

WPA Discussion Paper: Geopsychiatry; climate change and geopolitical determinants of mental health

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World Psychiatric Association

Geopsychiatry Action Plan Group:

WPA Geopsychiatry; climate change and geopolitical determinants of mental health

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Introduction:

We are living in an era of fast-changing geopolitical challenges with an increasing number of countries experiencing recurrent, protracted chronic crises within and across countries. Conflict, populism, the erosion of human rights, climate change, inequalities, gender-based violence, terror, and fragile security are changing the cultural and historical architecture of communities which is adding to the global mental health burden and presents global challenges [1]. The occurrence of various psychiatric disorders, such as depression and post-traumatic stress disorder, tends to rise in the aftermath of past collective traumas, such as conflicts and natural disasters [1]. Among the factors that shape these trends on a global scale, one theme that emerges prominently is the impact of climate change [2].

The overall global health effects of both mental health and physical health of climate change are not well quantified, however, what is known is that countries in the global South are bearing the brunt of its impact with greater food insecurity leading to famine and hunger, increased rates of suicides, fear, anxiety, and physical illness including chronic respiratory morbidity [1, 3]. There are nearly one billion people living with mental health conditions, yet in low- and middle-income countries, three out of four do not have access to mental health services [2]. The impact of climate change is compounding the already extremely challenging situation for mental health and mental health services globally.

The complexity of this current dynamic requires new approaches to the study of risk and protective factors for mental disorders and the best ways to manage them. In this sense, Geopsychiatry is a new field of Psychiatry that aims to explore the intersection of geography and psychiatry [4].

Geopsychiatry assesses the role of geopolitical determinants in the mental health of populations [4]. Geopolitical determinants of health are processes and factors that determine health and health response, which relate to nation states, policies, and the relationships between them [1, 5]. These factors tend to produce influence on people's lives which are particularly connected with 'placed' entities such as national boundaries, continental geographies, and proximity/distance from neighbours. Geopolitical approaches to mental health not only allow for more in-depth understanding of the geographic and political context within which mental health policy decisions are made and reversed, but also highlight cultural influences on the way policy decisions are mediated in different societies, including along individual/collective lines [1, 5].

Over the next few decades there will be a greater urgency to respond to these multi-dimensional challenges and to take heed and pay greater attention to the structural issues that create them. Many theories and outcomes in global mental health including social determinants of health are framed from the perspective of the global North [6]. These do not consider ongoing challenges and the reality in the distribution of political, geographical,

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environmental, and socio-economic factors across low and middle-income countries. Geopolitical determinants of health have been well recognised by the World Health Organisation (WHO) and are increasingly being discussed in academic circles in psychiatry, economics, and foreign policy [1]. Furthermore, there is an additional layer, which is that of community and cultural differences that influence community responses. For example, in socio-centric cultures, geopolitical determinants will affect community participation in response to various geopolitical events. Understanding geopolitical determinants of health [3] can give mental health professionals and policymakers an important additional perspective which is essential and relevant to all countries about matters on which coordinated international action is needed.

Climate change poses a great threat to humans as it continues to affect every part of the world and efforts to understand its effects on mental health would benefit from a Geopsychiatry approach. Therefore, this paper aims to review the current evidence on climate change and mental health and to discuss future directions for research and practice.

Evidence

The influence of climate change on mental well-being manifests through a diverse range of pathways, both direct and indirect. This impact encompasses long-term consequences arising from chronic factors like global warming, as well as immediate effects stemming from acute events such as heat waves and environmental disasters [7]. Furthermore, the exploration of the intricate relationship between individuals and their environment has given rise to novel notions within the realm of mental health and concepts like ecological anxiety or grief and solastalgia have emerged as a result [8].

Instances of severe weather events, such as floods and storms, have been associated with increased prevalence of depression, post-traumatic stress disorder, and various anxiety disorders [9]. Within the spectrum of climate-related mental health consequences, specific attention has been directed towards the vulnerability of two distinct demographics: the younger generation and the elderly. Moreover, gender differences emerge, with women facing a higher likelihood of experiencing depression, anxiety, and stress-related disorders, while men are more prone to suicide mortality [10].

Studies on global warming has revealed a noteworthy association: for every 1°C rise in ambient temperature, mental health mortality, including organic mental disorders, suicide, and self-harm, increased by 2.2%. Similarly, mental health morbidity, particularly affecting mood and anxiety disorders, as well as schizophrenia, showed a 0.9% increase. These impacts were more pronounced among individuals aged 65 and above, as well as among men [6]. Moreover, being exposed to temperatures over 30-32°C was associated with decreased levels of positive feelings and increased irritability and fatigue. These effects were greater for women and people with low socio-economic status. Low-income people may have more difficulty in accessing methods for adapting to increased temperatures, and

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therefore suffer more from climate change [6, 11]. These findings emphasize the influence of rising temperatures on mental health, underscoring the significance of addressing climate-related mental health concerns.

Ecological anxiety or grief encompasses the feelings of stress and apprehension stemming from the anticipation of future environmental changes or the sense of loss associated with ongoing ecological degradation. Children, adolescents, and individuals whose livelihoods are closely intertwined with the land experience heightened vulnerability. Moreover, individuals with limited access to mental health care often grapple with more acute forms of eco-anxiety or grief, exacerbating the challenges they face in navigating these psychological distresses [8, 12].

Finally, solastalgia encompasses a profound distress that arises when one realizes that the cherished location they call home is undergoing a physical desolation. This phenomenon becomes evident through a profound assault on one's sense of place, eroding the feeling of belonging and identity associated with that specific environment, leading to a deep sense of distress brought about by its profound transformation. Populations which cultural roots have a greater connection with the environment, such as indigenous people, are particularly vulnerable to this phenomenon [8].

Global Challenges

The mental health consequences of climate change are still poorly understood. Nevertheless, it is evident that countries in the global South bear the heaviest burden of its impact, grappling with heightened environmental challenges while having limited coping resources at their disposal. Despite this, the majority of studies examining the mental health impacts of such events originate from high-income countries, and there is a notable lack of comprehensive preventive and treatment strategies in place [6].

There are many global climate change summits that routinely discuss the multifaceted dynamics of climate change from the economic point of view and recognised as a predominantly physical health emergency; but not much attention has been given to the nexus between changes in these new weather patterns and mental health. At the Glasgow COP (Conference of the Parties) 26 [13] health was chosen as a priority area for science, however the programme did not fully include mental health and mental illness into its considerations. However, a report by the Intergovernmental Panel on Climate Change (IPCC) [14] published in February 2022, revealed that rapidly increasing climate change poses a rising threat to mental health and psychosocial well-being; from emotional distress to anxiety, depression, grief, and suicidal behaviour.

The mental health impacts of climate change are unequally distributed with certain groups disproportionately affected because of the many compounding geopolitical factors [6]. Worsening mental health will bring huge additional personal and economic costs. Climate

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change is adding to the growing global awareness that geopolitical factors play a major role in the mental health and well-being of individuals [3, 5]. However, some of the solutions to mitigating and adapting to climate change can also create improvements for mental health.

Recommendations

Leadership by the WPA is context dependent if it is to address the multiple factors which are urgently needed. The evidence strongly indicates the need for integrating mental health considerations within the scope of climate change actions and vice versa. This must include the range of mental health issues as described universally in the various diagnostic classification systems. Reflections on ranges from minor mental morbidities to serious mental disorders or childhood problems to disorders of the elderly are needed in interventions that aims to integrate mental health and climate change actions. However, these actions are not exclusive to or are restricted to the mental health and climate change as they are equally valid for the other multi-dimensional crises affecting the mental health of the global population.

- 1) Risk monitoring and a watch for early warning signs are critical in prevention or implementation of early interventions that should be seen in parallel with assessment of vulnerability.
- 2) Developing an appropriate workforce, that can address psychosocial components of mental health and wellbeing, is important. The informal workforce such as community health workers or lay volunteers must become more structured. Policy decisions on syllabi for the mental health workforce need critical attention. Furthermore, training must incorporate the need for emergency preparedness.
- 3) Interventions that include actions to mitigate climate change effects on health need to be incorporated into the routine evidence-based strategies available to address the range of mental health issues.
- 4) Interventions themselves must pay close attention to climatic conditions and consequent medical comorbidities. Vocational rehabilitation programmes for chronic mentally ill persons are challenged by the clinical, cognitive and disability related status of the population under consideration. Very often the environmental factors do not receive due attention, resulting in dire medical consequences. For example, cottage industry based vocational skills training –are viewed as easy to deliver and market. However, these programmes need to be informed about factors such as pollution, toxicity, and extreme heat.
- 5) Research to understand the relationship between climate change and the onset of perpetuation of mental health problems must be promoted for deeper understanding. Funding bodies must pay heed to the urgent need for this.

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- 6) Proper governance can help adaptation of climate change action which can in turn mitigate several mental health related issues. The WHO Policy document of Climate Change [2] clearly recommends the role of governance

Conclusion

Climate change poses a significant threat to mental health, especially among the most vulnerable populations. Policy-making, research and clinical practice should focus on actions that prevent, mitigate, and respond to the mental ill health arising from this global crisis and international factors. Taking a Geopsychiatry approach could prove invaluable in understanding health, illness, and health-care delivery and their complex relationships from a supranational and international viewpoint [15].

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