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MORALITY BEFORE KNOWLEDGE

Climate change and public health in this new era: Understanding health disasters due to climate change

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ABSTRACT

The environment and natural resources are undoubtedly under threat from a number of factors as a global society, such as desertification, water scarcity, climate change, deforestation, loss of biodiversity, and reliance on toxic energy sources. Furthermore, the outcome of the Covid-19 epidemic is still unknown. This study aims to explore the contemporary interaction between public health and climate change. We need to begin developing new conceptual approaches—that is, better ways of thinking, speaking, and doing. This is the first idea we need to consider, and we should do it in light of climate change, a particularly large-scale and intricate environmental disaster. Expanding our perspectives on health communication is necessary, as is delivering messages that encourage meaningful involvement and wise approach decisions rather than inspiring apathy, fear, or melancholy. In order to accomplish an affordable way of life in the natural environment and to develop comprehensive and forward-thinking methods that stop prolonged climate change, we must provide communities and governments with our help.

KEYWORDS: climate change; human activities; public health

1. Introduction

The environment and natural resources are undoubtedly under threat from a number of factors as a global society, such as desertification, water scarcity, climate change, deforestation, loss of biodiversity, and reliance on toxic energy sources. Furthermore, we are currently dealing with the Covid-19 pandemic, a catastrophe whose outcome is completely unknown. This issue is intricately linked to poverty, socioeconomic inequality, growing population pressures, human health, and ultimately human survival (Lagro, 2018).

It is essential that we as a society recognize that we have a shared obligation to address this global catastrophe (Hathaway and Maibach, 2018). In order to combat climate change, public health experts work closely with environmental scientists, social scientists, and other experts (Mercuriali et al., 2022).

The US Centers for Disease Control and Prevention (CDC) and other public health organizations are paying more and more attention to climate change. Eleven "Priority health actions for climate change" are listed in the CDC's policy on climate change and public health. This entails keeping an eye on the environment, illness risk, and disease occurrence

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in addition to pinpointing the highest-risk populations and geographic areas (Valentová and Bostik, 2021).

Informing decision-makers, medical professionals, and the general public about the health hazards associated with climate change is also a major goal, as is creating and executing strategies to address the health risks associated with it. Communities can use a wide range of policy tools, such as smart power grids, green construction laws, tree conservation regulations, and urban design guidelines, to produce climate-resilient environments (Zhong and Huang, 2019).

2. Methods

We need to begin developing new conceptual approaches—that is, better ways of thinking, speaking, and doing. This is the first idea we need to start with, and we should use it whether dealing with climate change, a natural disaster risk, or problems of extraordinary scope and complexity.

2.1 Thinking

Regarding considerations, tackling climate change calls for a more comprehensive approach that crosses the current borders of the health sciences and formal healthcare segments, as well as a longer duration of treatment than is customary in healthcare settings. (Rudolph et al., 2020). As noted by Mors et al. (2010), although being extensively addressed, society still has low levels of awareness and concern regarding contemporary environmental challenges, particularly climate change. Thus, in order to raise awareness and deepen comprehension of these environmental catastrophes, good communication is essential (Johnson, 2020).

2.2 Communication

Recent years have seen amazing advancements in the creative application of communication to address issues related to public health (Anwar et al., 2020). Behavioral choice theory, social marketing, risk communication, media advocacy, entertainment education, and interactive decision support systems are some of the approaches that were described (de-Graft Aikins and Akoi-Jackson, 2020). In the past few years, there has been a significant advancement in the use of creative communications to address public health issues.

Public health faces a wide range of difficulties, necessitating an equally wide range of intervention options. The definition of inclusivity promotes thinking about different strategies (Salmon and Poorisat, 2019). A few of these innovations have been assessed and shown to be useful. The strategy makes use of interactive decision support systems, social marketing, risk communication, behavioral decision theory, media advocacy, and entertainment education.

2.3 Action

Climate change action must provide a number of social, economic, environmental, and health benefits. enhanced seasonal climate forecasts, food security, clean water availability, emergency and disaster response systems, and early action (De Meyer et al., 2021).

Early detection of hunger and insurance coverage can both produce many beneficial benefits and lessen the destruction caused by future climate change. The ability to adapt to climate change is crucial for all nations, but it becomes even more crucial for developing nations whose economies heavily rely on industries like agriculture, which are particularly

sensitive to the effects of the climate and are more difficult to adjust to than industrialized nations (Bouman et al., 2020).

3. Results and Discussion

Numerous major health risks posed by climate change can be mitigated by implementing robust public health surveillance systems. Reviewing initiatives to evaluate and improve public health monitoring systems' ability to assist health-related disaster adaptation due to climate change is our goal. Selected national public health associations also provide us with information (Ganesh and Smith, 2018). Researchers, professional societies, and federal, state, and local public health agencies have made important first steps toward evaluating and enhancing surveillance capability. However, many initiatives have been made by organizations operating on their own, without the assistance of a common conceptual framework or approach. To be more precise, the necessity of long-term thinking is the ideal strategy to start with. The necessity of systems thinking is the second. The third is that the issue needs to be adequately framed and communicated. The chance to assume leadership roles in the health sector is the fourth. Finally, there's the chance to receive extra health benefits. To increase the public health surveillance capacity required to safeguard people's health, a more thorough and methodical approach is required (Varughese and Purushothaman, 2021).

3.1 Long Term Health

Organizers of long-term health focus on the feature of present demands and satisfy that need. In an ideal environment, they would also anticipate future demands and make plans to allocate resources to meet those needs. Up until recently, planning for one's health was rarely done over several decades. On the other hand, public health and preventive medicine must have experience in dealing with climate change in order to predict health demands on a never-before-seen timeline. Leaders are required by the Great Peace Law of the Haudenosaunee (Iroquois Confederation of Six Nations) to take into account how their decisions would affect the seventh generation of people. Practically speaking, it seems that public health and preventive medicine need to incorporate science and future technologies, such as scenario creation, modeling, and forecasting, as well as prompt action to address upcoming issues and obstacles (Navon et al., 2021).

3.2 System Thinking

Health professionals and other professions dealing with very complicated issues face a challenge from climate change. A continual cycle of development, accumulation, restructuring, and replenishment connects human systems like financial markets and transportation policy, natural systems like ice sheets and forests, and the integration of human-nature systems like agriculture and watersheds. Numerous characteristics of such an integrated human-nature system are very relevant to climate change disasters (Berry et al., 2018). First, feedback loops and complementary impacts exist. For instance, urban heatwaves are more likely to occur as a result of climate change; when these occurrences happen, there is a greater need for air conditioning, which increases the amount of coal burned in power plants and exacerbates climate change. Second, thresholds and nonlinearities are features of complex systems. This could result in a "tipping point," when minor adjustments have a big effect. Ultimately, heterogeneity occurs in complex systems both in space and time. There will be an increase in temperature (Mambrey et al., 2020).

3.3 Positive Messages

Experts in health realize that effective communication is essential. To safeguard their well-being, people must take certain actions, some of which are contradictory, perplexing, or downright irritating: altering their diet, getting colonoscopies, taking medication, using condoms, etc. When it comes to climate change disasters, communication does more than only changing behavior; it also shapes attitudes and disseminates facts. People must be well informed on climate change in order to support preferred government policies and make appropriate decisions regarding their own, their families', and their communities' actions. They need information that promotes constructive interaction in order to prevent pessimism, hopelessness, and despair. Health professionals need to encourage people to adopt appropriate personal habits and group decisions that will protect their health from the effects of climate change disasters.

This seems to be the aim that many communications about climate change fail to achieve. First, the goal of social marketing is to influence people's behavior in terms of interpersonal communication. Understanding the competition, identifying the target audience, establishing win-win agreements, segmenting the market, and focusing on expected returns are crucial phases in message development and delivery. Second, high-stress, high-concern, or contentious circumstances are where risk communication is most frequently employed. In order to develop information, cooperation, trust, and belief in order to solve a problem, risk communication places a strong emphasis on two-way communication. Thirdly, the more popular phrase "health communication" refers to communication that tries to educate individuals about health, support persons making health-related decisions, and/or modify health-related behavior.

Effective climate change communication is receiving more and more attention. This challenge needs to stay at the forefront of health activities given the potential for compelling communication to directly and indirectly advance public health and the potential for ineffective communication to harm individuals. Additionally, public health and preventive medicine have strong traditions of health communication.

4. Conclusions

Instead of inspiring disinterest, anxiety, or despair, we should extend our perspectives on health communication, provide messages that inspire meaningful participation, and encourage wise approach decisions. In order to accomplish an economical way of living in the natural environment and to develop comprehensive and forward-thinking techniques that prevent extended climate change disasters, we must provide communities and governments with our help. An increasing amount of research is concentrating on the effects that climate change is having both now and in the future on human health. This includes measuring the harm and illness caused by major weather events, heat waves, and floods; it also includes the rise in respiratory, vector, and marine diseases; and it includes risks to food and water sources. Lastly, in order for actions to combat climate change to produce advantages for human health, the environment, the economy, and society at large, we must recognize and encourage co-benefits.

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