Paper 1

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# Paper 1

**List and explain at least three physical factors affecting community health**

Physical factors have a direct impact on public health. Several physical factors are there that influence the public, yet the major factors are proximity to toxic substances, unavailability of healthy and clean food or water, and community design. The burning of fossil fuels releases various toxic gases into the air resulting in smoke. The inhalation of the polluted air makes an individual more prone to respiratory diseases. Additionally, the releases of methane and carbon dioxide gas from spray cans, CFCs can result in damaging the ozone layer that is responsible for protecting us from harmful UV rays. The exposure to the UV rays results in various skin diseases (National Research Council, & Committee on Population, 2013).

The ingestion of contaminated water or food may also have adverse effects on public health. Due to industrial discharge, a substantial concentration of viruses is detected in the water. Many infectious diseases such as cholera, typhoid, jaundice, and malaria can be spread through contaminated water.

Community design also has a greater impact on public health. A densely populated communicate can serve as an ideal condition for the spread of the disease. Additionally, communities located in swampy areas are more prone to diseases because of a lack of a proper sewage system.

Thus, it is necessary to keep the environment clean to prevent the disease spread.

**Describe the organization of the World Health Organization (WHO) and two of the six**

**points in the World Health Organization’s agenda.**

 World Health Organization is an organization that is concerned with international public health. This organization was founded on April 7, 1948, and is also a member of the United Nations development group ("What we do", 2019). This organization aims to provide quality care to every individual while also advocating for health issues. World health organizations also have a six-point agenda according to which the whole organization works.

One of the main agendas of the world health organizations is advocating for evidence-based practices. The responsibility of the WHO organization is not only promoting health but to promote and spread awareness regarding the evidence-based practices in health care facilities. The evidence-based practices rely upon scientific evidence. The implementation of evidence-based practices may reduce the chances of errors in decision making regarding patient care.

Another main agenda is to reduce the spread of diseases, thus reducing morbidity rates. The WHO team not only tracks the spread of the disease but also helps in preventing them. The team spread awareness regarding the hygiene and precautionary measures to stop the disease spread. Further, the organization also proposes several interventions that can facilitate in improving the health of people all around the world.

**Define epidemiology, and explain why case rates are important to epidemiologists**

The term epidemiology can be defined as the branch of medicine that deals with the distribution and determinants of health-related events and possible control of diseases (MacMahon & Pugh, 1970)*.* A set of criteria that facilitates in deciding whether an individual has a particular disease or not is known as a case. On the other hand, the term rate is defined as the number of events that occur at a given amount of time in a specific population. The case rates are extremely important for the epidemiologists as by using the information that is presented in the case rate can help them in determining the root cause of the diseases. It also facilitates them in locating the most vulnerable population that is more to or at the risk of getting several diseases.

By using the information gained from the case rates, the epidemiologists can also help in proposing solutions that may help in controlling the disease. Epidemiologists may also use the information to conduct experimental studies to determine the effectiveness of medicine or vaccination that may use to cure certain diseases. They can also use the information to prevent any future outbreaks. This will also ensure the timely response in the future if any outbreak of the specific diseases occurs. Additionally, the case rates can help in improving the vaccines that may help in preventing the disease. The case rates may also aid in improving life expectancy rates.

**References**

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