

Pathogens and their Severity

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ABSTRACT

The term 'Pathogen' refers to any infectious microorganism or agent which causes and transmits disease in a living host, the term pathogen was technically used in the 1880s. There are always numerous pathways through which pathogens could be introduced inside the host body. Soil has the most favorable conditions in protecting pathogens. Diseases that are caused through infections are usually pathogenic diseases and not all diseases are caused by pathogens.

Keywords: Microorganism; Pests; Pathogen; Virus

INTRODUCTION

Pathogenicity term is coined as the ability of the pathogen to inflict disease. Few governments have come up with the idea to elaborate the term and by this standard identity of pathogen and non-pathogen could be found out [1]. A pathogen is classified and differentiated based on its ability to produce toxins, input tissue, colonize, pirate nutrients and attack the immune system [2] of the host. Humans can be affected by many kinds of pathogens which include viruses as well as microorganisms that cause diseases like sneezing, coughing, fever, etc. Some of those symptoms are due to the pathogen itself while the rest depends on the immune system of the infected person.

Despite modern technology and numerous attempts, no fixed remedy is found to check the progress of prion diseases. Vaccines are a great potential that increases the immunity of the host body and enables it to fight with the actual pathogen when the host is infected. Almost all the diseases caused by the pathogens have vaccines however there are certain diseases like HIV, Dengue, and Chikungunya [3] that have no vaccines available. The treatment of viral infections depends exclusively on treating the signs of the contamination and such treatment can increase the immunity development time of the host and in return protecting the host when the actual pathogen attacks. Pathogens use different ways to spread themselves like sexually, coughing and sneezing, contaminated food and water are also the main sources of food poisoning caused by disease-causing microorganisms, mosquito is main responsible for the spread of pathogens. Pathogens damage the tissues and cells by secreting

the toxins which have the ability to replicate themselves. Some pathogens may cause mild problems while others have a fatal effect. Viral infections are mainly caused by a pathogen called a virus, it is not a living organism like bacteria and fungi [4] and is represented by a DNA code, protein, and fat. Viruses have the ability to invade the host and fix themselves to the host's cell. The virus injects its DNA into the cell and forces the cell to replicate it multiple times and during this process, the cell dies with a large quantity of virus present in the host body. Symptoms of the infection depend on the organism responsible for that infection.

CONCLUSION

Prevention of infections or diseases caused by pathogens could be achieved by following careful and simple preventive methods. Apart from maintaining good health simple steps should be followed like washing hands regularly with soap for at least 20 seconds, taking proper and updated vaccination on time for different age groups, surfaces of daily use must be kept clean, Stay in the home when symptoms of infection or disease are found, protection against insect bites, Take proper counseling from the medical professional in case the treatment in case, it is found to be not working.

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