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Post-traumatic Stress Associated with Cancer

BCCA Survivorship Forum - June 8, 2016

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Disclosures

- None

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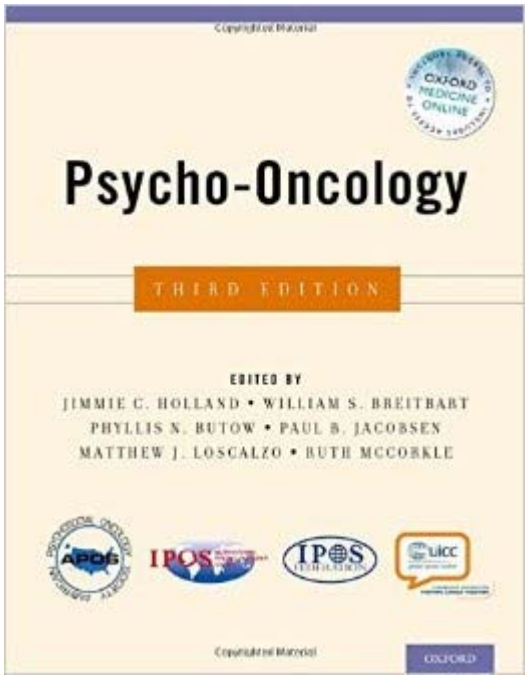
Acknowledgments

- Matt Doolittle
- Kate DuHamel



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Trauma History ≠ PTSD

- People who experience trauma may or may not experience long-term psychiatric symptoms
  - Those who do may or may not have symptoms that are closely related to their history of trauma
    - When there is a close relationship, it may or may not be consistent with PTSD

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Trauma as a "Reason"

- Psychiatric diagnosis does not assign "fault" in PTSD or in any other syndrome/diagnosis

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DSM-5

So much less to memorize

1980 - PTSD

1994 – Life Threatening Illness

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Diagnostic Criteria

- Exposure to actual or threatened death, serious injury, or sexual violence
  - Direct experience
  - Witnessed in person
  - Learn about events affecting close friend or family member (for death, must have been violent or accidental)
  - Repeated or extreme exposure to aversive details (e.g. paramedic frequently responding to car accidents)

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Diagnostic Criteria

- Intrusion / Re-experiencing
  - Memories
  - Dreams
  - Dissociation (e.g. “flashbacks”)
  - Psychological distress from trigger/reminder
  - Physiological reaction to trigger/reminder

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Diagnostic Criteria

- Avoidance of triggers/reminders
  - Avoidance of associated memories, thoughts, feelings
  - Avoidance of external triggers (people, places, objects, etc.)
    - BCCA, appointments, medications, treatments

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Diagnostic Criteria

- Associated changes in cognition and mood
  - Inability to remember important aspect of traumatic event(s) – lack of memory may not be trauma related in severe illness
  - Persistent negative beliefs about oneself, others, or the world
  - Distorted thoughts about the cause or consequence of the event(s) that lead to blaming self or others – common in cancer
  - Persistent negative emotional state (e.g. fear, anger, guilt, shame)

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Diagnostic Criteria

- Associated changes in cognition and mood (Continued)
  - Reduced interest in activities
  - Feeling detached or estranged from others
  - Inability to experience positive emotions

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Diagnostic Criteria

- Changes in arousal or reactivity
  - Irritable or angry outbursts without provocation
  - Reckless or self-destructive behavior
  - Hypervigilance – may be focused more internally when trauma is severe illness
  - Easy to startle
  - Difficulty concentrating
  - Disturbed sleep

(?illness related)

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Diagnostic Criteria

- Lasts for more than 1 month
- Clinically significant distress or impairment
- Not due to medications, drugs, alcohol

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Prevalence

- 10 – 20% of patients with cancer meet criteria for PTSD
- About double the lifetime risk within the general population
- Studies focused on cancer survivors estimate prevalence of 3 – 5%
- Up to 50% of young adult survivors may experience post-traumatic stress

Rourke et al., 2007; Stuber et al., 2010; Doolittle & DuHamel, 2015

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Ongoing Trauma in Survivorship

- Threat of future cancer or recurrence
- Threat of late effects
- Current late effects
- Reminders of cancer
- Social losses
- Cognitive losses
- Reproductive capacity

Place of safety is not ensured, possibly not even likely for some

Schwartz et al., 2015

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Symptoms and Behaviors in Post-traumatic Stress

- Negative ruminations
- Intrusive thoughts
- Nightmares
- Increased arousal when talking about cancer
- Avoidance of healthcare settings
- Hypervigilance of body systems
- Sense of foreshortened future

Schwartz et al., 2015

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Risk Factors

- Information is minimal in oncology populations
- In women with breast cancer:
  - Prior diagnosis of PTSD
  - Prior diagnosis of other anxiety disorders
  - Prior trauma
- Severity of cancer is not a strong predictor for PTSD

Andrykowski & Cordova, 1998; Butler et al., 1999; Shelby et al., 2008

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Risk Factors

- In the general population, other risk factors include:
  - Female gender
  - African American, Native American, Latino
  - Lower Education
- Increased risk in non-Caucasians may hold true in cancer, other risk factors not clear

Purnell et al., 2011

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Risk Factors – Young Adult Survivors

- Female gender
- Lower socioeconomic status
- Unemployment
- Lower education level
- Being single

Rourke et al., 2007; Stuber et al., 2010; Schwartz et al., 2015

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Risk Factors – Young Adult Survivors

- Variables that are less predictive:
  - Kind of cancer
  - Form of treatment
  - Age at diagnosis
  - Time since treatment

Rourke et al., 2007; Stuber et al., 2010; Schwartz et al., 2015

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Post-traumatic Growth

- Most cancer survivors are psychologically well adjusted
- Some also show post-traumatic growth where views of self, relationships, and future plans may be enhanced/improved compared to others

Barakat et al.,2006; Schwartz et al., 2015

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Differences with Trauma from Cancer

- Internal rather than external event
- Initial internal event precipitates a possible series of difficult external events
  - Symptoms
  - Communication of diagnosis
  - Side effects of treatment
  - Reaction of friends and family
  - Ongoing threat of progression or recurrence

Doolittle & DuHamel, 2015

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ICU and PTSD

- In 238 post-ventilated ICU patients:
  - Rate of diagnosable PTSD was 9.2% at 3 months post-ICU
  - Strong association between PTSD and recall of delusional memories and 57% of patients had delusional memories (e.g. staff trying to kill them)

Jones et al., 2007

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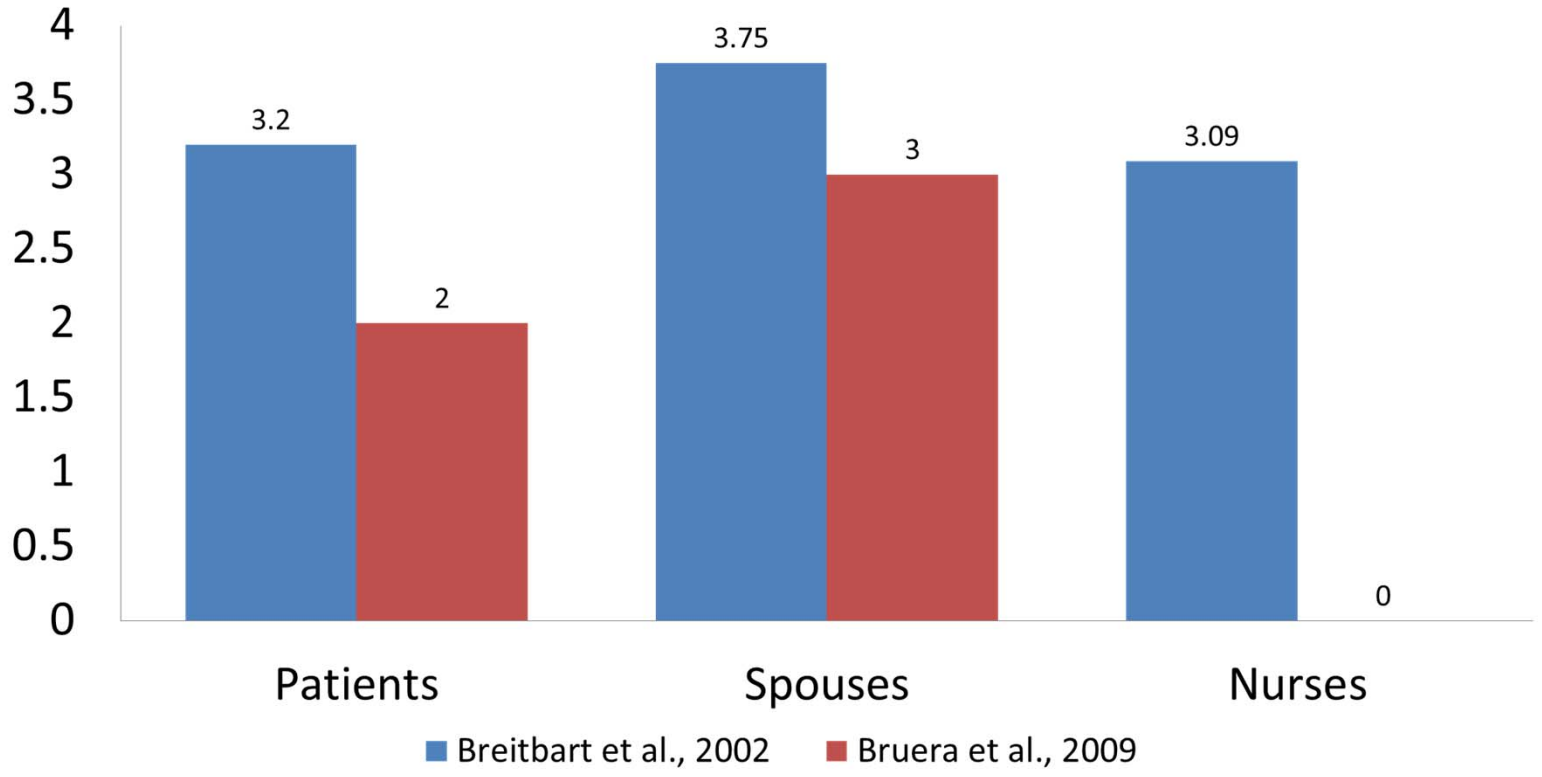
Family Distress - Delirium



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PTSD in Family Members

- Study of 65 mothers of childhood cancer survivors
  - 6.2% had PTSD
  - Additional 20% had subclinical PTSD

Manne et al., 1998

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Treatment - Medications

- Pick medications where side effects are helpful (e.g. increased appetite)
- SSRIs (e.g. sertraline, escitalopram)
  - Low dose fluvoxamine for nightmares
- SNRIs (e.g. venlafaxine, duloxetine)
  - May help with pain
- Mirtazapine
  - May help with sleep, appetite, and nausea

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Treatment - Medications

- Atypical antipsychotics (e.g. olanzapine, quetiapine)
  - Olanzapine may help with sleep, nausea, and appetite

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Tamoxifen

- Tamoxifen converted to active metabolite endoxifen via 2D6, so strong 2D6 inhibitors reduce effectiveness
- Strong 2D6 inhibitors: paroxetine, fluoxetine, sertraline, bupropion
- Weak 2D6 inhibitors: citalopram, escitalopram
- Very weak to no inhibition: venlafaxine, mirtazapine

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Procarbazine

- Procarbazine can act as a monoamine oxidase inhibitor (MAOI)
  - Need to be cautious with other serotonergic medications (e.g. SSRIs) to prevent serotonin syndrome

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Treatment - Psychotherapy

- Cognitive Behavioral Therapy (CBT)
  - Relationship between thoughts, feelings, and behaviors
  - Challenge “cognitive distortions”
  - May include exposure therapy
  - Some evidence for more sustained improvement in cancer patients when compared to supportive counseling
- Mindfulness-based stress reduction