

Conducting Research on Hurricanes: A Stress & Coping Perspective



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Characteristics of Traumatic Life Events



- **Random**
- **Unpredictable**
- **Uncontrollable**
- **When a community-based event (e.g., natural disaster): shared experience among many victims**

Common Immediate Responses to Disasters



- **Shock, disbelief, and/or emotional numbness (e.g., surprise and a feeling of unreality)**
- **Fear and separation anxiety**
- **Emotional distress (e.g., sadness, depression)**
- **Survivor guilt**
- **Somatic symptoms (headaches, GI distress, chest pains, nausea, loss of appetite)**
- **Ongoing memories, thoughts and mental pictures of the event (often intrusive, often avoided, often associated with anxiety)**

Common Immediate Responses to Disasters (cont.)

- **Sleep disturbance (including nightmares)**
- **Difficulty concentrating, disorganized thought**
- **Desire to be close with friends, family, or similarly affected others**
- **Need to talk about one's experiences**
- **Relief and a focus on one's good fortune relative to worse-off others**
- **Altruistic behavior**

Possible Short and Long Term Effects of Disasters



- **Psychopathological disorders (e.g., Acute Stress Disorder, PTSD, Major Depressive Disorder, other Anxiety Disorders)**
- **Generalized distress (sadness, fear, anxiety)**
- **Intrusive ruminations**
- **Physical symptoms (somatic complaints; physical health effects of chronic stress)**
- **Increased health care utilization and cost**
- **Disruptions in functioning (e.g., work, school, domestic activities, relationships)**

Possible Short and Long Term Effects of Disasters (cont.)



- **Decreased positive emotions**
- **Decreased psychological well-being**
- **Posttraumatic growth, meaning-making, construal of personal benefits (e.g., changes in personal values)**
- **Positive community effects (e.g., increased patriotism, altruism, social cohesion, volunteerism)**

The Myths of Coping with Natural Disasters



- Psychological responses are predictable; that is, there are universal reactions to natural disasters
- Emotional responses to natural disasters will follow a pattern, or orderly sequence of stages
- Psychological responses will be limited to those *directly* exposed to the disaster
- Degree of emotional response will be proportional to the degree of exposure, amount of loss, or proximity to the trauma (e.g., as “objective” loss decreases, so will distress)

Probable Moderators of Response



- Pre-existing mental health history
- Personality dispositions
- Family background (learned responses; modeling)
- Religious orientation; philosophical perspective
- Lifetime or recent trauma history
- Chronic stress
- Coping strategies/responses
- Social context, network responses over time
- Media exposure

Crisis Communications



<p>PRE-EVENT PLANNING</p>	<p>DURING THE CRISIS</p>	<p>POST-EVENT EVALUATION AND PLAN FOR FUTURE</p>
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Pre-event Preparation



- **Coordination of services and agencies *prior* to the chaos of the immediate aftermath of hurricane**
- **Identify authority for communication and clear chain of command**
- **Pre-establish relationships with media**
- **Identify evidence-based strategies for communication message**
- **Identify organizational entity who is responsible for mental health response and recovery; establish clear roles in advance**

Pre-event Public Education



- **Provide information on possible preparation and safety actions -- provide concrete recommendations about what to do**
- **Provide information on range of possible mental and physical health responses to the disaster – set up realistic expectations about what to expect**
- **Panic is rare and preventable**
- **Public often adapts and cooperates with trusted officials**

Immediate Aftermath

Post-event



- **Establish trusted spokesperson (by both public and the media)**
- **Provide credible and timely information**
- **Provide information for personal protection**
- **Provide information about response and recovery activities**
- **Recommend clear actions that enable choice of options and enhance perceptions of control**
- **Provide reassurance and optimism for future**

Beneficial vs. Detrimental Impact of the Media



- **Can provide useful/critical information to those who need and want it**
- **Can assist in containing anxiety and potential panic**
- **Can educate public and “normalize” variability of response**
- **Can provide opportunity to learn from others’ experiences**

But...

Beneficial vs. Detrimental Impact of the Media



- **Can enlarge geographic range of “direct” victims and reactivate traumatic experience via repeated traumatic visual images**
- **Can inaccurately portray range of responses to trauma**
- **Can perpetuate the myths of coping**
- **Can exacerbate distress and anxiety**

The Spokesperson(s)



- **Trusted authority**
- **Provides open and honest communication**
- **Can speak from the heart and the mind (and can keep both kinds of messages separate)**
- **Flexible; can shift gears with changing information**
- **Genuine emotion expressed (empathy vs. “scripted” response)**
- **Continuously available and accessible**
- **Has competent staff who can perform ongoing risk assessments so spokesperson can maintain credibility**

The Audience



- **“The Public” is not a monolithic entity; some individuals are more vulnerable than others:**
 - **Children, elderly, immigrants and refugees, first responders, etc.**
 - **Individuals with greater and/or direct exposure to the trauma**
 - **Individuals with history of traumatic life events**
 - **Individuals with prior psychiatric illness**
 - **Individuals with pre-existing health conditions**

The Message



- **Clear and understandable; concise and consistent**
- **Content of communication must be derived through research and not simply “hunches”**
- **Message must be rigorously pre-tested in advance**
- **Message should be sensitive to age and cultural and educational diversity of audience**
- **Ambiguity and uncertainty can be acknowledged, as long as it is honest and believable**

Avoiding Potential Pitfalls



- **Avoid multiple “authorities” with different political and policy agendas who provide inconsistent or conflicting messages (e.g., Police vs. Sheriff’s Department vs. Governor vs. County Mental Health Department)**
- **Do not assume the public will panic**
- **Target services to those who need them the most**

Avoiding Potential Pitfalls



- **Recognize the importance of not having conflicting messages that are influenced by politics**
- **Recognize that trust is shaped through repeated actions; once lost it is very difficult to regain**
- **Recognize that with repeated “false alarms,” many will acclimate to the threat and may fail to notice genuine danger**

Educating the Public



- **Educate public about prevention strategies and recovery efforts**
- **Offer options and reasons**
- **Coordinate message with the media, schools, the workplace, primary care physicians, mental health agencies, faith-based organizations**
- **Offer easy access to information (press conferences, phone numbers to call in, hotlines, websites)**

Post-event Activities



- **Minimize ongoing social and economic disruption (facilitate family reunification; return of basic services, etc.)**
- **Evaluate what worked, what failed; plan for the future with realistic short-term goals**
- **Avoid secondary exposure via repeated visual images of the trauma (if relevant)**

Research Needs



- Clarifying the time course of symptoms (requires longitudinal research beginning with very early assessments)
- At what point do “normal” responses become pathological?
- Identifying early predictors of long-term difficulties
- Cultural differences in response
- Impact on those directly vs. indirectly exposed
- Impact on special populations (e.g., first responders, law enforcement, children)

Research Needs (cont.)



- Identify factors that influence the perception of risk and the decision to evacuate or stay behind
- Identify factors that influence the decision to settle in a new location or return to one's prior community
- Investigate the role of these decisions on adjustment over time

Impediments to knowing...



- Funding – limited mechanism to obtain funding prior to disaster; limited availability in immediate aftermath of disaster; limited availability for funding over time
- Barriers to successful interdisciplinary collaboration
- Gatekeepers – prevent access to research populations (may be concerned with interference with service provision, or concerned about scrutiny and criticism)

Implications for Public Policy



- **The importance of being aware of and sensitive to the enormous variability in response, both immediately and over time**
- **The importance of avoiding pathologizing “normal” responses to an abnormal event**
- **Recognition that both the physical and mental health impact of the disaster is likely to go beyond those directly exposed; do not expect a simple dose-response relationship**

Implications for Public Policy



- **Recognition that there may be certain early predictors of long-term difficulties (e.g., mental health history, early behavioral disengagement, television exposure)**
- **Cultural differences in response are likely, based on prior life experience and cultural norms**
- **Need to be sensitive to the differential impact on special populations (e.g., first responders, law enforcement, children, etc.)**



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