An Update

Trauma Research:

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STUDY GLOBAL TRAUMA RECOVERY

A 3 Course Series. Hybrid Format, Case-rich & Facilitator Oriented. Includes International Experience. You can download the Course Flyer here.

Did you missed getting started in January? The Introduction to Global Trauma Recovery course will be run again from March 9th- April 13th. Send your applications in now!
Agenda

- Update on what we know
  - About the context and cost of trauma
  - About the biology of trauma
  - About what works in Sub-Saharan Africa
- Some challenges for us
Humanitarian Disaster Institute (HDI)

HDI is a college-wide interdisciplinary research center at Wheaton College dedicated to helping the vulnerable and underserved domestically and internationally across a wide range of issues related to humanitarian disaster response and management.
Trauma as blocking factor

Why make the effort to prove what we already know?

- Improve our capacity to give objective data to decision makers
- Illustrate the need for trauma recovery as a first order intervention
From our point of view, only once a minimum amount of cognitive, social, and emotional functioning is reinstalled in an affected individual will the person gain from community rehabilitation programs, such as income-generation activities, survivor support-group meetings, and public awareness-building and peace-building efforts.
Contexts of trauma?

- Poverty
- War and Conflict
- Disease
- Gender-based Violence

Each evidences extreme risk for PTSD and depression, correlated with increased suicide
Costs of Trauma
Extent and Impact
Conflicts with extreme sexual violence are exception, not rule
- Strategic rape is less common than claimed
- Most common forms of sexual violence are ignored (intimate partners)
- Men are victims too
Costs of trauma

- Extent of trauma: What percent of the population?
  - Studies range: 24-74%
  - BUT...100% met CRITERION A
    - Exposed to life threatening event
    - Reaction is horror, intense fear, helplessness

- Cost of PTSD in the US?
Costs of Trauma

- Comorbidity with Depression
  - 40-50% in numerous studies (2007-2010)
- Loss of work/role capacity
  - About 44 days per year in Africa
  - About 15 days per year in rest of developed world
- Loss of faith
  - Higher exposure to trauma → lower faith
  - Increased views of violence as solution to problem
Biology of Trauma?

Brief review
Secret ingredient to trauma?

- Traumatic events do not always lead to traumatic reactions. Only 25-35% end up with traumatic symptoms. Why?
  - NOT just biology, but...
    - Social support? Continuing isolation? Community response?
    - Active, successful reaction?

Factors impacting trauma reactions

- Traumatic Event
  - Background
  - Occupational Environment
- Organizational Support
  - Resilience Factors
- Level of Traumatic Response

Fawcett (2003), as cited by Boecker (2007)
The developing brain:

- **Plasticity**: The brain’s ability to adapt to experience
- **Use-dependent development**: Specific changes in the brain in response to repeated input (patterns) over time
- **The brain develops efficient ways to cope with and respond to daily experience!!!
What do we know?

- Three types of experience processing
  - Cognitive/consciousness (frontal cortex)
  - Emotional interpretation (limbic systems)
  - Reactive-fight/flight/freeze (brainstem)

- Overactive limbic system seems to shut down prefrontal cortex (used for activation, assessment, etc.)
  - Disconnection of cognition and affect
Those with PTSD symptoms showed decreased prefrontal cortex activity when asked to remember or think about former traumatic events.

- prefrontal cortex = area utilized for metacognition
- PTSD victims re-experience trauma rather than recall from their present experience.
- “People who experience trauma but do not develop PTSD, on the other hand, show more activity in the prefrontal cortex.”
The human brain:

1. Forebrain:
   - Cerebrum
   - Amygdala
   - Hippocampus

2. Midbrain
   - Pons
   - Cerebellum
   - Medulla oblongata

3. Hindbrain
   - Spinal cord
How the brain responds to memories of trauma:

- When people are exposed to memories of traumatic events, brain scans illustrate:
  - Activation of the survival response:
    - Heightened amygdala and other limbic activity
  - Not just a memory--Seeing and feeling
    - Activation of sensory areas
  - Decreased ability to speak:
    - Decreased activation of Broca’s area
  - Emotions are more important than language:
    - Marked Rt. hemisphere lateralization
Predisposition to trauma?

- Predisposed to strong affective experiences?
  - More likely to experience repeated memories
  - More likely to relive past experiences

- Hypothesis: predisposed are more likely to experience PTSD symptoms after traumatic event
Psyche/stress connection

Science of psychoneuroimmunology or physiological psychology teaches us:

- “Sickness” pattern: Your body shuts down to fight the injury or intruder (“nonspecific immune response”)
- Stress and infection work with the same system
  - Both utilize the interleukin 1 communication system that tells the body to fight
“...not only does stress produce the expected stress response, it also produces exactly the same behavioral changes--including decreased food and water intake and decreased exploration--and physiological changes, including fever, increased white blood cell count and activated macrophages seen in the ‘sickness response.’”
Cancer patients receiving doses of interleukin-1 often experience deep depressions.

High levels of stress from anxiety and depression lead to the body trying to fight as if there is an infection?

- shuts down pleasure senses to conserve energy
- encourages greater depression and anxiety
The consequences of living in a chronic state of alarm

- Excess cortisol (stress hormone)
- Breakdown of stress hormone regulation (harder to down-regulate stress response)
- Immune system breakdown, higher vulnerability to chronic illness
### Remember: biology only 1 factor

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<th>Biological</th>
<th>Psychological</th>
<th>Social</th>
<th>Spiritual</th>
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<tr>
<td><strong>Predisposing factors</strong></td>
<td>Prenatal care/insults; Genetics</td>
<td>Attachment; personality features</td>
<td>Socioeconomic Status</td>
<td>Generational patterns</td>
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<td><strong>Precipitating factors</strong></td>
<td>CNS diseases and other med. problems</td>
<td>Abuse, trauma, chronic poor functioning; emotional sensitivity</td>
<td>Abuse and neglect; social support?</td>
<td>Current faith context</td>
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<td><strong>Perpetuating factors</strong></td>
<td>Chronic disease/stress response</td>
<td>Poor adjustment to change</td>
<td>On-going lack of resources; oppression</td>
<td>Rigid faith contexts</td>
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Remember: Lots we don’t know

- Plenty of promises about new brain sciences, but... data sets are often tiny
  - Many popular texts/treatments that over-promise diagnoses and treatment results
- Some “weird” treatments may work but not for the reasons stated
- Back to left/right brain science?
  - Older theories based on localization
  - Newer theories based on activity scanning
What Works?
Works? Transferrable? Sustainable? Scalable?
Categories of interventions

- Exposure based
- Narrative-exposure based
- Educational
- Relational/Supportive or Artistic/traditional
- Alternative

- Spiritual? (little to no empirical data)
Effective?

- All listed will have positive outcomes, but
  - Rely on self-reports
  - Short follow-up
- Still need to answer
  - What provides the power?
Features

- Exposure (live or imagined)
- Reduction of arousal response
- Goal: re-tell, not relive

Issues

- Professional led; scalable?
Exposure models

- EMDR (Eye Movement Desensitization Reprocessing)
  - Creator: Francine Shapiro

- Prolonged Exposure
  - Creator: Edna Foa

- ACT (Acceptance and Commitment Therapy)
  - Description: [http://www.drluoma.com/ACT.html](http://www.drluoma.com/ACT.html)
Cognitive Processing Therapy

- 12 sessions
  - Focus on writing narrative
  - Focus on challenging maladaptive thoughts
NET and KidNET
- Focus on building autobiographical narrative while also exposing to lifetime traumas
- Refugee tells autobiography over 6 (2 hour) sessions (to trained lay counselor)
  - Recorded in mother tongue; retold and corrected
  - Focus on positives and negatives and future

Testimony method

Re-Wind Technique (1 session)

Value?
- Scalable, transferrable, focused on +/-
Children’s Accelerated Trauma Treatment

- Based on Re-Wind technique
- 90 minute session with child and figurines
  - Use figurines to tell entire trauma story
    - From “safe place” to final “safe place.”
    - Stay focused on characters
  - When finished, tell it backwards
  - Tell it forwards and backwards as fast as possible
  - Re-scripting: Tell story with imaginary friend in it so you will feel differently about the story
Good vs. bad storytelling

**GOOD**
- Includes whole self
  - History, present, capacities
- Comes in form of
  - Talking, artistic rendering, dance, etc.
- Teller has power
  - To tell, to not tell
  - Titrates story
- Purpose: to be seen, heard, valued

**BAD**
- Reduces teller to trauma
- Ignores capacities and history
- Telling equated to talking
- Teller has no power
  - forced to tell; forced to be silent
  - Swallowed up by trauma
- Purpose: to relive alone

See Richard Mollica’s, *Healing Invisible Wounds*
Emotional Freedom Techniques

- Called EFT but NOT Emotion Focused Therapy
  - AKA Thought Field Therapy
  - Tapping on 9 or 14 acupoints or meridians to eliminate energy blocks
  - Tapping while imaging a traumatic situation and saying, “Even though I’m afraid of dying, I deeply accept myself”

- Youtube video of it in Rwanda:
  [http://www.youtube.com/watch?v=3JLugqjn3o8](http://www.youtube.com/watch?v=3JLugqjn3o8)
Tapping illustration
Might it work?

- Reasons why?
  - Activating the left prefrontal cortex?
  - Focus on self-sufficiency vs. loss?
  - Calling a therapist (but not going) is indicated in improving mood over the long haul...why?

- Reasons why not?
  - Zero long-term follow up
  - Zero empirical research
Education

- Intervention:
  - Education about the nature of trauma, self-care
- One study
  - Control Group
  - Intervention group (without education)
  - Intervention group (with education)
- Most positive results?
What?
- Use of local traditions to tell story as community or group
- Multiple “sessions”

Value?
- High attendance and commitment
- Reduces stigma
- Robust results with child soldiers
  - Gradual reduction of symptoms
  - Improved social connections
Critical Incident Stress Debriefing
- (aka CISM (m for management)
- Within 72 hrs of incident
- Goal to educate about trauma, debrief about facts, feelings, impact, spiritual thoughts, etc.
- Often used many weeks after traumas
- Solid research suggests
  - Helpful for some
  - Harmful for others (creates more distress)
    - Can be overhyped and valued as a “get out the trauma” approach

Check out: [http://www.missionarycare.com/pdfs/Missionaries-Trauma.pdf](http://www.missionarycare.com/pdfs/Missionaries-Trauma.pdf)
Forgiveness as intervention?

- Uganda
  - Forgiveness as coping contributes to experience of personal empowerment
- Questions:
  - Forgiveness by choice or obedience?
  - Forgiveness an act or result?
Challenges?
Questions:

- Accurate data collection practices?
  - About the extent of trauma
  - About the results
- Identifying what works; alt. hypotheses?
- Expanding the databases of trauma
  - Ex: H. Hill’s Aboriginal vs. Congolese Responses to Trauma Healing
For slides:

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  - www.wisecounsel.wordpress.com
  - www.globaltraumarecovery.org