



“Principles of Prevention of Communicable diseases- A Literature Review”

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Abstract:

A communicable disease is one that is spread from one person to another through a variety of ways that include: contact with blood and bodily fluids; breathing in an airborne virus; or by being bitten by an insect. Most common forms of spread include fecal-oral, food, sexual intercourse, insect bites, contact with contaminated fomites, droplets, or skin contact. Prevention typically consists of methods or activities that seek to reduce or deter specific or predictable problems, protect the current state of well-being, or promote desired outcomes or behaviors.

Key words: Communicable disease, Prevention.

Introduction:

Communicable diseases, also known as infectious diseases or transmissible diseases, are illnesses that result from the infection, presence and growth of pathogenic (capable of causing disease) biologic agents in an individual human or other animal host. Infections may range in severity from asymptomatic (without symptoms) to severe and fatal. The term infection does not have the same meaning as infectious disease because some infections do not cause illness in a host.

Disease causing biologic agents include viruses, bacteria, fungi, protozoa, multicellular parasites, and aberrant proteins known as prions. Transmission of these biologic agents can occur in a variety of ways, including direct physical contact with an infectious person, consuming contaminated foods or beverages, contact with contaminated body fluids, contact with contaminated inanimate objects, airborne (inhalation), or being bitten by an infected insect

or tick. Some disease agents can be transmitted from animals to humans, and some of these agents can be transmitted in more than one way.¹

The major communicable diseases are Chickenpox, Hepatitis B, Hepatitis C, HIV / AIDS, HIV / STDs / Hepatitis, Influenza, Mumps, 2019-nCoV, CRE, Ebola, Enterovirus D68, Flu, Hantavirus. Measles, MRSA, Pertussis, Rabies, Sexually Transmitted Disease, Shigellosis, Tuberculosis, West Nile Virus, Zika.

The examples of communicable diseases are e.g. Influenza, polio, typhoid, measles, mumps, chickenpox, tuberculosis (T.B.), sexually transmitted infections and AIDS².

Top 3 communicable diseases:

The world's deadliest infections, including Tuberculosis, Malaria and HIV/AIDS, have been considered as the "Big Three" infectious diseases (BTIDs)³.

Spread:

Most common forms of spread include fecal-oral, food, sexual intercourse, insect bites, contact with contaminated fomites, droplets, or skin contact.⁴

Communicable disease “Transmitted from one person to another person or from a reservoir to a susceptible host.” E.g.: Tuberculosis etc.

Communicable Period:

Time period require for transmission of infectious agent from reservoir to a susceptible host. Controlled by o Improvement of personal hygiene o Improvement of social hygiene o Awareness about health o Awareness about disease.

Prevention:

Importance:

Prevention is better than cure. It's cheaper too. In fact, preventing future illnesses and preventing complications from existing conditions, are vital to the future sustainability of health systems. For a vaccine that prevents measles, or a medication that prevents a heart attack, the value is obvious.

With respect to human services, prevention typically consists of methods or activities that seek to reduce or deter specific or predictable problems, protect the current state of well-being, or promote desired outcomes or behaviors.

Preventing disease can save lives and money and is the best buy in the health sector. With rising healthcare costs, investments that reduce costs and improve health are particularly important.

3 types of prevention:⁵

- Primary Prevention—intervening before health effects occur, through.
- Secondary Prevention—screening to identify diseases in the earliest.
- Tertiary Prevention—managing disease post diagnosis to slow or stop.

Prevention:

1. Raising the resistance of the population to the disease by:

- i. Good social conditions: -
- ii. Satisfactory housing & adequate diet.
- iii. Vaccination: - After birth

2. Reduction of the human infection by:

- i. Detection & isolation of maximum number of case

Transmission prevented by isolation of patient. Ac. To disease.

Prevention important tips:⁶

- 1. Handle & Prepare Food Safely. Food can carry germs. ...
- 2. Wash Hands Often. ...
- 3. Clean & Disinfect Commonly Used Surfaces. ...
- 4. Cough and Sneeze into a Tissue or Your Sleeve. ...
- 5. Don't Share Personal Items. ...
- 6. Get Vaccinated. ...
- 7. Avoid Touching Wild Animals.
- 8. Stay Home When Sick.

Self care measures:

- a. Rest, Plenty of food
- b. High calorie diet
- c. Safe water supply
- d. Supply safe water
- e. Handle & Prepare Food Safely. ...
- f. Wash Hands Often. ...
- g. Clean & Disinfect Commonly Used Surfaces. ...
- h. Cough & Sneeze In to Your handkerchief. ...
- i. Don't Share Personal Items. ...
- j. Get Vaccinated. ...
- k. Avoid Touching Wild Animals

Methodology: Manual searching and analysis.

Discussion:

Keeping personal hygiene, like taking a daily bath and washing your hands frequently. Hand washing with soap and water is the simplest and one of the most effective ways to prevent transmission of many communicable diseases.⁷

The control of communicable diseases depends on a healthy environment (clean water, adequate sanitation, vector control, shelter), immunization, and health workers trained in early diagnosis and treatment.

This includes preventive measures such as **hand washing, cleaning, disinfecting, sterilizing, and vaccinating**. Other aspects include surveillance, monitoring, and investigating and managing suspected outbreaks of infection within a healthcare setting.

Use proper protection by health care workers like hand gloves while handling infected patients. Proper behavior with infected people.

Conclusion:

1. Prevention is better than cure.
2. Preventing Communicable diseases can save lives and money and is the best buy in the health sector.
3. Preventing Communicable diseases can improve the quality of life, personnel development and economic stability.

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