SCREENING AND TREATING INJURED TRAUMA SURVIVORS FOR PTSD AND DEPRESSION AT A LEVEL 1 TRAUMA CENTER

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Objectives

- Problem of PTSD after traumatic injury
- American College of Surgeon Committee on Trauma Recommendation
- Screening for PTSD and Depression
- Intervention with Injured Trauma Survivors
- Considerations and Next Steps

Important Domains in Quality of Life (QoL)

- Physical wellness
- Psychological well-being
- Cognition
- Social relationships
- General health/health change
- Economic demands
- Hopes and expectations
- Spirituality

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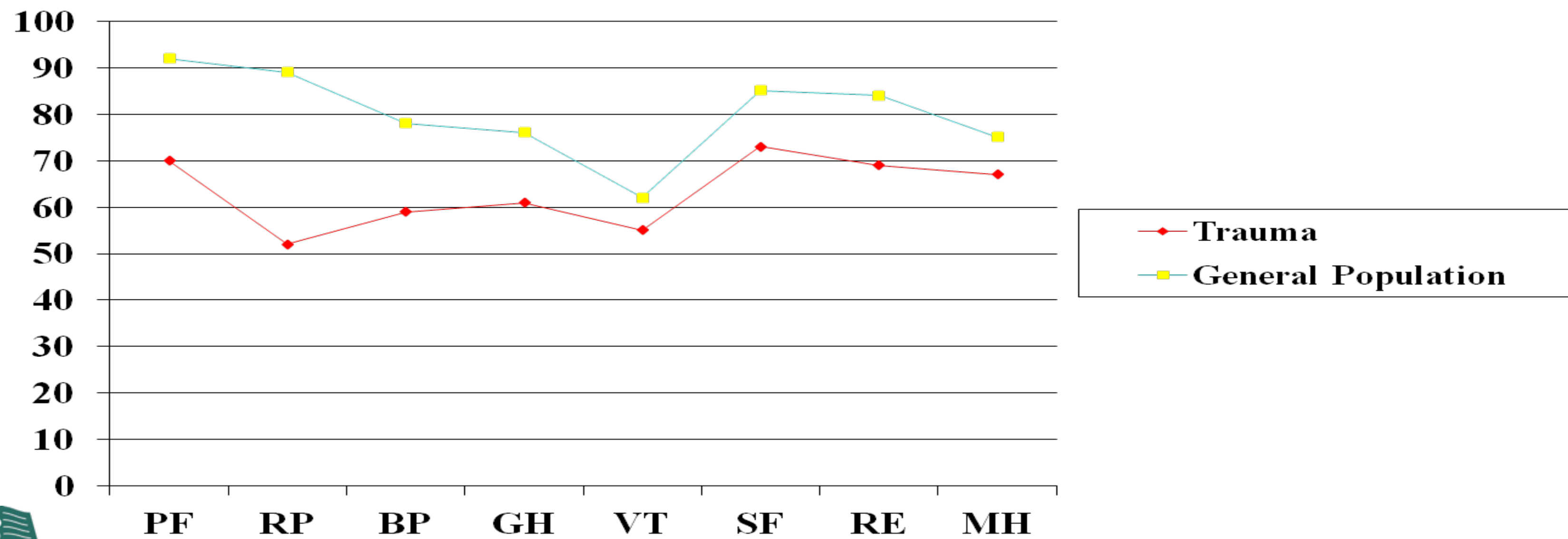
QoL after trauma



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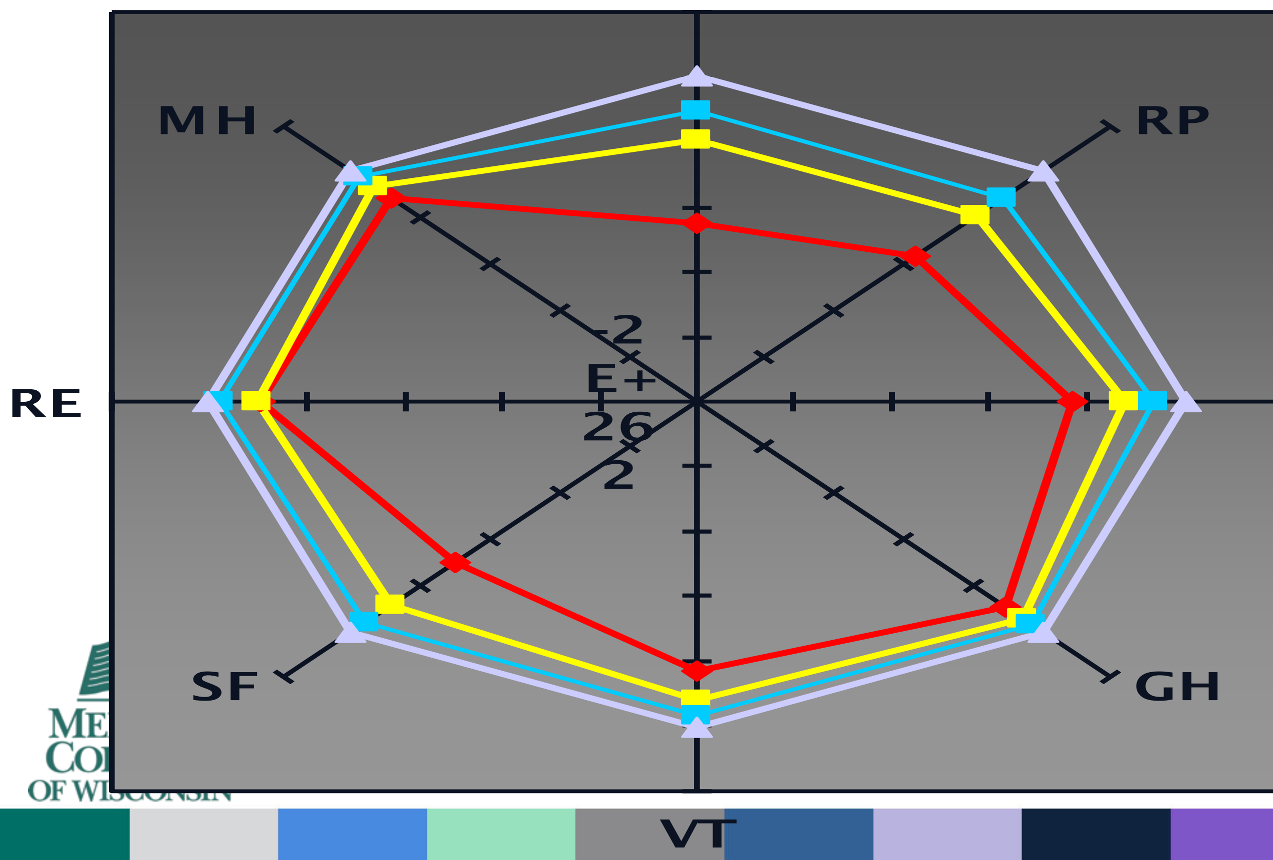
QoL after Trauma



MH = Mental Health
PF = Physical functioning
RP = Role pain
BP = Bodily pain
GH = General health
VT = vitality
SF = social functioning
RE = Role emotional

Kiely et al., 2006

QoL after Trauma

	PTSD severity	Physical QoL	Mental QoL	ISS
PTSD severity	-			
Physical QoL	-0.381**	-		
Mental QoL	-0.505**	0.371*	-	
ISS	-0.095	-0.06	0.04	-

(** p < 0.01; * p < 0.05, Kiely et al., 2008)

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Why is PTSD a problem?

- PTSD is one of the strongest contributing factor to lower QoL (Kiely et al., 2007)
- PTSD is significantly related to poor health outcomes
  - Inhibited immune functioning
  - Chronic pain syndromes
  - Gastrointestinal illness
  - Respiratory disease
  - Cancer

The PTSD Crisis That's Being Ignored: Americans Wounded in Their Own Neighborhoods

Dr. Andrew Dennis, a surgeon in the Cook County hospital trauma unit, looks at the wound of a man who was shot in 2012 in Chicago, on May 16, 2013. Americans in violent neighborhoods are developing PTSD at rates similar to combat veterans. (Daniel Acker/Bloomberg via Getty Images)

PTSD Defined

Symptom Clusters

- **Intrusions**
  - Nightmares, flashbacks
- **Avoidance**
  - Of people, places that remind someone of the trauma
- **Hyperarousal**
  - Feeling jumpy, easily startled
- Negative alterations in mood and cognitions
  - World is a dangerous place

Considerations

- 30 Days post-trauma
- Persistent, abnormal adaptation of neurobiological systems to the stress of trauma exposure (Sherin & Nemeroff, 2011)

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PTSD after traumatic injury

PTSD Symptom Severity

Chronic distress 21.8%
Delayed distress 5.6%
Acute distress 12.1%
No distress 60.5%

0
1 mo.
3 mo.
6 mo.

Hospitalization

Time since injury

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deRoon-Cassini, Mancini, Rusch, & Bonanno, 2010

Trauma Type & PTSD

- General population: 89.6% will experience at least 1 traumatic event
  - Average = 4.8 traumas
- Single incident traumatic injury
  - 2.8 million people traumatically injured each year

- 8% likelihood of developing PTSD (APA, 2000)
- Injured trauma survivors
  - Non-assaultive trauma: 8-20% PTSD
  - Assaultive trauma: 25-40% PTSD

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American College of Surgeon's Committee on Trauma

- Resources for the Optimal Care of the Injured Patient (ACS – CoT, 2013)
  - Outlines requirements & recommendations
  - Recommends PTSD and Depression screening followed by intervention
    - Posttraumatic stress disorder checklist (PCL)
    - Patient Health Questionnaire- 9 for Depression (PHQ 9)

Screening for PTSD & Depression

- ED Screen (Richmond et al., 2011)
  - Predictive Screening Tool for Depression and PTSD
  - 8 items

  - Benefits: adequate sensitivity and specificity
  - Challenges: ED discharge only, not validated in the hospitalized population

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Screening for PTSD & Depression

- Automated Screen (Russo et al., 2013)
  - 10 items
  - Abstracts from medical record

  - Benefits: High population impact
  - Challenges: Assumes all information is in the chart

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Screening for PTSD & Depression

- Injured Trauma Survivor Screen (ITSS), (Hunt et al., under review)
  - 9 items (5 for depression, 5 for PTSD
  - Score > 2 = risk positive
  - Benefits: Brief
  - Challenges: Time required by personnel

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Treatment Approaches

- Stepped Collaborative Care (Zatzick et al., 2004)
  - CC began in the hospital
  - CC consisted of
    - Continuous Post-injury case management
    - Motivational interviewing targeted at alcohol use/dependence
    - EB pharmacotherapy and/or CBT with persistent PTSD @ 3 mnths
  - Results
    - CC patients were less symptomatic over time related to PTSD symptoms and alcohol abuse/dependence

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Treatment Approaches

- Early prolonged exposure (PE) therapy (Rothbaum et al., 2012)
  - ED sample
  - 3 sessions of PE
    - ED at bedside, 1 & 2 weeks posttrauma
  - Results
    - Significant reduction in PTSD symptom severity by one month
    - What about hospitalized patients?

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Treatment Approaches

- Screen with wait to treat approach
  - Screen for PTSD risk (Wagner et al, 2007)
    - Re-evaluate at 1 month, if PTSD positive, then intervene
    - Behavioral activation reduced PTSD but not depression symptoms
  - Screen for Acute Stress Disorder (Bryant et al., 1999, 2008)
    - Initiate treatment 1-2 weeks after trauma
    - Psychoeducation with CBT (exposure and cognitive restructuring)

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Considerations

- Recovered trajectory

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deRoon-Cassini, Mancini, Rusch, & Bonanno, 2010

Considerations

- Recovered trajectory
- Resources
- Volume of trauma center

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Considerations

- Resources
- Volume of trauma center
- Integrated care approach

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Next Steps

- While PTSD and Depression screening are recommended, does it make a difference in outcome and QoL?
- Integration with trauma programs
- Treatment efficacy studies
- Mechanism of change

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QUESTIONS?

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