

Understanding the multi-level and multi-sectoral interventions for strengthening mental health of flood-affected population: Insights from a longitudinal household survey in the North of Vietnam

Background: Floods are the most frequent natural hazard in Vietnam, exacerbating mental health challenges such as depression, anxiety, and post-traumatic stress disorder (PTSD) among affected communities. Despite growing evidence of psychosocial impacts, longitudinal data on recovery trajectories and the effectiveness of multi-level mental health and psychosocial support (MHPSS) interventions and Disaster Risk Reduction measures (DRR) remain limited in low- and middle-income countries (LMICs).

Objectives: This longitudinal survey aims to examine the temporal dynamics of mental health outcomes in flood-exposed populations, identify risk and protective factors, and evaluate the role of MHPSS interventions and different DRR measures in promoting resilience. It integrates disaster risk management with public health to inform sustainable adaptation strategies.

Methods: The study will recruit 1,250 participants from two provinces (Lao Cai, Yen Bai) stratified into 3 groups by their hazard experiences (floods, landslides and both). Data will be collected at baseline, 6 months using validated scales for evaluating mental health problems including PHQ-9 (depression), GAD-7 (anxiety), PCL-5 (PTSD), and alcohol and substance consumptions. Linear mixed-effects models will analyze trajectories, accounting for individual variability and attrition (estimated 20%). Feasibility is ensured through local partnerships, with ethical approvals from Charité University and Hanoi Medical University.

Conclusion: This survey provides critical longitudinal insights into flood-related mental health in Vietnam, bridging gaps in evidence for targeted interventions amid climate change.

Author: PHAM, Thi Thu Trang

Co-author: SAIRAM, Nivedita (GFZ)

Presenter: PHAM, Thi Thu Trang