

The Impact of Viral Diseases on Human Health

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Abstract

This study aims to identify the impact of viral diseases on human health, what are the viral diseases that affect humans, how are viral diseases transmitted to humans? A questionnaire was prepared via Google Drive and distributed to the population aged 25-55 years, men and women, in Western Region (Mecca - Jeddah - Taif). As for the questionnaire, it was distributed via the social networking program (WhatsApp) 550 questionnaires were distributed, and 540 responses were obtained via email to the principal researcher. it included that fever and fatigue. Viruses can enter the body through inhalation of air 95%. Viral diseases are dangerous to humans and their overall health.

Keywords: The role, of nursing, in health volunteering, and its impact on society.

Viral disease or viral infection (1) (in English: Viral disease) Most viruses cause infectious diseases, the clinical symptoms of which differ fundamentally between species, even within the same family (2). It occurs when disease-causing viruses invade an organism's body, and infectious virus particles (virions) attach to and enter cells (3). This is a table of the

most important viruses with clinical symptoms: A virus is a submicroscopic infectious agent that reproduces only within the living cells of an organism. Viruses infect all forms of life, from animals and plants to microorganisms, including bacteria and archaea. Since Dmitry Ivanovsky's 1892 article describing a non-bacterial pathogen infecting tobacco plants and the discovery of

tobacco mosaic virus by Martinus Beijerinck in 1898, more than 6,000 virus species have been described in detail from millions of virus species in the environment. Viruses are found in almost every ecosystem on Earth and are the most numerous types of biological entity. The study of viruses is known as virology, a subspecialty of microbiology. The virus is widespread and causes a variety of serious diseases in humans, animals and plants. They are spread by a special distributor or mechanically. Most viruses do not lose their viability over the years but become infected as soon as they are exposed to the right conditions (living cells). Some viruses lose their properties in the external environment. Often, only one virus particle can cause a viral infection. For example, from a single poliovirus molecule, billions of viruses are formed in a matter of hours. Reproduction of the virus is associated with amino acids in the cytoplasm.¹ The sum of millions of virus molecules is visible under a microscope in the form of crystals or Xcells. The pathogenesis of the disease is that it is relatively small compared to other pathogens and does not develop in a normal artificial nutrient medium. Except for a few bacteriophages, they are lab. has been shown to reproduce under all viruses that can be studied in the laboratory are "measured" more accurately by various physical methods. Their diameter is 10-300 microns. It can be in the form of a stick, a ball or a string. Many virus pathogens that cause disease in plants and animals are round in shape. Wheat and alfalfa mosaic the virus looks like a bacterial rod or an arrow. The structure of the virus has been identified by electron microscopy and X-rays. They all contain an inner substance, mainly nucleic acid, which is surrounded by a protein shell. The chemical composition of only a few species of the virus has been studied. The structure of vaccines virus is probably as complex as that of ordinary bacteria. It contains nucleoproteins, carbohydrates and lipids. Nucleic acid occurs in the form of deoxyribose, and the lipid group occurs in the form of cholesterol, phospholipids,

and neutral fats. Phytopathogenic VIRUS contains ribonucleic acid (RNA), while pathogenic VIRUS contains RNA or DNA (deoxyribonucleic acid). Some VIRUS is obtained in the form of purified preparations, some of which form pure true crystals (eg, VIRUS of tobacco necrosis), while others form liquid crystals (e.g., tobacco mosaic VIRUS) or shale sediments. Ultra-centrifuged to separate and purify virus, various physicochemical methods are used.^{2,3} The classification of viruses and the symbols that represent them have not yet been adopted. They are given the same species and genus names as animals and plants, folk expressions, various abbreviations, are called by the genus name of the diseased organism, numbered next to it, or grouped into seeds and families according to VIRUS morphological,

chemical, and reproductive properties. The Latin name for the VIRUS genus includes the word virus (eg, enterovirus), and the family name includes the word viridae (eg, Poxviridae).

Material and Methods:

The study began in (in western Region (Mecca - Jeddah - Taif) in the Kingdom of Saudi Arabia), and the study ended with writing the data collection in September 2024. The researcher used descriptive analysis, an approach that uses quantitative or qualitative description of the social phenomenon (the impact of viral diseases on human health). The independent variable (the global prevalence of viral diseases) and the dependent variable (the local prevalence of viral diseases). This type of study is characterized by analysis, reason, objectivity, and reality. It is also concerned with individuals and societies, as it studies the variables and their impact on the health of the individual, society, and the consumer, and the spread of diseases and their relationship. For demographic variables such as age, gender, nationality, and marital status. Status and occupation (4), and use the Excel 2010 Office suite pie chart to sort the results (5). The questionnaire is a wonderful and

useful tool for collecting a huge amount of data, but the researchers were not able to conduct personal interviews with the participants in the online survey, and the questionnaire was only answered electronically, because the questionnaire consists of fifteen questions, all of which are closed-ended.

Results and discussion:

The percentage of approval to participate in a questionnaire entitled (The impact of viral diseases on human health) was 100%, while the percentage of their ages was as follows: from the ages of 25-34 years it was 26.3%, from the ages of 35-44 years it was 15.8% and from the ages of 45- 55 years old, 57.9%, while their nationalities were all Saudi men and women, and their gender was: the percentage of males was 84.2% and the percentage of females was 15.8%, and their marital status was as follows: government employees, male and female, 73.7%, private sector employees, male and female, 21.1%, and male and female perpetrators, 5.2%. As for the questions related to the responses to the questionnaire, they were as follows: First question: Can diseases be transmitted? Some viral diseases are transmitted from one person to another person. Are some diseases transmitted by insects or other animals? Question 2: Signs and symptoms may vary depending on the small organism causing the infection, but do they include fever and fatigue? Yes 94.7%, No 0%, and I don't know 5.3%. Question Three: Infectious or viral diseases are disorders caused by small organisms such as bacteria, viruses, fungi, or parasites? Yes, 94.7%, No, 5.3%, and I don't know, 0%. The fourth question: Can't viruses reproduce on their own? Yes, 52.6%, No, 42.1%, and I don't know, 5.3%. Question 5: Human impact on animals directly contributes to the spread of zoonotic diseases throughout the world? Yes 84.2% I don't know 15.8% and 0%. Question Six: Viruses grow only in living cells? Yes, 73.7%, No, 10.5%, I don't know, 15.8%. Question Seven: The vast majority of viruses do

not cause diseases to humans: many of them contribute to supporting ecosystems and some maintain the health of living organisms, including fungi? Yes, 47.4%, and no, and I don't know, tied, 26.3%. Question Eight: Personal hygiene is very important to protect against various viruses? Question 9: The surrounding environment is important in determining the extent of human health and its impact on him? Yes 100%. Question 10: Viral infection can be caused by several factors, and sometimes the causes are unknown, in order for the virus to survive within a population group? Yes 94.7% and I don't know 5.3% or 0%. Question eleven: Washing hands well before eating significantly reduces diseases? Yes, 100%. Question 12: Can viruses enter the body through breathing air? Yes 94.7%, No 0%, and I don't know 5.3%. Question Thirteen: Are there a small number of viruses that can infect both humans and animals? Yes 78.9%, No 21.1% and I do not know 0%. The penultimate question: Can some viruses change the way cells work, and can lead to serious diseases? Yes 88.9% and I do not know 11.1% nor 0%. The last question: The last question: Ensuring healthy and clean habits, using them on a daily basis, and including them in the daily routine changes a person's immunity? Yes 100%. (table no.1)

Table:no-1: The impact of viral diseases on human health according to participants.

The impact of viral diseases on human health	Yes	No	I don't know
Can diseases be transmitted? Some viral diseases from one person to another. Some diseases are transmitted by insects or other animals?	95%	0%	5%
Signs and symptoms may vary depending on which organism is causing the infection, but include fever and fatigue.	95%	0%	5%
Signs and symptoms may vary depending on which organism is causing the infection, but include fever and fatigue.	80%	0%	20%
Can viruses enter the body through breathing air	95%	0%	5%

There is a study entitled (To Study the Effects of Viral Diseases on the Human Body and Their Effective Treatment) (6) in 2021, it concludes that, it is less difficult to diagnose during an infectious disease outbreak. During this period, the specific clinical symptoms of each disease are clearly expressed. In addition to the patient's life history, the history of the disease is also inquired. Whenever possible, determine when and with what symptoms the disease has started. In the following days, they are asked what symptoms were added to them and how the initial symptoms developed. The patient himself may not know what is worth noting in the anamnesis for the medical professional. Therefore, it is necessary to get the necessary information from him through questions. In particular, it is important to know when the body temperature has risen, how many degrees it has reached, and at what time of the day it is most pronounced. Headaches, sleep disturbances are not only common symptoms but also specific to some infectious diseases. It is even important to know where the head hurts. Information such as the appearance of rashes on the body, their appearance, in what order they rash, how long they persist, also helps to

determine the true nature of the disease. In the diagnosis of intestinal infections, information such as abdominal pain, where it is most often felt, nausea, vomiting, diarrhea, recurrence of these symptoms makes it easier to diagnose.

Conclusion:

The result of the study was that viral diseases and their impact on humans, can diseases be transmitted? - Transmission of some viral diseases from one person to another. Are some diseases transmitted by insects or other animals? 95%, Signs and symptoms may vary depending on the organism causing the infection, but include fever and fatigue 80%.

Signs and symptoms may vary depending on the organism causing the infection, but include fever and fatigue. Viruses can enter the body through inhalation of air 95%. Viral diseases are dangerous to humans and their overall health.

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