Disaster Recovery: Lessons Learned When Information Is Not Readily Available

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In September 2017, Puerto Rico was hit by 2 category 5 hurricanes within a 2-week period. The island had experienced dozens of hurricanes through its history, and disaster readiness had improved, from storing adequate water supplies to new infrastructure codes. Still, this was the first time we experienced a natural disaster of this extent. The entire island lost power, potable water supply was limited, and gas and diesel fuels were nearly completely inaccessible. Telecommunications were down entirely, and infrastructure that imposed order on the main roads was rendered inactive. Waking up to the aftermath of the storm was difficult, and many inhabitants quickly realized recovery could take much longer than initially expected. This island's larger situation was mirrored in our hospital, which dealt with nonoperational utilities, injured infrastructure, and limited food supplies, all of which affected the ability to sustain normal operations.

The Accreditation Council for Graduate Medical Education expects sponsoring institutions to have procedures in place that address support for education programs and residents in the event of a natural disaster or other disruption in hospital operations.[1] While compromise of physical facilities and resources and interruption of operations are the norm during disasters, disaster plans are not able to predict every single contingency that may arise. However, it is in the aftermath of a disaster that institutional leadership learns to recognize how critical it is to have a plan in place. One key expectation is for the institution to be able to rapidly assess the impact of the event and determine if residents should be transferred to other programs to continue their education; yet the reality is that entire perspectives on life, rules, resilience, and priorities, including priorities for averting disruption to resident education, change in the aftermath of a disaster.

Many emotions are experienced by those who live through a disaster, and some of these may take precedence over administrative procedures. These emotions can reduce the ability to prioritize and address competing events in an effective and timely manner. Studies have addressed psychological symptoms that may manifest after hurricanes, including posttraumatic stress disorder, anxiety, psychological distress, and somatic symptoms.[2] Confusion and shock may be pervasive in the days immediately after the disaster, which contribute to a sense of hopelessness. Those who have not experienced a major disaster may contemplate readiness from a distance, with the risk of assuming that recovery will be led by government and organized agencies,[3] and that everything needed to survive life without public utilities is just a credit card swipe away. The truth is far different.

Confronting the reality of a disaster the size of Hurricane Maria is challenging, and although disaster plans provide direction, they do not provide the detail for all contingencies, nor can they assist with the emotional readiness necessary to navigate the recovery process.

There are 4 stages described by Kimura[4] of recovery after a disaster:

1. Disorientation phase: The first 10 hours to 1 day after the disaster; victims have difficulty orienting themselves to the postdisaster environment.
2. Acceptance of new reality phase: This phase extends up to 100 hours or several days; victims rationalize the damage and begin to adjust and accept the new environment.
3. Disaster utopia: This extends up to 1000 hours or about 2 months; victims adjust to a more primitive societal environment limited by lifeline and social service restoration.
4. Reentry to everyday life phase: This phase lasts up to 10 000 hours or 1 year; victims begin reconstruction following the restoration of lifeline and social services.

Surviving a disaster teaches you that these stages are dynamic. The magnitude of the event, the community's agility, and an individual's resilience are all factors that affect how quickly someone moves through these stages and whether they have to revisit any of them.

Two weeks after the hurricane, educational activities resumed at our hospital. This required flexibility

DOI: http://dx.doi.org/10.4300/JGME-D-18-00100.1

in accommodating to existing, more limited resources and to the individuals' receptiveness to the educational program and readiness for learning. The academic activities were back in place, but the emotional effects still lingered, and just because all returned to normal business, it did not mean we had returned to our normal lives. Gowan and colleagues[5] described gaps in disaster readiness and factors that may influence recovery, particularly if a prolonged recovery is expected. These factors may be influenced by aspects outside an individual's control, such as insurance burdens, personal costs, physical displacement, and social pressures to resume normal activities. An individual's ability to adapt may be aggravated by attitudes and behaviors. Institutions and programs may feel pressure to rapidly return to normal operations and overlook the influence of these elements on individuals.

Aftermath recovery is influenced by pre-event preparation, including emotional preparedness. Bier[6] discussed the importance of being psychologically prepared to manage a disaster and recover from the trauma. Preparedness begins before a disaster strikes and centers on enhancing resilience, information flow, and empowerment. Useful activities include discussing feelings and reactions that are normally expected after the event, identifying where to seek psychological assistance, talking about resilience with personal stories and research articles, teaching and practicing stress reduction methods, encouraging family involvement, and anticipating having to secure goods and property. Formal disaster plans rarely include any of these items.

There are other ways to help build resilience after a disaster. Getting involved in community recovery can contribute to individuals feeling useful, affirming their professional commitment, promoting social justice, and helping with healing. This also fosters a sense of belonging and recognition of common values.[7,8] Spiritual wellness also can help build resilience.[2,5] Although community involvement was not an explicit part of our disaster plan, it was key to our healing. Our facility opened its doors to the community, and medications, food, and shelter were provided to civilians, trainees, employees, and veterans. Residents and faculty used their private time to assist communities in the way they knew best, with devoted service. And when no one was watching, the greatest competency was being practiced—humanism. Serving the community in the aftermath of a disaster helps to strengthen individuals' resilience, and the payback from others provides a sense of community and the hope of recovery.

After disaster events, managing individual well-being is a high priority. Emotions can hinder the ability to follow a logical order, and it is critical that disaster plans incorporate administrative processes and emotional support. This may require accepting some business interruptions. Events of this nature are humbling experiences that may require compassion from business partners and even accreditors.

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