

# For Peer Review only for Community Mobilization: A Model for Preparedness for Puerto Rico After Hurricane Maria

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## Abstract

Puerto Rico was affected by Hurricane Maria in September 2017, and as of this writing, hundreds of thousands of people are experiencing fear, panic attacks, anxiety, and night terrors as a result of that hurricane. The results of this event is the need in Puerto Rico for an articulation of a disaster plan that includes psychosocial support, and that establishes linkages between the community responders, community health clinics and major hospital. The objective of this article is to propose an outline of a disaster preparedness plan that evolves from community psychosocial needs and uses the community capitals for a tiered intervention. While there is an effort to outline existing strategies to attend to counseling and mental health response, there is no clear articulation of a Disaster Plan that provides for psychosocial support and community mobilization at the initial tear of addressing community psychosocial needs. The data that informs this article were qualitative in nature including interviews to more than 200 persons in the 32 communities directly affected by Hurricane Maria, seventeen focused groups, and personal response by the co-authors during the twelve months after the disaster. Community mobilization, based on the decision-making capacity from the affected community, is responsible for mobilizing the response and recovery activities. The paper made two recommendations: (1) to use the community capitals to plan for preparedness, response and recovery. Two tools suggested are to explore the contributions of community capitals and the benefit of psychosocial first aid as a tool on primary intervention. A community-based psychosocial support structure integrated into the National Disaster Response Plan of Puerto Rico is proposed herein as a planning tool and mechanism to promote hope and well-being amongst the members of the affected communities. The article concludes by proposing a six-step process of engaging the community in disaster planning and proposes that for inclusion of a long-term psychosocial support plan for the community must be part of an institutionalized process including Emergency Management, Department of Health and Mental Health, and Human Services as leads in an island effort to prepare the citizens for a future disaster.

## Keywords

Community Mobilization, Hurricane Maria, Puerto Rico, Preparedness

## 1. Introduction

On September 20, 2017, Hurricane Maria, the strongest hurricane to hit Puerto Rico in almost a century, struck the Island of Puerto Rico as a Category 4 hurricane, bringing winds upwards of 150 miles per hour. For 36 hours, the hurricane crossed through the center of the town of Yabucoa

in the northeastern part of the island, exiting to the northwest near the town of Hatillo. Heavy winds, rains of up to 32 inches, and mudslides left the island without electricity, potable water, access to health facilities, or communication within and outside the island. After 4 months, the recovery process slowly reached the towns located in the swath of destruction left by the hurricane [1].

## 2. Community Interventions

A mental health and psychosocial program have been in operation in Ponce, Puerto Rico (the second-largest island) since the first decade of the century [2]. A program that might assist people affected by a disaster is community-based psychosocial support for individuals, families, the affected community, and the larger community [3]. Community-based psychosocial support is centered around three principles: (a) providing safety and security, (b) teaching the importance of altruistic behavior of psychological, social, and spiritual tithing, and (c) teaching the importance of speaking truth to power in support of the under-represented [4].

At the individual level, the program encourages people affected by a disaster to modify behaviors that reflect helplessness and hopelessness and to use community activities to adapt behaviors that lead to the production of greater personal effectiveness. Once those affected begin to feel a sense of freedom and enhanced capacity to move forward as a result of their new behaviors, they will be encouraged to identify a group of peers that can assess their community's needs and assets and collaboratively plan and implement contextualized recovery activities [5].

An engagement process that involves the community has been suggested, using the following six steps [6, 7]: (A) assess needs and the existing assets, (B) developing a shared vision, (C) collaboratively plan and act, (D) network for external resources, (E) determine the outputs, and (F) determine the impacts.

### 2.1. Step A: Assess Needs and the Existing Assets

At this stage, community volunteers are identified, and basic training is conducted on topics of psychological first aid, participatory functional assessment, and community mapping, including social capital as well as infrastructure [8]. The premise for this activity is that people affected by disaster have first-hand knowledge of their community prior to the disaster, what has happened in their community, and what should take place to recover and enhance resilience.

The match between assessment of needs and existing assets are best determined by using community capitals to ask questions about the affected community. Asking question about pre-disaster conditions provides a space for the community members to share their stories and experiences from the past disasters (i.e., Has a disaster of this magnitude happened here before? How did the population cope with the situation? How were elders, the ill that are homebound, the mentally ill, or displaced groups treated and protected? What do you remember from previous hurricanes?). These will revive lessons learned by the affected people, which will improve feelings of psychosocial well-being. This can evolve into creative practices for re-establishing place through cultural, environmental, social and economic capitals. Furthermore, it gives the affected people a glimpse into what they "can do". Involving the affected people in psychosocial

support activities generates the space for affected people to think differently and identify new possibilities in at least three ways.

First, the inclusion of all affected people creates the feeling of being visible to external humanitarian agents. Their narratives and performances in writing, painting, and acting in community theaters give the affected people the opportunity to document their presence (How they used, moved through, and made their place, neighborhood and community). The affected people can assert their right to be a part of the recovery (Healing process) of their place, neighborhood, and community. This series of activities promote the road to resilience by awakening the community capitals.

Second, through psychosocial support activities, the affected people are able to share with others the experiences of their place as inhabited. They also share an understanding based on psychic attachments, bodily and social memories, and fragile social ecologies. The discrepancy between the perception of the affected people and their inhabited neighborhood or community and the destroyed place will lead them to develop the necessary activities to re-establish place. As they consider the emotional tensions associated with the acceptance of the loss of everyday life in their place, affected people are encouraged to remember life in a previously unaffected neighborhood and community, and what "we had".

Third, if the affected people are understood as having been wounded by the recovery activities (or lack thereof) and the devastating power of Hurricane Maria itself, other images of place might focus attention on why places, people, groups, environments, and nature continue to be injured. If the affected people, their place, and neighborhood are wounded through displacement, material devastation, and root shock, so, too, is the whole community and its inhabitants.

### 2.2. Step B: Develop a Shared Vision

In the initial phase, affected people are encouraged to (a) identify activities that inspire participation in all segments of the community, (b) share experiences, stories, and traditions pertaining to how community crisis was dealt with in the past, and (c) envision a future so that the initial feelings of hopelessness and helplessness can be overcome. Residents in disaster areas take active roles in identifying and analyzing needs, project development, and decision making based on their priorities and vision for their future.

Psychosocial support may offer possibilities for place-based mourning and care across generations, which build self-worth, collective security, and social capacity. Materially, psychosocial support activities motivate the creation of social capital, provide a range of memorialization activities, create new forms of public memory, and are committed to intergenerational education and social outreach [9]. Affected people who stayed in their places and communities have begun to involve themselves with others in the evacuation, registration for Federal Emergency Management Agency (FEMA) and receipt of aid from

different sources. They have identified activities that strengthen the community. Their personal experiences have been put aside to focus on the re-establishment of place. They now believe in their capacity to become resilient because they have developed a shared vision: "they can".

### **2.3. Step C: Collaboratively Plan and Act**

#### **2.3.1. Articulating Strategies**

At this stage, community members are encouraged to become engaged in activities that will foster their growth in an inclusive way. These activities can include, but are not limited to, the following: (a) providing accurate and timely information about resources, services, and common reactions; (b) providing human capital from the victims in the community; (c) providing materials, cash, and labor from community residents in disaster zones and providing technical assistance from outside stakeholders; and (d) taking independent actions, to be completed by community residents, not external sources.

#### **2.3.2. Defining Interventions**

Once the broad strategies have been identified, the interventions are tested. This is when activities are experimented with and the best match between disaster-affected people and appropriate broad strategies are identified. For example, some people will share information, while others will want to construct. Some will implement psychological first aid, whereas others will conduct informal educational sessions with youth.

When planning the initial interventions using a community-based psychosocial support program, the residents in disaster areas must cycle through the following six core interventions: (a) providing accurate and timely information, (b) engaging in formal and informal educational experiences, (c) identifying and enhancing support and resources, (d) increasing access for the entire community population, (e) monitoring, and (f) reporting.

#### **2.3.3. Community and School Activities**

After the initial response, those affected by disaster oversee both initial and long-term recovery in their respective places and communities, and these activities occur primarily in community and school settings. At the community level, activities include improving the environment and reconstructing places. In schools, efforts focus on re-establishing formal schooling for children and adolescents and conducting informal school activities for youth and adults in the community. The emphasis at this stage is getting all the people engaged in long-term recovery. All projects are considered and supported by the coordinating committee, which is composed of community residents. Eventually, social capital is identified, and small community-wide projects and income-generating activities can begin and develop in conjunction with the recovery process planned by the community.

Psychosocial support activities typically serve as platforms for additional activities that are more concrete in

nature. This is a good time to initiate documenting the community engagement steps of the neighborhood recovery process. In other words, the steps taken are documented, and the changes led by the community residents are recorded. The adaptations made by the residents to settle into life in the new community, the institutionalization of changes, and the capacity-building activities are monitored and reported to the diverse groups in the community as signs of success and having the ability to enhance resilience and well-being.

### **2.4. Step D: Network with External Resources**

Usually, the community-based participatory process introduces needs that had not been identified or that had not been addressed for a lack of community capital. Part of the planning process is to bring the needs of all segments of the community to light. Once it is clear that external resources, technical, financial, and psychosocial needs are necessary to promote the re-construction of place through recovery activities, it is important for community members to approach external stakeholders and develop coalitions that will provide for the community's ultimate goals to rebuild itself. This might include people having a home to share with their family, neighbors, and community. People feel safe when they walk around the community, and they want to volunteer time to improve place. One area that external funds and university research projects can facilitate is in assisting the community to rebuild itself psychologically and spiritually through the recovery of their history, community stories, and the past. Networking with outsiders can be a means whereby people can understand where they came from, where they are now, and how they see themselves moving forward.

### **2.5. Step E: Determine Outputs**

The steps in the process to re-establish a sense of place and develop the community do not occur in a neat, sequential manner. Important actions occur in sequences that are specific to the situation. If a community is able to successfully bring about changes, its capacity to create even more community changes related to the group's mission should improve. Among the important outputs is the generation of trust to the extent where the community shares common risks and protective factors. Multiple communities can formulate a partnership to elicit funds from an external stakeholder so that new community changes and desired outcomes can be realized.

Some initiatives might work well to foster growth in one disaster-affected community but not in another; thus, remaining flexible in the adoption of interventions is crucial. This ensures the creation of an approach that belongs to community members and has been modified to fit community needs. Moreover, by changing interventions to fit local needs, community members can improve the ability to take care of their own problems.

## 2.6. Step F: Determine Impacts

Field personnel can follow up on the community re-establishment of place and determine the effectiveness of the steps toward resilience by assisting the affected communities in identifying the tools needed for following the effectiveness of their recovery process. Some of the perceptions of the community members might be that a sense of place has been re-established, resilience has been enhanced, community well-being is on the rise, and small businesses have returned. This can be accomplished by developing a scorecard that includes information about the community: its mobilization; willingness to share information with all its segments; ability to gather information, develop, and execute recovery plans; passion for immediate community action; and desire to share its achievements. Ultimately, these programs should help residents in disaster areas to transform from victims to victors.

For example, Hirsch & Marin conducted research that led to a "Puerto Rican Preparedness model." [10]. The article presents a model that explored health care delivery resources, health status and health care. The model would benefit by inserting into the model the availability of mental health, community level health post that would provide basic psychological first aid and referrals from community health workers or volunteers after a disaster.

## 3. Essential Components for a Recovery Psychosocial Support Response

For a community-based psychosocial support program to be effective in Puerto Rico, we suggest that the Puerto Rico National Response Plan include the following steps [11-13]: (a) integrate psychosocial support into the National Emergency Plan, (b) appoint a lead agency, (c) collaborate, and (d) develop and widely disseminate technical material.

### 3.1. Integrate Psychosocial Support into the National Emergency Plan

Psychosocial support should be integrated into disaster preparedness and contingency planning by considering capacity-building workshops and quarterly drills, and all stakeholders and resources should be identified and listed. Psychosocial support is an internationally known technique to alleviate suffering and enhance resilience after a disaster or humanitarian crisis [14]. Sensitizing and mobilizing communities about their impact of a potential weather-related emergency and putting into effect a locally developed plan is highly useful. The Emergency Plan of Puerto Rico would identify psychosocial support providers in the local communities, increase knowledge about the psychosocial effects on the diverse population, and the effects of extended periods of exposure to physical, environmental, and psychological effects.

### 3.2. Appoint a Lead Agency

One government entity should be appointed to lead both mental health and psychosocial support responses. This response should be cleared at the central level before being implemented at the lowest level, the community. The need for a diverse response to the community health, and mental health needs may require the active participation of several government, municipal and local entities to assist the population during response and long-term recovery. These may include, but are not limited to: Emergency Management, Department of Health and Mental Health, Department of Human Services, The IASC/MHPSS an international entity that provides guidance on addressing the mental health and psychosocial support needs in the post-disaster experience of the population and their communities [15], The guidance identifies four tiers of service. The initial tier of services occurs in the affected communities, often times provided by local citizens. A mental health and psychosocial response include advocating that services are put in place with responsible actors; documenting the impact of the disaster on the mental health and psychosocial well-being; and influencing the responders to deliver the services in safe, dignified, and socio-culturally appropriate ways that will promote psychosocial well-being.

### 3.3. Collaborate

Collaboration amongst all government entities should be encouraged, specifying a clear chain of command and responsibility for mental health and psychosocial support. The lead government agency should be responsible for developing a plan and determining coordination mechanisms and responsibilities in consultation with stakeholders at the senior and community levels with clear chains of command to the municipal level and earmarked responsibility for psychosocial support emergency response.

### 3.4. Develop and Widely Disseminate Technical Material

If originally in English, materials to be used by government and non-government partners in all Puerto Rican municipalities should be translated to Spanish, validated both culturally and contextually, and made shelf ready for immediate use. Guidelines and psychosocial support intervention manuals should be disseminated to mental health professionals working in community private offices and community hospitals and to general-level health staff (doctors, nurses, community health workers, and local volunteers).

Materials should also be disseminated to human resources outside of the health field (teachers, religious leaders, and volunteers). General documentation and guidance should be made available to the media and the general public, focusing on psychosocial support issues, coping, sources of support, and available care. Guidelines should also be available for the care of children, the disabled, the disadvantaged, and the elder population. Finally, guidelines for family tracing,

reunification, child abuse, and gender-based violence should be available.

#### 4. Conclusion

In this paper, the psychosocial effect of Hurricane Maria in Puerto Rico was introduced. Community-based psychosocial support as a tool for immediate response and recovery was proposed. Finally, suggestions for developing wide-encompassing plans to institutionalize psychosocial support in the Puerto Rico National Response Plan were proposed.

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