

## **Title: Student Burnout and Curriculum Design: Implications for Health Profession Education**

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### **Purpose:**

Physician burnout has gained increased attention with similar trends in Physician Assistants (PA); however, little information exists on PA student burnout.<sup>1</sup> Concerned about personal and professional implications of burnout, one PA Program created a new curriculum using four modifiable curricular factors to decrease student burnout.<sup>2-4</sup> The purpose of this study is to determine if a difference exists in the three subconstructs of burnout between two cohorts of students in two different curricula, and the contribution of the four modifiable curricular factors to these outcomes. It is hypothesized that compared to Traditional Curriculum students, New Curriculum students will have lower emotional exhaustion and cynicism scores, and higher professional efficacy scores.

### **Methods:**

This mixed-methods study included two cohorts of PA students - Traditional Curriculum (n = 42) and New Curriculum (n = 44). Students completed the Maslach Burnout Inventory-General Survey for Students eight-months post-matriculation. Descriptive statistics and independent t-tests were conducted for the three subconstructs of burnout (cynicism, professional efficacy, and emotional exhaustion) between the two student cohorts. Following quantitative analysis, five students from each cohort were randomly selected for focus groups interviews to assess the four modifiable curricular factors. Dedoose was used to identify a priori and emergent codes.

### **Results:**

For the quantitative tool, there was a 100% response rate. No significant statistical difference was found in the emotional exhaustion (p = 0.35), cynicism (p = 0.29) and professional efficacy (p = 0.23) scores between the two student cohorts (p < .05). Qualitative findings found that the exact terms for the three subconstructs of burnout were rarely used by the students when discussing the four modifiable factors within their respective curriculum. Instead five emergent codes were identified: motivation, well-being, time-in-class, demands from specific courses, and unclear expectations.

### **Discussion and Conclusion:**

The researchers were surprised at the quantitative and qualitative findings in this study, with the data pointing to additional factors outside the curriculum that may exacerbate or mitigate student burnout beyond the modified curricular components. Additionally, the qualitative findings demonstrate that student lived-experiences of burnout differ from the conceptual framework used in this study and existing tools. As a result, this study proposes that future research needs to assess student burnout on a continuum; use mixed methodologies including focus groups; and seek greater clarity on the five emergent codes. In addition to investigating curricular design models focused on the prevention of student burnout, further studies should examine external factors affecting students that cause burnout, external resources utilized by students to prevent

burnout, student attributes that may predispose to burnout, and the context experienced by students during data collection.

#### References:

1. Essary AC, Bernard KS, Coplan B, Dehn R, Forister G, Smith NE, and Valentin VE. Burnout and job satisfaction in the physician assistant profession: A review of the literature. *NAM Perspectives*, 2018.
2. Dyrbye LN, West CP, Satele D, Boone S, Tan T, Sloan J, and Shanafelt T. (2014). Burnout among US medical students, residents and early career physicians relative to the general US population. *Academic Medicine*, 2014; 89(3): 443-451.
3. Jennings ML. Medical student burnout: Interdisciplinary exploration and analysis. *Journal of Medical Humanities*, 2009; 30: 253-269
4. Dunham L, Dekhtyar M, Gruener G, CichoskiKelly E, Deitz J, Elliott D, Stuber ML, and Skochelak SE. Medical student perceptions of the learning environment in medical school change as students transition to clinical training in undergraduate medical school. *Teaching and Learning in Medicine*, 2017; 29(4): 383-391.
5. Kiessling C, Schubert B, Scheffner D, and Burger W. First year medical students' perceptions of stress and support: A comparison between reformed and traditional track curricula. *Medical Education*, 2004; 38(5): 504-509.