SOMATIZATION IN REFUGEES
AN OVERVIEW

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OUTLINE

- Present examples of refugee patients presenting with pain in a primary care clinic
- Discuss prevalence of somatic symptoms in refugees
- Discuss culturally bound somatic symptom manifestations
- Literature review on relationship between somatic symptoms and trauma
- Literature review on relationship between somatic symptoms and resettlement stressors
- Interactive discussion on presented refugee patients
Somatization

- A tendency to experience and communicate somatic symptoms and distress unaccounted for by pathological findings, to attribute them to physical illness and to seek medical help for them

- Components
  - Experiential
  - Cognitive
  - Behavioral

- May be a manifestation of underlying psychological distress

Lipowski 1998
Theoretical framework

- Medically unexplained somatic symptoms
  - Unknown medical illness
  - Due to psychological distress
  - Somatoform disorder/Hypochondriasis
- As part of psychiatric disorders
  - Depression – constipation, fatigue
  - Anxiety – Palpitations, Shortness of breath, chest pain
- Functional syndromes
  - Irritable Bowel Syndrome
  - Fibromyalgia
  - Chronic Fatigue Syndrome
  - Chronic Pelvic Pain
Worry about illness

Increased autonomic arousal

Sick role behaviors and worsening symptoms

Physical symptoms of arousal
Worry about illness

Increased autonomic arousal

Physical symptoms of arousal

Triggering of trauma memories

Sick role behaviors and emotional conflict

Cultural interpretation of symptoms

Secondary benefit

Fears in new country
Psychoanalytic conceptualization

- Disturbance in continuity of being – both from terrifying threat to existence and uprooting from a cultural environment and loss of identity
- Splitting of affect so psychic element is severed from somatic element
- Amygdala – formation of traumatic memories that are vivid and visceral but un-integrated and non-symbolic

Martin 2012 (Grief that has no vent in tears, makes other organs weep. Seeking refuge from trauma in the medical setting)
Prevalence of somatization

- Physical symptoms leading cause of outpatient medical visits
  - 20-25% chronic and recurrent
- 33% somatic symptoms medically unexplained
- Associated with anxiety and depression
- Higher symptom severity associated with psychiatric co-morbidity

Somatization across cultures

• **Strong association between somatoform disorders and depression/anxiety***
  – But many women with somatic symptoms did not have a mental disorder

• **Higher rates of somatoform disorder in primary care setting in South Americans**$
  – No difference at other sites (but very restrictive definition of somatoform disorder)

• **Somatic symptoms are an idiom of distress of severe social adversity**#
  – Multiple syndromes in Asian populations

*Shidhaye et al 2013, Int Rev Psychiatry
$Gureje et al 1997 Am J Psychiatry
#Hinton et al 2009, CNS Neurosci Ther
Somatization and trauma

- Patients with medically unexplained somatic symptoms have higher trauma rates*
  - Cognitive theories
  - Neuroendocrine correlates – HPA axis dysregulation, altered CNS activation
- High rates of medical comorbidity in those with PTSD#

*Roelofs et al 2007, Clin Psychol
#Pacella et al 2013, J Anx Disord
Potentially acutely serious? (<5%)
  Yes → Expedited diagnostic evaluation
  No

Likely minor and self-limited? (70-75%)
  Yes → 1. Address patient expectations
          2. Symptom-specific therapy
          3. Follow-up in 2-6 weeks
  No

Persistent unexplained somatic symptom? (20-25%)
  Yes
  No

Depressive or anxiety disorder?
  Yes → Antidepressant and/or cognitive-behavioral therapy
  No

Functional somatic syndrome?
  Yes → Syndrome-specific therapy if evidence-based
  No

- Regular, time-limited clinic visits
- Psychological assessment (e.g., somatoform disorders, personality disorders, history of trauma/abuse)
- Individual or group chronic symptom management programs
- Complementary medicine treatments, when evidence-based
- Rehabilitative rather than disability approach
## Prevalence of somatization in refugees

<table>
<thead>
<tr>
<th>Author/year</th>
<th>Population</th>
<th>Instruments</th>
<th>Type of symptom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moore 1991</td>
<td>75 Mien refugees in psychiatry clinic</td>
<td>Clinical diagnosis</td>
<td>Headache (93%), LBP (81%), Epigastric pain (89%), Diffuse extremity pain (85%)</td>
</tr>
<tr>
<td>JoMoore 2001</td>
<td>89 Mien and Laos refugees</td>
<td>Clinical diagnosis</td>
<td>Chronic pain (95%) Rheumatological disorder (88%)</td>
</tr>
<tr>
<td>Jamil 2005</td>
<td>116 Iraqi refugees</td>
<td>Iowa medical questionnaire</td>
<td>Mean 9.97 symptoms</td>
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<tr>
<td>Schubert 2010</td>
<td>49 help seekers in a center for torture victims</td>
<td>IES-R, HCSL 25, Sum of somatic complaints</td>
<td>Mean of 12.2 symptoms (SE Europeans more PTSD and somatic)</td>
</tr>
<tr>
<td>Priebe 1997</td>
<td>34 torture victims with mental sequelae</td>
<td>VonZorssen complaint checklist (65 item)</td>
<td>Somatoform disorder 14;82% restlessness, 77% backache, 68% body tension</td>
</tr>
<tr>
<td>Ramsay 1993</td>
<td>100 torture survivors</td>
<td>DSM III R checklists</td>
<td>Somatic pain disorder 29%, hyperventilation syndrome 14%</td>
</tr>
<tr>
<td>Somasundaram 2010</td>
<td>75 migrants for psych care at torture center</td>
<td>Clinical audit, qualitative interviews</td>
<td>Somatoform disorder 10, PTSD 47, MDD 58</td>
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<td>Hondius 1999</td>
<td>135 refugees in assessment center in Netherlands</td>
<td>Chart review</td>
<td>Classic PTSD 8/135; rest had some PTS</td>
</tr>
<tr>
<td>Silove 2007</td>
<td>1161 Vietnamese refugees vs. 7961 Australian born</td>
<td>CIDI Medical outcomes study short form</td>
<td>PTSD prevalence same but Vietnamese with more physical disability and Australians more mental disability</td>
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<td>Summerfield 2007</td>
<td>43 residents in post-conflict Nicaragua</td>
<td>GHQ subscales of psychosomatic symptoms</td>
<td>Psychosomatic symptoms in 57% men and 86% women</td>
</tr>
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## Cultural syndromes

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<thead>
<tr>
<th>Author/year</th>
<th>Population</th>
<th>Syndrome</th>
<th>Relation to trauma</th>
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<tr>
<td>Hinton 2001</td>
<td>85 Cambodian refugees</td>
<td>74% sore neck syndrome (wind in blood vessels)</td>
<td>Case vignettes of trauma experience</td>
</tr>
<tr>
<td>Hinton 2006</td>
<td>130 Cambodian refugees in psych clinic</td>
<td>44% sore neck panic</td>
<td>CAPS score predicted neck panic severity Higher CAPS scores with GIP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35.4% Gastrointestinal panic</td>
<td></td>
</tr>
<tr>
<td>Hinton 2006</td>
<td>104 Cambodians refugees in psych clinic)</td>
<td>50% tinnitus</td>
<td>OR of PTSD &gt;13.5 in tinnitus group</td>
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<tr>
<td>Hinton 2005</td>
<td>100 Cambodian refugees in psych clinic</td>
<td>42% sleep paralysis (<em>khmaoch sangkat</em>)</td>
<td>67% in those with PTSD (22.4% in those without)</td>
</tr>
<tr>
<td>Hinton 2010</td>
<td>220 Cambodian refugees</td>
<td><em>Khyal</em> attacks (60% meet panic attack criteria)</td>
<td>OR of PTSD 8.7 with <em>khyal</em> attacks</td>
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<td>Hagengimana 2002</td>
<td>100 Rwandan widows</td>
<td>40% panic attacks with somatic subtypes (headache, gastrointestinal symptoms, dizziness)</td>
<td>High HTQ, BDI, PCL scores in those with these panic attacks</td>
</tr>
<tr>
<td>VanOomeren 2001</td>
<td>Bhutanese refugees in Nepali camp (68 cases and 66 controls)</td>
<td>Medically unexplained dizziness (97%) or fainting (94%)</td>
<td>High somatoform dissociation (SDQ) Childhood trauma, loss (CIDI, HTQ) predicted symptoms</td>
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## Trauma and somatization

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<tr>
<td>Westermeyer 2010</td>
<td>622 Somali refugees</td>
<td>PCL, HADStress</td>
<td>More trauma types and high PCL scores associated with high HADStress scores</td>
</tr>
<tr>
<td>Gulden 2010</td>
<td>512 Ethiopian refugees (community dwelling)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hinton 2012</td>
<td>139 villagers from pol pot regime in rural Cambodia</td>
<td>C-SSI, PCL</td>
<td>SSI severity associated with PTSD severity</td>
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<td>Hermansson 2002</td>
<td>44 war wounded refugees in Sweden</td>
<td>HCSL 25 PTSS 10</td>
<td>Chronic pain associated with PTS, Depression, Anxiety</td>
</tr>
<tr>
<td>Bentley 2011</td>
<td>74 Somali refugees</td>
<td>SCL 90 HTQ HSCL 25</td>
<td>Somatic symptoms affected the relationship between trauma and depression/anxiety</td>
</tr>
<tr>
<td>Terheggen 2001</td>
<td>76 Tibetan students in India camp</td>
<td>PTI HCSL 25 somatic subscale items</td>
<td>Somatic anxiety and somatic depression common</td>
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<td>Jamil 2008</td>
<td>32 male Gulf war veterans</td>
<td>Iowa medical questionnaire PCL</td>
<td>More fibromyalgia, overall body pain, current pain in PTSD group</td>
</tr>
<tr>
<td>Hondius 2000</td>
<td>I- 480 refugees in health center II – 156 Turkish and Iranian refugees non-clinic sample</td>
<td>Chart review Semi-structured questionnaire</td>
<td>Somatic symptoms related to torture and psychological symptoms to both torture and migration issues</td>
</tr>
<tr>
<td>Hubbard 1995</td>
<td>95 young Cambodian adults with childhood trauma</td>
<td>SCL 90 HTQ HCSL 25</td>
<td>Somatoform pain disorder in females with current PTSD (PTSD 59%)</td>
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<td>VanOomeren 2001</td>
<td>418 tortured and 392 non-tortured Bhutanese refugees in camp</td>
<td>CIDI modules Partial HTQ</td>
<td>Tortured refugees more likely to report PTSD, somatoform pain disorder Persistent pain disorder more common with PTSD</td>
</tr>
<tr>
<td>VanOmmeren 2002</td>
<td>526 tortured and 526 non-tortured Bhutanese refugees in camp</td>
<td>HCSI 25 DSM III R Somatic symptom checklist</td>
<td>Somatic symptoms correlated with Depression, PTSD, torture status</td>
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<td>Schweitzer 2011</td>
<td>70 Burmese refugees</td>
<td>HTQ, HCSL, PMD checklist</td>
<td>37% somatization Affected by both trauma events and PMD</td>
</tr>
<tr>
<td>Hauff 1994</td>
<td>145 Vietnamese boat refugees</td>
<td>Specific structured study instrument, SCL 90 R, Vietnamese version</td>
<td>Somatization along with interpersonal sensitivity and aggression differentiated chronic PTSD group</td>
</tr>
</tbody>
</table>
Somatic symptoms in refugee assessment scales

- The New Mexico Refugee Symptom Checklist 121
  - 252 Vietnamese and Kurdish participants
  - 9 somatic and 3 psychological constructs
  - Associated with HCSL 25 and PSS SR

- Refugee health Screener 15
  - Good sensitivity and specificity in 3 ethnic groups
  - Somatic questions
    - Muscle, bone joint pains
    - Faintness, dizziness, weakness
    - Physical reactions when reminded of trauma

Hollifield 2009, J Nerv Ment Dis
Hollifield 2013, Gen Hosp Psychiatry
Disorders of Extreme Stress Not Otherwise Specified (DESNOS)

- Somatization is one of the 6 components
- Other components
  - Affect and impulse dysregulation
  - Dissociation
  - Negative self-perception
  - Impaired interpersonal boundaries
  - Altered sustaining beliefs
- Kosovar civilian war survivors
  - >40% reported somatization (largest prevalence among other categories)

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<th>Modality</th>
<th>Intervention</th>
<th>Outcome Measures</th>
<th>Result</th>
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<tr>
<td>Psychopharmacology: (Hinton 2012) N=56</td>
<td>Paroxetine +/- lorazepam, mirtazapine or bupropion. CBT elements and supportive psychotherapy</td>
<td>baseline-3m-6 months for PCL, C-SSI, SF-12.</td>
<td>Large effect sizes were seen on all measures. The SF-12 change score was more highly correlated to the SSI change score than to the PTSD change score.</td>
</tr>
<tr>
<td>Psychotherapy by lay counselors (Neuner 2008) N = 277</td>
<td>NET TC No treatment</td>
<td>Baseline, PDS, Somatic symptom score</td>
<td>Clinical and statistical reduction in scores</td>
</tr>
<tr>
<td>CBT-Biofeedback (Muller 2009) N=11</td>
<td>Short term cognitive behavioral biofeedback</td>
<td>PDS, Pain Disability Index, and VRS</td>
<td>Pre–post effects were small to medium for increased pain management, large for coping with pain.</td>
</tr>
<tr>
<td>CBT-BF and Activity: (Liedl 2011) N=30</td>
<td>RCT of traumatized refugees (in Germany/Switzerland) between CBT-BF, CBT-BF plus activity and waiting list.</td>
<td>PDS, HSCL-25, pain coping questionnaire HTQ, VRS.</td>
<td>CBT-BF and CBT-BF+activity both showed improvement on all outcome measures compared to waiting list. The effect CBT-BF+activity &gt; CBT-BF</td>
</tr>
<tr>
<td>Modality</td>
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<td>Outcome measures</td>
<td>Results</td>
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<tr>
<td>Trauma focused Psychotherapy: (Kruse 2009) N=70</td>
<td>25 hours of manualized psychotherapy (focused on affective dysregulation and interpersonal relationships,, feelings of safety, psycho-education, cognitive restructuring, muscle relaxation).</td>
<td>Bosnian patients with PTSD and Somatoform. Measures: HTQ, SCL-90, SF-36</td>
<td>Significant reduction in PTSD scores Improved health status (both physical and mental).</td>
</tr>
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</table>
Culturally modified treatments

- Education on symptom generation
- Verbalize trauma associations
- Cognitive restructuring – ‘tinnitus game’*
- Relaxation techniques
  - Breathing focused meditation visualizing Angkor Wat
  - Muscle relaxation – neck rotation visualizing lotus rotation
- Mindfulness based therapies#
  - Islamic Dhikir, Buddhist chanting, Hindu jappa

*Hinton 2008
# Somasundaram 2010
Relation to post-migration stressors

- Higher level of somatization associated with both trauma and post migration stressors (Fenta 2009, Eur Psych Conference)
- Employment status and environmental stressors contributed to poor self-rated health via both psychosomatic symptoms and psychiatric symptoms (Jamil 2010, Med Confl Surv)
- Somatization affected by both trauma and post migration difficulties (Schweitzer 2011)
Iraqi refugees and somatic symptoms

- Iraqi refugees with torture experienced more physical symptoms than those not tortured (Willard 2013, I Immigr Minority Health)
- Mean of 9.97 physical symptoms in 116 Iraqi refugees (Jamil 2005)
- Brief 3 session NET reduced depression and somatic symptoms and improved post traumatic growth in the treatment group at 2 and 4 months (Hijazi 2004, J Trauma Stress)
Tenets of treatment

- Education on symptoms
- Evaluate for trauma and co-existing PTSD, depression, anxiety
- Treat somatic syndromes and co-existing mental illness as indicated
- Address current social issues
- Empathic listening and reassurance
- Treatment relationship
- Consistent framework
- Explain limitations of medical science
- Use skills of cognitive restructuring and relaxation techniques
- Culturally relevant/traditional treatment, if applicable