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LETTER TO THE EDITORS

The role of psychiatry in areas affected by natural disasters

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Since late April 2024, the state of Rio Grande do Sul, Brazil, has been facing the most significant climate tragedy in its history. The National Institute of Meteorology's Virtual Center for Severe Weather Event Alerts issued a storm warning on April 26, 2024, predicting heavy rains between 30 and 60 mm/h, winds up to 100 km/h, hail, and the risk of power outages, agricultural damage, tree falls, and flooding.[1] On April 29, 2024, an alert of similar severity was issued, this time for virtually the entire state,[2] and the storm resulted in devastation and suffering.

The State Reconstruction Plan, announced by the state government in early May 2024, initially assessed the flood damage at BRL 19 billion. However, sources connected to the crisis management office believe this amount could be higher. The heavy rains have affected 450 municipalities, with estimates exceeding half a million displaced people, including around 80,000 people living in shelters. Direct flood and landslide damage has affected 2.1 million people. This disaster not only highlights the vulnerability of communities to extreme natural phenomena but also underscores the need to address the negative psychological impacts that accompany such events.

Publications worldwide have documented the effects of natural disasters, such as in Mexico, where a high incidence of trauma and PTSD was observed in affected communities.[3] After the 2004 tsunami, studies showed that up to 30% of survivors in the Indian Ocean region developed significant depression and anxiety symptoms.[4] In the United States, epidemiological studies identified a high prevalence of PTSD, depression, substance abuse, and suicide among Hurricane Katrina survivors.[5] After the 2010 earthquake in Haiti, findings indicated that the prevalence of PTSD reached 30% among survivors.[6] In Puerto Rico, studies on Hurricane Maria survivors showed high rates of PTSD and depression, highlighting the need for effective psychiatric interventions to mitigate the disaster's impact on mental health.[7]

Traumatic events of great magnitude often impact mental health and trigger negative psychological responses both in direct victims and affected communities, as well as in professionals involved in rescue operations, logistical support, and humanitarian assistance.

Following the 2013-2014 floods, Public Health England's National Study on Flooding and Health investigated the long-term impact of flooding and disruptions on mental health. Participants were categorized according to exposure as flooded, disrupted by flooding, or unaffected, and were followed annually for three years. The overall results showed that approximately 5.7% reported symptoms of probable depression, 8.1% of probable anxiety, and 11.8% of probable PTSD, with the prevalence of all probable adverse mental health outcomes being higher in the flooded group than the unaffected group.[8] A number of conclusions can be drawn from this study, which was published in March 2020. First, the impact of flooding on mental health was highly significant. There was an adverse impact on the mental health of those whose lives were disrupted by flooding, as well as of those whose homes were flooded. Second, the increase in mental health problems persisted for three years. Third, certain factors were associated with worse outcomes, such as the depth of floodwater in the home. Fourth, many people suffered persistent flood-related damage to their homes, which was associated with worse mental health outcomes. Fifth, evacuation and displacement, especially without prior notice, increased the risk of anxiety and post-traumatic stress disorder. Sixth, the loss of domestic public services was associated with negative effects on mental health, including (a) an increased risk of depression and anxiety among those who need these services, (b) insurance issues became significant secondary stressors, (c) higher prolonged demand for support, including formal sources, such as general practitioners, and informal sources, such as family and friends.[9]

In this context, psychiatry, a medical discipline dedicated to comprehensive mental health care, offers immediate emotional support, psychological stabilization, risk screening, therapeutic interventions, and long-term prevention strategies to alleviate suffering and promote victim recovery. It should be reiterated that the increased prevalence of PTSD, anxiety, and depression among survivors of major traumatic events requires effective interventions,[4,8] including the reception of displaced people, early intervention, social support, and psychopharmacotherapy, since these measures can reduce the incidence of serious psychiatric complications and promote subsequent functional adaptation.

Another aspect that warrants attention is psychiatry's role in building and promoting individual and community adaptability, providing resources and psychosocial support to overcome the emotional challenges associated with tragedy and the post-disaster reconstruction process.[10,11] The importance of individual and community adaptability in recovery after traumatic events, especially the ability to overcome adversity while maintaining healthy psychological functioning, has been the object of study. Researchers have found that providing social support and promoting coping skills are essential components of psychiatric intervention. Study results have shown the importance of adaptability after traumatic events, underscoring the importance of strengthening internal resources. Adaptability is also of critical importance for children, being essential for healthy development and for overcoming childhood adversities. Adaptability is influenced by a complex interaction

between individual and environmental factors, which highlights the importance of psychosocial interventions to strengthen adaptability in vulnerable individuals.[10,11]

Psychiatry also plays a prominent role in crisis management, guiding multidisciplinary teams and interventions directed at the specific needs of victims, such as identifying and reducing psychosocial risk factors that could perpetuate long-term suffering and vulnerability. Although health services in general are not equipped for large-scale disaster response, the lack of a psychosocial care network of sufficient size and quality for such situations compromises the population's access to mental health services and does not lessen the stigma associated with mental illness, which worsens the psychological impact of trauma.

Natural disasters, such as the flooding in Rio Grande do Sul, challenge the mental health and well-being of affected individuals and communities, especially since psychological treatment for these victims will be long-term and dependent on state policies. Although the impacts of such events on mental health are unequivocal, they can also support the development of evidence-based interventions and public policies to ensure equitable access to mental health care.

During these critical moments in Rio Grande do Sul, psychiatry is intensifying its efforts to promote health and prevent disease, alleviating immediate suffering, promoting individual and collective adaptability, and reducing the stigma of mental illness, thus aiding in emotional and psychological reconstruction.

At least for the next five years, health policies will be needed to effectively address, not only the most prevalent mental illnesses in the aftermath of the tragedy, but a broader scope of issues, including suicide, considering that highest suicide mortality rates in Brazil have historically been in Rio Grande do Sul; the alarming increase in alcohol and illicit drug consumption by the general population compared to previous years; and the underreporting of diseases, conditions, and events relevant to public health.

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