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Communicable Diseases: A Review



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ABSTRACT

As per WHO communicable disease is defined as Communicable, or infectious diseases, are caused by microorganisms such as bacteria, viruses, parasites and fungi that can be spread, directly or indirectly, from one person to another. Some are transmitted through bites from insects while others are caused by ingesting contaminated food or water or we can simply explain it had transmitted from one person to another person through air, water or by physical touch. Mostly communicable diseases are air borne. Communicable disease include malaria, Ebola, hepatitis, HIV/AIDS, chicken Pox, dengue fever, nipah, finally the Covid 19.





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INTRODUCTION

As per WHO communicable disease is defined as Communicable, or infectious diseases, are caused by microorganisms such as bacteria, viruses, parasites and fungi that can be spread, directly or indirectly, from one person to another. Some are transmitted through bites from insects while others are caused by ingesting contaminated food or water or we can simply explain it had transmitted from one person to another person through air, water or by physical touch. Mostly communicable diseases are air borne. Communicable disease include malaria, Ebola, hepatitis, HIV/AIDS, chicken Pox, dengue fever, niph, finally the Covid 19. According to WHO report the vaccination for communicable disease have a preventable in action and which also reduce the severity of the disease.

Malaria

Malaria is an acute febrile illness caused by Plasmodium parasites, which are spread to people through the bites of infected female Anopheles mosquitoes. It is preventable and curable. Malaria caused by different plasmodium parasite like plasmodium vivax, plasmodium falciparum, plasmodium malariae, plasmodium ovale. Vaccination was taken for malaria which help significant reduction in disease. For malaria falciparum the vaccination taken is Mosquirix for child 6 weeks to 17 months. 247 million cases: of malaria estimated worldwide in 2021 in 84 endemic countries. 619 000 malaria deaths worldwide in 2021, 95% (234 million) of malaria cases reported in Africa in 2021,96% of malaria deaths (593.000) reported in Africa in 2021.when the malaria had affected in Africa they had face one main problems financial outcome of the people. In some region of sub-Sahara many of mosquito become resistant to insecticides.

Ebola

Ebola Virus Disease is a serious infectious disease spread between humans from person to person. Infection is transmitted by direct or indirect contact with the blood, body fluids or secretions (stool, urine, saliva, semen) of infected people. Ebola is not air borne disease; it had transmitted from fruits bats of the Pteropodidae family are natural Ebola virus hosts. The vaccine used for Ebola ERVEBO (Ebola Zaire Vaccine).

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Hepatitis

Hepatitis is an inflammation of the liver that is caused by a variety of infectious viruses and

non-infectious agents leading to a range of health problems, some of which can be fatal. Here

hepatitis a is contagious disease. These can be transmitted from physical touch or caring each

other. The vaccination used is BIOVEC-A.

CHICKENPOX

Varicella (chickenpox) is an acute, highly contagious disease caused by varicella-zoster virus

(VZV), a member of the herpes virus family. It can be transmitted from touch and saliva etc.

the vaccination for chicken pox is the varicella vaccine. The programs were conducted by

government of India. For example, a data sheet given below explain the rising trends of

chicken pox in Kashmir in India.

Dengue fever

Dengue is a viral infection caused by the dengue virus (DENV), transmitted to humans

through the bite of infected mosquitoes.to prevent dengue different vaccine had used DENV-

1, DENV-2, DENV-3, and DENV-4.

TUBERCULOSIS.

Tuberculosis (TB) is caused by bacteria (Mycobacterium tuberculosis) that most often affect

the lungs. Tuberculosis is curable and preventable. TB is spread from person to person

through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs

into the air. A person needs to inhale only a few of these germs to become infected. The

world TB had celebrated in march 24. The symptoms of TB are chest tightness, shortness of

breath, cough with sputum and blood at times, weakness, weight loss, fever and night sweat.

The diagnosis of TB can be done by blood testing, sputum testing, and tuberculin skin test.

And we had also multi drug resonant testing. The treatment can be down like antimicrobial

agents. The TB contains both first line and second line drugs had used. The first line drugs

included such as isoniazid, streptomycin, kanamycin, rifampicin are used. If first line not

effected, we had used the second line drugs. Second line drugs included pyrazinamide,

rifambutin etc. and finally they had introduced the dots therapies.

Nipah

Nipah virus infection is an emerging bat-borne zoonotic disease transmitted to humans through infected animals (such as bats and pigs) or food contaminated with saliva, urine, and excreta of infected animals. Here is no special vaccination for niph we had taken immune boosters. Conducting a survey is a play key role.

Covid19

The virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe. Many of people were mentally destroyed and many of the students or adolescents depressed in home their complete future were blocked. But the government had completely support to the people and the vaccination used for covid19 is cosheild, covaccine. The vaccination had taken in 2doses and one booster doses had taken. The mode of transmission of Covid is through the air borne and it had transmitted through from animals and birds. At that time, we had avoided some type's fruits in our diet. And many of them economic conditions were tough especially low-income countries. These many problem we had faced at time of covid 19. After the first outbreak the DNA of microorganisms had changed the it came to new form called omnicorn. The people were worried about it.

THE DIFFERENT PROGRAMS CONDUCTED ON COMMUNICABLE DISEASES IN ALL OVER IN INDIA:

In many countries, they have conducted different programs for different communicable diseases. In India, they have conducted different studies to eliminate the communicable disease. They conducted a comprehensive study on malaria to complete the elimination of diseases in 2030. The various things they have done include national vector-borne. control program (NVBDCP) and other programs conducted like monovalent rapid diagnostic tests (RDT) Long-lasting insecticide-treated nets (LLINs), and Artemisinin-based Combination Therapy(ACT)not only monovalent rapid diagnostic testing had conducted bivalent rapid diagnostic testing both micrograms plasmodium vivax and plasmodium falciparum and later they had introduced pesticides and larvicides. During the study, they faced many challenges with the migratory population. In India, many people have migrated to the city for their work or their livelihood. Occasionally they go back to their hometown because the possibility of malaria is higher and the chance of spread is higher. Mainly they had a survey in which

certain areas or types of population is affected and studied. They had data analysis, advertisement and awareness programs. Finally, they concluded that the elimination of malaria in 2030 is difficult but can be attained. India has faced problems like low socioeconomic status, poverty, and no proper housing facilities, no improved health system, education systems in India. And all these enhancements of these things can avoid or eradicate malaria in India.

A study was conducted in South India on health workers. They surveyed Ebola in healthcare only in India people it is an international concern. The different methodology they adopted is a cross-sectional study and chi-squad chart. The cross-sectional study in which they had prepared a questionnaire, especially in multi-specialty hospitals of Telangana in India. The study was conducted out of 278 people in that 257 responded to the questionnaire 92.4% had responded and 61.1% were female, Physicians (45.5%) pharmacists (23.7%), and nurses (17.1%) responded to the study. They had concluded that most of them knew about it through radio and television Media. Few people know about it through newspapers and non-professional magazines. Next time these had in national wide. Finally concluded that lack of knowledge and awareness of programs.

A cross-sectional survey was conducted in India about hepatitis in that survey or study about the awareness, vaccination and knowledge about the hepatitis B virus all over India. Public awareness about the prevention, treatment, diagnosis and mitigation of the disease and the knowledge about vaccination. They conducted an online survey of both health workers and adults around 18 and they divided it into four domains. Domains include Domain a, domain B, Domain C and Domain D. domain A indicates the cause and spread of disease, domain B indicates the organ affected and the consequence, domain C indicates treatment and Domain D indicates vaccination. The survey was conducted by data collection, preparation of a questionnaire, demographic report, and domain-specific analysis. The report stated that only 25%have fair knowledge about HBV. And 44% have poor or incorrect knowledge about it. In domain-specific analysis, .47% have good knowledge about domain B and 43% have good knowledge about domain C and domain D. The survey concluded that people don't have proper knowledge about HBV. India needs to introduce more public health intervention programs, including the importance of vaccination, awareness programs, etc.

In northern India, they conducted a survey profile of dengue fever in children. Dengue fever is a self-limiting disease and mainly affects children which may affect in mortality and

morbidity of the country. The main objective of the study is to the clinical profile of dengue fever in children who are below the age group 15 and the survey was done under the department of paediatrics in medical college. The survey lasted for 17 months. The survey had down 130 patients 39 patients without warnings, 78 patients with warnings, and 13 patients with severe category of dengue fever. The survey concluded that early determination can prevent the disease.

Northern India had conducted a survey outbreak in Kashmir. The conducted-on chicken pox continuous 3 years (2013 to 2015). They conducted the study based on by using data analysis, and preparation of a questionnaire. They found things like low-income family who had only one room as their home as chicken pox is a communicable disease spreading also increased it can spread fast to their whole family. For communicable diseases, the temperature plays a key role in the spreading of disease. Next, they found out that many are people not immunized properly. They need awareness about the immunization programs should be conducted.

The study about the programs conducted on communicable diseases: that help promote the health and wellbeing of society. The health of the community or persons is very important, it is one of the key features of life so to protect our health we must do something like focusing on diet and nutrition is one of the main factors to control communicable diseases. Other methods like controlling pollution, next another factor like the socioeconomic status of the society, weaker, education, unemployment, violence, and homelessness. Providing current facilities and infrastructures, and using the given resources adequately, the mind-set of patients should be improved in very basis, obtaining medical check-ups, and maintaining cleanliness or the proper sanitation is another factor to prevent communicable diseases. While doing these we have many advantages like improving the self-health conditions of the person, increasing the community's well-being or their health conditions, and increasing the standard of living. If this improved all these communicable diseases would prevent and reduced all over the globe.

Communicable disease is a serious problem all over the world to controlling and preventing the disease is an important parameter. We know that in 2019 covid the whole world and world became still. Nobody knows what to do. How did had orginate? Does any vaccine have to prevent communicable disease? Even the government doesn't know what to do. However, we managed the conditions like finding the new vaccine. Another communicable disease niph

also causes problems but not as much as the covid in the world. Nipah was recently affected in south Kerala the problem it doesn't current vaccination has not yet been found.

In my prospect communicable diseases can be prevented by proper education of people, especially in rural areas, preventive action, help for the low economic status country for vaccination purposes, the importance of self-hygiene in between people, and providing proper shelter. Proper sanitation in the community help to improve health conditions, and we educate the people about communicable diseases, other method like health check-ups can also prevent.

We can work together for the good health of the community or world and a better future.

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