UFSM

REUFSM
REVISTA DE ENFERMAGEM DA UFSM

ISSN 2179-7692
OPEN ACCESS

Rev. Enferm. UFSM, v.15, e8, p.1-14, 2025 •
Submission: 08/16/2024 • Acceptance: 03/31/2025 • Publication: 05/05/2025

Reflection article

Reflections regarding mental health after the 2024 floods in the south of Brazil

Reflexões acerca da saúde mental a partir da enchente de 2024 no Sul do Brasil

Reflexiones sobre salud mental tras las inundaciones de 2024 en el sur de Brasil

Maria de Lourdes Custódio Duarte[I], Daniela Giotti da Silva[I], Alessandra Porto d'Ávila[I], Eduarda Paza Dias[I], Natália Klauck de Souza[I]

[I] Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil

Abstract

Objective: to reflect on the likely mental health repercussions of the 2024 floods in Rio Grande do Sul. **Method:** theoretical-reflective study, based on discursive formulations about the topic and supported by national and international scientific literature and by a critical analysis carried out by the authors. **Results:** the reflections here go beyond the impact of the flood on local infrastructure, as it generates individual, family, community, social, and psychic issues. The floods had repercussions on the mental health of the population, triggering feelings such as anxiety, depression, fear, irritability, and sleep disorders. **Conclusion:** the psychosocial effects of experiencing these climate disasters may lead to long term consequences much more severe than expected, since symptoms and feelings may persist for a long time, which can affect their functionality and impair daily life. Furthermore, their coping capacity may be harmed, depending on the degree of suffering of the individual.

Descriptors: Mental Health; Psychosocial Impact; Natural Disasters; Disaster Nursing; Public Policy

Resumo

Objetivo: refletir sobre as prováveis repercussões na saúde mental a partir da enchente de 2024 no Rio Grande do Sul. **Método:** estudo teórico-reflexivo baseado na formulação discursiva acerca da temática, sustentado pela literatura científica nacional e internacional e análise crítica das autoras. **Resultados:** as reflexões vão além do impacto na infraestrutura local, geram diversos problemas de ordem individual, familiar, comunitária, social e psíquica. As enchentes repercutiram na saúde mental da população, despertando sentimentos como ansiedade, depressão, medo, irritabilidade e distúrbios do sono. **Conclusão:** os efeitos psicossociais causados pela vivência dos desastres climáticos podem ter consequências a longo prazo muito

mais graves do que o esperado, uma vez que os sintomas e sentimentos podem persistir por muito tempo, o que pode afetar a sua funcionalidade e atrapalhar o seu cotidiano, além disso, a capacidade de enfrentamento pode estar prejudicada dependendo do grau de sofrimento em que o indivíduo se encontre.
Descritores: Saúde Mental; Impacto Psicossocial; Desastres Naturais; Enfermagem de Desastres; Política Pública

Resumen

Objetivo: reflexionar sobre las probables repercusiones de las inundaciones de 2024 en Rio Grande do Sul. **Método:** estudio teórico-reflexivo basado en una formulación discursiva con respeto al tópico, sustentado por la literatura científica nacional e internacional y análisis crítico de las autoras. **Resultados:** las reflexiones ultrapasan el impacto en la infraestructura local, generando muchos problemas individuales, familiares, comunitarios, sociales, y psíquica. Las inundaciones tuvieron repercusiones en la salud mental de la población, despertando sentimiento como ansiedad, depresión, miedo, irritabilidad, y trastornos del sueño. **Conclusión:** las consecuencias a largo plazo de los efectos psicosociales causados por la experiencia de los desastres climáticos pueden ser mucho más graves que lo esperado, pues los síntomas y sentimientos pueden persistir por mucho tiempo, lo que puede afectar la funcionalidad y molestar su cotidiano. Además, su la capacidad de enfrentamiento puede estar perjudicada dependiendo del grado de sufrimiento de la persona.
Descriptores: Salud Mental; Impacto Psicosocial; Desastres Naturales; Enfermería en Desastre; Política Pública

Introduction

Disasters may be described as the results of natural or man-made adverse events on a vulnerable ecosystem, leading to human, material, and/or environmental damage, coupled with economic and social losses. Disasters triggered by natural phenomena can be climatological disasters (drought, forest fires), hydrological (overflow, floods, downpours), meteorological (cyclones, tornados, heat waves), geological and geophysical (landslides, erosion, and earthquakes), or biological (epidemics, plagues).[1]

One person is displaced every second due to the many environmental disasters that affect millions of lives around the world. A mean of 25 million people must relocate every year for that reason.[2]

By analyzing the last 20 years, we can see that American countries are not the ones that suffer most with this impact. Nonetheless, Brazil is one of the ten countries that are most affected by these events in absolute numbers (51 million people).[1]

Its causes and consequences, as well as the responses and actions to prevent and mitigate them, have become topics of interest after many warnings from the scientific community about the potential of large-scale environmental

changes. These climate changes lead to an increase in the frequency and intensity of rains and other extreme events.[3]

An example was the flood that took place in May 2024, in Rio Grande do Sul (RS), which affected the state in an unprecedented manner. The intense rain that affected the region caused all rivers there to overflow, leading to deadly floods in many cities and municipalities. In the beginning of May, there had been so much rain that seven cities from RS ranked among those with the highest amount of rain in the world.[4]

This flood was overwhelmingly large, affecting many families in the area. Homes were flooded, properties were destroyed, and entire communities were forced to evacuate to find safety. Furthermore, with blocked roads and damaged bridges, the access to primary services, such as clean water and electricity, was severely compromised, harming thousands of people.[5]

Floods are natural disasters that take place very frequently, causing much of the damage that affects local and public infrastructure, housing, and the living conditions of communities and societies.[6]

In the case of the floods experienced by the RS people, shelters had to be organized to receive those who were displaced, which had an impact on their physical and mental well-being. Mental and psychosocial health issues can emerge when a person is isolated from their family or community, or when they are forced to live with others that they do not know.[7]

During a disaster, subjects often had an abrupt experience facing reality. At this point, their nervous system becomes altered, which can affect immune response, generating intense emotional feelings that may go from paralyzing fear to disordered agitation, from extreme pain to the complete lack of pain.[8]

These climate events are disorganizing episodes which can lead to physical and psychological illness. People who are directly or indirectly affected are susceptible, and psychosomatic symptoms may emerge, such as pain and many health issues. Pain can become worse when there are material and personal losses, since the subject needs to deal with grief and adapt their lives anew. Thus, it is easier for them to readapt when they have psychosocial support, which is not necessarily limited to specialized services.[8]

In this context, a psychosocial perspective would involve the combination of the relationships that the individual maintains with society, developing their psyche and including issues that go from emotional support, physical and mental health, and social support, including aspects such as material, sanitary, and spiritual support. Consequently, understanding and expanding discussions about mental health in the context of disasters is essential, since their psychosocial consequences go beyond physical and emotional lesions or material and human losses.[9]

This reflection is justified by the fact that natural disasters increasingly occupy the scientific and governmental agenda of the country, with many disasters having taken place worldwide in the last decades, be them natural or man-made catastrophes. Recently, certain situations stood out, such as the COVID-19 pandemic and the war in Ukraine, as well as the consequences of climate change manifested in intense and sudden storms. All these situations trigger intense stress and negative emotions, which are risk factors for psychological illness.[10]

In this study, we aim to provide an understanding of this event and its circumstances, and how it reverberates on the mental health of those affected, since the floods affect all aspects of society. Thus, the objective of this study was to provide a reflection on the potential repercussions of the 2024 floods in Rio Grande do Sul on mental health.

Method

This is a theoretical reflexive study, based on a discursive elaboration about the topic at hand and supported by national and international scientific literature, in addition to the perception and critical analysis of the authors.

It was conducted in the databases Scientific Electronic Library Online (SciELO), Sistema Regional de Información en Línea para Revistas Científicas de América Latina, el Caribe, España y Portugal (Latindex), National Library of Medicine (PubMed), and in the Latin American and Caribbean Health Sciences Literature (LILACS), from May to July 2024. The database Descriptors in Health Sciences (DeCS) was used to choose the descriptors used in the search process, namely, the Portuguese version of the descriptors “desastres naturais” (natural disasters), “saúde” (health), “impacto psicossocial”

(psychosocial impact), "saúde mental" (mental health). We considered the period from 2019 to 2024 due to the increase in publications about disasters in the last five years. Furthermore, the reflections produced here were a result of literature interpretation and, also, from the reflective impression of the authors.

Results

Reflecting on the mental health repercussions of the flood in Rio Grande do Sul

In the last few years, the intensity and frequency of natural disasters has increased around the globe. This growth may be a consequence of how cities have expanded in the last few years, occupying inadequate areas and increasing how often risky situations take place; of the environmental changes caused by human activities, leading to an unbalance in the physical environment; of the climate changes that also helped increase the frequency and intensity of disasters.[11]

In Brazil, the number of disasters grew considerably. In 2011, there were more than 900 deaths caused by events such as floods and landslides due to rain, with the Southeast being the most affected region, while the South had the largest number of people being affected.[11]

In RS, in 1941, there was an event known as the Great Flooding. In Porto Alegre, there were 22 consecutive days of rain between April and May, which led to the greatest climatic catastrophe experienced thus far in the city. The waters of Guaíba Lake reached their historical height of 4.76 meters above their regular level.[12]

70 thousand of the 272 thousand people in the city had to abandon their homes, and financial losses included more than 600 companies, which would take many months to go back to business or had to declare bankruptcy. Furthermore, agricultural activities were also impacted, since a relevant number of people abandoned them in the islands, increasing the rural exodus that had been taking place since the first decades of the 20th century.[13]

Therefore, the 1941 flooding was decisive to build the Flood Protection System, a wall that extends by more than 2 thousand meters, including part of Mauá Avenue (where part of the floodgates are placed). The "Mauá Wall", in addition to a concrete wall built in the Centro Histórico neighborhood, a pump

room, and dikes spread around many different places, finished construction in the 1970s. The structure included 68 kilometers, a system that was supposed to protect the city from floods of up to 6 meters.[12]

However, the lack of maintenance in the water control structures, including cracks on the containment walls and operational failure in the drainage system of the floodgates, resulted in leaks and in the flooding that took place in 2024, in the capital of the state and its surrounding region.[4]

In 2024, the RS population faced one of the greatest flood-related disasters that ever took place. This disaster was even greater than the one from 1941, as a mere six days of rain could bring even more harm than had taken place then. In some areas of the state, more than 700 mm of water were registered, raising the levels of Guaíba Lake to 5.33 meters and showing the magnitude of this event when compared to the highest previous historical records.

The intense rains reached, first, the region of Taquari Valley, including cities such as Estrela, Lajeado, Roca Sales, Muçum, Arroio do Meio, and Cruzeiro do Sul - cities which had faced recent floods and were already in a severe situation of flooding.[4] The water already accumulated, coupled with such strong rainfall, increased the levels of the Guaíba Lake, flooding the central region of Rio Grande do Sul, where the capital is located, and extending to other neighborhoods and cities in the metropolitan region, in the first half of may.

On June 18, 177 had died, according to reports from Civil Defense; 806 were harmed, and 34, missing. 478 municipalities, from a total of 497, were affected by the climate event, and more than two million people were affected throughout the state. More than 350 thousand of them were displaced, and nearly 10.5 thousand had to go to temporary shelters.[5]

Shelters are facilities made to welcome those whose communities and houses were made temporarily or definitively inaccessible due to adverse events caused by natural disasters. In general, contingency plans are used to determine how the space in the shelters will function. Families are provisionally relocated to places such as schools, sports gyms, and exhibition centers, as they are usually able to receive a large number of people.[7]

Temporary shelters are made to attend the population affected by great natural disasters, especially in cases of flooding. A shelter must be transitory, providing the minimum necessary conditions for a decent life. To ensure that they reach this goal, there must be an articulation involving multiple professionals.[7]

During the emergency experienced by the RS people during the 2024 flood, the number of people who had lost or could not access their homes grew, and shelters were the way our society found to deal with this issue.[5] Although collective centers are often the only option for displaced persons, they can, on occasion, stay with relatives who can provide the space, or receive social support.[14]

As the flood continued and the areas at risk of flooding increased, some of the early shelters had to be deactivated. Therefore, the number of shelters only increased, as the demand for them grew exponentially, since people who received relatives at home also needed to evacuate.[5]

Thus, with the rise of the waters, many lost their homes and sources of income. Different industry and local commerce sectors were drastically affected, and the socioeconomic harm will take time to be mitigated.[4]

In this context, climate disasters have economic impact that is proportional to the magnitude of the event and its extent. This damage is mostly associated with the fact that the situation directly affects the productive capacity of the region harmed, since its effects have an impact on physical capital stocks, workers and workforces, physical and transport infrastructure, agricultural resources, general stocks, and others.[15]

Thus, the floods have many different impacts on the economy, at both a personal and institutional level. Regarding the personal level, many families lose their possessions and, in general, have to invest in recovering their homes and purchasing new furniture. Thus, the most vulnerable population, living far from urban centers, usually suffer even more from these incidents.[14]

However, in the context at hand, population from all social classes were affected, demanding humanitarian aid to be able to reorganize themselves and their families. Thus, on an institutional level, the State must give support to these families.[14]

Some health institutions were also affected by losses in both physical structure and human resources, as health workers had their own houses affected and could not

go back to work. Thus, many services had to be interrupted, and the population could not find access to the ones that were not, meaning that care was only available in places that were far too distant from the regions affected.[16]

The impact of the floods on health may be direct or indirect, in the short, medium, or long term, and can affect individual and community, becoming a public health concern. The search for epidemiological evidence that the floods have an impact on health has led to some findings. The most immediate ones are deaths (drowning, electrocution, or trauma), lesions (contusions, lacerations, or fractures), and transmissible disease (fecal-oral route and disease vectors).[3]

Contact with contaminated water can also cause several diseases, especially those associated with fecal-oral transmission (diarrhea, hepatitis, gastroenteritis) and vectors (dengue, hantavirus, and leptospirosis).[3] Thus, during the floods in the RS, leptospirosis was one of the most common diseases, as the risk for contamination can increase in up to 70% in this context, not to mention it continues to be active after the period of floods due to contact with infested places and residues.[17]

In this setting, the impact on health can be both physical and psychological. Thus, mental health can also be influenced by floods, with previous studies having identified post-traumatic stress disorder (PTSD), anxiety, irritability, aggressiveness, insomnia, depression, and even suicide.[10]

When the water started to rise and invade streets and homes, people had to face abrupt changes to their lives and, as a result, began to experience intense feelings, such as paralyzing fear. This impactful experience breaks the mental organization of an individual, causing disorientation and difficulties in making decisions, leaving these individuals stunned and, in extreme situations, causing dissociation from reality.[8]

Emergencies cause many individual, family, community, and social issues. They weaken the support and protection of people, increasing risks and tending to exacerbate preexisting social injustice and inequality.[18]

This affects many people, leading to structural destruction and altering human geography, which provokes social disorganization as functional networks are destroyed

or altered. Disasters can provoke fear, horror, feelings of impotence, forcing a confrontation with destruction, chaos, with one's death or that of others, and acutely disturbing beliefs, values, and meanings.[10]

This tragedy affected families and neighborhoods, impacting mental health more than individual crises. The support one could receive from the community simply does not come, seeing as all people were affected. This increases the suffering of the victim, who not only suffers for their own situation, but also for those that are close to them.[19]

Humans have defense and adaptation mechanisms to deal with stress, sadness, and frustration, so they can live with emotional tension while maintaining balance. However, in catastrophic situations, these mechanisms are not sufficient to deal with the sudden emotional discharge, as the threat is so extreme that it shatters that balance, causing suffering and trauma.[19]

During disasters, it is often necessary to evacuate and displace people from their homes, towards places that are out of the risk areas. When people have to leave their homes, they experience a lot of stress, as they are insecure and uncertain that they will be able to come back. This changes their routine and exacerbates negative symptoms, such as as anxiety and fear.[20]

In this context, people who were displaced from their homes due to the 2024 floods can develop worse depressive symptoms than those who did not need to evacuate their residences.[4] Furthermore, when there was a previous evacuation warning, the level of psychosocial disorganization and stress is lower than in cases where there was no time to organize one's belongings before evacuating.[2] All these symptoms tend to become worse if an early intervention does not take place.[3]

Whenever possible, local professionals must refer the person to emergency care. The intervention must be focused on protecting and reestablishing minimal conditions, including appropriate clothing, food, shelter, sanitation, and primary treatment (including medication and psychosocial support). As a result, attending the physiological and biological needs is also mental health care, so victims have comfort while going through this extreme situation.[6]

Thus, there must be teams prepared to provide psychosocial support to those affected, especially multiprofessional teams, with space for care and listening. Specific drug treatment must also serve mental health needs whenever needed, especially in highly stressful situation.[21]

Health workers intervene at any time during a catastrophe with a unique and individualized approach, in order to increase the resilience of victim and community, while working to minimize the odds of developing PTSD.[6] Thus, resilience in these situations involves the resources and abilities of the community, so they can recover and adapt when exposed to a disaster.[8]

Social support, coupled with early interventions, is a relevant factor to comfort those affected, thus being a way to reduce negative mental health impacts. This type of support includes interpersonal relationships based on the availability and trust between individuals, showing concern and valuing the other. Thus, the less the social support provided to individuals, the greater their psychic suffering.[1]

Statistics regarding the mental health of people displaced after disasters, regardless of their socioeconomic status, are significant. In this regard, psychological support during the emergency that is a disaster must consider its later stages, including the importance of understanding the implicit social suffering in this process of victim deterritorialization, which, for the families, consists in a moment where their reality is reconstructed, with implications for their health, from a perspective of community life.[22]

The long-term consequences of experiencing climate disasters may be much worse than expected, seein as symptoms and feelings may persist for a long time. They may affect one's functionality and daily life, also harming their ability to cope, depending on their degree of suffering.[1]

These consequences are exacerbated when they go through triggering experiences, such as the strong rain that took place not long after the rivers flooded and the floods took place. Feelings of anxiety, depression, fear, irritability, anger, fobias, panic, appetite loss, fatigue, dizziness, nightmares, and insomnia reappear, and, as a result, the person affected relives the traumatic experience, consolidating the trauma and affecting an already weakened mental health.[22]

There is also concern regarding the psychological impact of disasters on the mental health of health and relief professionals, who can also be considered survivors and victims, as the presence of high PTSD levels, anxiety, depression, occupational stress, and burnout, may appear after their work in disasters.[10]

Therefore, Civil Defense investments are necessary in these situations, increasing not only their financial resources and machinery, but also the technical-scientific staff working there, at a municipal, state, and federal level, which would allow them to have time and ideal conditions for action, rescuing people and preventing disasters. Another important agenda includes environmental education, to raise awareness of the population in schools and through media in general.[4] One must know and remember the climate history of the state, of Brazil, and of the world, in order to reduce damage, especially the one related with the mental health of the population.

Considering the form and characteristics of a reflective study, this one was based on national and international literature, featuring the perceptions and a critical analysis from the authors. This reflection, however, may be limited, as there were few specific studies during its writing. The timeliness of the information and interpretation of studies produced during the 2024 floods and other natural disasters, in regard to the mental health of the population, results from a specific experience from the period. Thus, new interpretations may arise as other studies are carried out, addressing long-term repercussions to the mental health of the population.

Interventions to prevent and manage risk are essential, including works such as raising awareness of the community, training professionals responsible for psychological first aid, and strengthening the bonds between the population and local services, in order to prevent severe damage from climate events, or even their occurrence.

Conclusion

This topic is pertinent as its long-term psychosocial consequences are still immeasurable. Thus, multiprofessional action, aimed at embracing these people, can mitigate repercussions to mental health, avoiding psychic illness.

Authorities and work teams combine their efforts to mitigate the damage and control risk within a time frame, in all stages of the disaster cycle. Although most

countries have plans to manage disasters, the ability of the organ responsible to make decisions hinges on a form of work that is articulated with all sectors involved, such as housing, environment, education, and health systems. Thus, the State must provide preventive maintenance as opposed to corrective actions, that is, invest in strategies to prevent, so interventions do not begin only after a calamity has already taken place, further aggravating the impact of floods.

Thus, we propose that the health sector must act in articulation with other sectors to reduce the risk of disasters. Additionally, universities must continue to promote extension activities in several sectors of society, forming professionals that are sensitive and prepared to deal with calamities, while also developing research in this field.

We expect the reflections provided here, regarding the mental health of the population affected by floods, to be discussed with other segments of society, going beyond managers and health workers to contribute to the understanding of coping mechanisms during disasters, while discussing the best ways to prevent more severe psychic suffering. Furthermore, these people must receive support to restructure themselves after the flood period is over, both socially and in regard to their physical and mental health.

References

1. Carvalho MM, Oliveira SS. Psychosocial aspects in socioenvironmental disasters of geoclimatic origin: an integrative literature review. Saúde Debate. 2020;44(Spec No 2):334-52. doi: 10.1590/0103-11042020E223.

2. United Nations Office for Disaster Risk Reduction (UNDRR). Disaster displacement: how to reduce risk, address impacts and strenghten resilience [Internet]. Geneva (CH): UNDRR; 2019 [cited 2024 jun 26]. Available from: https://www.preventionweb.net/publications/view/58821.

3. Silva EL, Resende RMS, Frutuoso RL, Bezerra AB, Salvi BB, Rohlfs DB. Emergência em saúde pública por inundações: a atuação do Ministério da Saúde em ocorrências no Brasil de 2004 a 2017. Saúde Debate. 2020;44(N Esp 2):176-87. doi: 10.1590/0103-11042020E212.

4. BBC News Brasil. Rio Grande do Sul [Internet]. 2024 [acesso em 2024 jun 26]. Disponível em: https://www.bbc.com/portuguese/topics/c06gq6k654jt.

5. Coordenadoria Estadual de Proteção e Defesa Civil do RS. Defesa Civil atualiza balanço das enchentes no RS [Internet]. Porto Alegre: Coordenadoria Estadual de Proteção e Defesa Civil do RS; 2024 [acesso em 2024 jun 26]. Disponível em: https://www.defesacivil.rs.gov.br/inicial.

6. Ribeiro MP, Freitas JL. Atuação do psicólogo na gestão integral de riscos e desastres: uma revisão sistemática da literatura. Gerais Rev Interinst Psicol. 2020;13(2):1-20. doi: 10.36298/gerais202013e14794.

7. Nappi MML, Nappi V, Souza JC. Multi-criteria decision model for the selection and location of temporary shelters in disaster management. J Int Humanit Action. 2019;4(16). doi: 10.1186/s41018-019-0061-z.

8. Rafaloski AR, Zeferino MT, Forgearini BAO, Fernandes GCM, Menegon FA. Mental health of people involved in natural disasters from the perspective of the workers involved. Saúde Debate. 2020;44(Spec No 2):230-41. doi: 10.1590/0103-11042020E216.

9. Gawrych M. Climate change and mental health: a review of current literature. Zmiany klimatu a zdrowie psychiczne: przegląd aktualnej literatury. Psychiatr Polsk. 2022;56(4):903-15. doi: 10.12740/PP/OnlineFirst/131991.

10. Queirós C. Saúde mental nas pandemias e catástrofes: o risco de adoecer psicológico. Territorium. 2023;30(1):61-75. doi: 10.14195/1647-7723_30-1_5.

11. Gonzalez AC, Pereira VA, Carniatto I, Dalla Valle AC. Impacto dos desastres naturais em uma população do Sul do Brasil e a importância da Educação Ambiental para redução dos riscos. Rev Eletrônica Mestr Educ Ambient. 2023;40(1):53-7. doi: 10.14295/remea.v40i1.13935.

12. Silveira ALL. Chuvas e vazões da grande enchente de 1941 em Porto Alegre/RS [Internet]. Bol Geogr Rio Gd Sul. 2020 [acesso em 2024 jun 26];35:69-90. Disponível em: https://lume.ufrgs.br/handle/10183/217187.

13. Torres LH. Águas de maio: a enchente de 1941 em Rio Grande. Historiæ [Internet]. 2012 [acesso em 2024 jun 26];3(3):239-54. Disponível em: https://periodicos.furg.br/hist/article/view/3270/1949.

14. Rodrigues Neto EXR, Lima AJ. Inundações em Teresina-Piauí: uma questão sócio histórica. Rev Bras Gest Urbana. 2019;11:e20180177. doi: 10.1590/2175-3369.011.e20180177.

15. Ramos JK, Krug J, Ferretti PC, Kroenke A. The effect of natural disasters on direct foreing investiment from countries. Rev Ibero Am Est. 2021;20(1):e16234. doi: 10.5585/riae.v20i1.16234.

16. Freitas CM, Silva IVM, Xavier DR, Silva EL, Barcellos C. Desastres naturais e seus custos nos estabelecimentos de saúde no Brasil no período de 2000 a 2015. Cad Saúde Pública 2020;6(7):e00133419. doi: 10.1590/0102-311X00133419.

17. Florêncio IA, Alves DA, Sales CBPM, Oliveira ECT. Leptospirose no município de Maceió, Alagoas: caracterização dos casos confirmados. Braz J Health Rev. 2023;6(4):14947-58. doi: 10.34119/bjhrv6n4-077.

18. Rodríguez J, Zaccareli Davoli M, Pérez R; Organización Panamericana de La Salud. Guía práctica de salud mental en desastres [Internet]. Washington (DC): OPAS; 2009 [acceso 2024 jun 11]. Disponível em: https://iris.paho.org/handle/10665.2/2800.

19. Menegat RP, Witt RR. Critical Requirements for nursing practice in rural disasters caused by floods. Rev Bras Enferm. 2019;72(3):687-91. doi: 10.1590/0034-7167-2017-0606.

20. Gerstner RMF, Lara-Lara F, Vasconez E, Viscor G, Jarrin JD, Ortiz-Prado E. Earthquake-related stressors associated with suicidality, depression, anxiety and post-traumatic stress in adolescents from Muisne after the earthquake 2016 in Ecuador. BMC Psychiatry. 2020;20(1):347. doi: 10.1186/s12888-020-02759-x.

21. Manfrini GC, Treich RS, Rumor PCF, Magagnin AB, Moncada MA, Furtado JR. Primary health care actions in natural disasters. Texto Contexto Enferm. 2020;29:e20180256. doi: 10.1590/1980-265X-TCE-2018-0256.

22. Fernandes GCM, Bellaguarda MLR, Heideman ITSB, Meirelles BHS, Silva HL, Romero Cárdenas AV. Demands for psychosocial support from communities vulnerable to natural disasters. Rev Bras Enferm. 2020;73(Suppl 1):e2019021. doi: 10.1590/0034-7167-2019-0213.

Authorship contribution

1 – Maria de Lourdes Custódio Duarte
Corresponding author
Nurse, Doctor – malulcd@yahoo.com.br
Research conception and/or development and/or manuscript writing; Review and approval of the final version

2 – Daniela Giotti da Silva
Nurse, Master's student – danigiotti13@gmail.com
Research conception and/or development and/or manuscript writing; Review and approval of the final version

3 – Alessandra Porto d'Ávila
Nurse, Master's student – alessandradavilamk@gmail.com
Research conception and/or development and/or manuscript writing; Review and approval of the final version

4 – Eduarda Paza Dias
Nursing student – eduardapazadias@gmail.com
Research conception and/or development and/or manuscript writing; Review and approval of the final version

5 – Natália Klauck de Souza
Nurse, Master's student – nataliaklaucks94@gmail.com
Research conception and/or development and/or manuscript writing; Review and approval of the final version

Editor in Chief: Cristiane Cardoso de Paula
Associate Editor: Daiana Foggiato de Siqueira

How to cite this article

Duarte MLG, Silva DG, d' Ávila AP, Dias EP, Souza NK. Reflections regarding mental health after the 2024 floods in the south of Brazil. Rev. Enferm. UFSM. 2025 [Access at: Year Month Day]; vol.15, e8:1-14. DOI: https://doi.org/10.5902/2179769288634