

# Behavioral Health Following Disasters and Terrorism

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# Overview

- Effects
- Research Base: Interventions
- Expert Guidance: Intervention
  - DBH systems
  - Characteristics
  - Components
  - Interventions across phases

# Disaster Effects: What

77% samples found specific psychological problems

68% PTSD

36% Depression

32% Anxiety

39% nonspecific distress

23% physical health problems and concerns

10% chronic problems in living

9% psychosocial resource loss

*(Norris, Friedman, Watson, Bryne, Diaz, and Kaniasty, 2002)*

# Disaster Effects: Magnitude

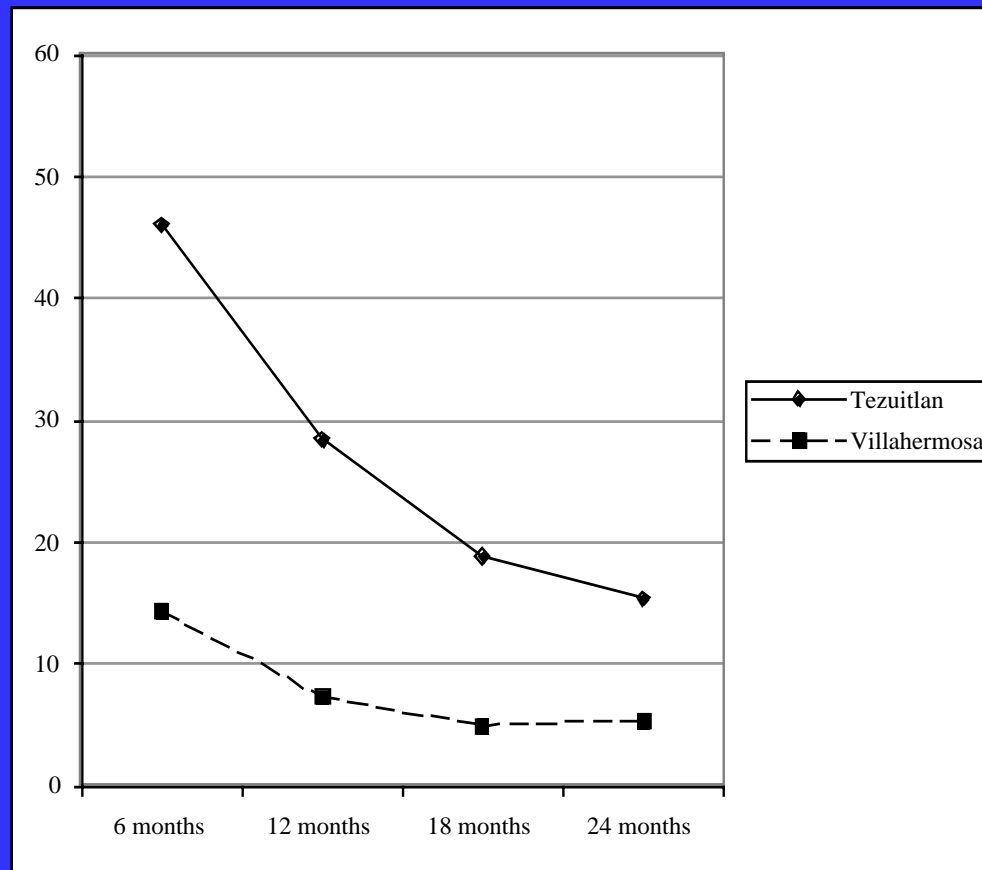
Percent of Samples Finding Effects:

- Very Severe -- 18%
- Severe -- 21%
- Moderate -- 50%
- Minimal or Transient -- 11%

# Disaster Effects: How Long

- 34 panel studies examined changes over time:
  - 79% Symptoms/effects declined.
  - 12% Symptoms/effects did not change.
  - 3% Symptoms/effects increased.
  - 6% Findings were mixed.
- Most people recover within a year.
- Nonetheless, significant minority may remain distressed for some time.

# Illustration: PTSD over Time



# Event-Level Risk Factors

- Human causation
- Mass casualties
- High trauma
- Duration of the crisis / uncertainty
- Significant financial disruption
- Significant community disruption / displacement

# Population-Level Risk Factors

- Women > men
- Children > adults
- Among adults, middle-aged > others
- Disaster location: developing countries > developed countries
- Ethnic minority populations > White
- Low SES > high SES

# Individual- & Family-Level Risk Factors

- Severe exposure, especially injury, life threat, and extreme loss
- High secondary stress
- If adult, presence of children in home
- If child, parental distress
- Predisaster psychiatric history
- Lacking or losing beliefs in one's ability to cope or control outcomes
- Possessing few, weak, or deteriorating social resources

# **Interventions: Methodological Issues**

- **Disasters are Chaotic and Intense**
  - **Controlled studies are difficult**
  - **Focus on assistance, not research**
- **Not all disasters are alike**
- **Random assignment to experimental and control groups is hampered**
- **Follow-up is difficult**

# How Do We Know How to Respond Following Disasters?

- Disaster Research
- Extrapolation
- Consensus
- Clinical Experience
- Customer feedback
- Program evaluation

# Evidence base for early intervention for adults

- High level of evidence:
  - none
- Medium level of evidence:
  - Cognitive behavioral therapy
- Low levels of evidence:
  - Debriefing, EMDR, Psychopharmacology, Psychodynamic therapy, “Alternative” therapies

# Evidence base for later-stage interventions for adults

- High level of evidence:
  - CBT
- Medium level of evidence:
  - EMDR, SSRIs
- Low level of evidence:
  - Psychodynamic therapy, “Alternative” therapies

# Evidence base for traumatic grief interventions: Adults

- Low levels of evidence:
  - All – there are not enough well controlled studies of any particular intervention at this point in time to draw firm conclusions

# General Recommendations

- Interventions should be tailored
- Expect normal recovery
- The presumption of disorder in the early post-incident phase is inappropriate
- Target multiple outcomes
- Promote normal recovery, resilience, and personal growth

# General Recommendations

Take into account special needs of:

- Those with previous mental health problems
- Those who are disabled
- Other high risk groups

# Prior to Implementing I

- Goals should be clearly determined:
  - Who are we providing services for?
  - What are we doing?
  - Who will be conducting the intervention?
  - What outcomes do we want to see?
  - Phases of response

# Prior to Implementing II

- The experience of the person needs to be taken into account to maximize acceptability
- Developmental and cultural issues must be addressed
- Intervention should be integrated into the natural helping network.

# Prior to Implementing III

- The program should be part of the framework for a system of care
- It should include elements of strengthening existing strengths and resources, as well as ameliorating symptomatic response
- The intervention program has to be practical, achievable and implementable at the program level.

# An Effective DBH program

## Proactive

- Integrate responses into local, state, and federal emergency preparedness communities
- EMA, FEMA, Public Health, Hospitals, Faith-based communities, Law Enforcement
- Provide training beforehand
- MH professionals, Media, Public agencies, Educational institutions
- Match tasks to skills
- Maintain database of people and skills
- Maintain portion of staff in reserve to cover entire developmental recovery period
- Foster recognition that each aspect of disaster can impact community mental health

# An Effective DBH program

## Protective

- Dept MH responsibilities
- Limit inappropriate interventions from professionals
- Initiate aid to those who need it
- Identify needs of at-risk individual who may need help later
- Identify evidence-based interventions for use later
- Implementation of most-researched methods first
- Protect against all possible BH problems
- Reduce exacerbation of existing mental disorders

# An Effective DBH program

## Pragmatic

- Provide tools for less-resilient individuals
- Build inherent strengths to enhance resilience / recovery;
  - organize training
  - support natural community groups in helping themselves

# An Effective DBH program

## Principle-driven

- Increase evidence-informed principles of:
  - Safety
  - Efficacy
  - Hope
  - Connectedness
  - calming

# An Effective DBH program

## Proven

- Include evidence-informed interventions as much as possible
- Include periodic monitoring of at-risk individuals
- Evaluate services for community feedback
- Build evidence base for future interventions

# Innovative service delivery

- Take services to people where they are
- Use contact methods useful to the situation
  - Face to face
  - Telephone
  - Internet
  - Print
- Use marketing messages that focus on concerns and interests
- People are logically more likely to use services that meet their needs
- When travel, access, resources are limited or constrained, adjusting delivery methods is critical

# A Variety of Interventions

- Addresses variable exposure Levels
- Some have had repeated traumatization
- Differing temperament / personality / level of consciousness
- Differing cultural perceptions of healing
- Compliance issues
- Motivation/avoidance
- Ongoing adverse life circumstances
- Fluctuating course of traumatic stress

# Culturally Informed

- Disaster brings together many cultures/resources/roles - a common experience may diminish barriers between cultures initially.
- Disasters reveal cracks in the societal foundation between groups.
- Disaster creates multiple shifts in lives that have effects in the long-term.

# Ethnocultural Group

Include community members in:

- specifying what trauma and healing mean to them
- how they prioritize them in their own definition of recovery
- how and whether they're able to use them and access resources
- how you can work together to support their prioritized goals.

# Ethnocultural Individual

- Assess from both caregiver and client's perspective whether the client feels ethnic group is respected by caregivers
- Assess acculturation, racial and cultural identity
- Assess whether people know the individual unique stresses that are triggers for them and if they know what to do when they are vulnerable

# Key Concepts in DBH services for cultural groups

- Always..remember that the individual is embedded in a broader familial, interpersonal, and social context.
- Techniques are essentially the same regardless of culture, but the client's explanatory models are culturally derived
- Value interdependence as well as independence as an appropriate goal
- Recognize that cultural competence is a process not an end-state:
  - Clinicians will only experience despair if they are expected to know everything
  - Advocate for, facilitate, or conduct treatment and evaluation research
  - Research is the only way to identify what is truly effective

# Ethnoculturally - Informed Care

- Manage and modify assumptions
- Assess community needs early and often
- Provide free and easily accessible services
- Work collaboratively and proactively to reduce stigma and mistrust and to engage groups
- Develop strong, innovative community outreach and action
- Utilize mass media
- The source communicating education is important
- Make sure you have good resources in the community before you assess and target your goals
- Leave a legacy

# Key Components of Early Intervention

## Systems Issues / Program Management Process:

1. Prepare / foster capacity and resilience
2. Conduct needs assessments
3. Monitor the rescue and recovery environment
4. Foster recovery
5. Evaluate outcomes

# Key Components of Early Intervention

## Interventions / Direct Survivor Care:

1. Provide for basic needs
2. Triage
3. Psychological First Aid
4. Outreach and information dissemination
5. Technical assistance, consultation and training
6. Treatment

# Typical immediate phase interventions

- Provide support
- Reduce high arousal
- Increase social support
- Enhance coping with event/reactions
- Decrease fear of symptoms
- Increase understanding of traumatic stress reactions/grief
- Prevent maladaptive coping: avoidance, rumination, substance abuse, isolation
- Prevent “loss of resources”

# Typical interventions that should occur later (3 weeks - years)

- Reframe negative cognitions
- Increase therapeutic exposure
- Facilitate emotional/spiritual processing
- **Treatment and therapy**
  - For individuals who develop psychopathology in response to disaster, usually identified after three weeks
  - For individuals in treatment prior to disaster who need assistance to return to pre-disaster level of functioning

# The Phase-based Model of Disaster Response

## **Most experts recommend a stepped approach**

- Some deliveries may help most people in early adaptation
- Over time, as time progresses, some require more individualized and time-consuming interventions reserved for minority of people who require it

# Phases of Intervention

- Pre-disaster planning
- **Immediate or acute**
- **0-14 days**
- **Intermediate phase**
- 14 days-3months
- **Later phase**
- 3 months onward
- **Other time-based phases**

# Phases of Recovery

- Impact / emergency / heroic  
(increased energy) (0-72 hours)
- Early post-impact / honeymoon / recoil-rescue  
(2 days – 3 months)
- Recovery / disillusionment  
(3 months – 36 months)
- Restoration / restabilization  
(36 – on)

# Media Message Phases

- Addressing devastation in the immediate phase
- Intermediate phase signaled by beginning of stories of survival and recovery.
- When coming out of disillusionment phase people are more apt to accept messages validating hope and recovery
- Transition time between phases is major public education campaign opportunity.

# Immediate or Acute Phase of Intervention

- **DO NOT:**
- CBT or EMDR
- Pharmacological interventions for symptomatic relief only
- Formal Screening and Assessment
- CISD for primary survivors

# Debriefing

- **Does not consistently reduce risks of later developing PTSD or related adjustment difficulties.**
- **Poor Research Methodology**
- **No randomized controlled trials conducted with mass violence populations.**

# Why Might Debriefing Produce Negative Outcomes?

- **Association between heightened arousal in acute phase and long-term psychopathology**
- **Dismantling dissociation and avoidance in immediate phase may be detrimental to some individuals**
- **Multiple and complex stressors with different timelines**
- **Potential for re-traumatization by hearing the stories of others**

# Expert Panel: Debriefing

- Timing: For most people some avoidant “down time” is helpful, and debriefing can interrupt this process.
- Systematic ventilation of feelings is the objectionable part of debriefing.
- “Mandatory” or exclusive offering are also objectionable.
- Not ideal format for assessment or education (it’s only presented once, and doesn’t give enough time for education or motivating behavior change).
- Might preclude other interventions
- Inappropriate for acutely bereaved persons, certain cultures

# Expert Panel: Debriefing

- Operational Debriefing for first responders
- More flexible, modular, voluntary options should be made available for both first responders and primary survivors
- More research is needed with different populations, goals, and modalities

# Immediate or Acute Phase of Intervention

## DO:

- Triage
- Support Incident Command Structure
- Engage pre-existing relationships
- Reinforce role as support, educator, and provider of practical assistance
- Deliver Psych First Aid
- Death notification
- Clinical Intervention for more severe responses

# Intermediate Phase of Intervention

- **Do NOT:**
- Utilize crisis counseling model to address all life difficulties unrelated to current disaster
- Expect survivors to come to the office
- Set up a program without thinking of it's ending
- Forget to put staff care as a long-term priority

# Intermediate Phase of Intervention

- **DO:**
- Continue viewing survivors of disaster as a population where majority will return to general state of normalcy within three months
- Encourage communities to acknowledge their progress towards recovery, celebrating successes publicly such as the reestablishing of a significant basic service (water tower, sewer connections, electric)
- Implement Secondary Psychological Assistance
- Implement Crisis Counseling
- **Target Interventions for high risk groups**

# Early Screening Benefits

- **Early Assessment can:**
- **Identify problems that require immediate attention**
- **Identify possible vulnerabilities as well as sources of strength**
- **Flag individuals who warrant follow-up screening**
- **Modify early education to survivors and family so that it is most effectively tailored to their circumstances**

# Informing Intervention: Peri- and Post-Trauma Risk Factors

- **Peritraumatic dissociation and panic**
- **Derealization and time distortion (one week post-trauma)**
- **Emotional numbing, motor restlessness and a sense of reliving the trauma (within one month post-trauma)**
- **Negative perceptions of other people's responses**
- **Negative perceptions of symptoms**
- **Exaggeration of future probability of trauma**
- **Catastrophic attributions of responsibility**
- **Attempts to avoid thinking about or reminders of the trauma**

McNally, Bryant, & Ehlers, 2003

# Crisis Counseling Services

- Are primarily home and community based
- Focus on assessment and enhancement of strengths
- Encourage the use of existing coping skills and the development of new ones
- Support adaptation
- Accept content at face value
- Attempt to restore disaster victims to their previous level of functioning
- Validate the appropriateness of reactions to the event
- Normalize disaster distress responses rather than pathologize them
- Have a psychoeducational focus

# Later Phase of Intervention Interventions

- Historically, between 3 and 10% of individuals have required formal, professional mental health treatment in the aftermath of disasters
- Survivors may present with range of problems such as depression, sleep disturbance, fear, guilt, substance misuse

# Later Phase of Intervention

## Do NOT:

- Initiate CBT prior to individual being ready
- Attempt to address life events or problems outside of individual's reaction to current disaster
- Avoid preparing individuals for DBH program's termination
- Avoid referring individuals for outside MH treatment if needs are more widespread than disaster responses

# Later Phase of Intervention

## DO:

- Focus in on the small percentage who show continuing distress
- Refer for enhanced services
- Refer for treatment:
- For mass trauma, wait until individual has other practical needs met and has enough energy and resources for CBT.
- Continue supportive crisis counseling until individual ready for CBT
- Address Anniversaries and Trigger Events

# Take Home Messages

- Multiple avenues of intervention for:
  - Who: Different exposure levels, different types of individuals, different cultures, different ages, etc.
  - When: Different times
  - Where: Different settings
  - What: Different outcomes
- Multidisciplinary, multiagency
- Evidence-Informed or consensus-informed as much as possible
- The more universal the intervention, the more choice people should have and the less the possibility for harm should be
- Emphasize Resilience and Community-Building