**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:**
  - 27% survey response (222/817)
  - Females: 55% (122/222), Males: 45% (100/222)
  - PBL: 20% (45/222), SGL: 80% (177/222)

- **Emotional exhaustion:**
  - 29% (234/817)
  - Females: 56% (131/234), Males: 44% (103/234)
  - PBL: 20% (47/234), SGL: 80% (187/234)

- **PHQ-4 Differences between Genders**
  - Females: 56% (131/222), Males: 44% (100/222)
  - PBL: 20% (45/222), SGL: 80% (177/222)

- **Emotional exhaustion:**
  - Females: 56% (131/234), Males: 44% (103/234)
  - PBL: 20% (47/234), SGL: 80% (187/234)

- **PHQ-4 Differences between Curriculums**
  - PBL: 20% (45/222), SGL: 80% (177/222)

- **PHQ-4 Differences between Genders**
  - Females: 56% (131/222), Males: 44% (100/222)
  - PBL: 20% (45/222), SGL: 80% (177/222)

- **Anxiety Differences between Genders**
  - Females: 55% (122/222), Males: 45% (100/222)
  - PBL: 3.2 (3.1 to 3.6), SGL: 3.7 (3.6 to 4)

- **Depression Differences between Genders**
  - Females: 55% (122/222), Males: 45% (100/222)
  - PBL: 3.2 (3.1 to 3.6), SGL: 3.7 (3.6 to 4)

- **PHQ-4 Differences between Curriculums**
  - PBL: 3.2 (3.1 to 3.6), SGL: 3.7 (3.6 to 4)

- **Anxiety Differences between Curriculums**
  - PBL: 3.2 (3.1 to 3.6), SGL: 3.7 (3.6 to 4)

- **Depression Differences between Curriculums**
  - PBL: 3.2 (3.1 to 3.6), SGL: 3.7 (3.6 to 4)

**Results con’t**

- PHQ-4:
  - <6: mild and normal mood symptoms
  - ≥6: severe and moderate mood symptoms

- PHQ Anxiety:
  - Females: p-value = 0.0002
  - Males: p-value = 0.0973
  - PHQ Depression:
  - Females: p-value = 0.00157
  - Males: p-value = 0.0606

- Emotional exhaustion:
  - Females: p-value = 0.0606

**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

**References**