Natural Disasters, Psychological Well- Being and Resilience: Concerns related to Marginalized Groups

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Abstract : Natural disasters influence millions of people every year. Besides their severe effects on the life and infrastructure of country, natural disasters create immense collective stress over and above the capability of the affected population to cope with the emotional, physical, and financial burden. The consideration of the mental health and psychosocial well being of individuals, families and communities have recently been acknowledged in the context of natural disasters. But still there is lack of studies related to the impact of these catastrophic events on the marginalized groups of the country. The purpose of this article is to discuss the effect of these devastating events on the psychological well- being of the people of marginalized groups having poor resilience strategies. It is believed that resilience is the ability of people or communities in complex socio- economic settings to learn, adapt, transform and cope in the face of shattering and stressful life events. Thus, it is logical to hypothesize that having resilient attitude may help better to overcome of these devastating experiences. Moreover, the ability to "bounce back" from natural disasters seems very relevant and promising. Hence, although much has been documented about resilience but the disaster milieu offers a foremost opportunity to reframe, reorganize and construct new meaning to it. Finally, this article concludes with a discussion on the inclusion of marginalized sections in building preparedness and community resilience for the future calamities.

Keywords - Natural disasters, psychological well- being, resilience, community resilience and marginalized groups.

I. INTRODUCTION

Every year, natural catastrophic events, such as, earthquakes, floods, storms, heatwaves and droughts cause huge humanitarian and economic damage around the world. These Disaster episodes affect millions of people and exert a collective social suffering that requires a monumental effort by individuals, communities, societies, and the world community to overcome. While we can prepare for natural disasters and predict them to some extent, nothing can completely stop them from happening. In the past decade, disasters from natural events of all types have on average affected approximately 200 million people every year (Done, 2012), or about 3% of the world's population, while killing an additional 78,000 a year (Done, 2012), based on a 10-year average. More than 370,000 people alone died in the period 2001–10 as a result of extreme weather and climate conditions (WMO, 2013), such as extreme cold, heat, storms, floods and drought. Hence, deaths are the most obviously negative aspect of such disasters, but the statistics on the number of people killed or affected is not the whole human story.

Disasters that occur in the last few years have impose the necessity of focus on special needs of marginalized groups. Statistics tend to count up the lives lost and economic devastation of these events, but it is less easy to quantify the psychological impact of a disaster on marginalized groups. Poor living conditions, inadequate infrastructure, a lack of income diversification and limited access to basic services, especially education and information, ensure that the poorest and most marginalized people are disproportionately affected by disasters. Therefore, undoubtedly disasters hit the weakest the hardest. These underprivileged people are not only more vulnerable to climate-related shocks, but they also have fewer resources to prevent, cope with, and adapt to disasters. They tend to receive less support from family, community and financial systems, and even have less access to social safety nets (World Bank report, 2016). So, yes, disasters can discriminate on the same lines that societies discriminate against people.

Committing to address the root causes of disasters will help to address peoples' underlying vulnerabilities, increase their capacities to cope with the effects of natural hazards and facilitate empowerment processes. This can be achieved by the equal participation of all segments of society in disaster risk reduction decisions.

II. NATURAL DISASTERS AND MARGINALIZED GROUPS

A disaster is the tragedy of a natural or human made hazard (a hazard is a situation which poses a level of threat to life, health, property, or environment) that negatively affects society or environment (Reissman, Schreiber, Shultz & Ursano, 2010). Natural disasters are far from rare events, killing a million people a decade and leaving many more homeless, with costs reaching into the billions. Such extreme natural events leave a trail of deaths, destroyed homes, shattered communities and far-reaching damage to national economies and overall well being of the people of the country. No need to mention that the most devastating effect is experienced by the most vulnerable groups.

People who are marginalized have relatively little control over their lives, and the resources available to them. This results in making them handicapped in delving contribution to society. A vicious circle is set up whereby their lack of positive and supportive relationships means that they are prevented from participating in local life, which in turn leads to further isolation. Moreover, disaster

risk not only depends on the severity of hazard or the number of people or assets exposed, but that it is also a reflection of the susceptibility of people and economic assets to suffer loss and damage. Levels of susceptibility (and exposure) help to explain why some non-extreme hazards can lead to extreme impacts and disasters, while some extreme events do not (IPCC, 2012).

In the context of different hazards, marginalized groups are more susceptible to damage, loss and suffering than others and likewise (within these groups) some people experience higher levels of vulnerability than others (Wisner, Cannon, David & Blaikie, 2004). These groups find it hardest to reconstruct their livelihoods following a disaster, and this in turn makes them more vulnerable to the effects of subsequent hazard events (Wisner, Cannon, David & Blaikie, 2004). Consequently, we have to reduce vulnerability in order to reduce disaster risk. Hence, marginalization is the human dimension of disasters and is the result of the range of economic, social, cultural, institutional, political and psychological factors that shape people's lives and the environment that they live in (Twigg, 2004).

Thus, marginality is so thoroughly demeaning, for economic and psychological well-being, for human dignity, as well as for physical security. Marginal groups can always be identified by members of dominant society, and will face irrevocable discrimination. Hence, marginalization is a slippery and multilayered concept. Marginalization has aspects in sociological, economic, and political debates.

The most vulnerable groups, who are considered as marginalized are: women (gender), children, older people, people with disabilities, migrants, and ethnic minorities and indigenous peoples.

- **Vulnerability linked to gender:** There are a number of contributing factors why women, globally, are more likely to suffer the effects of disasters than men. These include gender roles and responsibilities within a family or society due to societal constructs, being less economically independent and less educated (Niaz, 2009). These determine people's workloads and their engagement in reproductive and productive activities. These combined gender-based inequalities constrain women's opportunities to access and secure livelihoods, thereby exacerbating their vulnerability, and also undermining their capacities to cope with disasters.
- **The age gap:** Children and young people in poorer and developing countries often take on adult responsibilities as part of their daily lives, including working and caring for family members, which may undermine their health status and their educational performance. In turn, this impedes their abilities to cope with shocks as well as their long-term opportunity to access formal employment, therefore aggravating their vulnerability to disasters (Bartlett, 2008). Children are also at high risk of hunger and malnutrition, which is often exacerbated during disasters.

  The elderly are also severely at risk of natural hazards and are more likely to suffer the effects of disasters, as they are often reliant on others for help. During times of stress, the reduced mobility, strength and health of older people, their impaired sight and hearing, and greater vulnerability to heat and cold, can restrict their abilities to flee from and cope with potential harm, such as floods or prolonged warm spells (HelpAge International, 2012). Furthermore, the lack of effective social pension and wider welfare systems in many low and middle income countries means that older people often rely on farming and on ecosystem services to sustain their daily needs, which makes them more vulnerable to natural hazards (Wang, Otto, & Lu, 2013).
- **Vulnerability to disability, and poverty:** People with disabilities (e.g. physical disability, intellectual impairment or mental health problems) can be at a high risk from disasters (Smith, Jolley & Schmidt, 2012). Less mobility, speed and reduced sensory input can mean more risk of injury or death. An estimated 15% (600 million) of the world's population live with some form of disability. Amongst these, 80% live in less wealthy countries and the majority live in poverty (Handicap International, 2006). This has severe impacts during a disaster, in terms of access to services, evacuation and dependency. As with those vulnerable to disasters as a result of their age, people with disabilities may be more dependent on other household or community members to fulfill their daily basic needs and are thus more at risk if the levels of supportive infrastructure and social relationships are limited.
- **Discrimination on the basis of ethnicity and cultural factors:** People who suffer from ethnic discrimination often face restricted access to public services, employment, education or health care (UNPFII, 2008; CARE, 2013). This may result in their being trapped in areas prone to hazards without access to warning systems or other preventative measures (Gaillard & le Masson, 2007; Mercer, Dominey-Howes, Kelman, & Lloyd, 2007). Discrimination on the basis of ethnicity means that many ethnic groups, such as indigenous people and ethnic minorities, are marginalized within the country in which they live, resulting in limited rights, social protection, support or political recognition (Cadag, 2013). A number of factors, including language, cultural norms or religious practices can affect a group's vulnerability and capacity to deal with a disaster, if they differ from those of the dominant group. For instance, depending on different cultural norms, women may not be able to leave the house without a male relative or without the decision of their husband, even if they have received an early warning about a disaster. Also, men may 'hesitate to send their wives and daughters to shelters where they are likely to stay in close proximity to other men' (IFRC, 2014). Globally, people are 'likely to have at least a partial perception and response to risk that is based on their culture' (IFRC, 2014), beliefs and values, that may help them to 'live with risks and make sense of their lives in dangerous places' (IFRC, 2014).

III. NATURAL DISASTERS AND PSYCHOLOGICAL WELL- BEING

Well- being is a broad, multidimensional concept that must be understood through socio-cultural, contextual and situational lenses (Psychosocial Assessment of Development and Humanitarian Interventions, 2009; White, 2009). It can be said that well-being is an outcome of access to resources from many domains (e.g. economic and material, cultural, social ecology, emotional, spiritual and cognitive, etc.) that are utilized by individuals (or families and communities) when responding to life circumstances, including the adversities of disaster.

Almost all people exposed to a disaster, are affected psychologically. Hence, the people who are more susceptible to disaster must be more affected in terms of their psychological well- being. There are many psychological effect of such huge disasters on their well-being (both eudaimonic and hedonic), attitude change toward life (e.g., evaluating ordinary life), and prosocial behaviors, since many people lost everything—their family members, schools, workplaces, towns, and homes. Further, these survivors will exhibit an array of distress reactions across all domains of human function (e.g. physical, emotional, cognitive, behavioural, social and spiritual). The intensity and variety of reactions vary based on individual differences as well as the nature of the exposure to disaster.

A disaster would have a significant impact on psychological well-being; however, its impact on eudaimonic and hedonic well-being differs. Eudaimonic and hedonic well-being reflect correlated but different aspects of quality of life (Ryff, & Singer, 2008, Ryan, Huta & Deci, 2008, Delle Fave, Brdar, Freire, Vella-Brodrick & Wissing, 2011).

Hedonism, a doctrine attributed to the ancient Greek philosopher Aristippus, proposes that feeling pleasure is important. Hedonic well-being is measured by the occurrence of positive affect and the absence of negative affect and satisfaction to life (Kahneman, 1999). In contrast, eudaimonic well-being, a doctrine of the ancient Greek philosopher Aristotle, is explained by self-actualization, self-acceptance, or commitment to socially meaningful goals and capabilities (Ryan, Huta & Deci, 2008; Ryff & Singer, 2008). Hedonic well-being is focused on the outcome of good living and temporal emotional pleasure, whereas eudaimonic well-being focuses on the way one lives and achieves purpose in life (Uchida, Takahashi & Kawahara, 2014.

In general, previous research has shown that national tragedies decrease people's hedonic well-being by increasing negative emotions (Back, Küfner & Egloff, 2010, Metcalfe, Powdthavee & Dolan, 2011).

With the exception of studies focusing on posttraumatic stress disorder, very few have investigated how well-being is affected by natural disasters, but those that have examined disasters show that they negatively affect hedonic well-being (Frankenberg, Friedman & Thomas, 2009). In sum, these studies suggest that the tragedies increase negative emotions and thus decrease well-being at the hedonic level. While research conducted by Kimball, Levy, Ohtake & Tsutsui (2006) has provided important information on how disasters affect hedonic well-being, it is still not clear how individuals' eudaimonic well-being is affected by the disasters. Eudaimonic well-being involves value attached to social relationships and the community (Ryan et al., 2008); thus, if altruistic tendencies increase after a disaster, eudaimonic well-being could also be increased.

IV. RESILIENCE IN MARGINALIZED SECTIONS

Natural disasters can have different short or long-term impacts on various groups within society (Bankoff, Frerks & Hilhorst, 2004). Since person's vulnerability (e.g. gender, age, physical abilities, ethnicity and sexuality), for instance, can lead to a higher risk of death or injury, longer recovery times or greater risk of mental or physical trauma the preventative aspect is building preparedness and resilience before an extreme natural event actually occurs. This involves increasing public awareness of the potential for the occurrence of a natural disaster, ensuring that risks and appropriate responses are understood. Consideration needs to be given to the marginalized sections as well. Because marginalized sections have more pre-disaster vulnerability and lesser extent of resources left to recover after the disaster. The post-disaster aid and relief also often unfairly distributed to the benefit of the most affluent segments of the society (Cuny, 1983; Middleton & O'Keefe, 1998). Therefore, disasters frequently lead to more marginalized people as those whose livelihoods have been affected are often unable to recover (Walker, 1989; Wisner, 1993; Winchester, 1992).

However, rather than focusing only on what limits people's ability to reduce their risk, the policy makers objectives of disaster risk reduction (DRR), must be to emphasize understanding people's capacity to resist and recover from disasters, as well as enhancing the overall resilience of people, society and systems. The local and traditional knowledge vulnerable communities possess to respond to disasters should form the basis of outside interventions to reduce disaster risk (Twigg, 2004).

Most definitions of resilience refer to notions of rebound, or bouncing back, from deformation or distress. The concept of individual resilience has evolved in psychology and the behavioral health sciences as a means to understand what adaptive capacities allow some individuals to continue functioning effectively and display positive outcomes in the face of adversity. (Castleden, McKee, Murray & Leonardi, 2011).

Resilience is seen as a set of protective factors and, most importantly, as a process of positive adaptation following exposure to adverse events (Dutton & Greene, 2010; Fleming & Ledogar, 2008). Viewing resilience as a process of positive adaptation has led to the search for factors that may encourage and promote a cascade of protective properties during and following exposure to adversity. A supportive social context in a community, prior to an adverse event, has emerged as a key component of resilience and provides a bridge between individual resilience theory and its exploration to a community-level (Dutton & Greene, 2010; Fleming & Ledogar, 2008; Levac, Toal-Sullivan & Sullivan, 2012; Morrow, 2008). The process of marginalization, from pre-disaster vulnerability to post disaster recovery and resilience, has been formalized by Susman, O'Keefe and Wisner (1983) and Wisner (1993). Both emphasized that increasing marginalization heightens people's vulnerability in the face of natural hazards through underdevelopment and environmental degradation (Susman, O'Keefe & Wisner, 1983; Wisner, 1993). Disasters thus become more effective. Eventually, relief aid reinforces status quo, erodes resilience, and leads to further marginalization and underdevelopment that, in turn, pave the way for more disasters to happen. Hence, it is important to note, however, that building community resilience is much more than the summation of individual resiliencies.

Community resilience is the need of the hour. It is an emerging approach to public health emergency preparedness which encompasses individual preparedness as well as establishing a supportive social context in communities to withstand and recover from disasters. A supportive social context is somewhat is much needed in reference to marginalized sections**.** Hence, building community resilience to disasters—the ability to mitigate and rebound quickly—has received increased attention and need a central focus of the policy makers.

Community resilience has been defined as the sustained ability of a community to withstand and recover from adversity (e.g., economic stress, epidemic infection, manmade or natural disasters). It represents a paradigm shift in the existing approach for disaster management by emphasizing an assessment of overall community strengths and not simply describing the vulnerabilities.

Chandra et al. (2010), in their literature review, describe the 5 core components of community resilience as physical and psychological health, social and economic equity and well-being, effective risk communication, integration of organizations (governmental and nongovernmental), and social connectedness. Norris, Stevens, Pfefferbaum, Wyche, and Pfefferbaum (2018) describe community resilience as a set of networked adaptive capacities, including economic development, information and communication, community competencies, and social capital. Consistent with the concept of resilience as a set of social characteristics and a process of adaptive behavior, Nuwayhid, Zurayk, Yamout & Cortas (2011) describe components of resilience before as well as during and after an adverse event. Their findings suggest that community resilience is a process rather than an outcome. Collective identity, prior experience with the adverse event, and social support networks contribute to building resilience over time. Additionally, community cohesiveness, social solidarity, and a connected political leadership help to sustain resilience after the event. All these features of community resilience indicates clearly that in order to building preparedness and resilience to overcome the disasters, the policy makers must have to include the concerns related to marginalized sections. Because, though natural disasters can lead to a higher risk for marginalized groups, but at the same time, different groups may bring unique skills, resources and knowledge to reduce risk and overcome the aftermath of a disaster. The strengths and challenges of each group should be recognized at an early stage of preparing the assessment.

Even those who are supposed to be less able to recover from disasters have their own ability to overcome the havoc they wreak. People's resilience, however, strongly depends upon the nature, strength, diversity and sustainability of their livelihoods, thus echoing factors which matter in shaping vulnerability. In that sense, those who are marginalized in facing natural hazards because of weak and unsustainable livelihoods also often prove poorly able to recover from the aftermath of disasters. Hence, action taken (preparedness and resilience building) before a natural event occurs is the most effective way to prevent and minimize damage, specially the psychological one.

V. CONCLUSION

In summary, this paper contributes to the literature that studies the effects of natural disasters on psychological well- being of the survivors and advocating the need for building them more resilient as well as the whole community. Nonetheless, till now very few studies addressed the links between pre- and post-disaster marginalization or how people's poor livelihoods and well- being affect their ability to recover from the aftermath of a disaster. Given that trends indicate the likelihood of more natural disasters in the coming decades, the shortfall in effort on preparedness and resilience is clearly not a sensible or prudent approach. There needs to be a much greater focus in preparedness and resilience. However, while increased attention and investment in this area would help communities avoid future natural disasters. The reality is that an extreme natural event, such as an earthquake or storm, need not become a disaster at all if there is adequate resilience and preparedness in place.

In addition, since creating a resilient community is a shared responsibility across many actors, future research will need to examine how effectively a resilience-oriented community engages and empowers individuals across a nation.

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