Assessment and Mitigation of Psychological Reactions to Disaster, Terrorism and War

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Standard Disclaimer

The opinions expressed in this presentation are those of the author and do not represent the official opinion of the Uniformed Services University of the Health Sciences, the Department of the Army or the Department of Defense.
Reasons to do an Assessment

- Develop strategic plan
- Reports to command, families, media
- Apportion resources
- Target interventions

To Not Do Stupid Stuff
Needs Assessment

- Individual
- Group
- Population
Type of Event

- Natural disaster
  - Flood, hurricane, earthquake,
    Tornado, tsunami
- Man-made disaster
  - Accident, combination
- Terrorist event
- Complex humanitarian emergency
- War/occupation
  - US soldiers
  - Local nationals
- CBRNE Events
The Pentagon
Anthrax
Fear Was Contagious
The Basics First
Assessment of Physical Needs

- Numbers affected
- Shelter
- Food
- Wounds/Illnesses
- Infectious Disease
- Medications Available
- Fuel
  - Heat
  - Cooking
- Continued violence
Assessment of Mental Health Needs

- Vulnerable populations
  - Previously mentally ill
  - Wounded
  - Bereaved
  - Tortured
- Medications
- Hospital Beds
  - General
  - Psychiatric

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How to Assess Mental Health Needs

• Try to gain as much information as possible before departure to affected site
• On the ground assessment usually necessary
  – Avoid “windshield survey”
• Survey/ talk to
  – Schools
  – Hospitals
  – Clergy
  – Community leaders
  – Shelters
• Psychometric assessments
  – Utility?
Assessment of Mental Health Resources

• Personnel
  – Traditional mental health workers
  – Red Cross
  – Crisis counselors
  – Others

• Crisis counseling centers

• Clinics/Hospitals

• Medications
  – Psychiatric
  – Medical
Family Assistance Centers

- Anticipate need in advance
- Services
  - Informational briefings
  - Red Cross
  - Department of Justice, FBI
  - Counseling
  - Childcare
    - recreation
  - Medical care
  - DNA collection
  - Needs of hotel/center staff
  - Data collection
Assessment Needs to be On-going

- “Honeymoon” period common following disasters
- When attention and media leave, often physical and psychological needs surface
  - Feelings of bitterness, abandonment, anger at government
- Clean-up period
  - Tedious, may still be dangerous
International Issues

• Complex humanitarian emergencies
  – Displaced populations
  – Migrants, refugees

• Steps to do a Physical Assessment
  Well-Established
  – Sphere.org

• Assessment of mental health needs
  – Science is not there yet
  – Consider War, Trauma and Violence by Joop de Jong
  – WHO documents available on web
  – Ritchie EC, Hamilton S. Early Interventions & Risk
    Assessment Following Disaster, Psychiatric Annals,
War—US Soldiers

• Mental Health Assessment Team (MHAT- I) released spring 04 on mental health needs of our soldiers in Iraq
  – First report on mental health in the combat zone
  – Precipitated by apparent suicide cluster
    • Probably this was temporary phenomenon
  – Report describes issues of access to care, lack of psychiatric medications, danger in traveling to reach providers, stigma
• MHAT-II to be released soon
Occupation

• Evaluation of the mental health needs and resources of the Iraqi people
  – Chronically mentally ill
  – Traumatized populations
  – Less than 90 psychiatrists
    • No social workers or psychologists
    • Severe shortage of nurses
  – Free-standing psychiatric hospitals
  – Community resources
Terrorism

- The purpose of terrorism is to terrorize.
- Preparation of the public should help diminish panic.
- We will here focus on CBRNE (chemical, biological, radiological, nuclear, explosive agents).
Psychological Effects of CBRNE Agent Characteristics

- Invisible, odorless
- Ubiquitous symptoms
- Uncertainty
- Novelty (Unfamiliarity)
- Grotesqueness
CBRNE Issues Since 9/11

- Cropduster planes grounded
- Run on gas masks, antibiotics
- Requests for anthrax and smallpox vaccines
- Anthrax cases (5 deaths)
- Run in bookstores on books on bioterrorism
- Perceptions of racism
- West Nile virus
- Sniper attacks in DC area
- Poison gas in Moscow
- SARS
- More anthrax scares
Disaster Behaviors

• Getting out of the train or out of the way of the wave
  – Panic vs organized behavior

• Family vs. Mission—for the first responders
  – “Which Direction Do You Run?”

• Social Disarray--
  – No rules, looting,
  – “Who gets the lifeboats?”
    • Or antibiotics or vaccines or gas masks or food

• Sensory overload
  – Dead bodies, mass destruction
Worried Well?
Psychiatric Issues--Acute

• Stress as reaction to terrorism
• Additional fear of unknown w CBRNE
• Have I been exposed?
  – *May be worried but not well*
• Changes in mental status secondary to agents
• Medical triage
  – Triage in, or triage out?
• Quarantine, reverse isolation
  – Possible new terms: social contact, shielding, home quarantine, “snow day”
• Loss, grief
• Underreactions: psychological denial, fatalism
Psychiatric Issues--Long term

• Depression
• Post Traumatic Stress Disorder
• Somatic symptoms
• Overreactions, eg obsessive concern w decontamination, hoarding protective equipment
• Anger at government
• “Pentagon Syndrome”
• “Anthrax anxiety”
• Multiple unexplained physical symptoms (MUPS)
• Economic fall-out may lead to collapse of tourism, flight of business, job loss
• Hospital closings
Assessment Issues
Biological Agents

- Numbers of exposed
- Numbers potentially exposed
- Infectivity
- Numbers presenting for care
  - Numbers not presenting for care?
- Quarantine issues
- Economic fall-out
Mitigation of Mental Health Effects

• Discussion with command
  – command consultation model
  – previous relationship important
  – “hanging around” critical

• Town hall meeting
  – provocative questions asked

• Successful Medical response bolsters the sense of safety
  – Early detection
  – Successful management of casualties
  – Effective treatments
Key Principles of Early Intervention
Basic Needs

• Safety/Security/Survival
• Food and Shelter
• Orientation
• Communication with family, friends and community
Psychological First Aid

- Support for distressed
- Keep families together
- Facilitate reunion with loved ones
- Provide information/foster communication/education
- Protect from further harm
- Reduce physiological arousal
Monitoring the recovery environment

- Observe and listen to the affected
- Monitor the environment for toxins
- Monitor past and ongoing threats
- Monitor services that are provided
Outreach/Information Dissemination

- “Therapy by walking around”
- Using established community structures
- Flyers
- Websites
Technical Assistance/Consultation/Training

- To relevant organizations
- To other caregivers, responders
- To leaders
Fostering Resilience/Recovery

- Social interactions
- Coping skills training
- Education about stress response
- Group and family interventions
- Fostering natural social support
- Looking after the bereaved
- Repair organizational fabric
- Operational debriefings, when standing procedure in responder organizations
Triage

• Clinical Assessment
• Referral when indicated
• Identify vulnerable/high risk individuals/groups
• Emergency hospitalization
Treatment

- Individual/family therapy
- Group psychotherapy
- Pharmacotherapy
- Spiritual support
- Short-term or long-term hospitalization
Sample Best Practice Guidelines

• *Early, brief, and focused psychotherapeutic intervention can reduce distress in bereaved spouses, parents, and children*

• *Selected cognitive behavioral approaches may help reduce incidence, duration, and severity of acute stress disorder, post-traumatic stress disorder, and depression in survivors*
Sample Best Practice Guidelines

- Early interventions in the form of single one-on-one recitals of events and emotions evoked by a traumatic event do not consistently reduce risks of later post-traumatic stress disorder or related adjustment difficulties.

- Other practices that may have captured public interest have not been proven effective, and some may do harm.
Learning to Wear the Protective Gear

• Preparation in Advance needed
  – In the past, often lack of realistic training
• PRACTICE
• Communication
  – speech intelligibility
  – voice, phone, e-mail
• Identification restricted visual fields
  – name tags
• Clear identification of “Who’s in Charge?” especially important
Confidence Builders

• Ensure proper fit of mask
  – correct size
  – consider hair, beard,

• Familiarity with equipment

• Communication
  – Radio, cell phones (will they work?)

• Computers
  – E-mail (electrons are clean!)
SUMMARY

Psychological Effects of WMD

Acute Effects: Possibly large numbers of psychological casualties.

Long-Term Effects: Expect high costs for long-term disability health care.
Current Conflicts
OEF/OIF

• Initial questions about weapons of mass destruction
• Rapid optempo
• Strain on families
• Continual danger for troops and medics
Initial Mental Health Issues in Iraq

- Significant forward mental health presence
- Dangers of travel
- Troops not always able to travel to meet with practitioners
- Question of a suicide cluster
- Psychiatric evacuations from theater
- Medical/surgical evacuations from theater
Mental Health Assessment Team

Report 1

• Data collected by 12 person team fall 2003
• Report released February 2004
• Covered morale, service delivery, access to mental health--deficiencies found
The Ongoing Insurgency

- Extended deployment
- Increasing personal threats
- The scandal from Abu Ghraib
- Repeated deployments
- Casualties on all sides
Surveillance

- NEJM article by Hoge et al reported that about 16% of returned soldiers had PTSD, anxiety, depression
  - Anonymous survey
  - Conservative scoring used
  - Report received wide-spread attention
  - Media: 1/6 soldiers has PTSD!

- Ongoing post-deployment health assessments
  - Service member fills out form, then face to face with licensed provider
  - 3-5% receive referral
Mental Health Assessment Team II

- Deployed back to Kuwait/Iraq in August 2004
- Principle mission to focus on whether recommended changes had been implemented
- Report pending
Re-Integration Home

• Deployment Cycle Support
• Anecdotal reports of problems
• Additional challenges for Reserve Component
• Preparation for the return
Post-Deployment Health Re-Assessment (PDHRA)

- “Honeymoon” period
- 90 to 180 days following deployment
- Active duty and reserve component
- Emphasis on behavioral health
- Implementation plan being worked out
- VA will have key role
High-Risk Populations

• Wounded service members and their families
• Psychiatrically ill patients
• Families of the deceased
• Medical staff and other highly exposed personnel (eg chaplains, mortuary affairs, casualty assistance officers)
• Medical Hold/holdover patients
• Isolated Reserve component
Operation Unified Assistance
The Tsunami
Focus on Mercy Project Hope Task Force

- Mercy deployed to provide sustenance s/p tsunami
- Project Hope provided civilian providers to work
- LTG Peake (ret), MG Timboe (ret), BG Bester (ret) provided leadership
  - Large contingent from Massachusetts General Hospital
  - We provided “just in time” training on the Comfort
  - Mixed levels of disaster experience

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First Responder Issues

• Chain of command often unclear; evolving
• Dealing with dead bodies, helplessness
• Caring for orphans, exploited/abused children
• High risk for Post-Traumatic Stress Disorder, Depression and other behavioral health manifestations
  – data from Rwanda, 9/11, other disasters
• Difficulty re-connecting with families, employers
• Can preparation/stress inoculation mitigate?
• Critical importance of morale, cohesion, and communication
• Traditionally under-prepared
INTERNATIONAL RELATIONSHIPS DURING DISASTERS - “The Fog of Relief”

- Affected Country Requirements
- NGOs
- USG
- UN Coord and Agencies
- UNICEF
- WFP
- UNDP
- ICRC
- Other Donors
- DONORS
- UNHCR

USAID’s Office of U.S. Foreign Disaster Assistance
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Project Hope/USNS Mercy

Operation Unified Assistance

Tsunami Relief Mission
Lessons Learned

• Some found just in training helpful, others did not
• Difficulties with civilian-military interface
• Some staff underutilized, some overworked
• Security issues
  – ship terrorist target?
  – getting ashore
• Communication back home difficult
• Psychosocial issues on land overwhelming
• Overall high sense of satisfaction
• Challenges to doing research in disasters
Mental Health and Mass Violence Book

The Pentagon

• Mental Health Support to the Pentagon Following the Attacks on 9/11 eds Ritchie EC, Hoge C, Military Medicine, September 2004.
Assessment

Questions or Comments?

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