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Research Article

A COMPREHENSIVE REVIEW ARTICLE ON 5 F'S OF DISEASE TRANSMISSION AND ITS PREVENTION

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ABSTRACT

The 5 F's, that infectious diseases are transmitted from one person to another are through food, finger, fluid, fomite, and faeces. A major public health concern is that infectious diseases affect children more frequently. To increase awareness of health issues and alter behavior in a way that would promote good health and prevent illness, it is crucial to disseminate health information. Children who are still young and developing have little grasp of how contagious diseases spread and the health issues that affect them. A disease will result from an unhealthy lifestyle and activities among individuals. When a disease spreads from one person to another by direct or indirect contact, it is said to be communicable. Indirect contact means includes a range of mechanisms including the usual 5 F's: "finger, food, fomite, faeces, fluid." Direct contact nothing but infectious disease is frequently communicated through direct touch. The 5 F's roles in disease transmission: Food poisoning is caused by eating tainted food. Infections caused by infectious organisms found in faeces that enter the body through the mouth are known as faeco-oral infections. Hands frequently pick up bacteria through direct or indirect contact with contaminated surfaces. A fomite is an inanimate object that is used to transmit an infectious disease from one person to another. Prevention and control measures include, Spend no less than 20 seconds washing your hands with soap and water. Chapels cleaning their hands after using the restroom. Avoid sharing tooth brushes, razors, and use condoms while having sex. Many infectious diseases can be prevented using vaccines.

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INTRODUCTION

5 F's of disease transmission

A robust and healthy country is built on its children. Over 1.2 billion children live on the planet, and 21% of Indians are children. Children who are still young and developing have little grasp of how contagious diseases spread and the health issues that affect them. A disease will result from an unhealthy lifestyle and activities among individuals. The pathogenic pathogens can spread through the 5F's—food, fluid, faeces, finger, and fingernail—and cause significant illness in people.

By learning more about health issues and changing one's behavior, these can be avoided.

Disease

A disease is a specific aberrant state that adversely affects an organism's structure or function on the whole or in part, and which is not immediately brought on by any external trauma. It's common knowledge that diseases are medical illnesses with recognizable indications and symptoms. A disease can be brought on by either internal dysfunctions or external sources like infections. Internal immune system abnormalities, for instance, can result in a wide range of diseases, such as

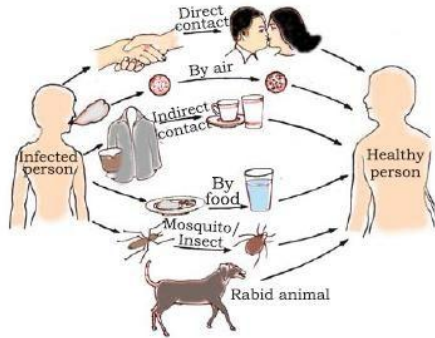
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different types of immunodeficiency, hypersensitivity, allergies, and autoimmune disorders.

Disease Transmission

"Transmission of disease from person to person by direct or indirect contact" is what is meant by communicable disease. Direct interaction Person-to-person contact and droplet transmission are two common direct contact methods for the transmission of infectious diseases. Relative contact: The conventional "5 F's" — "finger, food, fomite, faeces, fluid" — are included in this broad category of mechanisms. Different forms of indirect transmission are possible: • Unclean hands and fingers; • Vehicle born; • Vector born; • Air born;



Role of 5 F's in disease transmission

Food

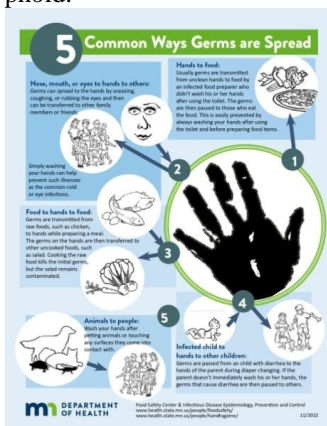
Any substance eaten to meet the body's nutritional demands. Food poisoning is caused by eating contaminated food, and it commonly leads to gastrointestinal illness. For instance, typhoid, gastroenteritis, and diarrhea.

Feces

When infectious organisms found in faeces enter the body through the mouth, it causes illnesses known as faeco-oral infections. Transmission may occur through contaminated food, water, hands, or targets. The following diseases are transmitted via faeces: cholera, polio, hepatitis, typhoid, diarrhea, and others.

Finger

Hands frequently pick up bacteria through direct contact with contaminated surfaces or indirect contact. It is possible to spread the infection to other body areas by rubbing one's eyes, nose, or mouth with contaminated hands. Examples include skin infections, lung infections, and gastrointestinal system infections like typhoid.



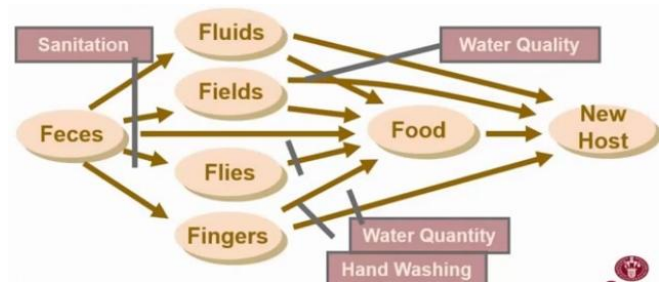
Fomite

A fomite is an inanimate object that is utilized to transmit an infectious disease from one person to another. Examples include beds, linens, towels, tissues, diapers, hairbrushes, forks, knives, and spoons, as well as restroom doors. These inanimate objects are one of the most common sources of illness in people, especially children, since they carry germs that propagate infection.

Fluid

Body fluids are liquids that come from within a person's body and help with nutrient transportation and cell waste disposal. Blood, saliva, semen, vaginal secretions, mucus, and urine are a few examples. HIV, Hepatitis B, and Hepatitis C are a few examples of diseases that can be spread by bodily fluids.

F- Diagram



Preventive measures

Prevention is always better than cure. Cooperation between school employees, the health department, doctors, and students is essential to halting and controlling the spread of disease. Measures for prevention and control include:

Often Hand Washing

Spend no less than 20 seconds washing your hands with soap and water.

Cooking, visiting a sick person, and using the restroom all need washing your hands. After handling trash, stroking an animal, sneezing, coughing, or blowing your nose, wash your hands. Washing your hands is the most effective, cost-effective, and efficient technique to prevent cross-infection.

Hygiene of food

Pathogens can be found in food. Cleansing your hands, surfaces, and objects. Always put a lid on the cooked meal. Keep raw and cooked food separate to avoid food borne sickness. Always wash produce before eating it.

Feco-oral disease transmission prevention

Chapels cleaning their hands after using the restroom.

Prevention of disease transmission by fomite

Reduce exposure and sanitize any potential bugs by cleaning frequently. Wear personal protective equipment, such as gloves, masks, uniforms, and boots, as necessary.

Body fluids-related disease transmission prevention

Treat all bodily fluids, including blood, as contagious Avoid getting a tattoo, ensure that the needles are clean, avoid sharing tooth brushes or razors, and use condoms while having sex.

Different Protection

Many infectious diseases can be prevented using vaccines. For instance, the vaccine against salmonella typhi protects typhoid.
- Hepatitis B immunization to prevent exposure to the disease
treating a worm infection with deworming for instance, albendazole (under supervision of health personnel)

General measures include

Using an O.R.S. for diarrhea, drinking carrot juice to get rid of worms, taking fluids and eating a liquid diet to treat typhoid, remaining at home while ill, having access to safe drinking water, and maintaining environmental cleanliness are all examples of preventative measures.

Ethical clearance

This article is a purely a narrative review article hence it is not required an ethical clearance.

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Conflict of Interest – Nil

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