instances of diabetes and diabetes-related conditions through regular health screenings. Early diagnosis is key to preventing and treating diabetes.

### **Public Health Issue #3: Hypertension**

Another symptom of obesity is hypertension, or high blood pressure, which is a key contributor to heart disease. Screenings for high blood pressure are part of routine preventive care protocols.

However, some populations don't have proper access to routine medical care or can't afford care services. Millions of adults have uncontrolled hypertension, which can be managed with diet, exercise, and medication.

- Collect research on health trends in communities and demographic groups
- Monitor the outcomes of specific intervention programs to determine which efforts are most effective



## SOCIETY APPROACH TO PANDEMIC PREPAREDNESS.

### 3.1.1. Government leadership

While all sectors of society are involved in pandemic preparedness and response, the national government is the natural leader for overall coordination and communication efforts. In its leadership role, the central government should:

- identify, appoint, and lead the coordinating body for pandemic preparedness and response; enact or modify legislation and policies required to sustain and optimize pandemic preparedness, capacity development, and response efforts across all sectors;
- prioritize and guide the allocation and targeting of resources to achieve the goals as outlined in a country's Pandemic Influenza Preparedness Plan;
- provide additional resources for national pandemic preparedness, capacity development, and response measures; and
- consider providing resources and technical assistance to countries experiencing outbreaks of influenza with pandemic potential.

### 3.1.2. Health sector

The health sector (including public health and both public and private health-care services), has a natural leadership and advocacy role in pandemic influenza preparedness and response efforts. In cooperation with other sectors and in support of national intersectoral leadership, the health sector must provide leadership and guidance on the actions needed, in addition to raising

awareness of the risk and potential health consequences of an influenza pandemic. To fulfil this role, the health sector should be ready to:

- provide reliable information on the risk, severity, and progression of a pandemic and the effectiveness of interventions used during a pandemic;
- prioritize and continue the provision of health-care during an influenza pandemic;
- enact steps to reduce the spread of influenza in the community and in health-care facilities; and
- protect and support health-care workers during a pandemic.

### **3.1.3. Non-health sectors**

In the absence of early and effective preparedness, societies may experience social and economic disruption, threats to the continuity of essential services, reduced production, distribution difficulties, and shortages of essential commodities. Disruption of organizations may also have an impact on other businesses and services.

For example, if electrical or water services are disrupted the health sector will be unable to maintain normal care. The failure of businesses would add significantly to the eventual economic consequences of a pandemic. In order to minimize the adverse effects of a pandemic, all sectors should:

- establish continuity policies to be implemented during a pandemic;
- plan for the likely impact on businesses, essential services, educational institutions, and other organizations;
- establish pandemic preparedness plans;
- develop capacity and plan for pandemic response;
- plan the allocation of resources to protect employees and customers;
- communicate with and educate employees on how to protect themselves and on measures that will be implemented; and
- contribute to cross-cutting planning and response efforts to support the continued functioning of the society.

### **3.1.4. Communities, individuals, and families**

Civil society organizations, families, individuals, and traditional leaders all have essential roles to play in mitigating the effects of an influenza pandemic. Non-governmental groups should be involved in preparedness efforts and their expertise and capabilities harnessed to help communities prepare for and respond to a pandemic. The supporting document '*Whole-of-society pandemic readiness*' explores the roles of each of these groups in greater detail.

#### **Civil society organizations**

Groups that have a close and direct relationship with communities are often well placed to raise awareness, communicate accurate information, counter rumours, provide needed services, and liaise with the government during an emergency.

## Individuals and families

During a pandemic, it is important that households take measures to ensure they have access to accurate information, food, water, and medicines. For families, access to reliable information from sources such as WHO and local and national governments will be essential. Individuals, especially those who have recovered from pandemic influenza, may consider volunteering with an organized group to assist others in the community.

### 3.2. WHO

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WHO has been mandated by a series of World Health Assembly resolutions to provide Member States with guidance and technical support regarding influenza. These are listed below:

- **WHA 56.19:** Prevention and control of influenza pandemics and annual epidemics;
- **WHA 58.5:** Strengthening pandemic influenza preparedness and response;
- **WHA 60.28:** Pandemic influenza preparedness: sharing of influenza viruses and access to vaccines and other benefits.

WHO will work with Member States across a range of activities, including coordination under the IHR (2005), designation of global pandemic phases, switching to pandemic vaccine production, coordination of a rapid containment operation, and providing early assessments of pandemic severity.

#### 3.2.1. Coordination under International Health Regulations (IHR 2005)

The International Health Regulations (2005) also referred to as IHR (2005),<sup>11</sup> are an international legal instrument adopted by the World Health Assembly in 2005.<sup>12</sup> They are legally binding upon 194 States Parties around the world and provide a global legal framework to prevent, control, or respond to public health risks that may spread between countries.

Under the IHR (2005), a number of reporting requirements obligate States Parties to promptly inform WHO of cases or events involving a range of diseases and public health risks. These include the obligation to notify WHO of all cases of “human influenza caused by a new subtype” in their territories within 24 hours of assessment in accordance with the case definition established by WHO for this specific purpose.

- if the public health impact is serious;
- if the event is unusual or unexpected;
- if there is a significant risk of international spread; or
- if there is a significant risk of international travel or trade restrictions.

The IHR (2005) also obligates States Parties to develop national public health capacities to detect, assess and respond to events, and to report to WHO as necessary. If a potential pandemic or related public health risk should arise, the IHR also provides extensive options for national authorities to obtain information from incoming aircraft, ships, and other vehicles and

travellers, and includes the potential use of medical or public health interventions subject to various safeguards and other requirements.

### **3.2.2. The designation of the global pandemic phase**

The designation of the global pandemic phase will be made by the Director-General of WHO. The designation of a phase will be made consistent with applicable provisions of the IHR (2005) and in consultation with other organizations, institutions, and affected Member States.

### **3.2.3. Switching to pandemic vaccine production**

WHO issues bi-annual recommendations on the composition of seasonal influenza vaccines and, in addition, has been reviewing vaccine candidate viruses for A (H5N1) and other influenza subtypes with pandemic potential since 2004.

This process is undertaken in consultation with WHO Collaborating Centres (CCs) for influenza, National Influenza Centres, WHO H5 Reference Laboratories, and key national regulatory reference laboratories based on surveillance conducted by the WHO Global Influenza Surveillance Network (*GISN*).

### **3.2.4. Rapid containment of the initial emergence of pandemic influenza**

The intention of a pandemic influenza rapid containment operation is for national authorities, with the assistance of WHO and international partners to prevent or delay the widespread transmission of an influenza virus with pandemic potential as soon as possible following its initial detection. Rapid pandemic containment is an extraordinary public health action, which builds upon, but goes beyond, routine outbreak response and disease control measures.

The WHO pandemic rapid containment guidance,<sup>20</sup> which is periodically reviewed and updated, outlines what should be done, provides information on how to do it, and serves as the foundation for the development of more detailed operational plans. Rapid containment poses a number of planning, resource, and organizational challenges. The exercising of operational components of pandemic preparedness and response plans, including elements related to pandemic rapid containment operations is strongly encouraged.

### **3.2.5. Providing an early assessment of pandemic severity on health**

As soon as possible, WHO will provide an assessment of pandemic severity to help governments determine the level of interventions required as part of their response. As outlined in section 2, past influenza pandemics have been associated with varying levels of illness and death. Although making an informed assessment of severity early in the course of a pandemic will be challenging, such an assessment will assist countries in:

- deciding whether or not to implement mitigation measures that may be potentially disruptive;
- prioritizing the use of antivirals, vaccines, and other medical interventions;
- managing continuity of health care; and
- communicating with the media and the public and answering queries.

Pandemic severity may be assessed in many ways. One fundamental distinction is an assessment based on direct health effects as opposed to one based upon societal and economic

effects. While societal and economic effects may be highly variable from country to country and dependent upon multiple factors (including the effects of the media and the underlying state of preparedness), WHO plans to assess pandemic severity based primarily on observable effects on health.<sup>21</sup>

Essential components of an effective pandemic influenza surveillance system will include:

- early detection and investigation;
- comprehensive assessment; and
- monitoring.

**Conclusion**, we need a healthy lifestyle to build up a healthy immune system and to avoid disease. Here, “maintain” means a healthy immune system to protect your body. To maintain body immunity, We should eat a variety of food and keep a balanced diet.

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