(Reviewed Manuscript - Version of Record to Follow)

EDITORIAL:

MENTAL HEALTH IN THE ERA OF CLIMATE CHANGE: A RISING EMERGENCY FOR PAKISTAN

Rizwan Taj

Chairperson Dept. of Psychiatry, PIMS

ABSTRACT

Climate change has transformed over the past decades from a distant environmental issue to an immediate existential problem. Pakistan, which consistently ranks in the top ten most climate-vulnerable countries in the Global Climate Risk Index, stands at the forefront of this reality. Heatwaves in Karachi, recurrent droughts in Sindh and Baluchistan, the devastating floods in 2022 affecting over 33 million people, and in the year 2010 super floods have highlighted the urgent threat. The psychological effects of climate change on Pakistan's population are still not well understood, despite the fact that attention is frequently focused on the loss of infrastructure and physical health effects. The additional pressures of climate- related issues call for urgent attention to mental health policies and services, which are already under strain.

KEYWORDS

Climate change, Environmental Challenge, Natural disasters, Geopsychiatry

INTRODUCTION

Climate change has transformed over the past decades from a distant environmental issue to an immediate existential problem. Pakistan, which consistently ranks in the top ten most climate-vulnerable countries in the Global Climate Risk Index, stands at the forefront of this reality¹. The overlap between climate and psychiatry is gaining recognition within geopsychiatry, a field that investigates the impact of environmental and geopolitical elements on mental well-being. In Pakistan, disasters caused by climate change combine with pre-existing social factors like unemployment, poverty, rural—urban migration, weak health systems, and political instability, are amplifying their impact on mental health².

Extreme conditions of weather, like sudden flooding in Khyber PakhtunKhwa, the encroaching Sea in Sindh's coastal regions, and heatwaves in Punjab, not only devastate the homes and livelihoods but also displace communities, disrupt families, and erode cultural connections. These disruptions often appear

(Reviewed Manuscript - Version of Record to Follow)

as acute psychological distress, post-traumatic stress disorder, depression, and eco-anxiety^{3,4}. Persistent exposure to droughts and lack of food security intensifies ecological grief, despair, and suicidal ideation⁵.

Notably, migration and displacement caused by environmental decline, as observed in Sindh and South Punjab, have led to cultural bereavement and identity crisis, increasing vulnerability to mental health problems⁶. Data from Pakistan and various low- and middle-income countries indicate that displaced populations and individuals living in poverty are more significantly affected, resulting in a "polycrisis" where environmental, economic and social stresses converge⁷.

CHALLENGES IN PUBLIC HEALTH

Healthcare system of Pakistan is not equipped to handle the psychological and social impacts of climate change. Primary healthcare systems often do not incorporate mental health into disaster response, resulting in survivors of floods, droughts, and heatwaves lacking psychological first aid or longer-term support⁴. Vulnerable population, such as women, children, the elderly, and those with pre-existing mental health disorders, face the amplified risks⁵.

Climate change indirectly exacerbates mental health issues by increasing food and water scarcity, elevating the prevalence of infectious diseases like dengue and malaria, and causing loss of livelihoods⁸. These factors contribute to chronic stress, prolong cycles of poverty, and strain coping strategies. The outcome is a heightened prevalence of psychiatric conditions, often unrecognized in national disaster data^{9/10}.

POSSIBLE STEPS FOR PAKISTAN

Pakistan requires an urgent climate policy that includes mental health considerations. Steps forward may involve:

- 1. **Policy Integration**: Adaptation policies for climate change need to include assessments of mental health impacts².
- 2. **Disaster Preparedness**: Incorporating mental health assistance into support disaster response systems is crucial, which includes training of first responders and community health personnel in psychological first aid⁴.

(Reviewed Manuscript - Version of Record to Follow)

- 3. **Community Resilience**: Local efforts like community discussion groups can create safe environments for addressing eco-anxiety and fostering resilience¹¹.
- 4. **Research and Data**: It's essential to conduct locally relevant studies to measure the psychological impact of climate-related disasters in Pakistan and guide culturally appropriate interventions⁶⁷.
- 5. **Capacity Development**: Psychiatry programs need to incorporate connections between climate and mental health, preparing future practitioners with the understanding to respond effectively⁸.

CONCLUSION

The mental health community in Pakistan, including psychiatrists, psychologists, social workers, and policymakers, holds both a moral and professional duty to tackle the psychiatric effects of climate change. The climate emergency is not a distant threat; it is currently altering the lives of millions of individuals nationwide^{1/10}. Acknowledging and addressing its effects on mental health is crucial for building a resilient society. Focusing on mental health as a central to climate initiatives allows Pakistan to adopt a comprehensive, compassionate and sustainable approach to one of the most significant challenges of our era.

REFERENCES

- Eckstein D, Künzel V, Schäfer L. Global Climate Risk Index 2025. Bonn: Germanwatch; 2025. Available from: https://www.germanwatch.org/sites/default/files/2025-02/Climate%20Risk%20Index%202025.pdf
- World Bank. Climate and health vulnerability assessment: Pakistan. Washington (DC): World Bank; 2023. Available from: https://documents1.worldbank.org/curated/en/099070324142031034/pdf/P50199317ac51302 718f4d1733583b5c276.pdf
- 3. Sheikh S, Saleem S, Riaz H. Environmental change and floods: the long-ignored effects on mental well-being in Pakistan. *Front Public Health*. 2024;12:1434123. doi:10.3389/fpubh.2024.1434123
- 4. Malik A, Iftikhar H, Farooq S. Effects of floods on the mental health of Pakistanis. *Ann Med Surg* (Lond). 2023;85:183-8. doi:10.1097/MS9.00000000000183
- 5. Yasir A, Khan S, Rafiq M. Impact of climate change on women mental health in rural Pakistan (Malakand Division). *Int J Environ Res Public Health*. 2024;21(8):4156. doi:10.3390/ijerph21084156
- Khan M, Abbasi S. Climate hazards in Pakistan: case study on mental health in District Badin. Connecting Climate Minds Case Studies. 2024. Available from: https://hub.connectingclimateminds.org/research-and-action/case-studies/14
- 7. Irfan M, Ahmed T, Rauf A, Ali M. Investigating associations between climate change anxiety and children's mental health in Pakistan: impacts and priority actions. *Disaster Med Public Health Prep.* 2024;18:e57-e65. doi:10.1017/dmp.2024.65

JOURNAL OF PAKISTAN PSYCHIATRIC SOCIETY (VOL 22 ISSUE 03) (REVIEWED MANUSCRIPT - VERSION OF RECORD TO FOLLOW)

(Reviewed Manuscript - Version of Record to Follow)

- 8. Iqbal MF, Iqbal M, Shafiq M, Khalid M, Ahmad S. Effect of climate change on health in Pakistan. *Proc Pak Acad Sci.* 2021;58(1):61-74. Available from: https://www.paspk.org/wp-content/uploads/2021/02/LS-624.pdf
- National Disaster Management Authority (NDMA). National Disaster Management Plan (NDMP). Islamabad: NDMA; 2024. Available from: https://www.ndma.gov.pk/public/storage/plans/July2024/5zDDAfbGfg07p4soVuWh.pdf
- 10. World Economic Forum. How climate change affects youth mental health in Pakistan. Geneva: WEF; 2024. Available from: https://www.weforum.org/stories/2024/08/climate-change-pakistan-mental-health-eco-anxiety
- 11. Hashim A, Baloch S. Pakistan floods leave lasting trauma for survivors. *The Guardian*. 2025 Sep 2. Available from: https://www.theguardian.com/global-development/2025/sep/02/pakistan-floods-trauma-natural-disasters-mental-health-survivors-ptsd