Assessing Mental Health Differences In Medical Students

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Background
- Medical school can be a stressful time
- Many schools continue to look at factors that impact the level of stress
- Schools often offer different models of curriculum for their students
- Rowan University School of Osteopathic Medicine (RowanSOM) has two distinct curriculum designs:
  - Problem-based Learning (PBL) - small group discussions with case-based learning
  - Synergistic Guided Learning (SGL) - a traditional lecture based learning
- Goal: understand if there is a difference in the incidence of mood symptoms, anxiety, depression, and emotional exhaustion amongst students based on gender and curriculum

Methods
- Population: Full-time Medical Students at Rowan University School of Osteopathic Medicine
- Survey: Online PHQ-4 Questionnaire and 3 emotional exhaustion prompts
- Analysis: Chi-square and ANOVA test evaluated at a 0.05 significance level

Results
- PHQ-4: 0: 66% severe and moderate mood symptoms
  - 6: mild and normal mood symptoms
- PHQ Anxiety: ≥3 positive for anxiety
  - Gender Differences: p-value = 0.0002
  - Curriculum Differences: p-value = 0.0973
- PHQ Depression: ≥3 positive for depression
  - Gender Differences: p-value = 0.0157
  - Curriculum Differences: p-value = 0.0606
- Emotional exhaustion:
  - 3 prompts scored on a likert scale: 1 - never to 5 - always
  - Females reported a higher average on each prompt
  - SGL students demonstrated feeling more emotionally drained, used up, and burnt out from studies than their PBL counterparts

Discussion
- Gender differences in PHQ-4 and emotional exhaustion illustrate a greater burden medical school may have on females
- More must be done to encourage women and create a healthy culture for all students in the medical field
- Our data found no statistically significant difference between the two curriculums in regard to anxiety or depression
- Demonstrates the toll that a medical school education may take on a student regardless of their curriculum
- Additional research is required to identify the other factors of the PBL curriculum and learning approach that may contribute to a lower burnout rate among its students

PBL curriculum & males students demonstrated lower levels of emotional exhaustion when compared to the SGL and female peers.

Females have a greater propensity towards depression and anxiety compared to their male counterparts.

![Graphs showing PHQ-4, Anxiety, and Depression differences between genders and curriculums]