



MENTAL HEALTH OF HEALTH PROFESSIONALS DURING THE FLOODS IN RIO GRANDE DO SUL: A QUALITATIVE STUDY

SAÚDE MENTAL DE PROFISSIONAIS DA SAÚDE NAS INUNDAÇÕES NO RIO GRANDE DO SUL: UM ESTUDO QUALITATIVO

SALUD MENTAL DE PROFESIONALES DE LA SALUD EN LAS INUNDACIONES EN RIO GRANDE DO SUL: UN ESTUDIO CUALITATIVO

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RESUMO

Objetivo: Analisar o impacto na saúde mental de profissionais da saúde que atuaram durante as inundações ocorridas no Rio Grande do Sul. **Método:** Este estudo qualitativo foi realizado no Vale do Taquari a partir de entrevistas com enfermeiros, técnicos de enfermagem, médico e farmacêutico que atuaram nos serviços de saúde durante as inundações. As entrevistas foram submetidas à análise de conteúdo de Bardin. **Resultados:** Emergiram duas categorias: i) percepções e sentimentos dos profissionais diante dos desafios das inundações, com foco nos impactos na saúde mental dos profissionais de saúde, incluindo sofrimento individual e coletivo, medo intenso e ansiedade antecipatória, com repercussões duradouras; e ii) estratégias de enfrentamento utilizadas pelos profissionais da saúde durante as inundações, com destaque para a formação de redes de apoio, a união da equipe, o diálogo e a reorganização do fluxo de trabalho. **Conclusão:** A saúde mental dos profissionais foi significativamente impactada, marcada por sofrimento, medo intenso e ansiedade persistente. Apesar das dificuldades, foram desenvolvidas estratégias de proteção, como a construção de redes de apoio, o fortalecimento do diálogo e a reorganização do trabalho. Recomenda-se a preparação prévia dos profissionais e da rede de saúde para atuação em situações de crises climáticas, com o objetivo de minimizar danos.

Descritores: Mudança Climática; Enfermagem; Inundações; Resiliência Psicológica; Saúde Mental; Profissionais de Saúde.

ABSTRACT

Objective: To analyze the impact on the mental health of health professionals who worked during the floods that occurred in Rio Grande do Sul. **Method:** This qualitative study was conducted in the Vale do Taquari based on interviews with nurses, nursing technicians, a physician, and a pharmacist who worked in health services during the floods. Interviews were submitted to Bardin's content analysis. **Results:** Two categories emerged: i) perceptions and feelings of professionals in the face of the challenges of the floods, focusing on the impacts on the mental health of health professionals, including individual and collective suffering, intense fear, and anticipatory anxiety, with lasting repercussions; and ii) coping strategies used by health professionals during the floods, highlighting the formation of support networks, team unity, dialogue, and the reorganization of workflow. **Conclusion:** The mental health of professionals was significantly impacted, marked by suffering, intense fear, and persistent anxiety. Despite the difficulties, protective strategies were developed, such as the construction of support networks, strengthening of dialogue, and reorganization of work. Prior preparation of professionals and the health care network for action in climate crisis situations is recommended, with the aim of minimizing harm.

Descriptors: Climate Change; Nursing; Floods; Psychological Resilience; Mental Health; Health Professionals.

RESUMEN

Objetivo: Analizar el impacto en la salud mental de profesionales de la salud que actuaron durante las inundaciones ocurridas en Rio Grande do Sul. **Método:** Este estudio cualitativo se realizó en el Vale do Taquari a partir de entrevistas con enfermeros, técnicos de enfermería, médico y farmacéutico que actuaron en los servicios de salud durante las inundaciones. Las entrevistas fueron sometidas al análisis de contenido de Bardin. **Resultados:** Emergieron dos categorías: i) percepciones y sentimientos de los profesionales frente a los desafíos de las inundaciones, con foco en los impactos en la salud mental de los profesionales de la salud, incluyendo sufrimiento individual y colectivo, miedo intenso y ansiedad anticipatoria, con repercusiones duraderas; y ii) estrategias de afrontamiento utilizadas por los profesionales de la salud durante las inundaciones, con destaque para la formación de redes de apoyo, la unión del equipo, el diálogo y la reorganización del flujo de trabajo. **Conclusión:** La salud mental de los profesionales fue significativamente impactada, marcada por sufrimiento, miedo intenso y ansiedad persistente. A pesar de las dificultades, se desarrollaron estrategias de protección, como la construcción de redes de apoyo, el fortalecimiento del diálogo y la reorganización del trabajo. Se recomienda la preparación previa de los profesionales y de la red de salud para actuar en situaciones de crisis climáticas, con el objetivo de minimizar daños.

Descriptores: Cambio Climático; Enfermería; Inundaciones; Resiliencia Psicológica; Salud Mental; Profesionales de la Salud.

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What is already known:

- Extreme climate events produce profound emotional repercussions in health professionals, often long-lasting, with effects that may persist even after the end of the climate crisis.
- The preparation of professionals and health services is essential to reduce impacts and prevent damage to the mental health of these workers.
- Emotional support for professionals during climate crises, provided by trained and qualified teams, contributes to minimizing negative impacts on mental health.

What this article adds:

- Expands the understanding of the emotional and psychological repercussions on the mental health of health professionals exposed to situations of collective suffering, marked by intense fear, threat to life, and extreme exhaustion.
- Describes protective factors developed by professionals during the climate crisis caused by the floods, aimed at reducing psychological distress.
- Analyzes the need to prepare professionals and health services for climate crises through the implementation of psychosocial support protocols, the organization of work processes, continuing education in disasters, risk management, and the strengthening of public policies.

INTRODUCTION

In 2024, several extreme climate events (ECEs) affected Latin America and the Caribbean. Among the ECEs, floods caused by exceptional rainfall, wildfires associated with drought and extreme heat, and the first Category 5 hurricane recorded in the region, Beryl, which devastated several Caribbean islands, stood out. In Brazil, 10 ECEs were recorded in 2024, three of which were classified as unprecedented: the rains in the state of Rio Grande do Sul (RS), the drought in the Amazon, and the heat wave in the central region of the country⁽¹⁾. In the case of RS, human influence was associated with a 15% increase in rainfall intensity compared with its natural potential, with global warming identified as the main factor responsible for this phenomenon⁽²⁾.

The floods that occurred in RS in 2024 affected approximately 2.3 million people, impacted 96% of the municipalities in the state, and resulted in 184 deaths, in addition to 25 people still missing⁽³⁾. This climate disaster caused physical damage, psychological suffering, and significant overload on the health care system⁽⁴⁾. Like the general population, health professionals were also exposed to the risk of mental illness during and after the floods, particularly symptoms of anxiety, depression, and acute stress⁽⁵⁾.

Exposure to climate change, whether through extreme events or gradual environmental changes, can trigger or intensify mental and psychosocial distress. Traumatic events, whether individual or collective, can generate intense suffering and significantly affect people's quality of life. In some cases, this suffering tends to persist and may progress to post-traumatic stress disorder (PTSD) or to the development of other immediate or long-term psychopathologies⁽⁴⁾. Specifically, climate disasters such as floods are associated with increased prevalence of conditions such as depression, anxiety, acute stress, and PTSD. Mental health professionals and other health workers may be doubly exposed, as they act simultaneously as caregivers and as direct victims of the crisis⁽⁶⁾.

In situations of ECEs, emotional preparedness strengthens the performance of nursing in rescue operations and assistance in climate disasters, contributing to the reduction of psychological distress⁽⁷⁾. The relevance of this preparedness became particularly evident during the pandemic caused by COVID-19, an extreme event with potential psychological repercussions similar to those observed in

ECEs. During the pandemic, health workers experienced significant psychological distress, while certain protective factors and coping strategies were identified as important indicators of these professionals' mental health. In addition, professionals who underwent psychological and/or psychiatric follow-up showed lower levels of psychological distress when facing the pandemic⁽⁵⁾.

Studies conducted in climate disaster contexts in Saudi Arabia identified important barriers faced by nurses, such as staff shortages, inadequate resources, emotional and psychological stress, as well as insufficient training and unclear protocols. These findings point to the need for integrated approaches to prepare these professionals, aligning training with real-world experiences and addressing psychological and operational dimensions of disaster care⁽⁸⁻⁹⁾.

The present study aims to analyze the impact on the mental health of health professionals who worked during the floods that occurred in RS in 2024, considering the challenges faced and the protective strategies experienced. Thus, it seeks to contribute to strengthening the resilience of professionals, health institutions, and public policies aimed at preparing for and responding to climate crises.

METHOD

This is a descriptive, exploratory study with a qualitative approach that investigated the performance of health professionals during the climate crisis that occurred in 2024. Sample was intentional by convenience and was composed based on the indication of professionals who worked during the flood period. Sample size was defined by theoretical saturation, considering the diversity and intensity of the experiences reported during the climate crisis. For the conduct and reporting of the study, the CONsolidated criteria for REporting Qualitative research was applied⁽¹⁰⁾.

The study was conducted in four cities in Vale do Taquari, a region in central RS that was severely affected by the floods in May 2024. After 8 consecutive days of storms, the region presented a scenario of great devastation, with flooded cities, interrupted highways, isolated communities, and numerous human losses⁽²⁾. Health services were severely affected, including flooded hospitals and basic health units (BHUs), in addition to interruptions in the supply of electricity, water, internet, and other means of communication. The destruction of roads and bridges resulted in the isolation of neighborhoods and municipalities,

compromising access and the continuity of care activities in health services⁽³⁾.

Among the four selected cities, two included hospitals that were partially flooded. In the third municipality, both the hospital and primary health care (PHC) services were included, both affected by the floods. In the fourth city, PHC services were included due to the flooding of BHUs, in addition to the local hospital, which acted as a regional backup. In total, six health services were considered.

Participant selection occurred through focus groups conducted with the aim of identifying professionals who worked in health services during the floods. It should be noted that the focus groups did not produce data for analysis in this study and were used exclusively as a stage for field recognition and participant recruitment. For the composition of the sample, the diversity of the reported experiences and the potential for deepening the narratives were considered. Initially, 11 professionals were selected, including nurses, a nursing technician, a physician, and a pharmacist.

The inclusion criterion was having worked in the selected health services during the days of the floods. Professionals who were no longer linked to the health service at the time of data collection, who did not agree to participate in the interview, or with whom it was not possible to establish contact or schedule an interview were excluded. Of the 11 professionals contacted by telephone, two did not respond to the invitation and one reported schedule unavailability, resulting in eight participants included in the study.

The interviews were conducted online by two researchers from the fields of psychology and nursing, affiliated with Universidade La Salle and Universidade Federal do Rio Grande do Sul (UFRGS), both with experience in conducting interviews and focus groups. One of the researchers worked as a nurse in the Vale do Taquari region during the flood period and facilitated contact with participants and municipal authorities.

The interviews lasted an average of 40 minutes, were previously scheduled, recorded, and subsequently transcribed in full. For their conduction, an instrument developed by the researchers based on the literature on the topic was used, consisting of 16 guiding questions. The instrument included thematic axes related to the emotional and psychosocial repercussions of working in a disaster context, risk and protective factors for mental health, and perceptions of the institutional and community support received. This procedure made it possible to explore in depth the personal experiences during the disaster and to identify risk and protective factors associated with working in climate crisis contexts.

Data collection took place between May and November 2025. Even 1 year after the climate disaster, memories of the event remained vivid among participants due to the intensity of the experience and its repercussions. This characteristic was evidenced by the richness of detail present in the interviewees' narratives.

Content analysis was conducted according to Bardin's thematic approach. The analytical process followed three stages: pre-analysis, with organization of the corpus and definition of objectives; coding and categorization; and

treatment of the results, inference, and interpretation, with synthesis and discussion of the findings⁽¹¹⁾. From a preliminary reading, initial impressions and recurring elements in the participants' discourses were identified. Coding and organization of units of meaning were conducted independently by two authors. In cases of disagreement, a third author acted as a judge to reach a consensual definition of the categories, resulting in the identification of two thematic categories.

The study protocol was approved by the Research Ethics Committee of the Hospital de Clínicas de Porto Alegre (approval no. 7.313.821), with approval from the participating institutions. All provisions of Resolution no. 466 of December 12, 2012, of the National Health Council were respected, and all participants signed an informed consent form. This study is part of the project "Climate resilience of health services: evaluation and guidelines for improvements," developed at UFRGS, with funding from Fundação de Amparo à Pesquisa do Estado do Rio Grande do Sul through public notice 04/2024. To ensure participants' anonymity, each was identified by the letter "P," followed by the sequential number of the interview and the professional category, without mention of the institutions involved.

RESULTS

The study included eight participants: four nurses, one nursing technician, two physicians, and one pharmacist. Among them, seven were female and one was male. Professional experience ranged from 2 to 20 years, covering different levels of health care, including mental health services such as the Psychosocial Care Center, hospitals, and PHC units.

Some participants had their workplaces directly affected by the floods, which required the interruption, reorganization, and relocation of services. Other professionals began working in improvised spaces to ensure continuity of care for the population. Based on the analysis of the individual and collective interviews, two thematic categories emerged: i) professionals' perceptions and feelings in the face of the challenges posed by the floods and ii) strategies used by health professionals during the floods, presented below.

Professionals' perceptions and feelings in the face of the challenges of the floods

This category refers to the experiences of health professionals in the face of the climate crisis that occurred unexpectedly in May 2024. Although the interviews were conducted in the second half of 2025, approximately 1 year after the event, participants reported vivid and detailed memories of those days, highlighting the significant impact of the experience on their personal and professional trajectories.

Among the most frequently reported feelings were intense fear, anxiety, and the perception of threat to life. These emotions represented acute reactions triggered during the event and that persisted beyond the period of the floods, as illustrated in the excerpts below:

It was something like, I don't know, I thought I would

never see something like this. It was like terror, crying, anxiety. (P2, Nursing Technician)

This will be difficult for us to overcome, you know? It stays there, I think it's a mark that remains and you know, it's like a wound, right? It heals, but it's still there. (P2, Nursing Technician)

These statements reveal a peak of emotional distress, with intense and immediate manifestations such as anxiety and crying. At the same time, they point to the persistence of these experiences as lasting subjective marks. Thus, the event does not end when the waters recede, remaining as a painful memory and as a sign of the persistence of psychological distress, as described in the following account:

I fell into a deep depression (sadness), I couldn't hear the sound of machines anymore, it felt like they were right here on the sidewalk, on the street... Wow... I can't explain the feeling, but it felt like I was going into panic... That I couldn't hear any machine noise, any sound, and even when I looked out the window, I could only see mud and people cleaning. (P7, Pharmacist)

Another recurring feeling among professionals was the sense of helplessness when people asked for help and there were no conditions to assist them. Several factors contributed to this perception, such as work overload, scarcity of materials and equipment, shortage of professionals, and unsafe conditions caused by the floods. Thus, the feeling of helplessness came to represent a limit to professional performance, preventing workers from carrying out their activities in what they considered an adequate and effective way. This scenario was described as an experience of collective suffering, as illustrated in the following accounts:

Look, it's a mix of feelings. We feel very powerless in the face of the situation because it's a new situation for everyone. (P6, Nurse)

Knowing that people are calling you and you can't help. How are you going to do something for someone if you had no way to get there? So, there are several situations in which you need to understand that providing care also means forgetting your own pain and managing to act for the other person. (P1, Nurse)

The emotional overload associated with extreme fatigue, both physical and mental, emerged recurrently in the narratives. Exhaustion was not limited to the body, extending to the psychological sphere and producing continuous strain, which compromised the ability to cope with a prolonged routine of alertness and insecurity. In this context, climate signals began to function as emotional triggers, generating anticipatory anxiety.

Anxiety hits as soon as it starts to rain, when rain is already forecast, anxiety hits, even though my house wasn't flooded, I start worrying about the hospital, worrying about moving things out, you know? (P2, Nursing Technician)

Analysis of the narratives also pointed to the persistence of challenging emotional repercussions and to a gradual process of elaborating the lived experience. Although some

level of emotional reorganization occurred over time, the distress remained present, revealing the intensity of the initial impact and the difficulty in processing the event.

I couldn't talk about it without crying, because of so many feelings, but today I can already feel less impacted. Not that it diminishes what happened, but I can talk about it in a calmer way now. (P1, Nurse)

The interviewees also mentioned the presence of environmental triggers associated with the flood experience. Episodes of rain began to provoke emotional discomfort linked to the memory of the situation experienced. This process triggered states of hypervigilance, characterized by constant anticipation of a possible threat, even in the absence of real risk.

It's a disaster that, wow, I never want to go through that again. Sometimes when it rains there's this tightness in my chest. Could it happen again. . . so. . . it left a mark. (P7, Pharmacist)

In addition, many professionals were directly affected by the floods, with their own homes flooded, which made it difficult or impossible to travel to their workplaces. The reduction in the number of available workers worsened working conditions and intensified the overload on teams, characterized by long shifts and insufficient periods of rest. In this context, it became necessary to reorganize the work process, requiring extraordinary effort from professionals who remained on duty and contributing to increased psychological distress.

The team was reduced. . . we rotated among ourselves, sleeping for a period and working the next. (P5, Nurse)

We moved all the medications. . . me and another girl. . . we pushed everything by ourselves. (P5, Nurse)

It was a very stressful period. . . we worked a lot, didn't eat, didn't rest. (P3, Psychiatrist)

We started to realize that we really needed some breathing space, to take care of ourselves a little too, to have a break, to switch off (rest) because otherwise it wouldn't work, it was starting to become too much, not exactly burnout, but we were starting to become very, very exhausted. (P3, Psychiatrist)

Coping strategies used by health professionals during the floods

In this category, coping strategies adopted by health professionals to deal with the emotional impact and work demands during the climate crisis caused by the floods were identified.

One of the main strategies reported was solidarity among team members, expressed through the willingness to help colleagues and service users whenever possible. Participants described the mobilization of individual and collective resources aimed at maintaining emotional health and ensuring the continuity of work during the crisis. The statements indicated that interpersonal support played a central role in this process, especially through dialogue and the creation of listening spaces, such as conversation

circles and daily exchanges among colleagues, perceived as forms of support and protection.

My grandmother used to say: between one day and another, there is a night. . . I carried that with me throughout my life. (P1, Nurse)

We were practically like family. It was one supporting the other without looking at hierarchy. . . there were moments when they gave us words of comfort and moments when we gave words of comfort to them. (P5, Nurse)

Initiatives aimed at emotional self-regulation and preservation of well-being were also reported, such as the deliberate search for “moments to breathe” during the work routine and the strengthening of the sense of unity among team members. At the same time, strategies oriented toward problem-solving emerged, including participation in courses, training activities, and the development of workflows to deal more effectively with the demands imposed by the emergency situation. On a personal level, sources of emotional support associated with beliefs, life lessons, and family support were highlighted, as well as ongoing mental health care, such as individual psychotherapy.

There was a strengthening of care networks and relationships between services, especially due to the closer connections promoted during the flood period. The temporary integration of the three services, which worked jointly for approximately two months, fostered stronger bonds, improvements in work processes, and the consolidation of more consistent collaborative practices. (P6, Nurse)

We had spaces to talk, conversation circles, where we were able to express ourselves, where we managed to talk about feelings and how much it impacted us while we were still trying to rebuild ourselves as well. (P1, Nurse)

We started to have training sessions, the city administration also began offering courses; we started reading about the topic; other members of the team also took courses, and we had more training opportunities. (P3, Psychiatrist)

Participants also emphasized that, given the floods, there was a practical and emotional reorganization of daily work, with a redefinition of priorities necessary to maintain team safety and continuity of care. Reviewing priorities became a form of adaptation to the crisis, involving concrete strategies to reduce errors and deal with risky situations. In addition, the anticipation of critical scenarios led to the planning of protection and contingency measures, reflecting the search for greater organization and control amid instability.

During the (flood) in September 2023, I was not here; I worked as a volunteer in medication dispensing, and there was no time to save anything, a lot was lost. In the May 2024 flood, we decided to create an evacuation plan to collect everything, to try to save as many medications as possible so that we would not lose too much and could also continue providing care. (P7,

Pharmacist)

I packed everything separately so that I wouldn't make mistakes with medications. (P7, Pharmacist)

From a psychosocial perspective, the narratives reinforced that coping with the crisis occurred collectively, sustained by interpersonal bonds and communication spaces among professionals. Mutual support and team unity were identified as essential factors, materializing through practices of collaboration and solidarity in the workplace. At the same time, ways of processing suffering through emotional expression and ongoing professional support emerged, indicating that mental health care was an important component in sustaining the ability to cope with the situation.

During that moment there was no hierarchy. At that moment, we were all a team. If a patient had to be carried, everyone joined in, from physicians to the director and the care manager, all together. (P5, Nurse)

I saw a very strong movement of collaboration, of wanting to help. (. . .) Colleagues made a whole effort to help her, they even helped with the first months of rent (. . .) even though it was a very sad moment, I saw this movement of empathy for others very strongly. (P8, Nurse)

I think that when I managed to cry at that moment, it was like letting everything out, and that helped me. But I believe that some colleagues may not have been able to do that and ended up needing more medication, anyway, to soothe (calm), let's say, their hearts. Each person feels things differently, and that was my perception. (P7, Pharmacist)

During the event, the psychology team made themselves available. I didn't need to go because I already attend therapy. So, I continued with my therapist. (P8, Nurse)

Overall, the accounts indicate that during the floods, professionals developed strategies of emotional expression and interpersonal support in the workplace. Crying was mentioned as a mechanism of emotional release and regulation, suggesting the need to externalize suffering in order to make it more bearable. At the same time, communication among team members functioned as a space for support and for the collective construction of meaning in relation to the lived experience, contributing to sustaining the ability to cope with the crisis.

DISCUSSION

The first category of analysis revealed feelings, perceptions, and challenges faced by health professionals in the context of ECEs. Literature indicates that working in disaster situations can produce significant repercussions on the mental health of these professionals, especially in scenarios marked by work overload, institutional vulnerability, personal losses, continuous exposure to human suffering, and the absence of immediate psychological support⁽¹²⁾.

In line with the findings of this study, research shows that frontline workers are at greater risk of developing symptoms of stress, anxiety, and depression, as well as emotional

exhaustion resulting from extreme working conditions⁽¹³⁻¹⁵⁾. The experience of the 2024 floods in RS reinforces this evidence by revealing structural and care-related weaknesses that intensified the psychosocial impact on the professionals involved^(16,17). These impacts may have been aggravated by the historical insufficiency of resources allocated to mental health in emergency situations in Brazil, particularly in contexts where multidisciplinary teams remain exposed for prolonged periods to extreme suffering^(18,19).

Based on the participants' statements, it is observed that insufficient structural conditions make access to psychological support even more relevant for professionals involved in rescue, care, and reconstruction processes. Rapid and structured interventions, such as psychological first aid and institutionalized emotional support, have the potential to reduce symptoms of stress, anxiety, and depression as well as strengthen individual and collective resilience⁽²⁰⁻²²⁾. International studies also indicate that workers who act directly with populations affected by climate disasters are at greater risk of developing burnout syndrome, PTSD, and moral distress when they perform their activities without adequate support^(14,15).

Similar results have been identified in studies with nurses working in emergencies with multiple victims, which highlight shortages of professionals, inadequate infrastructure and resources in services as well as high levels of emotional and psychological stress^(8,23,24). Important differences were also observed between professionals who had prior preparation for disaster response and those who had not received specific training⁽⁸⁾. In a study conducted after the earthquake that occurred in Turkey in 2023, more than half of the nurses reported not having received prior preparation for disaster response, revealing significant gaps in professional training in this area^(13,25). Similarly, participants in the present study pointed out the need for prior and continuous training to face climate crisis situations.

With regard to the second thematic category, coping strategies mobilized by professionals during the floods were identified. These strategies emerged progressively in daily work routines and interactions among professionals, contributing to reducing the negative impact on mental health. Among them, the unity among team members stood out, expressed through dialogue, listening, and the exchange of experiences.

Strategies focused exclusively on the individual, such as individual psychotherapy, although recognized by participants as an important resource, are insufficient for rebuilding social and support networks. In this sense, strengthening the sense of community and mutual support plays a central role in protecting professionals working in disaster contexts⁽²⁶⁾.

A scoping review on interventions aimed at humanitarian volunteers identified consensus regarding the need for structured support strategies for professionals working in emergencies, including group sessions, remote support, and evaluations before and after the actions carried out. Such interventions contribute to reducing symptoms of stress and anxiety among these workers⁽²⁷⁾.

The traumatic experience lived during disasters has also been associated with a disruptive syndrome characterized by the rupture of the continuity of everyday life⁽²⁸⁾.

In this context, support networks emerge as fundamental resources for processes of adaptation, reconstruction, and social reorganization. Literature highlights that cooperation, solidarity, and collective mobilization are central elements for strengthening community resilience, favoring the overcoming of suffering and the reconfiguration of social life^(21,29,30).

Thus, disaster response should include not only material reconstruction measures but also actions aimed at the emotional processing of lived experiences, the creation of listening spaces, and the preservation of collective memory. Such strategies should include continuous psychological follow-up, team training, emotional response protocols, and the strengthening of professional and community support networks⁽²⁹⁻³¹⁾. The integration of these practices is essential to minimize subsequent psychological impacts and to promote more protective work environments in the face of new ECEs.

As indicated in the statements of the interviewed professionals, the absence of clear guidelines, continuing education, and specific protocols for disaster response increases the risk of psychological illness among health workers^(15,23). Recent studies on the floods in RS also confirm a high prevalence of anxiety, depression, acute stress, and trauma-related symptoms among these professionals^(17,18).

The present study highlights the urgent need for structured psychosocial care actions aimed at health professionals in disaster contexts. Although the literature already points to health education initiatives aimed at coping with natural disasters⁽³¹⁾, it remains essential to recognize that caring for teams is a central element for sustaining the resilience of services, ensuring continuity of care, and contributing to the reconstruction of affected communities^(21,29). This perspective is aligned with international recommendations on psychosocial care in emergencies, which emphasize the importance of qualitative approaches to understand emotional and organizational impacts in crisis contexts⁽²³⁾.

The findings of this study converge with the literature by highlighting challenges experienced by health professionals, risks to mental health, and the need to invest in strategies for damage mitigation and strengthening the resilience of services in the face of the increasing frequency of ECEs associated with climate change.

Considering that global warming already directly impacts the climate and tends to intensify and increase the frequency of these ECEs, the results presented have relevant implications for the fields of health and nursing. The findings may support the planning of disaster preparedness and response actions, the incorporation of competencies in mental health and risk management into professional training and continuing education, as well as the structuring of psychosocial care mechanisms for teams before, during, and after critical events. Although limited to a specific territory, the study contributes to strengthening evidence-based practice, the resilience of professionals, and the development of policies and protocols aimed at protecting health workers in climate emergency scenarios.

In this sense, the results also highlight relevant contributions to nursing by emphasizing the importance of preparing professionals and health services for this reality.

Such preparation includes the implementation of psychosocial support protocols, continuing education in disasters, risk management strategies, and actions focused on worker care. These initiatives may strengthen both individual and collective resilience as well as the institutional capacity for response and continuity of care. In addition, it becomes essential to highlight and systematize the need for structured public policies that incorporate mental health as a central axis of emergency management, with continuous actions of prevention, response, and recovery before, during, and after climate crises, aimed both at affected populations and at frontline professionals.

Among the limitations of the study, it is worth highlighting that it was conducted in a specific geographic region of RS, within a singular context of a large-scale climate disaster. In addition, the number of participants and professional categories was relatively limited. Therefore, future studies are recommended to expand territorial scope, include greater diversity of professional categories, and adopt designs with mixed methods in order to deepen the understanding of risk and protective factors related to the mental health of health professionals in ECE scenarios.

CONCLUSION

The study demonstrated a significant impact on the mental health of health professionals who worked during the floods, characterized by collective suffering marked by intense fear, perception of threat to life, persistent anxiety, and extreme exhaustion. These experiences generated pro-

found emotional repercussions, often long-lasting, which may persist even after the end of the climate crisis and leave significant emotional marks.

At the same time, protective mechanisms constructed within the disaster context itself were identified, including the formation of new support networks, strengthening of unity among teams, dialogue, solidarity, and the reorganization of workflows, as well as everyday support among colleagues.

Given these findings, strengthening the preparation of professionals and health services for action in climate crises is recommended through strategies such as continuing education in disasters, risk management, and the implementation of public policies aimed at prevention, strengthening institutional response, and protecting the mental health of workers in the face of ECEs.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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USE OF ARTIFICIAL INTELLIGENCE

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All authors are responsible for the textual writing and critical review of the intellectual content, the final version published, and all ethical, legal, and scientific aspects related to the accuracy and integrity of the study.



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