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

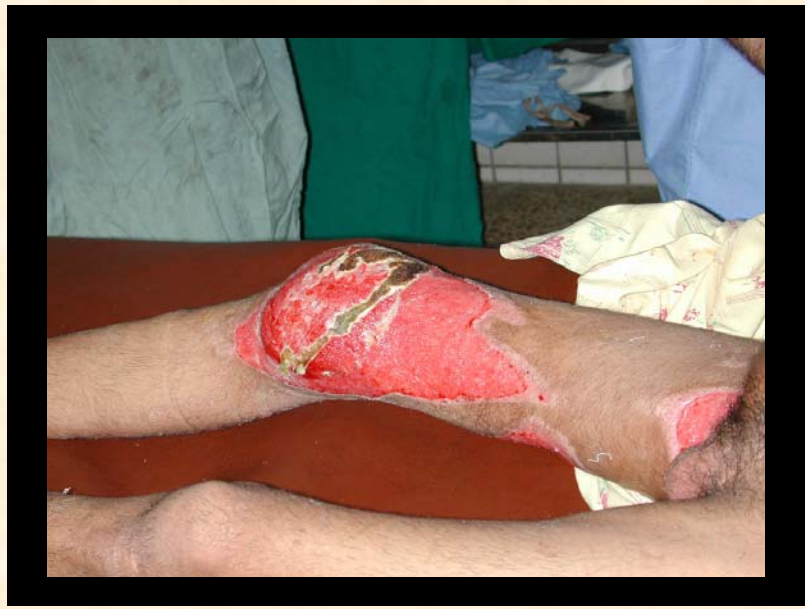
To Not
Do Stupid Stuff

Needs Assessment

- Individual
- **Group**
- **Population**

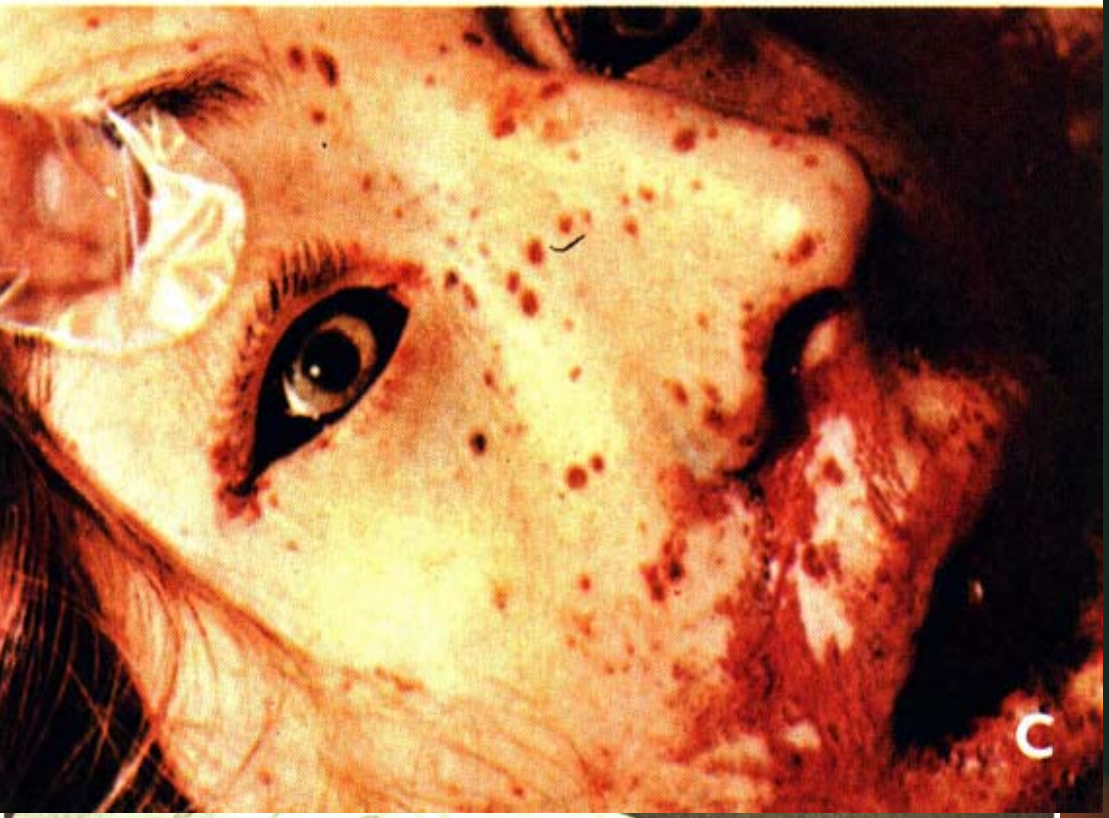
Type of Event

- 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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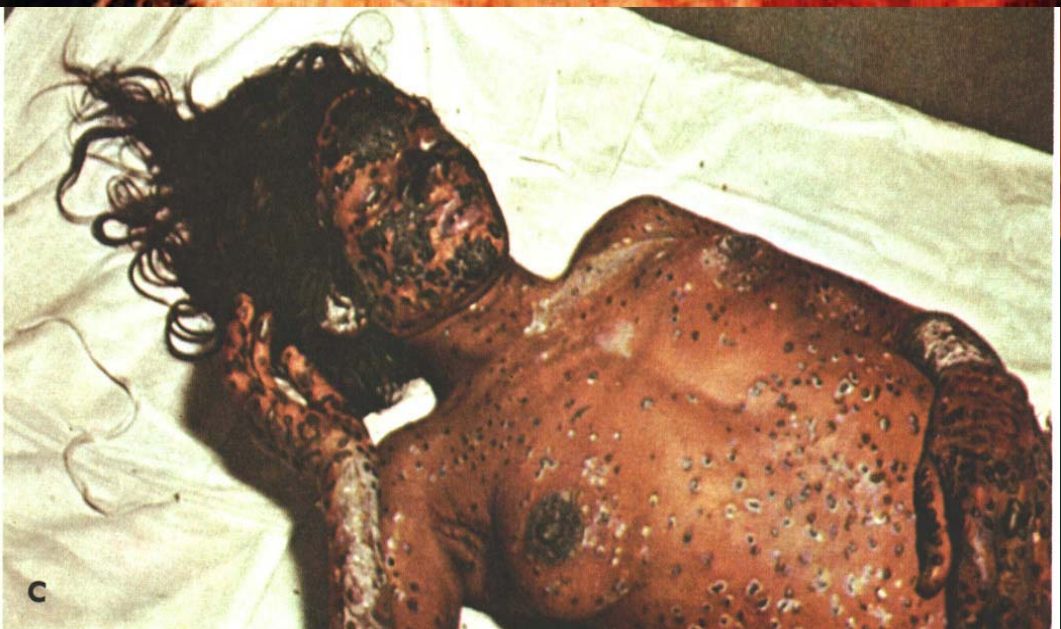
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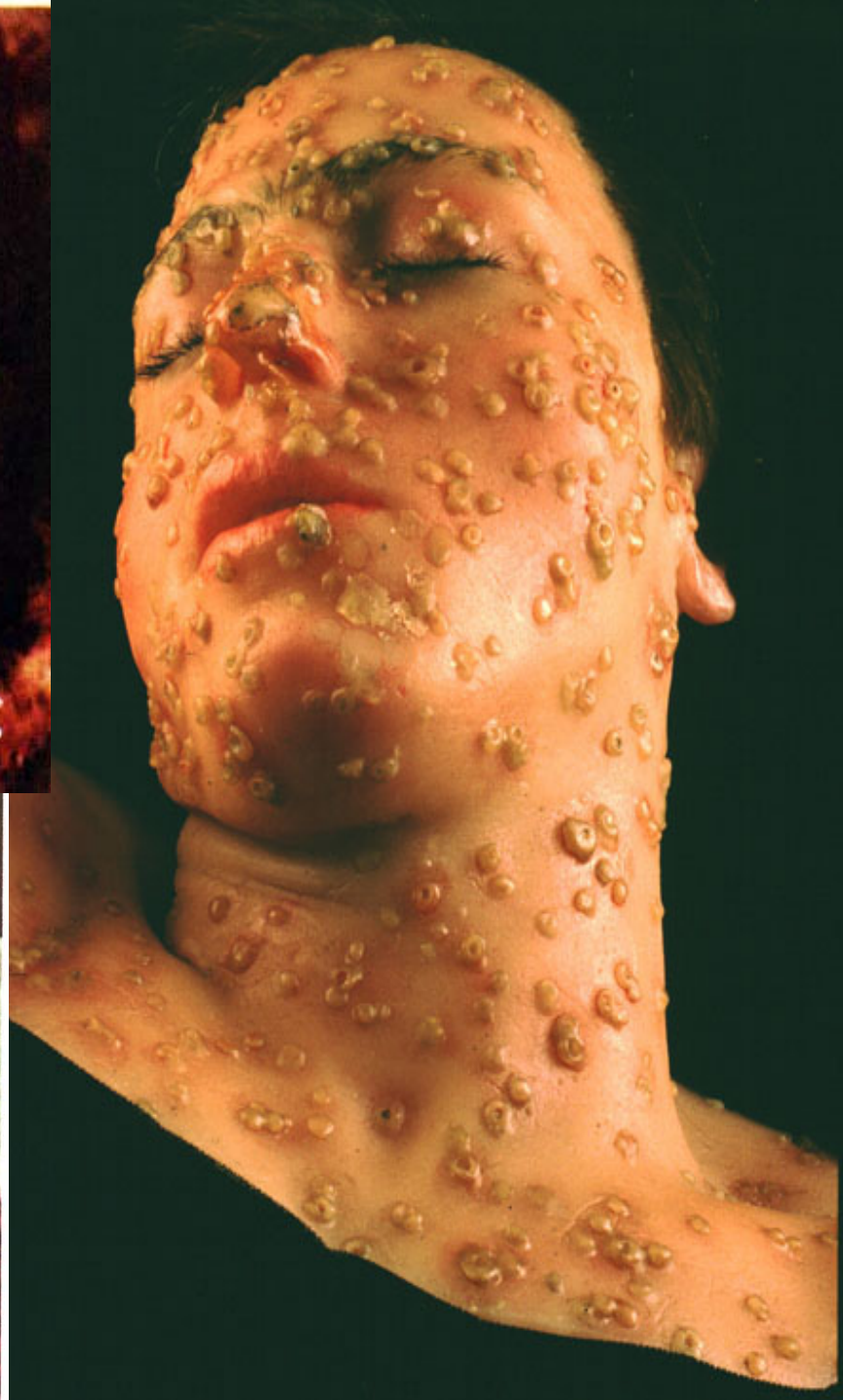



PMI

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

How to Assess Mental Health Needs

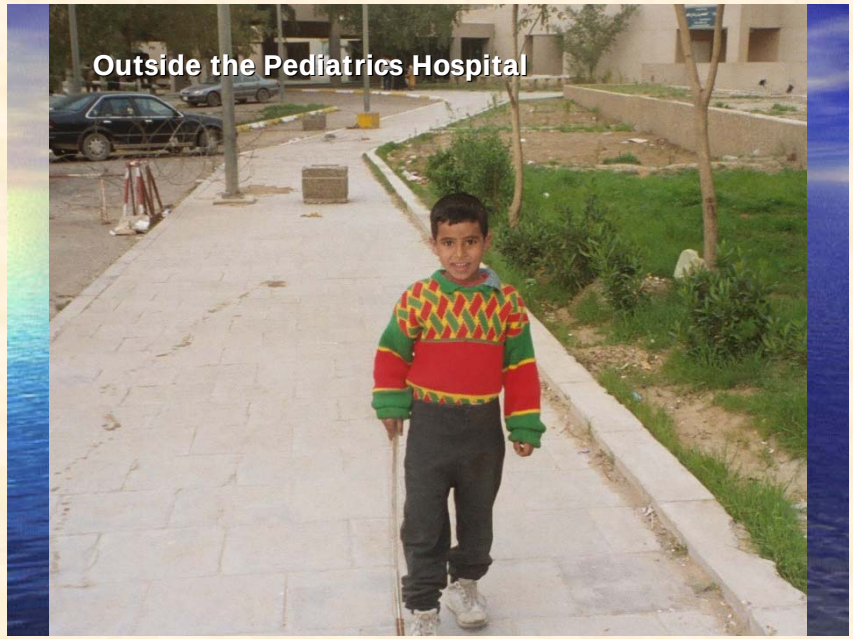
- Try to gain as much information as possible before departure to affected site
- On the ground assessment usually necessary
  - Avoid “windshield survey”
- Survey/ talk to
  - Schools
  - Hospitals
  - Clergy
  - Community leaders
  - Shelters
- Psychometric assessments
  - Utility?

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

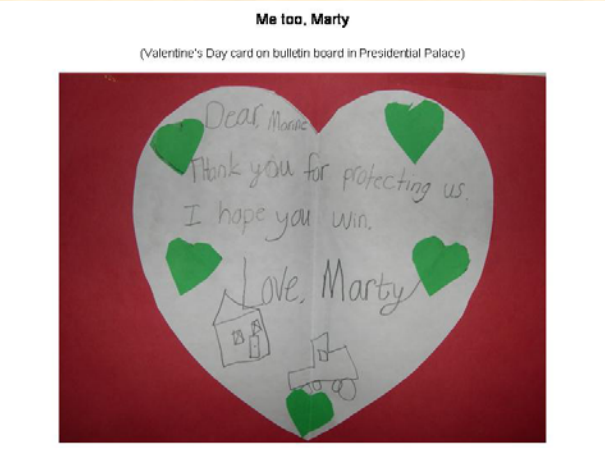
International Issues

- 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, September, 2004.

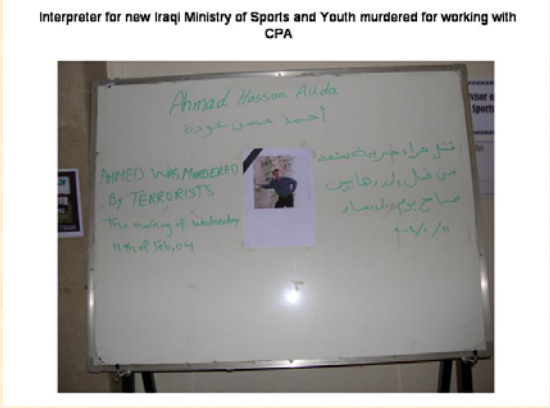
War—US Soldiers

- 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 to 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 bioterrrorism
- 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

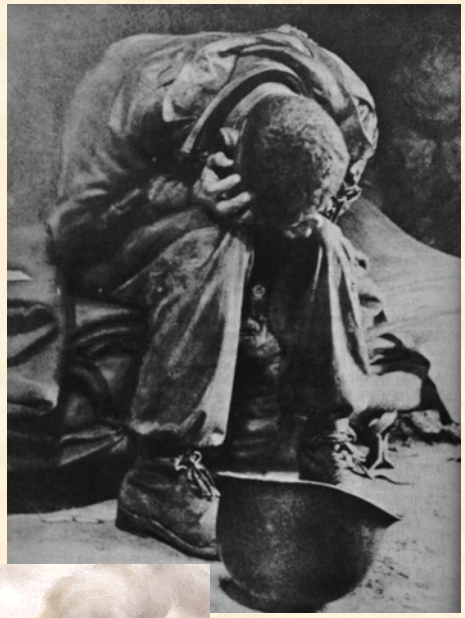
Psychiatric Issues--Long term

- 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 Ag

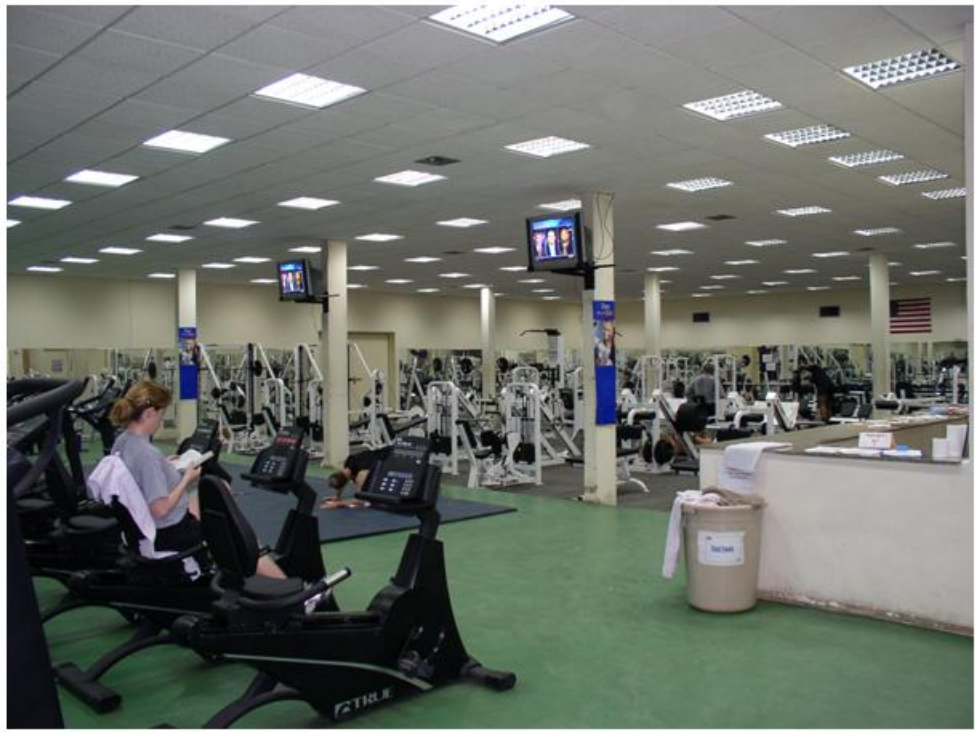
- Numbers of exposed
- Numbers potentially exposed
- Infectivity
- Numbers presenting for care
  - Numbers not presenting for care?
- Quarantine issues
- Economic fall-out

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

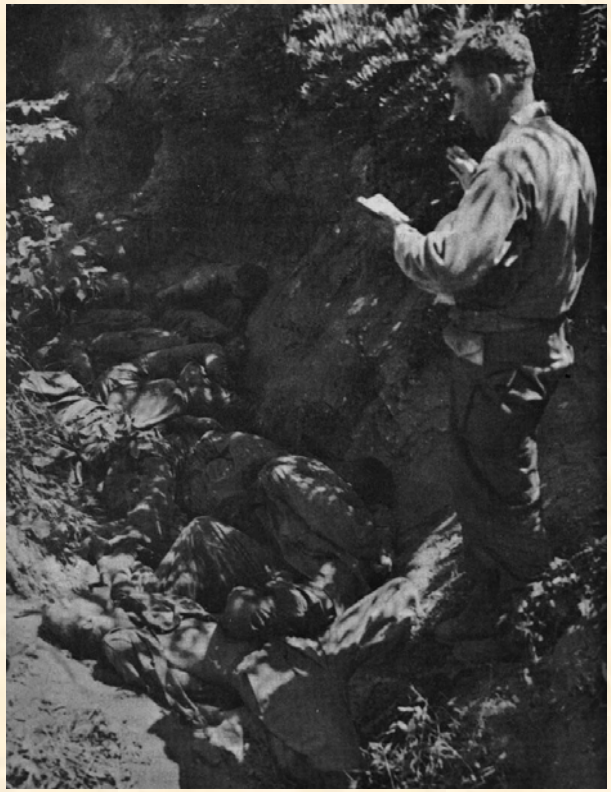
Fostering Resilience/Recovery

- 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

ference

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

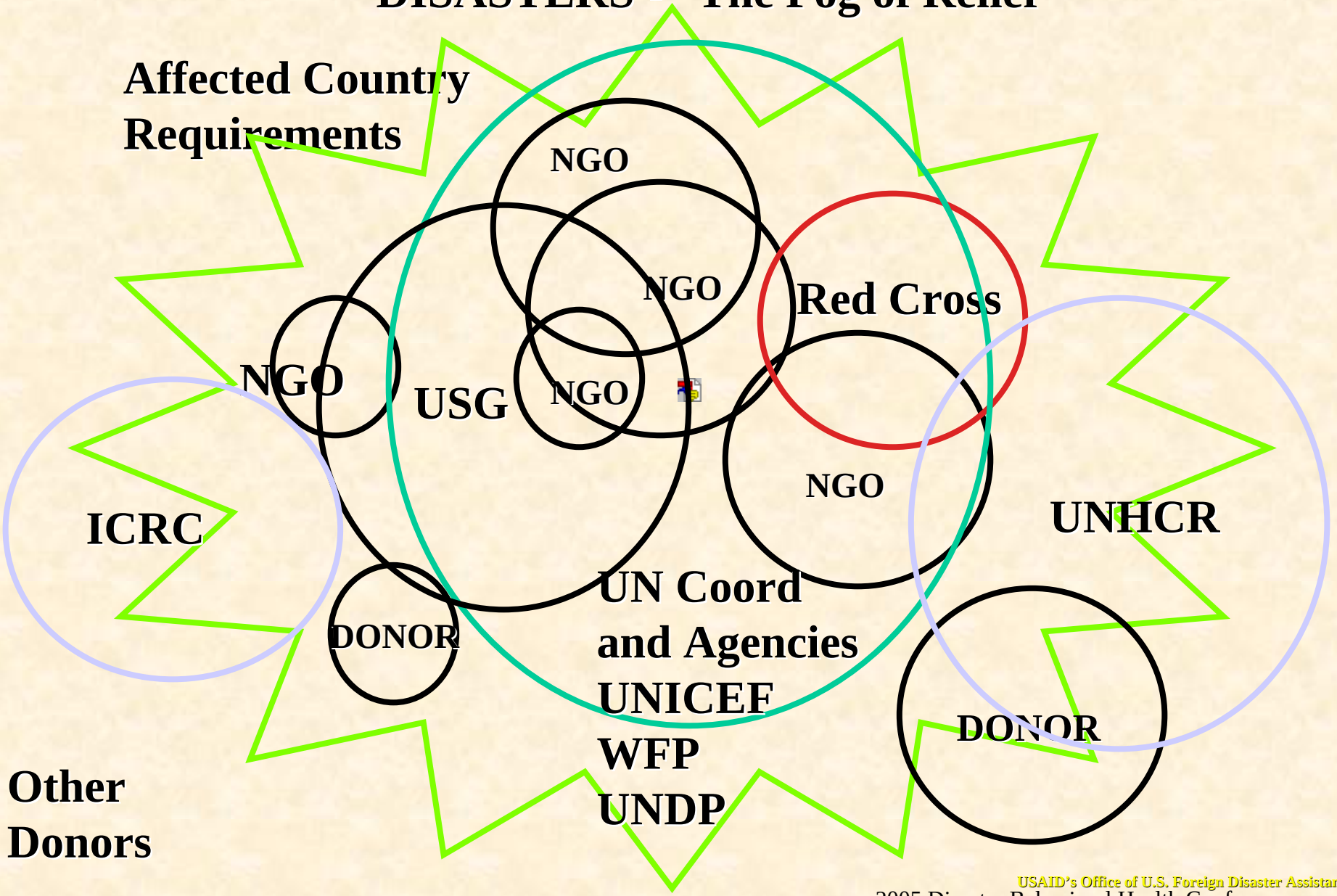
Focus on Mercy Project Hope Task Force

- 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 Mass General Hospital
  - We provided “just in time” training on the Comfort
  - Mixed levels of disaster experience

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"

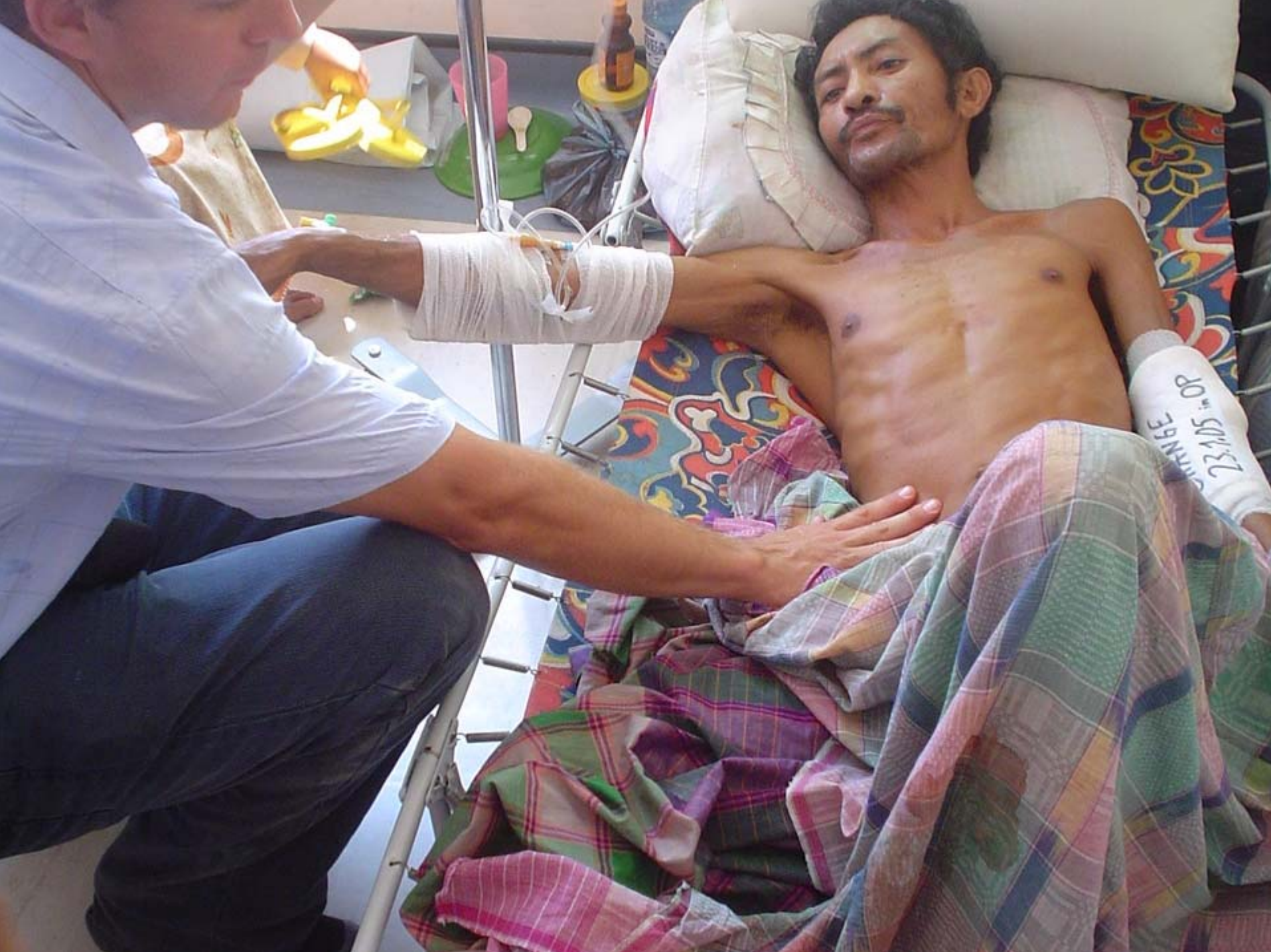



PLTD APUNG. 1

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

National Institute of Mental Health. Mental Health and Mass Violence: Evidence-Based Early Psychological Intervention for Victims/Survivors of Mass Violence; A Workshop to Reach Consensus on Best Practices. NIH Publication No 02-5138, Washington DC: U.S Government Printing Office. Call *301-443-4513* for a free copy or on the web at

http://www.nimh.nih.gov/research/massviolence.pdf

The Pentagon

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

Assessment

- Ritchie EC, Hamilton S. Early Interventions & Risk Assessment Following Disaster, Psychiatric Annals, September, 2004.

Questions or Comments?

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