

Review Article

Mental Health Needs and Concerns During Floods

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Abstract

Natural Disasters can happen at any place irrespective of the developed, developing or the least developed status of a country. It can cause massive destruction to the lives and livelihoods of large population and hence, to the national economies. It is experienced that the least developed and developing countries are impacted more severely by large scale natural disasters especially the flood. A number of studies have shown a range of symptoms resulting from exposure to natural disasters such as flooding. Among these consequences, individuals may experience symptoms of post-traumatic stress disorder (PTSD), depression and anxiety. The aim of this article was to examine the psychological impact of flooding.

Keywords: Mental health needs, Floods, Mental health concerns, PTSD.

Introduction

Natural disasters kill sixty thousands people globally. There was almost 0.1% percent of death occurred due to all around the world which widely ranges from 0.01% to 0.04%. Droughts and floods have considered as the most devastating catastrophe that havoc the life and livelihood of human beings including other animals. It is also a fact that death tolls tend to be largely centered on low-to-middle income countries. The lack of infrastructure, disaster preparedness, weather forecasting and preventive and mitigating policies could lead to severe repercussion.^[1] There would be more likelihood of floods losses in upcoming years. Early warning systems and mitigation strategies would be done to reduce the occurrences and to curb the impact of floods.^[2] The communication regarding early warning has to be conveyed to the public at large preventing the impending risk associated with this natural disaster. However the information impact of flood and its

mortality, injury either unknown or underreported^[3]

There are different types of flood which created lot of concerns to the humanity like Coastal floods or (storm surges) occurred in the coastal areas of sea and big lakes which creates high level of water levels and tidal waves. Secondly, flashfloods occurred after rainfall with high intensity with a sudden onset of water rise happens commonly on hilly areas. Thirdly, River caused flooding of the river outside the river frontiers because of sudden gush of water from dam after a heavy rainfall. Finally, Drainage problems and tsunamis are also contribute to flooding.^[4]

Flooding in Indian context

Moreover in Indian context, According to the global assessment records our country stands top five in the world for being often hit by the natural disaster like floods.^[5] India, a lower middle income country faces a lot of economical difficulty to withstand the disaster.^[6] Being a disaster prone state India witnessed a lot of devastating flood in the past both in southern and Northern state like Mumbai in 2005, Uttarakhand in 2015, Chennai in 2015 etc. In Kerala in August 2018 flood due to heavy rainfall had stricken the community massively during the passage of monsoon depression. This eventually resulted

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in taking more 4000 people's live away and affected by 5.4 millions of people. The economic loss for this flood was 3.8 million as estimated by government of Kerala during the post flood evaluation.^[7]

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Many of the researchers were done after the disaster signifies the importance of magnitude of psychological problems after the disaster. This is the time when the model of care should focus on primary prevention rather than waiting the problem to occur and then taking the precautions. Assessment and interventions at the early phases are corner stone to promote mental health and wellbeing and further it may focus upon the prevention development of mental health issues at the grass root level. This can be achieved largely by early screening of the people affected with flood with specially considering the vulnerable population like pregnant women, children and senior citizens. The mental, emotional and physical response pattern of the individual affected would be different according to their individual ,socio-cultural and the severity of disaster. At the individual level it includes coping styles, resilience system, pre morbid factors and person with existing mental health disorder. Socio cultural factors includes mainly social familial factors and the community support systems. Moreover, another important parameter is severity of disaster in terms of the physical damages of assets, the number of humans affected with fatalities including injuries and duration of exposure and recurrence.^[8]

Psychological concerns during flood

The effect of flood on psychological well being is largely affected because of obvious reasons like loss of loved ones, properties and house hold itself. This can be as a result of various stressors including primary and

secondary. The primary stressor is due to the immediate loss and concerns whereas secondary stressors denotes the anticipated tensions related to emotional break down regarding the rebuilding and thinking about the post disaster aftermaths. Flooding can challenge the different domains of resilience namely physical, emotional, mental and spiritual.^[9] World Health organization stressed upon the fact that mental health aspect of flood victims had not been taken care of with deserving attention by the disaster preparedness team. The people living in developing countries had taken a toll on mental health and the capacity to protect them is limited.^[10] In Kerala state, there reported approximately 5.4 million severely affected and 400 people lost their lives. The financial loss found to be 5.3 million dollars as per the findings of post disaster assessment commissioned by the Government of Kerala.^[11]

The impact of disaster in mental health is affected is a well known fact among all ages. The incidence of PTSD among children was 30.6% after been affected by the super cyclone in Orissa. This was conducted one year after the calamity^[12]. This type of mental illness has been under reported and undiagnosed due to the lack of skill identifying the stress reactions various among parents, teachers and mental health professionals.^{[13],[21],[27]} .The common symptoms may include experiencing psychological distress when they are exposed to visual cues like damaged building and environment. This kind of traumatic reminders were important to development of psychological trauma.^[14] Fear of getting affected with the disaster again would in turn lead to anxiety and depression among children and with preexisting psychiatric illnesses the chances of anxiety were more were also reported.^[15] Moreover the vulnerability of getting PTSD and other mental health disorders among women were reported compared to its male counterparts.^[12]

The main concern here is the development of post traumatic stress disorder (PTSD). The incidence of PTSD in India constitutes about 70% at its maximum after the natural disaster apart from the considerable financial and physical loss^[16] A cross sectional study conducted by Mason et al reported almost one third of population met the criteria of PTSD, almost one third of the populations had psychiatric problems and one fourth

had affected affected with depression^[17]. In August 2018 Kerala witnessed a disastrous flood which was being worst than the flood in 1924.

Community relocation is necessary to prevent the people to fall in to much danger. People building may totally destructed and death of their loved ones had really been painful leading to more psychological distress. As a disaster management team community has to be mobilized with helps of central/state/district/local self government in collaboration with mass community participation such as youths and involving people from NGOs Non governmental organization.^{[18] , [22] , [23]}

Mental Health Care during Flood

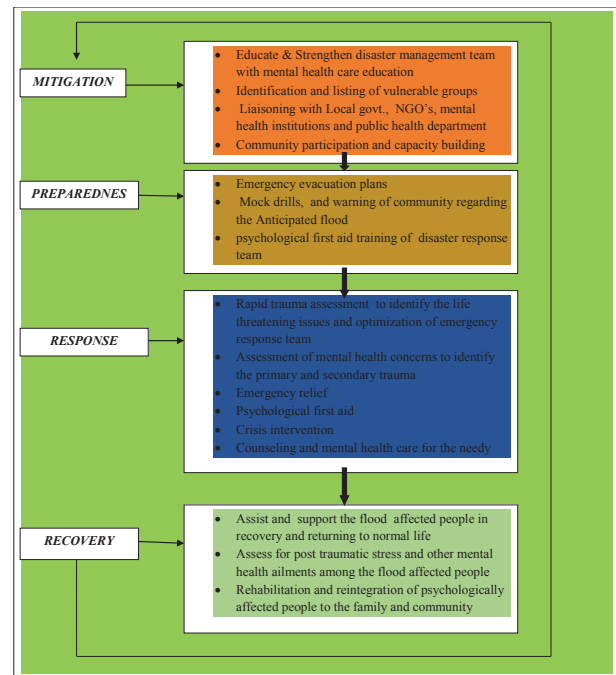
The mental health assessment and care should be planned and framed before the actual occurrence of flood. A framework has been prepared by the reviewer in view of addressing mental health concerns during all 4 phases of disaster management. The mental health care team should work in liaison with the disaster management team and local government for the preparedness, early identification, management and rehabilitation of people affected by flood^{[19], [24], [25], [26]}

Lessons learned after the flood

There are different experiences and learning's unleashed post flood are following

1. Emergency management and Triaging (To save precious lives according to the priority)^[20]
2. Assessment of mental health concerns (To rule out the mental health concerns at the initial phase)
3. Individual tailored psychological intervention
4. Identification of person living with co morbid Illness (Detailed assessment to promote primary prevention)
5. Tracking the vulnerable population(like women, child and the elderly)
6. Community Participation and awareness (Support group and capacity building)
7. Enabling the process of rehabilitation for rebuilding and to develop better resilience system

FRAMEWORK FOR MENTAL HEALTH ASSESSMENT AND MANAGEMENT IN FLOOD



Conclusion

In all man-made and natural disasters, least discussed topic is the assessment, care, rehabilitation and reintegration of people who are mentally affected the unanticipated event. The proper framing up and implementation of psychological first aid and crisis management through all four phases of disaster management is recommended considering the unaddressed mental health issues among the people for the early recovery and resilience^[28,29]

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