



LETTER TO THE EDITORS

Floods in southern Brazil: the urgent need for mental health support in the context of climatic disasters

Braz J Psychiatry. 2024;46:e20243845 doi:10.47626/1516-4446-2024-3845



Between late April and early May 2024, Rio Grande do Sul, the southernmost state of Brazil, experienced heavy rains that caused massive flooding, affecting nearly 2.4 million people in approximately 96% of the state's municipalities. This socio-natural disaster displaced over 500,000 people, claimed the lives of 182 people (29 others are still missing), and disrupted essential services such as water supply, internet, and electricity for thousands of households. The financial losses from the floods are still difficult to quantify. Although most of Rio Grande do Sul was affected, marginalized and vulnerable populations in low-income areas were disproportionately affected. Page 1.2

Over the past few years, a growing body of evidence has linked climate change to adverse mental health outcomes. Extreme events such as droughts, heat waves, wildfires, sea level rise, and flooding can cause significant stress and potentially traumatic experiences that affect the well-being of affected populations.^{3,4} In this context, small increases in the prevalence of mental health

conditions such as major depression, anxiety disorders, posttraumatic stress disorder, and suicidal behavior are expected. This phenomenon is associated not only with the occurrence of acute disasters, but also with chronic and slow-onset climatic changes.^{3,5,6} In addition, climate change imposes a significant economic burden and disproportionately affects vulnerable populations, particularly in developing countries, who are likely to face additional challenges such as food insecurity and water scarcity exacerbated by global warming.^{3,4} Finally, pessimism about the future of our planet has been linked to a chronic fear of environmental catastrophe, a phenomenon known as "eco-anxiety," which appears to be more pronounced among younger people.⁴

The flooding in Southern Brazil is a stark reminder that climate change is not just a future concern, but an existing reality. While El Niño contributed significantly to the heavy rains in Rio Grande do Sul, human-induced climate change also played a role in this recent disaster. This underscores the urgent need for increased public and private investment in strategies that support disaster preparedness and response, in line with the principles of the Sendai Framework.^{1,7} Recent estimates indicate an increased risk of similar events occurring in the near future.1 Although many volunteers offer assistance, all mental health and psychosocial support efforts, especially those involving external personnel (whether individuals or organizations), must be integrated and coordinated with the existing health system structure. To complement the various strategies already in place, such as management, training and support, the Brazilian Unified Health System has published recommendations for basic psychological support in disaster contexts (Box 1).8-10 Despite these efforts, more needs to be done - not only to implement measures to prevent and mitigate future socio-natural disasters, but also to address the looming mental health crisis that is likely to follow such catastrophic events.

Box 1 Recommendations from the Brazilian Ministry of Health for health care workers providing basic psychological support in disaster contexts⁸⁻¹⁰

- Offer support for acute anxiety and stress with the use of nonpharmacological interventions (e.g., breathing techniques and muscle relaxation).
- Offer support in a noninvasive manner, promoting active listening in a private and silent environment.
- Offer support in a calm manner.
- Encourage healthy habits (e.g., sleep, self-care, etc.).
- Offer support as needed (when the affected person seeks for validation and professional advice).
- Offer support in the context of grief and psychological stressors (special attention to children and adolescents).
- Reassure the individual that their privacy will be protected.
- Provide guidance to avoid excessive exposure to tragic and negative news in the media.
- Provide assistance in locating services and other professionals who may be able to help the individual address specific issues related to the disaster.
- Provide specialized care whenever needed (psychiatrists, psychologists, and other mental health professionals).
- Provide transparent, clear information whenever possible.
- Be alert to the potential deterioration of pre-existing mental health conditions (ensure that affected persons do not discontinue medication or mental health treatment).
- Provide shelter with adequate and clean infrastructure for those displaced by the disaster (with provision of water, food, sanitation, clothing, leisure, etc.)
- Provide special assistance to vulnerable populations.
- Placement of children and other vulnerable people with their families or with a reference adult.
- Pay special attention to the situation of victims in shelters and other related places, providing a safe environment that protects people from all forms of violence.

Thiago Henrique Roza, 1,2 in Daniel **Prates-Baldez**, 2,3,4 D Debora da Silva **Noal**, Beatriz Schmidt, 6 Ana Cecilia Andrade de Moraes Weintraub, Laiana Azevedo Quagliato, Portonia Antonio Egidio Nardi, 8 p Flavio Kapczinski^{2,3} ¹Departamento de Psiquiatria, Universidade Federal do Paraná, Curitiba, PR. Brazil. ²Programa de Pós-Graduação em Psiguiatria e Ciências do Comportamento, Departamento de Psiquiatria, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil. ³Instituto Nacional de Ciência e Tecnologia Translacional em Medicina, Porto Alegre, RS, Brazil. ⁴Faculdade de Medicina, Universidade Federal do Rio Grande (FURG), Rio Grande, RS. Brazil. ⁵Fundação Oswaldo Cruz (FIOCRUZ), Ministério da Saúde, Brasília, DF, Brazil. ⁶Programa de Pós-Graduação em Psicologia, Instituto de Ciências Humanas e da Informação, FURG, Rio Grande, RS, Brazil. ⁷Programa de Pós-Graduação em Saúde Coletiva, Faculdade de Medicina, Universidade de São Paulo, São Paulo, SP Brazil. ⁸ Programa de Pós-Graduação em Psiquiatria e Saúde Mental, Instituto de Psiquiatria, Universidade Federal do Rio de Janeiro, Rio de Janeiro, RJ, Brazil.

Submitted Jul 24 2024, accepted Aug 03 2024.

Disclosure

The authors report no conflicts of interest.

Author contributions

THR: Conceptualization, Project administration, Writing – original draft.

DP-B: Writing – review & editing.
DSN: Writing – review & editing.
BS: Writing – review & editing.
ACAMW: Writing – review & editing.
LAQ: Writing – review & editing.

FK: Supervision, Writing - review & editing.

All authors have read and approved of the final version to be published.

Handling Editor: Lucas Borrione

AEN: Writing - review & editing.

How to cite this article: Roza TH, Prates-Baldez D, Noal DS, Schmidt B, Weintraub ACAM, Quagliato LA, et al.

Floods in southern Brazil: the urgent need for mental health support in the context of climatic disasters. 2024;46:e20243845. http://doi.org/10.47626/1516-4446-2024-3845

References

- 1 Clarke B, Barnes C, Rodrigues R, Zachariah M, Alves LM, Haarsma R, et al. Imperial College London [Internet]. Climate change, El Niño and infrastructure failures behind massive floods in southern Brazil. 2024 [cited 2024 Aug 16]. https://spiral.imperial.ac.uk/handle/100 44/1/111882
- 2 Defesa Civil RS. rs.gov.br [Internet]. Defesa Civil atualiza balanço das enchentes no RS – 10/7. 2024 Jul 10 [cited 2024 Jul 17]. https:// www.defesacivil.rs.gov.br/defesa-civil-atualiza-balanco-das-enchent es-no-rs-10-7
- 3 Climate mental health making connections. Nature Ment Health. 2024;2:119-20.
- 4 What happens when climate change and the mental-health crisis collide? Nature. 2024;628:235.
- 5 Burrows K, Denckla CA, Hahn J, Schiff JE, Okuzono SS, Randriamady H, et al. A systematic review of the effects of chronic, slowonset climate change on mental health. Nature Ment Health. 2024; 2:228-43.
- 6 IASC Reference Group on Mental Health and Psychosocial Support in Emergency Settings [Internet]. Mental health and psychosocial support in emergency settings. 2007 [cited 2024 Aug 16]. https://interagencystandingcommittee.org/sites/default/files/migrated/2020-11/IASC%20Guidelines%20on%20Mental%20Health%20and%20Psychosocial%20Support%20in%20Emergency%20Settings%20%28 English%29.pdf
- 7 United Nations Office for Disaster Risk Reduction [Internet]. Sendai Framework for Disaster Risk Reduction 2015-2030. 2015 [cited 2024 Aug 16]. https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030
- 8 Brasil, Ministério da Saúde [Internet]. Saúde mental e atenção psicossocial em desastres: crianças em abrigos provisórios. 2024 May [cited 2024 Aug 16]. https://www.gov.br/saude/pt-br/centrais-deconteudo/publicacoes/cartilhas/2024/cartilha-criancas-em-abrigosprovisorios.pdf
- 9 Brasil, Ministério da Saúde [Internet]. Saúde Mental e atenção psicossocial em desastres: respostas emocionais e primeiros cuidados psicológicos em desastres e emergências. 2024 May [cited 2024 Aug 16]. https://www.gov.br/saude/pt-br/centrais-de-conteudo/pub licacoes/svsa/enchentes/respostas-emocionais-e-primeiros-cuida dos-psicologicos-em-desastres-e-emergencias/view
- 10 Brasil, Ministério da Saúde [Internet]. Saúde mental e atenção psicossocial em desastres: perdas e lutos. 2024 May [cited 2024 Aug 16]. https://www.gov.br/saude/pt-br/assuntos/saude-de-a-a-z/e/enchen tes/publicacoes/cartilha-perdas-e-lutos.pdf/