



A REVIEW ARTICLE ON FOOD POISONING

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ABSTRACT

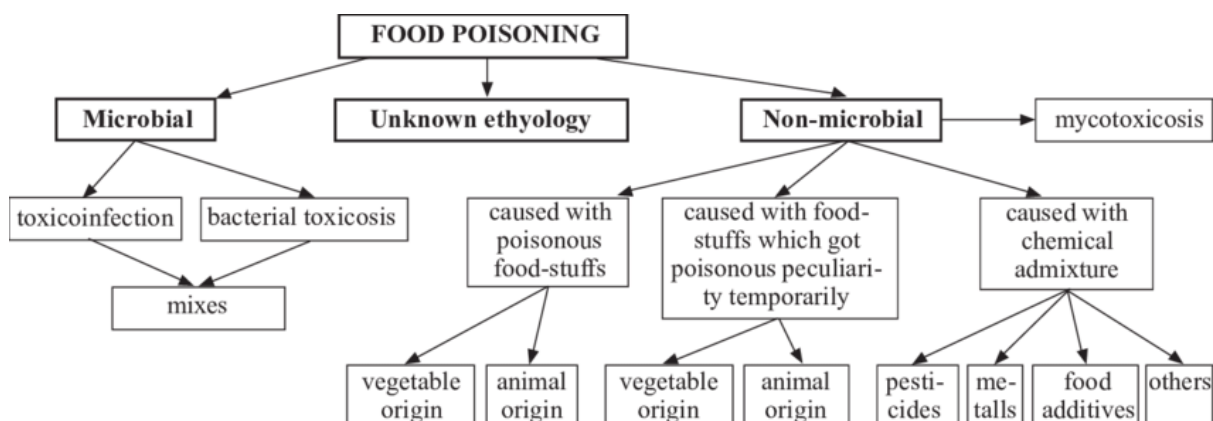
One of the most common health problems world-wide is foodborne illness, and are particularly rampant in third World countries such as India, mainly due to a relative lack of sanitation and public hygiene. Illnesses caused by eating non-bacteria food is called food poisoning. There is often more than one reason for an outbreak or outbreak, for example, food may be left at room temperature for many hours, resulting in failure to eliminate or kill Bacteria levels are very dangerous. The majority of episodes may be directly linked to infection or infectious agents spread by the faecal-oral route and transmitted either on fomites, on contaminated hands, or in food or water. Most cases of food poisoning are considered moderate and their symptoms resolve spontaneously within several days without treatment, while severe and chronic cases require hospitalization.

Keywords: Poisoning, toxicity, diaries, pollution, diarrhoea

INTRODUCTION

Food poisoning is a set of symptoms resulting from eating food contaminated with bacteria, The World Health Organization estimates that there are more than 1000 million cases of acute diarrhoea annually in developing countries, with 3-4 million deaths. Our lifestyles have changed over the last few years which include an increasing reliance on ready prepared meals, eating out rather than cooking and taking more holidays abroad laboratory studies have shown that the ingested food is the direct cause by planting the bacteria that cause poisoning, and food poisoning caused by bacteria is the main cause in more than 80% of food poisoning case. Some foodborne disease outbreaks that were once contained within a small community may now occur across larger communities or on global dimensions Knowing, where your food is sourced from and the standards of care and safety that have been applied may help to reduce the incidences of food poisoning.

Classification of Food Poisoning



1. Inoculum size:

The number of microorganisms that must be ingested to cause disease varies considerably from species to species. For *Escherichia coli*, *Giardia lamblia*, or *Entamoeba*, as few as 10-100 bacteria or cysts can produce infection, while 10⁵-10⁸ *Vibrio cholera* organisms must be ingested orally to cause disease.

2. Toxin Production:

The production of one or more exotoxins is important in the pathogenesis of numerous enteric organisms. Such toxins include enterotoxins, which cause watery diarrhoea by acting directly on secretory mechanisms in the intestinal mucosa. Food poisoning depends upon host defence mechanisms e.g. Normal flora, Gastric acid, Intestinal motility.

3. Accidental poisoning:

Young children are especially susceptible to accidental poisoning in the home because of curiosity and a tendency to explore, and the elderly, who are often confused about their medications. Countries cannot completely eliminate this problem by enacting laws, monitoring places where food is prepared, and periodically examining people involved in preparing food. Food preparation shops have the greatest responsibility towards the consumer by purchasing meat from approved and experienced food preservation places, and these stores must also provide the necessary equipment for preserving meat in particular and other types of food in general. Ingested (ingested) and absorbed toxins cause symptoms throughout the body because they often deprive the body's cells of oxygen or activate or block the action of enzymes and receptors. Skin exposure to toxins can cause various symptoms, such as rashes, pain, and blisters.

Also, prolonged exposure to toxins can cause skin inflammation. Eye exposure to toxins can damage the eye, causing eye pain, redness, and decreased vision.

4. Deliberate poisoning:

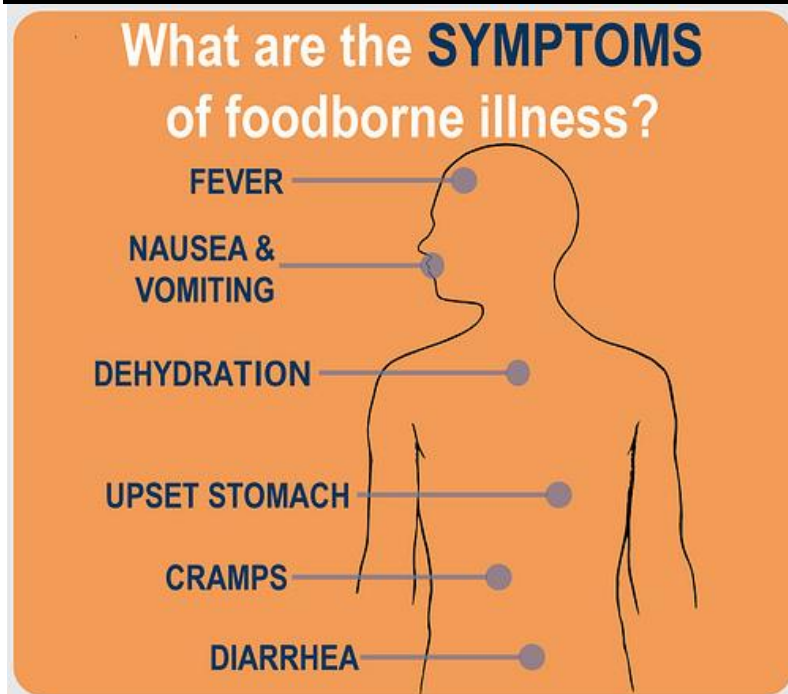
Poisoning may be a deliberate attempt to kill or commit suicide. Most adults who attempt suicide by poisoning use more than one drug and also drink alcohol. Poisoning can be used to weaken a person. Noting that good hygiene practices before, during and after food processing reduce the chances of exposure to foodborne diseases. A common awareness trend among the public health community is that regular hand washing is one of the most effective defences against the spread of foodborne diseases. Foodborne diseases can also be caused by pesticides or medicines in foods, in addition to natural toxic substances, including poisonous mushrooms or reef fish.

5. Prevention of bacterial food poisoning:

Proper frozen storage of foods helps prevent food poisoning. Prevention is often the role of government, by setting strict rules for health and public services for veterinary surveys of animal products in the food chain, from the agricultural field to manufacturing and delivering products to supermarkets and restaurants. In the home, prevention is mainly food safety practices. Many forms of bacterial food poisoning can be prevented, even if the food has been contaminated, by adequately cooking the food, and either eating it directly and quickly, or freezing it effectively. However, one of the boxes had defects in it, which resulted in contamination of the meat kept inside.

Symptoms:

Symptoms of poisoning vary depending on the poison, the amount used, the age, and the health of the person using it. Some poisons are not very uremic syndrome. Other bacterial pathogens that transmit disease through food include:



Prevention:

1. Buying groceries

- Buy meat and seafood items only from hygienic outlets.
- Do not buy items whose expiry date has elapsed.
- Do not buy items containing undercooked or raw animal-derived ingredients.
- Buy only pasteurized milk or cheese.
- Do not buy eggs which are cracked or leaking.



2. Storage

- Take groceries directly home and store immediately in the refrigerator.
- Always store raw meat, poultry, or seafood in plastic bags, so that drippings do not contaminate other items in the refrigerator.
- Purchased hot foods should be eaten immediately, or kept hot ($> 60^{\circ}\text{C}$), or refrigerated.
- Do not store eggs in the egg-section of the door (provided in most refrigerators), since adequate cooling does not occur. Place them inside cartons and store them in the main section of the refrigerator.

3. Temperature requirements

- a) Never leave cut vegetables or meat in the open. Store them in the refrigerator or cook them.
- b) Ensure that the temperature in the main section of the refrigerator is always below 4°C, and that of the freezer is below -18°C.
- c) Cook all meat and seafood thoroughly before eating. Never consume undercooked oysters, clams, mussels, sushi, or snails.
- d) Cook eggs thoroughly until both the yolk and white are firm. Never eat runny yolk.

CONCLUSION

Food borne intoxications are the most wide spread global public health problem in present scenario. An incident of food poisoning will cause serious financial loss, sometimes resulting in business closure, bankruptcy, and loss of work. However, the true incidence of food borne illnesses are unknown for the many reasons, including poor responses from affected person during visiting the health officials, misdiagnosis of the illness, improper collection of samples for laboratory analysis and improper laboratory examination. So there is a need to implement strict food safety laws. Food inspectors can at any time enter a place where food is being prepared. They will inspect the food and can take away samples for testing. Premises found to be unfit can be closed, persons found guilty of breaking the laws can be fined, imprisoned, customers suffering from food poisoning can claim financial compensation.

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