

## Floods and Climate Change: An Impact on Women and Child Health



Umair Maqbool Ahmed

### Abstract

The 21st century grapples with numerous challenges, prominently among them being natural disasters and calamities, which endanger human lives globally. Chaotic weather patterns and unpredictable rainfall exacerbate vulnerability, particularly among women and children, leading to increased morbidity and mortality. The perturbation of climatic turmoil disrupts growth and exposes them to health impediments. With floods affecting over two billion people in the past two decades, and climate change exacerbating health risks, urgent action is imperative. The consequences of extreme weather events extend beyond health, impacting human progress and prosperity, with floods alone resulting in significant casualties and financial losses. Women and children, the most vulnerable during such disasters, face immense challenges accessing healthcare and coping with health barriers. Strategic action and compliance with global health authorities are essential to mitigate these challenges and prioritize the well-being of women and children in the face of escalating climate-related incidents.

<sup>1</sup> Aga Khan University Hospital

**Correspondence:**  
Umair Maqbool Ahmed  
umair.maqbool@aku.edu

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The 21st century is grappling with a myriad of challenges. Among those challenges, natural disasters and calamities pose a severe peril to human lives and limbs around the world. Chaotic weather conditions and unpredictable rainfalls have made the human population vulnerable across the globe (1). It leads to increased morbidity and mortality among the destitute segments, specifically among women and children. The perturbation of climatic turmoil halts the growth of both the former and the latter. Children are deprived of the basic necessities that they need to grow at the desired level, while women are left in dilapidating conditions due to which they face several health impediments. Further, the uncertain climate conditions do not only potentially deteriorate the health conditions of the mother and child, rather they also potentially impair their quality and overall standard of life (2). According to WHO, World Health Organization, it is estimated that burgeoning numbers of more than two billion population have been affected due to the ferocity of floods during the duration of last two decades. It is also reported that around 47% of natural disasters which have occurred are mainly related to floods (3). Similarly, climate changes equally affect the health of women and children. Inability to adapt to such untoward weather situations, women and children bear the heavy brunt of it. As a result, children get exposed to various infections and diseases and suffer from malnutrition owing to inadequate provision of diet and nutrients. Further,

contaminated water and an unclean environment have a daunting effect on their overall hygiene and well-being. Due to this, they undergo life-long repercussions. Acute diarrhea conditions, cognitive deficiency, fragility, and other gastrointestinal illnesses advance during such appalling weather conditions among them. Such weather conditions are detrimental, as the effects of greenhouse gas emissions are evident and consequently, the earth is warming. Indeed, it is concerning that the warming trend is no longer accelerating at a snail's pace rather it is growing with considerable momentum. Further, it has the potential to be continued for several years if apt measures are not taken. Considering the fact, that even if nations across the globe do adhere to the 2015 Paris Accord, the global temperature will keep on rising by 1.5°C (4). In addition, there is also significant evidence to bank on the fact that there will be a rise in climatic upheavals owing to ongoing climatic chaos. Having said that, extreme weather conditions such as heavy rains, escalated ultraviolet radiation, ocean acidification and a monumental rise in sea levels can be witnessed. Such very conditions have immense potential to cause extreme heatwaves, food scarcity, crippling livestock and jeopardize agricultural capacity (5). Hence, the ultimate depravity of biodiversity and the ecosystem would result in growing innumerable pests and vector-borne afflictions and will result in detrimental health outcomes (6). The severity and wrath of climatic challenge and floods is not only limited to undermining health conditions, in fact, they also

impede human progress and prosperity and bereft them of the ability to thrive in life and do better. It is reported that floods and other climatic chaos have resulted in around 300,000 human casualties and a massive loss of USD 1.7 trillion in terms of financial loss worldwide (7). Moreover, it is evident that the 21st century thus far has witnessed a higher number of floods as compared to the previous one, owing to which 600 billion USD have been lost globally amid 2900 flood calamities. These huge numbers of floods have impacted the lives of around 2.8 billion people all around the world (7). Women and children are considered the most vulnerable segments during natural disasters. In most situations, this very fragment is often found at the receiving end. The untoward and uncertain weather conditions often bring plenty of challenges for them to cope with. Every time such a situation arises, an excessive amount of challenges also appear. Access to healthcare facilities is denied, and amid the non-availability of adequate health facilities, several health impediments are faced by them. Such as the children undergo several health complications, as they suffer from diarrhea and other digestive-related issues. On top of it, contaminated water also contributes as the most important determinant of malnutrition among them (8). The sudden abruption in weather conditions and climate changes cause various changes. Similarly, the way the children get exposed to various viruses and diseases, the women also face a plethora of health-related barriers that

halt their well-being. Thus, it is imperative that global health authorities must come forward and take proactive measures to cope with uncertain climate-related incidents. The exponential loss of human life is alarming due to climate-related incidents. Therefore, prioritizing strategic action and compliance to mitigate the challenges faced by women and children during natural calamities like floods is a need of the hour for those who reign in the corridors of power.

## References

1. Abbass K, Qasim MZ, Song H, Murshed M, Mahmood H, Younis I. A review of the global climate change impacts, adaptation, and sustainable mitigation measures. *Environmental Science and Pollution Research*. 2022;29(28):42539-59.
2. Ngcamu BS. Climate change effects on vulnerable populations in the Global South: a systematic review. *Natural Hazards*. 2023:1-15.
3. Zhu W, Cao Z, Luo P, Tang Z, Zhang Y, Hu M, et al. Urban Flood-Related Remote Sensing: Research Trends, Gaps and Opportunities. *Remote Sensing*. 2022;14(21):5505.
4. Venios X, Korkas E, Nisiotou A, Banilas G. Grapevine responses to heat stress and global warming. *Plants*. 2020;9(12):1754.
5. Cheng M, McCarl B, Fei C. Climate change and livestock production: a literature review. *Atmosphere*. 2022;13(1):140.
6. Prakash S, Verma A. Anthropogenic activities and Biodiversity threats. *International Journal of Biological Innovations, IJBI*. 2022;4(1):94-103.
7. Perera D, Seidou O, Agnihotri J, Rasmy M, Smakhtin V, Coulibaly P, et al. Flood early warning systems: a review of benefits, challenges and prospects. *UNU-INWEH, Hamilton*. 2019.
8. Williams P, Beardsley J, Isaacs D, Preisz A, Marais BJ. The impact of climate change and biodiversity loss on the health of children: An ethical perspective. *Frontiers in Public Health*. 2023;10:1048317.