Evidence of Secondary Traumatic Stress in Medical Students over the Course of Clinical Clerkships

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The Dream Keeper
By Langston Hughes

Bring me all of your dreams,
You dreamers,
Bring me all of your
Heart melodies
That I may wrap them
In a blue cloud-cloth
Away from the too-rough fingers
Of the world.

Background

• Definitions
  • Burnout/Compassion Fatigue
  • Major Depressive Disorder (MDD)
  • Secondary Traumatic Stress (STS)

“Job related stress in any practice environment...[leading to] emotional exhaustion, depersonalization, and low personal accomplishment.”1,2

Depressive symptoms among medical students was found to be 27.7%3
Among resident physicians 28.8% and increased with each year4

“What the natural, consequent behaviors and emotions resulting from knowledge about a traumatizing event experienced by a significant other. It is the stress resulting from helping or wanting to help a traumatized or suffering person”5
Background

- **STS in providers**\(^6,7\)
  - EM physicians: 12.7%
  - Licensed social workers: 19%
  - Mental health providers treating active military: 19%
  - Trauma surgeons: 22%
  - EM nurses: 33%
- **STS in medical students**\(^8,9\)
  - Protective factors
  - Risk factors
Aims

1. To determine if STS is present among third year medical students at the University of Colorado School of Medicine

2. To assess how the prevalence may vary as students progress through their third-year clerkships

3. To investigate how the type of curriculum (LIC versus traditional) contributes to the development or progression of these symptoms

Methods

- Study participants
  - Third year medical students 2020-2021 (n = 190)
  - LIC students
  - Non-LIC students
- Survey administration
  - June, October, January, April
- STSS Scale\textsuperscript{6}
- Data Analysis
  - Multilevel growth modeling

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<tr>
<th>STSS SCALE</th>
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<tr>
<td>For each statement below, indicate how frequently the statement was true for you in the past seven days (never, rarely, occasionally, often, very often).</td>
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<tr>
<td>1. I felt emotionally numb.</td>
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<td>2. My heart started pounding when I thought about my work with patients.</td>
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<td>3. It seemed as if I was reliving the trauma(s) experienced by my patient(s).</td>
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<td>4. I had trouble sleeping.</td>
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<td>5. I felt discouraged about the future.</td>
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<td>6. Reminders of my work with patients upset me.</td>
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<td>7. I had little interest in being around others.</td>
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<td>8. I felt jumpy.</td>
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<td>9. I was less active than usual.</td>
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<td>10. I thought about my work with patients when I didn't intend to.</td>
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<td>11. I had trouble concentrating.</td>
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<td>12. I avoided people, places, or things that reminded me of my work with patients.</td>
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<td>13. I had disturbing dreams about my work with patients.</td>
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<td>14. I wanted to avoid working with some patients.</td>
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<td>15. I was easily annoyed.</td>
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<td>16. I expected something bad to happen.</td>
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<td>17. I noticed gaps in my memory about patient sessions.</td>
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Results

- Mild = 28-37
- Moderate = 38-43
- High: 44-48
- Severe: 49+

SEVERITY OF STS

- High or severe
- None, mild, or moderate

JUNE: 10.6
OCTOBER: 28.8
JANUARY: 26.5
APRIL: 23.1
Results

Discussion & Implications

- Overall STS rates among medical students
  - Trajectory over time
  - LIC participation
- Limitations
  - COVID-19 pandemic
- Future directions
  - STS by subcategory (intrusion, avoidance, arousal)
  - Interventions

References

THANK YOU!