

MENTAL HEALTH IN THE CONTEXT OF CLIMATE CHANGE: ANALYSIS OF THE PSYCHOLOGICAL IMPACTS ON VULNERABLE POPULATIONS

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Abstract: Climate change has intensified in recent decades, generating devastating consequences for the environment and, consequently, for human health. Mental health has emerged as a critical area of concern, since extreme weather events such as natural disasters, droughts and floods directly impact the psychological well-being of vulnerable populations. This study aims to analyze how climate change influences mental health, focusing on the psychological effects these changes have on communities in situations of vulnerability. The aim of this analysis is to explore how climate change impacts the mental health of vulnerable populations, discussing the main risk factors involved and addressing strategies that can be adopted to minimize these effects. This discussion is relevant because recognizing the emotional consequences of the climate crisis creates a basis for developing public health practices and psychosocial approaches that promote resilience and adaptation. By focusing on the psychological impact of climate change, we aim to contribute to a more comprehensive and inclusive response to the challenges of a changing world. This is a literature review, based on a qualitative approach, using the Scielo, Google Scholar and PubMed databases. To enhance the research, the health descriptors “climate change”, “mental health”, “psychological impacts” and “solastalgia” were used, with a time frame between 2007 and 2020. The methodology adopted for this analysis consists of a comprehensive literature review, using academic sources and reports from health and environmental organizations. The study addresses how extreme weather events, food insecurity and forced displacement affect mental health, leading to an increase in disorders such as anxiety, depression and post-traumatic stress disorder (PTSD). In addition, the social inequalities that aggravate these impacts are discussed, considering that populations with less access to health resources and services are more susceptible to the adverse effects of climate change. It is concluded that climate change poses a significant threat to mental health, especially for vulnerable populations already facing socio-economic challenges. It is essential that public health policies integrate mental health considerations into climate change adaptation and mitigation strategies. Promoting psychological support programs and implementing targeted interventions can help minimize the negative impacts on mental health, strengthening the resilience of affected communities



and promoting a more effective response to climate crises.

Keywords: Mental Health, Family and Community Health; Climate Change and Public Health.

INTRODUCTION

The increasing intensification of climate change has generated global concerns not only in the environmental and economic spheres, but also in the sphere of mental health. Extreme events, such as heat waves, droughts, floods, and wildfires, have been affecting communities around the world, particularly those in situations of socioeconomic vulnerability. Studies indicate that these populations are the most susceptible to the psychological impacts of climate change, due to factors such as limited adaptive capacity and prolonged exposure to environmental disasters. This scenario has several consequences on the mental health of affected individuals, including symptoms of stress, anxiety, depression, and, in some cases, post-traumatic stress disorder (PTSD) (Berry et al., 2018).

In addition to the direct repercussions caused by climate disasters, the indirect effects of climate change also impact psychological well-being. Food insecurity, loss of housing, and forced displacement are factors that enhance the psychological distress and emotional vulnerability of the affected populations (Hayes et al., 2018).

As a result, people living in rural and coastal areas, especially in developing countries, are among the most affected, as they depend on natural resources for survival and often lack access to adequate health services. Given this reality, it is essential to understand the link between climate change and mental health in order to develop psychological support interventions and public policies that protect and promote mental well-being in vulnerable populations (Cianconi et al., 2020).

In contexts where psychological support resources are scarce, such as in developing countries, the impact of these events is exacerbated by the difficulty of accessing specialized care, leaving populations in an even more vulnerable situation (Doherty and Clayton, 2011).

Therefore, the relationship between mental health and climate change also involves the indirect



and chronic effects, such as food and economic insecurity generated by environmental degradation, which affect mental health cumulatively and prolongedly. Research suggests that the psychological impact of climate change is particularly relevant for rural and coastal communities, which rely heavily on the natural environment for livelihoods and income. In these populations, the perception of environmental instability contributes to the loss of identity and connection with the land, generating a situation called “eco-anxiety”, characterized by constant concern with the future of the planet (Albrecht et al., 2007).

In addition, studies show that certain groups, such as the elderly, children, and people in situations of socioeconomic vulnerability, are more likely to develop mental health problems in response to the impacts of climate change. Children and adolescents, in particular, face long-lasting psychological effects, due to emotional vulnerability and growing understanding of environmental risks (Sansone and Sansone, 2011).

As a result, the challenge of adapting and strengthening the resilience of vulnerable populations thus becomes a priority for public policies, which must integrate mental health and environmental sustainability into their approaches. Thus, understanding these impacts is essential to formulate interventions that mitigate the effects of climate change on mental health and promote a more resilient future for communities globally exposed to this phenomenon (Swim et al., 2010).

The objective of this analysis is to explore how climate change impacts the mental health of vulnerable populations, discussing the main risk factors involved and addressing strategies that can be adopted to minimize these effects. Such a discussion is relevant, because by recognizing the emotional consequences of the climate crisis, a basis is created for the development of public health practices and psychosocial approaches that promote resilience and adaptation. With attention focused on the psychological impact of climate change, it is intended to contribute to a more comprehensive and inclusive response to the challenges of a changing world.



MATERIALS AND METHODS

This is a literature review, based on a qualitative approach, using the Scielo, Google Scholar, and PubMed databases. To improve the research, the health descriptors “climate change”, “mental health”, “psychological impacts”, and “solastalgia” were used, with a time frame between the years 2007 and 2020.

Inclusion Criteria:

1. Articles published between 2007 and 2020.
2. Studies that explore the relationship between climate change and mental health.
3. Peer-reviewed publications in recognized scientific journals.
4. Studies that address direct and indirect psychological impacts of climate change.

Exclusion Criteria:

1. Articles that do not address the connection between climate change and mental health.
2. Studies that do not present empirical data or that have inadequate methodologies.
3. Publications in non-indexed journals or with a low impact factor.
4. Reviews that do not consider the impact of climate change on psychological well-being.

Guiding Question:

What are the impacts of climate change on mental health, and what are the health policy responses to address these emerging issues?

Boolean Markers:

“climate change” AND “mental health”.

“psychological impacts” AND “climate”



THEORETICAL FOUNDATION

Climate change has generated a series of stressors that directly impact the mental health of populations, especially those who are already in a situation of vulnerability. Extreme weather events, such as hurricanes, wildfires, and floods, trigger acute psychological trauma, resulting in a significant increase in levels of anxiety, depression, and post-traumatic stress disorder (PTSD). Communities affected by natural disasters often face these conditions, which are further aggravated when we consider the effects of gradual changes, such as rising sea levels and desertification. Environmental degradation, coupled with climate variability, generates a sense of loss and despair, affecting the mental health of individuals who depend on natural resources for their livelihoods (Berry et al., 2018).

In addition to direct stressors, climate change contributes to social and economic problems, such as food insecurity and forced migrations. Food insecurity, resulting from environmental degradation, is strongly associated with mental health problems, including depression and anxiety disorders. In an analysis carried out, it was observed that vulnerable populations, such as farmers and rural workers, are especially impacted, since their lives and well-being are closely linked to environmental conditions (Mastrorillo et al., 2016).

Furthermore, it is emphasized that the “eco-anxiety”, developed by children, characterized by constant concern with the future of the planet and its consequences, can affect the emotional development of these children, making them more susceptible to mental health problems. Older people, meanwhile, face additional risks, such as the loss of social ties and loneliness, especially after climate disasters, which can lead to isolation and depression. Low-income populations, on the other hand, often face difficulties in accessing mental health services, limiting their support options during times of crisis (Khan et al., 2020).

Given the significant impact of climate change on mental health, it is critical to implement interventions that address both causes and effects. Strengthening social support networks and promoting



community resilience are essential to mitigate psychological impacts (Bennett et al., 2016). Capacity building and awareness programs can help communities develop strategies to cope with and adapt to climate change, thereby promoting mental health.

In addition, public policies that integrate mental health and adaptation to climate change are necessary. Training mental health professionals on the effects of climate change can improve responsiveness to these issues by ensuring that interventions are culturally appropriate and accessible (Reid et al., 2019). Ongoing research on the relationship between climate change and mental health is vital to inform practices and policies that can mitigate these effects, ensuring a holistic and effective approach.

Faced with this complex scenario, it is crucial to implement policies and practices that promote resilience and mental health in affected communities. Strengthening social and community networks is an essential component of recovery from climate disasters, providing emotional and practical support that can help individuals address the challenges resulting from climate change. Capacity building programs that teach coping and adaptation skills to climate change can also help communities better prepare for extreme weather events, thereby minimizing mental health impacts (Mastrorillo et al., 2016).

Therefore, it is essential that mental health professionals are trained to understand the implications of climate change on psychological health. They suggest that training professionals at the intersection of mental health and climate change can improve the quality of care provided and ensure that interventions are culturally appropriate and accessible. Ongoing research on the interrelationship between mental health and climate change is critical to inform practices and policies that can mitigate these effects, promoting a holistic and effective approach (Swim et al., 2010).

In short, the impact of climate change on mental health is a multifaceted phenomenon that requires an integrated and comprehensive response. Understanding the complex interactions between climate factors and psychological effects is vital for formulating strategies that ensure a healthy future for all, especially for those already facing social and economic disadvantage. The proactive approach, which incorporates mitigation and adaptation measures, is essential to protect vulnerable populations



and promote resilience in the face of an uncertain future (Hayes et al., 2018).

CONCLUSION

The analysis of the impacts of climate change on mental health reveals a complex and worrying relationship, especially in vulnerable populations. The direct and indirect effects of these changes, which manifest themselves through extreme weather events, environmental degradation, and socioeconomic uncertainty, have generated a significant increase in mental health problems, such as anxiety, depression, and post-traumatic stress disorders. It is evident that the most affected populations are those already facing socioeconomic challenges, including children, the elderly, and low-income communities, who often lack access to adequate mental health resources.

The evidence presented throughout this work indicates the urgent need for policies and interventions that address not only the physical impacts of climate change, but also its psychological repercussions. Strengthening social networks, training mental health professionals on climate issues, and implementing resilience support programs are essential measures to mitigate these adverse effects.

Additionally, it is crucial to promote public awareness of the intersection between mental health and climate change in order to create a more inclusive and proactive environment. The integrated approach, which considers environmental and psychological factors holistically, will enable communities to address current and future challenges more effectively.

Finally, this work underscores the importance of continuing research in this area, exploring the dynamic relationship between climate change and mental health. Only then will it be possible to develop effective strategies to protect vulnerable populations and promote a sustainable and healthy future for all. The urgency of action in this sphere is indisputable, given the rapid pace of climate change and its increasingly visible impacts on global public health.



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