Title: Identifying stress-related variables: Building effective programs to reduce student burnout

Session Type: New Program

Target Audience: Administrator

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## **Objectives:**

Multiple published studies document a high prevalence of stress and burnout in dental students. However, it is unclear how dental schools can best identify effective, targeted student interventions. To address these questions, a longitudinal survey research study was designed to explore multiple measures of perceived stress and variables related to stress resilience and academic performance. The aims of the study were to identify variables associated with higher levels of perceived stress, type and prevalence of activities used to manage stress, and relationships between stress symptoms, life-events, and academic performance. This data will inform development of programs that identify and assist students at highest risk for stress-related problems, create tools and resources to promote stress resilience, and enhance dental school curricula to promote student wellness as integral to professional development and optimal patient care.

## Methods:

The online voluntary survey included multiple validated measures of perceived stress as well as socio-demographic information, type and frequency of relaxation/stress management activities, and multiple additional variables linked to stress. The survey was administered twice (fall of 2015 and spring of 2016). Survey responses were matched and linked to students' academic records, then de-identified to protect student confidentiality. A \$10 gift card incentive was offered for completing each survey.

## <u>Results:</u>

125 D1 students completed both surveys. Statistically significant associations included decreased perceived stress at the second survey and students who used alcohol, marijuana, or sedatives at least once a week showed higher levels of stress, depression, and anxiety. No statistically significant associations were found between academic performance and the following variables: commute length, undergraduate major, being a caretaker of children, and time spent on active vs. passive stress-reduction activities. 65% of D1 students believed that significant life events impacted their academic performance.

## Conclusion:

Preliminary data analysis demonstrates that stress-related symptoms are common and students report a wide range of activities to self-manage their symptoms. This ongoing study will provide data regarding modifiable variables associated with stress and its impact on dental students' academic performance and represents an important step toward the development of effective interventions to promote student wellness and stress resilience.

Learning Focus: Emerging Issues and Trends

Professional Interest Key words: Counseling, Personal/Academic; Institutional/Organizational Development; Professionalism

Dental Education Area: Predoctoral

Target Career Level: Early Career, Mid-Career

Student Competition Poster: Yes

New idea session: Yes

100-word abstract for New Ideas Session program book (if selected):

Prevalence of stress and burnout in dental students is high, but it is unclear how dental schools can best target effective student interventions. An ongoing, longitudinal survey research study explores perceived stress and multiple key variables related to stress resilience and academic performance in first and second year dental students. Preliminary analysis shows stress-related symptoms were common, students used a wide range of activities to self-manage their symptoms, and 65% of D1 students believed significant life events impacted their academic performance. This study identified modifiable variables associated with stress and academic performance, representing an important step toward developing effective interventions.

IRB Approval: Yes -- Tufts Health Sciences Campus Institutional Review Board Exemption # 11832