

Impact of Floods on Mental Health in Nepal: An Emerging Public Health Concern

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A devastating flood on 26th August 2026 in Nepal affected several communities near the Bhote Koshi and Trishuli river corridors [1]. Fifteen municipalities were declared as disaster crisis affected areas by the Government of Nepal for the duration of three months. It damaged homes, roads, markets, bridges, hydropower infrastructure and customs facilities. It affected 84000 people with 1356 deaths [2]. Global warming is the potential factor which leads to heat waves, wildfires, droughts, and extreme precipitation events causing flooding [3, 4]. A recent prospective UK Biobank study on 200,000 participants suggests that exposure to flood is significantly related to the psychiatric disorders and Dementia [5]. Flood can lead to psychiatric disorders which will further develop Dementia in the exposed population. The estimated prevalence of Dementia in 2021 was 57 million among them 60% from the low- and middle-income countries with an economic burden of US\$ 1.3 trillion [6]. Scientific evidence suggests that exposure to multiple disasters can worsen the mental health conditions of the population [3, 7]. Yakubu et al. reported that there is two times more risk of developing post-traumatic stress disorder (PTSD), depression and anxiety among those who exposed to flood compared to others [8]. In addition, another study suggested that cognitive impairment in the children was significantly associated with maternal exposure to flood, and it was five times more for those who in first trimester of pregnancy [9]. There are very limited research studies in the

impact of flood on mental health in South Asia settings and none of them from Nepal [10]. Among them most prevalent psychological disorders were post-traumatic stress disorder (0.2%-100%), depression (0.7% to 61.5%), and anxiety (0.1% to 44%) [10]. The magnitude of the mental health burden from flood can be condensed with cost effective timely and sustainable evidence-based interventions targeting pre and post natural disaster [11-14].

Recommendations

1. Evidence based mental and psychological health intervention should be added to the disaster preparedness program. Local, provisional and National disaster plans should include the continuity of care for existing mental health patients, early identification of new cases, referral pathways, and psychological first aid [15].

2. Nepal need an evidence-based approach like mhGAP Humanitarian Intervention Guide (mhGAP-HIG), which can be implemented in the existing health care system. This has an intervention adapted from the Inter-Agency Standing Committee (IASC) Guidelines with four components such as (i) Clinical services, (ii) focussed psychological support, (iii) strengthening community and family supports, and (iv) social considerations in basic services and security [16]. Luitel et al. has done research on the mobile app-based WHO mhGAP intervention guide. They found few modifications to the app according to Nepal context, and reported that it is acceptable

and feasible after modification in the use of primary care setting [17]. It is not possible to treat mental health as a secondary consideration in disaster response in Nepal due to the unaffordable cost associated with it. Investment should be done in primary care setting with innovative interventions.

3. There is no research related to mental health and flood in Nepal. It is important to explore further scientific evidence by both cross sectional and longitudinal studies as the outcome of interest can significantly differ in Nepalese context [10]. Nepal Health Research council can develop the National research blueprint which can include Nature Disaster and Mental Health as a priority area. This will help to develop policies and policy briefs in future with country specific evidence.

Climate change related natural disasters are common in Nepal due to its geography. Our editorial suggests the need of further research in this domain and mental health should be included in the climate change policy. Nepal government should allot more funding for mental health services to improve the monitoring, surveillance, adaptation and resilience planning.

Competing interests

There is no conflict of interest for any author of this manuscript.

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