



Climate Change and its Impact on Health



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Abstract

Climate change is a serious threat to global public health, with potential consequences ranging from physical and respiratory illnesses to mental health problems and food security. Mitigating these impacts requires concerted efforts to reduce greenhouse gas emissions and adapt health systems to new challenges. The objective of the research is to reflect on the impacts that climate change is causing on health today. The methodology used was qualitative research, based on a bibliographic review. The result was that the globalized world and greenhouse emissions are causing continuous illnesses in people; society must create communication programs that train the population to reduce the impacts that climate change is causing today.

Keywords

climate change;
CO emissions;
diseases;
infections;

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Introduction

The impacts of climate change on human health are as dangerous as they seem, but there is still much to be done to raise awareness of these risks and promote specific policies and actions, particularly at the local level. It is necessary to better understand the relationship between the environment and health in order to apply the principles of sustainability in personal and professional activities (Lin & Wang, 2021; Pao & Chen, 2019). This situation leads to a reflection that is already observed by some scientists and is expected to intensify in the future. The viruses that have been appearing for more than 10 years are conditions that, including COVID-19 (Suryasa et al., 2024), are conditions that are endangering humanity.

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According to [Arata de Bellabarba \(2008\)](#), it is necessary to intervene decisively, highlighting the link between health, environment and sustainability, in particular the formulation of policies and the planning of actions where awareness campaigns on this issue must be promoted through health care associations and institutions and include them in future training plans for health care providers, as well as in continuing education courses.

Although climate change is an undeniable fact, it is possible to reduce the severity of its consequences, especially in terms of health, this sector needs to develop appropriate research methods to evaluate the impact of political decisions on health ([VijayaVenkataRaman et al., 2012](#); [Hallegatte, 2009](#)).

The ideology of sustainable development is perhaps one of the most significant that humanity has reached since the industrial revolution began. From the individual to large human groups, everyone is immersed and responsible, and therefore aware that with the daily attitudes and actions that are being developed, the quality of life could be improved and a better planet delivered to our future generations in this time. In this sense, the importance of advancing dissemination processes in the new generations is relevant, these topics have to be present in schools, schools and health centers ([Montiel, 2023](#)), so that they prepare to face the challenges to health and everyday life.

Materials and Methods

A bibliographic search was carried out to understand the possible implications of climate change on human health, a qualitative analysis of the possible increases in diseases caused by the conditions that are occurring was carried out, the deductive method was also used to propose actions to prepare the population to face this natural situation that is going on.

Analysis and Discussion of the Results

It is a real fact that climate change has caused different diseases and according to experts they will continue to increase. In this reflection, an analysis is made of the types of conditions that are occurring and will continue to increase, for example those related to the increase in temperatures ([Matés et al., 1999](#); [Emerit et al., 2004](#)).

Heat waves have been present in the last year, reaching more than 40° degrees in some territories and thermal sensations of up to 48° ([Climate, 2024](#)), affecting different regions not only in the Southern Cone, these heat waves increase the risk of heat-related illnesses, such as heat stroke and dehydration, especially among vulnerable groups such as the elderly, children, and people with chronic illnesses (World Health Organization [\(WHO, 2018\)](#)).

Also diseases transmitted by Vectors that have been geographically distributed such as mosquitoes and ticks, which transmit diseases such as dengue, malaria and Lyme disease. Areas that were previously not affected by these diseases now face new risks due to changes in temperature and precipitation patterns, such as the regions of Latin America and the Caribbean ([Padilla-Rodríguez, 2023](#)).

One of the health problems that arise are respiratory problems, mainly due to the increase in temperature and air pollution aggravated by the most frequent and severe forest fires, all of which worsens diseases such as asthma and obstructive pulmonary disease chronic (COPD). Higher levels of ground-level ozone and fine particles in the air are directly linked to respiratory and cardiovascular problems ([IPCC, 2014](#)).

Changes in weather patterns affect agricultural production, causing food shortages and increasing food insecurity. This leads to higher levels of malnutrition, especially in vulnerable areas. Additionally, there is growing concern about the decreasing nutritional value of crops due to increasing levels of carbon dioxide in the atmosphere ([Miranda, & Zavaleta-Cortijo, 2023](#)).

Problems of water scarcity exacerbated by droughts and melting glaciers increase the risk of waterborne diseases such as diarrhea, cholera and other gastrointestinal infections ([Khan et al., 2015](#); [Houshian et al., 2006](#); [Khan et al., 2017](#)). Floods, which are more frequent due to climate change, also contaminate water sources and spread these diseases. The current contamination of rivers and the insensitivity that exists in their care means that these diseases increase more every day ([Berberian, & Rosanova, 2012](#)).

Today, global migratory movements are a reality; climate change is a factor that contributes to these massive displacements of people, since living conditions become unsustainable in some regions (Faist, 2018). All of this causes the spread of diseases, post-traumatic stress and lack of access to basic health services in displaced populations.

Another health condition due to the impact of climate change is mental problems, caused by extreme weather phenomena, such as hurricanes, floods and droughts, as well as economic and food insecurity, all of which causes an increase in stress and anxiety, depression and other mental problems. These problems can be exacerbated by the loss of livelihoods and uncertainty about the future (Quintana Solórzano, 2017), and are associated with post-traumatic stress disorder, anxiety disorder, depression, and feelings of grief and loss.

Conclusions

An analysis was carried out of the health impacts caused by climate change, in the globalized world and greenhouse emissions are causing diseases in people, in this context communication programs must be planned that train the population based on reduce the impacts that climate change is causing today and with it diseases that affect society.

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