Feeling the Burnout: Perceptions of Burnout, Anxiety, Depression, and Personal Achievement in US Podiatric Medical Students

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Statement of Purpose
The purpose of this cross-sectional study was to evaluate the perceptions of burnout, anxiety, depression, and personal achievement among podiatric medical students.

Literature Review
Medical school is a very physically and emotionally demanding period, and the psychological morbidity among students has unfortunately been shown to be high [1]. The school environment coupled with other life stress factors can lead to burnout syndrome. Burnout syndrome is a condition resulting from chronic workplace stress that cannot or has not successfully been managed [2,3]. Burnout is characterized by feelings of exhaustion, mental distancing, and inefficacy [3].

Burnout syndrome has only recently become an acknowledged phenomenon. Literature has shown that 49.6% of medical students experience burnout and 25% exhibited depression [4,5]. It is not uncommon for medical students to also experience anxiety. Up to 11.2% may even suffer from suicidal ideation [4,5]. These emotional strains have been shown to not only impact the mental health of the students, but also affect their work performances. Specifically, studies have shown a decrease in patient empathy and professionalism when students experience burnout.

The American College of Foot and Ankle Surgeons and the American Podiatric Medical Association (APMA) have both acknowledged the significance of physician burnout. Numerous studies have shown concern for burnout in allopathic and osteopathic medical students. These studies prompted medical schools to intervene on an institutional level to improve their students’ mental health, encourage protective factors, and examine student mistreatment [6-10]. However, the prevalence of burnout among podiatric medical students remains unknown.

Materials and Methods
Under Institutional Review Board (IRB) exemptation, an invitation to assist in the distribution of a 50-question anonymous survey was extended to a listed email addresses of APMA student leader at each of the 9 podiatric medical schools. Only one invitation was declined.

Results
A total of 479 responses were eligible for inclusion. Burnout scores ranged from 0 to 84 (mean average of 31.5) with 34.66% considered low, 34.53% moderate, and 28.81% high. Anxiety scores range from 0 to 21 (mean average of 10.3) with 30.9% normal scores, 23.8% borderline scores, and 45.3% abnormal scores. There was a significant difference in anxiety scores, year in school, and age group between participants who had low, moderate, or high burnout levels (p < 0.000, p=0.002, and p = 0.007, respectfully). Student age, marital status, and year in school were all significant impacts on anxiety levels (p = 0.032, p = 0.028, and p = 0.032, respectfully).

After adjusting for age, marital status, and year in school, increased age and anxiety caused an increased risk for moderate or high burnout. Third year students had a significant difference in moderate or high burnout levels compared to other years (p = 0.039 and 0.006, respectfully). Students between the ages of 26 and 35 also had significant differences in moderate and high burnout levels compared to students outside of this range (p = 0.011 and p = 0.009).

Discussion and Conclusion
In recent years, the prevalence of burnout has become increasingly demonstrated with medical students indicating burnout rates as high as 49.6% [4]. Our study found approximately 65% of respondents reported moderate or high levels of burnout. The study also found that 45.1% reported abnormal levels of anxiety, which was within the range reported in previous literature [11,12]. Students with higher anxiety levels in their second or third year of medical school between 26 and 35 years old were shown to be the highest risk for burnout. The limitations of this study included a lack of information on burnout and possible volunteer bias due to the nature of the study. Moreover, one school declined participation, influencing generalizability of the results. Finally, the cross-sectional nature of this study prevents causation inference.

In conclusion, high rates of self-perceived burnout and anxiety were found among the US podiatric medical students surveyed using the MBI-HSS and IADS. Despite inherent limitations of this study, institutional intervention for the promotion and development of protective factors appears warranted.

References

Figure 1: Percentages of students with low (28.81%), moderate (36.53%), and high (28.81%) burnout rates. (n=479)

Figure 2: Percentages of students with normal (65.69%), borderline (23.80%), and abnormal (45.30%) anxiety rates. (n=479)