The January 2025 Southern California Wildfires: Public Mental Health Impacts and a Call to Action

M Marthoenis

Department of Psychiatry and Mental Health Nursing, Universitas Syiah Kuala, Banda Aceh, Indonesia, 23111 *Corresponding author: marthoenis@usk.ac.id

Editorial

Wildfires are increasingly recognized as not only ecological disasters but also public health crises. January 2025 Southern California wildfires, among the most devastating in recent years, burned over 40,000 acres, displaced thousands of residents, and caused significant loss of property and life. While the immediate physical destruction and economic toll are evident, the long-term effects on mental health are less visible but equally critical. This editorial explores the mental health consequences of wildfires, identifies populations at risk, and calls for both national and global action to address and prepare for the psychological repercussions of such disasters.

Mental Health Impacts of Wildfires

Wildfires can induce a wide range of mental health issues, including acute stress, post-traumatic stress disorder (PTSD), anxiety, depression, and substance abuse. These effects are particularly pronounced in individuals directly affected by the fires, such as evacuees, first responders, and those who lose their homes or loved ones. In a wildfire disaster-prone, such as California, the lifetime exposures to traumatic events could a very high among their population (Marthoenis et al., 2018). However, repeated exposure to news about catastrophic wildfires on mass or social media can also trigger trauma in viewers.

Acute Stress and Post-Traumatic Stress Disorder

Wildfires often entail life-threatening situations, sudden evacuations, and extended periods of uncertainty, all of which can provoke acute stress reactions. If these reactions are not effectively addressed, they may develop into PTSD. Research on the 2018 Camp Fire in California revealed that direct exposure to large-scale wildfires significantly increased the risk of mental health disorders, particularly PTSD and depression (Silveira et al., 2021). Moreover, 67% of individuals directly impacted by the Camp Fire reported experiencing recent psychological trauma (Grennan et al., 2023). The January 2025 wildfires could indicate a similar or potentially higher prevalence of psychological distress among affected populations.

Anxiety and Depression

The prolonged disruption to daily life caused by wildfires—including displacement, financial strain, and the destruction of community infrastructure—is a significant driver of anxiety and depression. Children, adolescents, and elderly individuals are particularly vulnerable, as they often lack the resources or coping mechanisms to manage stress (To et al., 2021; Varshney et al., 2023). These challenges underscore the urgent need for mental health support systems and community-based interventions to address the psychological aftermath of wildfires.

Substance Use Disorders

Wildfire survivors are at heightened risk of developing substance use disorders as a maladaptive coping mechanism. substance use has been often observed among wildfire survivors (To et al., 2021; Varshney et al., 2023). Increased rates in alcohol or drug use were observed among evacuees following the Hurricane Katrina in 2005 (Cepeda et al., 2010), a pattern likely to be replicated in Southern California.

Long-Term Psychological Distress

The long-term psychological distress following wildfires extends beyond immediate mental health conditions such as depression, anxiety, PTSD, and substance use. Prolonged exposure to the aftermath of wildfires—including displacement, financial strain, and the destruction of community infrastructure—can lead to enduring stress and trauma. Rebuilding homes, dealing with insurance claims, and recovering livelihoods are prolonged stressors that can exacerbate preexisting mental health conditions or give rise to new ones. This prolonged disruption to daily life is a significant driver of anxiety and depression. Children, adolescents, and elderly individuals are particularly

Marthoenis. AJPHN 2024; 3 (X): - http://doi.org/10.62377/fdtqx765

vulnerable, as they often lack the resources or coping mechanisms to manage stress (Luthar, 1991). the enduring psychological distress following wildfires underscores the critical need for targeted mental health interventions and support systems to assist affected individuals, particularly vulnerable populations such as children, adolescents, and the elderly.

Vulnerable Populations

Wildfires disproportionately impact certain populations, leading to significant mental health challenges. Children and adolescents exposed to such disasters may experience lasting psychological effects, including developmental delays and behavioral issues. This group is known for their high prevalence of experience traumatic disorder following a disaster (Marthoenis et al., 2019). Elderly individuals often face physical and cognitive challenges that exacerbate their vulnerability during and after wildfires. Low-income communities, with limited access to healthcare and resources, find it harder to recover and manage mental health challenges. First responders, such as firefighters, police officers, and emergency medical personnel, are at high risk for PTSD and burnout due to repeated exposure to traumatic events. Additionally, pregnant women are at risk of preterm birth, low birth weight, and stillbirth, exacerbated by heat stress from wildfires causing heat exhaustion or heat stroke. Individuals who become homeless or lose their properties and have nowhere to stay are at heightened risk for mental health issues, including anxiety, depression, and PTSD. The loss of a home and the uncertainty of housing can lead to increased stress and a sense of instability, further exacerbating mental health challenges. These profound mental health challenges faced by vulnerable populations highlight the urgent need for targeted interventions and support systems to aid their recovery and resilience, and to plan for better preparation in the future.

Preparing for the Future

As wildfires become an increasingly common consequence of climate change, it is imperative to adopt a comprehensive approach to disaster management that prioritizes mental health. First, recognizing mental health as a central component of disaster response necessitates the allocation of resources to support affected individuals. Second, providing immediate mental health support can significantly reduce the incidence of conditions such as PTSD and depression among survivors. Thirst, building resilience within communities is another vital strategy. Enhancing community resilience through disaster preparedness training and social cohesion initiatives can mitigate the mental health impact of wildfires. A community-driven approach contributes to increasing social resilience to forest fires by incorporating local knowledge into disaster risk reduction policies and plans. Lastly, integrating mental health considerations into broader policies on climate change and disaster management ensures a comprehensive approach to community well-being. By adopting these strategies, we can better prepare for the mental health challenges posed by wildfires and other climate-related disasters, fostering a more resilient and supportive environment for all affected individuals.

Conclusion

The January 2025 Southern California wildfires serve as a stark reminder of the complex interplay between environmental disasters and mental health. Addressing these challenges requires a multi-faceted approach that combines immediate support, long-term care, and preventive measures. The mental health consequences of wildfires are not just a local issue but a global one, necessitating collective action from governments, healthcare providers, researchers, and communities. By prioritizing mental health in disaster response and preparedness, we can better support those affected by wildfires and build a more resilient future.

References

- Cepeda A, Valdez A, Kaplan C, et al. (2010) Patterns of substance use among Hurricane Katrina evacuees in Houston, Texas. *Disasters* 34(2): 426–446.
- Grennan GK, Withers MC, Ramanathan DS, et al. (2023) Differences in interference processing and frontal brain function with climate trauma from California's deadliest wildfire. *PLOS Climate* 2(1). Public Library of Science: e0000125.
- Luthar SS (1991) Vulnerability and Resilience: A Study of High-Risk Adolescents. *Child development* 62(3): 600–616.
- Marthoenis, Meutia I, Sofyan H, et al. (2018) Exposure to Traumatic Events and PTSD in a Postconflict and Disaster-Prone Area. *Journal of Loss and Trauma* 23(2). Routledge: 128–139.
- Marthoenis M, Nirwana A and Fathiariani L (2019) Prevalence and determinants of posttraumatic stress in adolescents following an earthquake. *Indian Journal of Psychiatry* 61(5): 526.
- Silveira S, Kornbluh M, Withers MC, et al. (2021) Chronic Mental Health Sequelae of Climate Change Extremes: A Case Study of the Deadliest Californian Wildfire. *International Journal of Environmental Research and Public Health* 18(4): 1487.

Marthoenis. AJPHN 2024; 3 (X): - http://doi.org/10.62377/fdtqx765

To P, Eboreime E and Agyapong VIO (2021) The Impact of Wildfires on Mental Health: A Scoping Review. Behavioral Sciences 11(9): 126.

Varshney K, Makleff S, Krishna RN, et al. (2023) Mental health of vulnerable groups experiencing a drought or bushfire: A systematic review. *Cambridge Prisms: Global Mental Health* 10: e24.