POLICYBRIEF

The Nexus Between Climate Change, Human Mobility and Mental Health

Understanding Challenges and Exploring Opportunities

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Highlights

1. The relationship between climate change, human mobility and mental health is a complex, underexplored and pressing challenge.
2. Different types of human mobility can affect mental health in various ways; when mobility is less voluntary, impacts tend to be more serious.
3. Discrimination in host communities and stigma surrounding mental health within both migrant and host populations create psychological barriers, leading to social withdrawal and worsening mental health challenges.
4. Children and adolescents are highly vulnerable to risks due to their developmental stages, dependence on adults, and exposure to disruptions in family, school and community life, especially in displacement situations.
5. Recognizing migrants' agency in rehabilitation planning ensures that their values and priorities are considered, leading to more people-centered programs and better cultural integration.
6. AI-based storytelling offers a transformative way to address climate-induced displacement by creating personalized narratives that resonate with diverse audiences and drive action on climate migration.

Background

Climate-related stressors – such as extreme weather events – can cause loss of livelihoods and displacement of people, often triggering mental health conditions (e.g. anxiety, depression and post-traumatic stress disorder) in those affected. Such impacts can be intensified by pre-existing vulnerabilities and inequalities relating to age, gender, economic disparities and displacement. These factors create multifaceted challenges, since vulnerable populations are often the least equipped to cope with and recover from the psychological toll of climate change. Furthermore, poor mental health (resulting from climate-induced stressors) can lead to impaired cognitive abilities, strained familial and social relationships, substance addiction and even suicide ideation (WHO, 2022; Okamoto, et al., 2023).

Globally, it has been estimated that 3.6 billion people are living in highly climate-vulnerable regions. While we do not yet know how many people will be displaced by climate events in the future, we do know that climate change hazards are becoming both more frequent and more intense. It is therefore likely that the 20.3 million people internally displaced by climate-related hazards in 2023 (IDMC, 2024) is a number which will be exceeded in years to come.

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Furthermore, climate hazards may damage infrastructure and systems that are necessary for supporting healthcare systems. Traumatic experiences, such as witnessing the loss of homes and communities, and fears for safety are common among displaced populations. With climate change driving more frequent and severe displacement worldwide, there is an urgent need to understand and address the mental health challenges faced by affected populations to provide effective psychosocial support.

Human mobility in the context of climate change (HMCCC)

There are four main types of human mobility in the context of climate change and each type can affect mental health

The impacts of diplacement

As displacement is the form of HMCCC that is likely to have the most severe health impacts, we give it extra attention in this policy brief. Many displaced people experience reduced autonomy and control over their living conditions and future prospects, leading to heightened stress, anxiety, and a sense of powerlessness (Ngcamu, 2023; UNHCR, 2024). Various factors can thus pose threats to the mental health of populations affected by human mobility in the context of climate change.

For displaced populations in new host regions, common barriers such as language and cultural differences, low health literacy, and social exclusion often lead to the underutilization of primary care and over-reliance on emergency services

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differently. **Displacement**, or forced migration, occurs when there is little or no agency involved in moving (Atapattu., 2020). This typically occurs when a sudden-onset hazard such as a cyclone puts lives or livelihoods at risk and so people move before, during or after the climate event.

Migration occurs when more personal agency is involved, typically caused by slow-onset processes such as changes in rainfall or drought (van der Geest, 2011). There is an element of agency in climate-related migration; nonetheless, it is often not totally voluntary as global and historical socio-economic processes lead to a situation in which people move (Oakes et al., 2023).

Planned relocation refers to situations in which entire communities move to a safer location, often with support from a government (Mortreux et al., 2018; Durand-Delacre et al., 2023). Until now, this has most often taken place in Small Island Developing States with affected populations moving to higher ground or to another island due to sea levels rising (Gini et al., 2024).

Immobility is also important to consider. Voluntary immobility occurs when affected people choose to stay, deeming their present circumstances as preferable or more certain than moving (Oakes, 2019). Sometimes this involves resistance to government-imposed planned relocation projects (van der Geest et al., 2023). Involuntary immobility occurs when people do not possess the resources necessary to move out of environmentally stressed areas or have nowhere to go to; for this reason, such people have been termed 'trapped' (Black and Collyer, 2014).

(WHO, 2018). Mental healthcare is particularly difficult to access due to a lack of capacity (WHO, 2022) and different cultural norms around mental health conditions among healthcare providers (Penuela-O'Brien, 2023). These challenges are exacerbated by inadequate housing, lack of social support, and limited access to social and cultural capital (Wali, 2018). Structural barriers in the healthcare system (such as long waiting lists, financial constraints, and mistrust in healthcare systems in host countries) further hinder access to care for displaced populations (Giuntella, 2018).

There are a range of mental health-related impacts which can occur or be intensified through mobility and the new context it creates. They include:

1. *Loss of belonging and social, cultural and environmental connection:* Displaced individuals often experience a loss of social, cultural and environmental ties, exacerbating feelings of isolation, grief and psychological distress.

2. *Discrimination and double stigmatization:* Populations may face discrimination in host communities that in turn impacts mental health. Moreover, stigma around mental health issues within migrant populations or host communities create psychological barriers to seek support or to achieve social integration. Such double stigmatization can lead to social withdrawal, which in turn worsens mental health challenges.

3. *Barriers to accessing mental health services:* Many displaced individuals lack access to adequate mental health care that is culturally sensitive, timely and community-led.

Structural barriers such as waiting times, costs, language differences and a lack (or limited availability) of services hinder access to mental health interventions.

4. *Lack of agency and decision-making opportunities:* Psychological agency reflects an individual's perception of their capacity to control their own lives (Bandura, 2001), and a lack of it is associated with increased vulnerability to anxiety, depression and motivational challenges (Tang, et al., 2023). Displaced individuals often have little control over decisions affecting their lives, deepening feelings of powerlessness and psychological distress.

5. *Vulnerability of children and adolescents:* Children are especially vulnerable to risks due to their developmental stages and reliance on adults for protection and decision-making (Fritze, et al., 2008). Children may suffer from disrupted family, school and community functioning, lack of agency, and prolonged exposure to stress in displacement settings.

At the Paris Committee on Capacity-building 6th Capacity-Building Hub at COP29, researchers from United Nations University (UNU) hosted a workshop to build capacity and exchange ideas on Human Mobility in the Context of Climate Change, and how climate-induced displacement impacts mental health. Based on the rich interactive discussion at the session, we explored some innovative responses:

Innovative solutions:

Socio-ecological approach

As described earlier, migrant and displaced communities seek access to culturally important resources and are affected by loss of access to them. Some try to recreate these cultural experiences through nurturing resources (e.g., by growing specific foods or culturally important plants in urban gardens) or actively seeking particular cultural practices that help them retain psychological connections with their 'bio-cultural' spaces (Strunk and Richardson, 2017; Lapina, 2017; Bodeker and Neumann,2012). Anticipating displacement risks, communities have put in place various human and ecological measures to build resilience. This is done in a manner sensitive to the needs and realties of the population (eg., vulnerability to landslides or sea incursions) and/or assets (eg., planting mangroves, better coastal area management); thereby ensuring strategic prioritization of responses in the possible event of different socio-ecological scenarios (for eg.,demographic changes, new livelihood activities coupled with natural hazards, etc) arising from environmental and other changes.

AI-based storytelling

To effectively address the issue of forced displacement, AI can identify key themes and sentiments surrounding climate migration by analyzing vast data from social media, news articles and academic research, and is able to craft compelling stories that not only inform but also evoke empathy and understanding. Moreover, it can facilitate interactive experiences where users engage with the narrative through choices that reflect their values and concerns. This participatory approach encourages deeper engagement with the subject matter, fostering a sense of agency among individuals regarding climate action and migration policies. From a policy perspective, leveraging AI-based storytelling can enhance awareness and understanding of the socio-economic impacts of climate-triggered displacement. It can serve as a tool for policymakers to visualize potential scenarios and consequences of inaction or inadequate responses to climate change.

Key policy recommendations:

1. **Support adaptation in place while facilitating adaptive forms of mobility**
It is essential to support people to live sustainable and dignified lives without needing to move. However, when people want or need to move, finding ways to promote dignified forms of migration and if necessary planned relocation can reduce the risk of trapped populations and future displacements.

2. **Promote inclusive and culturally sensitive mental health services**
Services need to be customized for the displaced population's needs, by increasing funding for training mental health professionals in cultural competency, and engaging displaced individuals to co-design and implement responsive support systems.

3. **Support social reintegration efforts**
Opportunities for displaced individuals to build social networks can be fostered through community events, language classes and skills-building programs. This could be established through partnerships with local authorities to provide mentorship and peer-support programs.

4. **Combat stigma and discrimination**
Awareness campaigns in host communities should be developed to reduce stigma around displaced populations and mental health issues, helping to build a safe space where migrant communities (including children and adolescents) can address their emotions and encourage open dialogue.

5. **Empower displaced individuals in decision-making**
We need to incorporate migrant voices into policy discussions and support migrant-community-led initiatives that encourage participation among displaced populations to regain a sense of agency.

6. **Leverage AI-driven storytelling**
AI storytelling can empower stakeholders, fostering deeper discussions on climate-triggered displacement and illustrate potential scenarios of climate inaction, advocating for comprehensive policies that prioritize sustainability and human rights.

7. **Recognize the agency of migrants in rehabilitation planning**
The values and priorities of migrants related to access to various services (food, healthcare, livelihoods, etc) should be considered, as well as their resource use and spatial management, among other aspects. This will enable a better bridging of cultures and more people-centred programs and outcomes.

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