

A Medical Student Mental Health Survey: Effects of Delays in Care on Burnout and Depression

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Abstract

Background/Purpose: Despite high prevalence of mental illness and burnout among medical students, the majority of students who have depression symptoms or suicidal ideation are not treated. Burnout has been strongly associated with alcohol dependence and increased suicidal ideation; delays in care could have serious consequences.^{1,2} Our study seeks to identify key themes in medical student mental health care delays. **Methods:** We designed and administered a mental health survey to medical students in the 2019-2020 year that collected information on demographics, depression/anxiety levels, burnout scores, barriers to mental health care, and treatment-seeking behaviors. Data was analyzed for differences among students who delayed seeking treatment versus those who did not. Qualitative data was also analyzed for reasons students delayed care. **Results:** Medical students who delayed care had a significantly higher rate of burnout/depersonalization (37% vs. 13%, $p = 0.00854$) and depression scale scores (mean 7.52 vs. 4.95 respectively, $p = 0.00654$) compared to those who did not delay care. They also tended to be younger (21-25 years old) (80%, $p = 0.00164$). Reasons for delaying care included lack of knowledge of mental health symptoms, stigma, denial, and fear of professional impact. **Discussion/Conclusion:** Given the high prevalence of mental illness and burnout among medical students, it is imperative to help students receive care when needed. Delaying care is correlated with higher burnout and depression scores. Many cited obstacles could be invalidated with mental health education and awareness, increasing help-seeking behaviors and the well-being of our medical students.

Background

Poor medical student mental health is a problem prevalent across countries and cultures. While medical students' physical, emotional and overall health are higher than their peers at the start of medical school, their health steadily declines to a low by the end of first year and never recovers back to baseline levels.³ The ramifications of poor mental health pervades medical practice, resulting in more medical errors, poorer patient care, and decreased physician job satisfaction.⁴ Help-seeking behavior also remains poor. One institution found that only 34% of medical students reporting depression or anxiety in the last year actually sought counseling.⁵ A first step in evaluating how we identify mental health problems including burnout among medical students is the evaluation of the experience of medical students, including factors contributing to help-seeking behaviors and barriers to care.

Figure 1. Breakdown of Responses by Mental Health Symptoms vs Diagnoses and Delays in Care

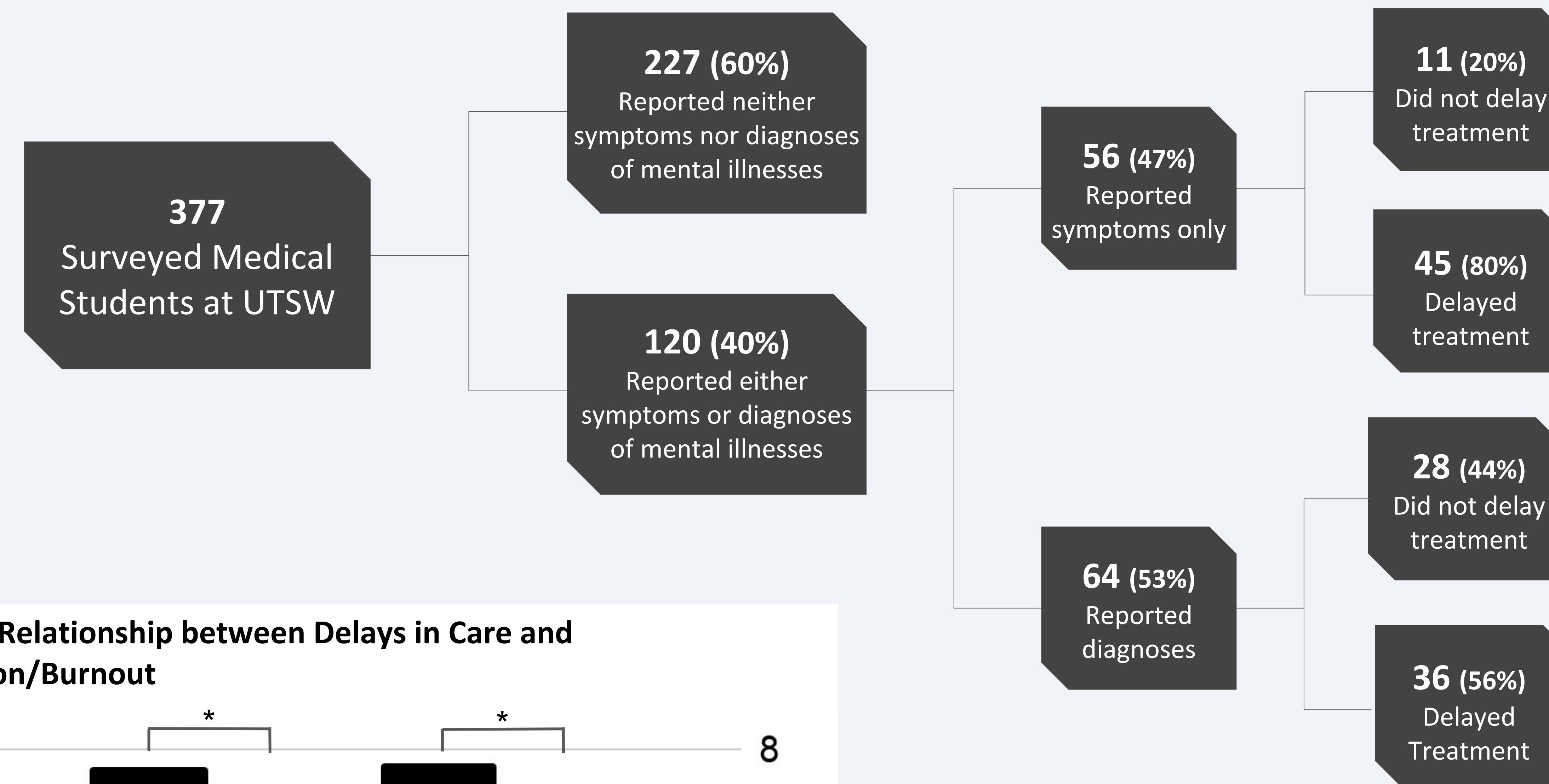
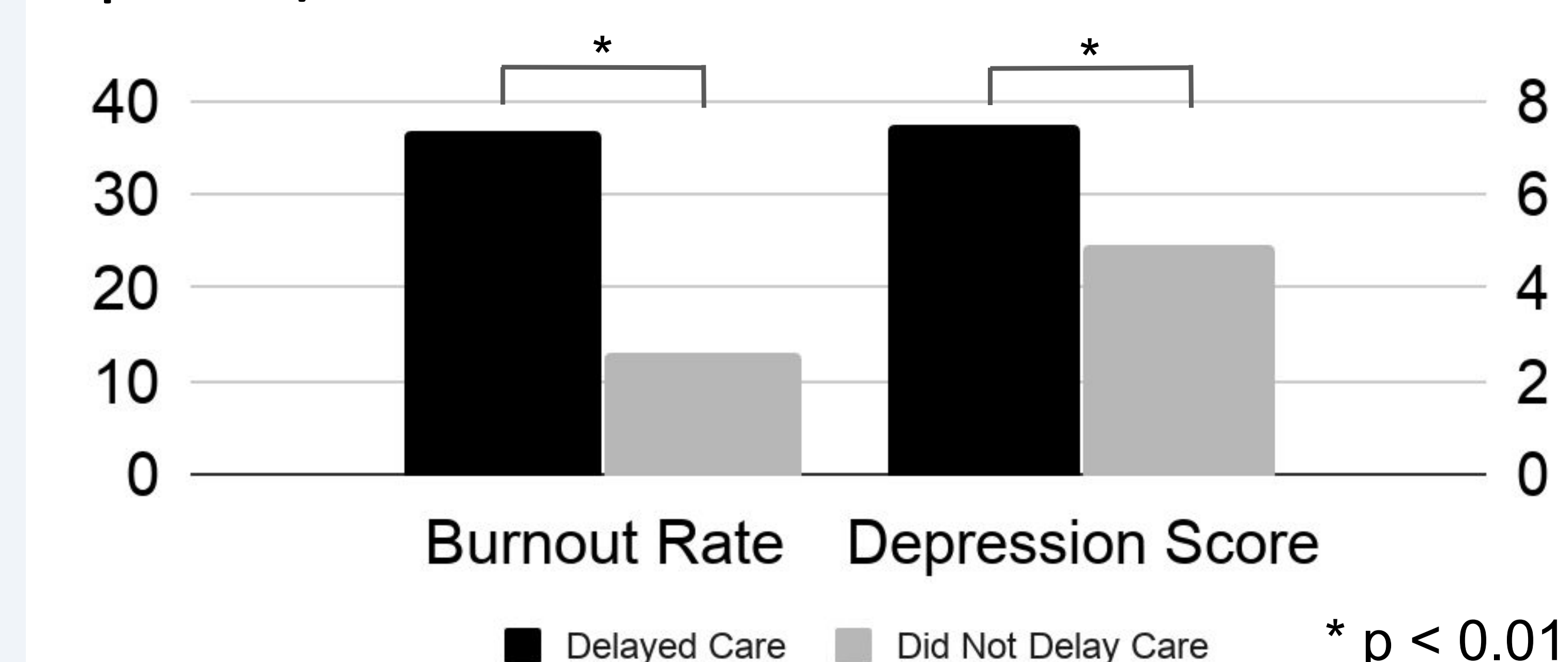


Figure 2. Relationship between Delays in Care and Depression/Burnout



Methods

We performed a cross-sectional survey assessing medical student mental health at a large public medical school during 2019-2020. The survey was developed and administered through Research Electronic Data Capture (REDCap). The survey evaluated:

- depression (PHQ-9) and burnout (shortened MBI with questions for emotional exhaustion, depersonalization, self-reported burnout)
 - prevalence of mental health problems and diagnoses
 - help-seeking behaviors and barriers to care
- Students were categorized as having delayed care if they (1) indicated that they delayed mental health care or (2) reported having mental health symptoms and never sought treatment.

Results

Analysis of the data used 2 proportion z-tests and t-tests on 347 survey responses. Findings showed that:

- Of students with mental health diagnoses/symptoms ($n = 120$), **68% ($n = 81$) reported delaying care** (Fig. 1)
- Students who delayed care had **significantly higher rates of burnout/depersonalization** (37% vs. 13%, $p = 0.00854$) and **depression scale scores** (mean 7.52 vs. 4.95 respectively, $p = 0.00654$) compared to those who did not delay care (Fig. 2)
- Those who delayed care **tended to be younger** (21-25 years old) (80%, $p = 0.00164$)
- Top reason for delaying care was lack of education or resistance/denial of having a problem** (Table 1). Some students did not give a reason and only the top 5 reasons are displayed.

Table 1. Top 5 Reasons for Delaying Mental Health Treatment ($n = 81$)

Reason	# of Responses (%)
Resistance to treatment due to denial or lack of education	33 (41%)
Lack of time	19 (23%)
Fear of professional impacts	10 (12%)
Lack of money	10 (12%)
Fear of stigma	9 (11%)

Conclusions

Our preliminary comparisons show that there are significant ramifications to delaying mental health treatment.

- The majority of students who had mental health diagnoses reported delaying care.
- Delaying care is correlated with higher rates of burnout.
- Average depression score is significantly higher in those who delayed care, indicating a possible relationship between delaying care and depressive symptoms (although both are below threshold for depression diagnosis).
- Obstacles such as lack of knowledge of mental health symptoms and fear of professional impact could be alleviated with mental health education and awareness in medical school to increase help-seeking behaviors.
- Interestingly, those who delayed care tended to be younger, pointing to a possible individual characteristic of emotional maturity and recognition of mental health problems in seeking help.

These preliminary data show the importance of further studies to evaluate individual characteristics and environmental factors contributing to medical student well-being. Next steps include piloting a longitudinal medical student mental health study at multiple institutions to better follow students across four years of

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References available upon request