

# 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.)

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- **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><b>PRE-EVENT PLANNING</b></p>	<p><b>DURING THE CRISIS</b></p>	<p><b>POST-EVENT EVALUATION AND PLAN FOR FUTURE</b></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.)**



## For further information:

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