

Introduction

- A student-led study was conducted to observe the incidence of depression stratified to each year of the medical program. This was observed through the standardized PHQ-9 questionnaire.
- The PHQ-9 questionnaire is used in standard clinical practice for diagnosis and management of depression. Increased levels of depression have been shown to be associated with burnout.
- Through this study, the aim is to provide a foundation for using data driven studies to implement change into the medical curriculum to improve outcomes for students early on.

Methodology

Participants:

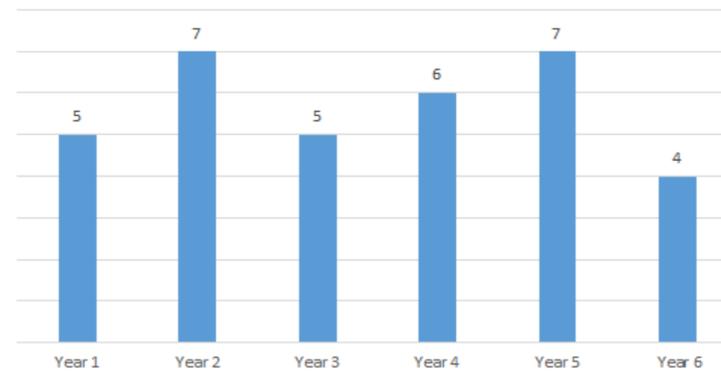
- Between February 5th, 2019 and March 7th, 2019, students who were enrolled at the University of Missouri-Kansas City School of Medicine were asked to complete an anonymous survey comprised of a PHQ-9. The survey was facilitated by RedCAP, an online survey collection service.
- The cross sectional survey was comprised of 396 out of 690 (57%) enrolled medical students from all six years of the program. Students were approached via informational class meetings and emails during the survey period. Medical students from both the B.A/M.D and MD only programs were enrolled, all other students were excluded from the survey enrollment.
- The study was anonymous, voluntary, and no personal information identifiers beside year in the program were obtained. Student's did not received compensation for taking part in the study. The survey was approved by the University's institutional review board.

Standardized Instrument:

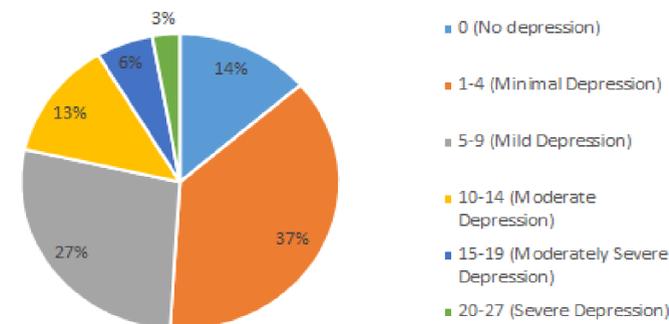
- The PHQ-9 was selected on the basis of its psychometric properties and its extensive use in clinic medicine to help facilitate in identifying depression.

Results

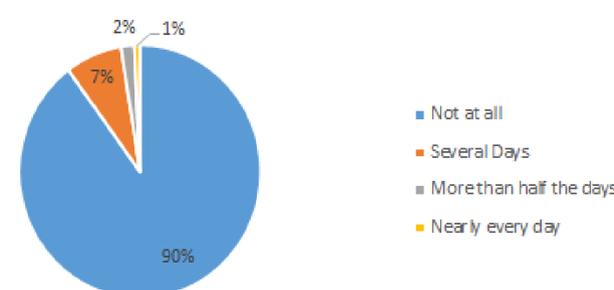
Average PHQ-9 Score Per Year in Medical School



Overall Participants PHQ-9 Scores at UMKC School of Medicine



PHQ-9 Question 9: Thoughts that you would be better off dead, or of hurting yourself



Conclusion

- Of the 396 students surveyed, 201 (51%) had minimal or no depression symptoms within the past 2 weeks.
- 36 (9%) students had a PHQ-9 score of 15 or above indicating moderately severe to severe depression.
- This indicates a significant subsection of students within the medical school have symptoms of depression.
- The average PHQ-9 among all the classes, except Year 6, equates to mild depression.
- The majority of the student body has PHQ-9 scores that equate to minimal to no depression.
 - The higher individual class scores highlight the severity of depressive symptoms in those few students that do in fact classify as moderately severe to severe depression.
- Lastly, 10% of the student body admitted to having thoughts of suicide at least "several days" in the past 2 weeks.

References

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- Paul A. Harris, Robert Taylor, Robert Thielke, Jonathon Payne, Nathaniel Gonzalez, Jose G. Conde, Research electronic data capture (REDCap) - A metadata-driven methodology and workflow process for providing translational research informatics support, *J Biomed Inform.* 2009 Apr;42(2):377-81.
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