

2020

Do the Current Health Behaviors of Third-Year Medical Students Have Correlations with Their Frequency and Confidence in Counseling of Patients on Preventive Health Behaviors?

Shelby L. Liesemeyer

Susan Evans

Jenenne A. Geske

Follow this and additional works at: https://digitalcommons.unmc.edu/emet_posters



Part of the **Medical Education Commons**

Are current health behaviors of third-year medical students related to their frequency and confidence in counseling of patients on preventive health behaviors?

Shelby L Liesemeyer, M4; Susan Evans, MD, Department of Family Medicine; Jenenne Geske, Department of Family Medicine
University of Nebraska Medical Center, Omaha, NE 68198

INTRODUCTION

- Fewer than 1/10 children and adults eat recommended amount of daily vegetables¹
- According to the CDC, getting enough physical activity could prevent 1/10 premature deaths but only 1/2 of adults get the recommended amount of physical activity¹
- Two leading predictors of preventive counseling among medical students: healthier personal preventive practices and encouragement of healthy lifestyles from their medical schools²
- *Healthy Doc=Healthy Patient Principle* found consistent correlations between compliant physicians' health habits and compliance of their patients³
- Physicians that have good health habits are more likely to provide counseling in general on health habits and more aggressive counselling⁴
- The world's leading causes of death: Heart disease, cancer, accidents, stroke, diabetes, are largely preventable⁵

METHODS

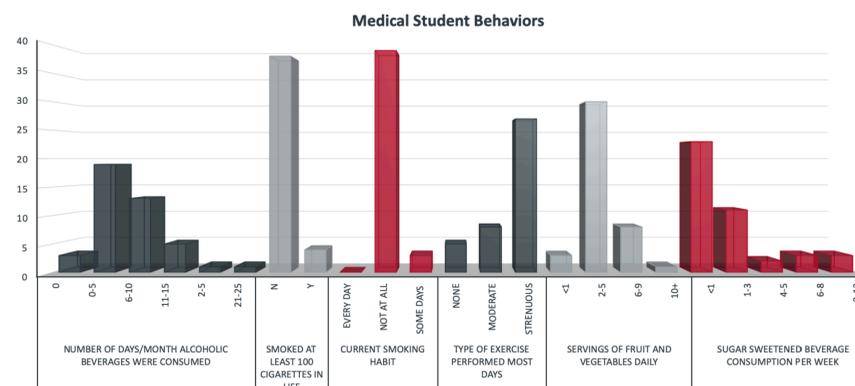
- 42 third-year medical students at the University of Nebraska Medical Center
- Entering their 8-week Family Medicine clerkship rotation
- Completed Pre- and Post-Rotation Questionnaires
 - Pre-Questionnaire: 16 items
 - Demographics
 - Own lifestyle behaviors
 - Perceived importance/relevance of nutrition counseling
 - Confidence in their own counseling behaviors
 - Frequency of own behaviors
 - Post-Questionnaire: 3 items
 - Perceived importance/relevance of nutrition counseling
 - Confidence in their own counseling behaviors
 - Frequency of their own counseling behaviors
- Family Medicine Rotation served as an intervention to see if surveys changed from pre-rotation to post-rotation
- Purpose of the Study:
 - Determine if the Family Medicine rotation changes students' perceptions about counseling patients about lifestyle behaviors
 - Examine how students' own lifestyle behaviors are related to their counseling behaviors and perceptions



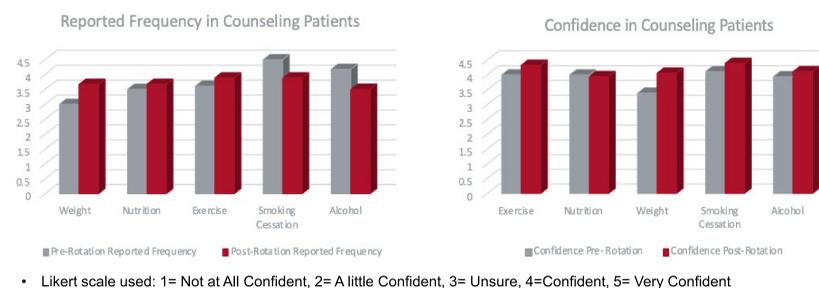
RESULTS

- Sample size, n=42 pre- and n=18 post-rotation
- From Pre-to Post-Rotation, students:
 - Reported asking patients more often about their weight (p=0.006)
 - Reported asking patients less often about smoking cessation (p=0.023)
 - Reported asking patients less often about alcohol use (p=0.018)
 - Felt more confident in counseling patients on their weight (p=0.010)
- No statistical significance was found when comparing the students' lifestyle to their confidence and perceived frequency in counseling patients
- Medical students overall showed very similar behaviors: lower alcohol intake, non-smoking, partaking in strenuous exercise, with recommended servings of fruit and vegetables and low sugar-sweetened beverage intake

MEDICAL STUDENT BEHAVIORS



PRE- AND POST- REPORTED FREQUENCY AND CONFIDENCE



CONCLUSION AND FUTURE DIRECTION

- No correlation was found between students' health behaviors and their confidence and frequency in counseling on lifestyle
- Completing the family medicine clerkship was found to have a statistically significant effect on certain counseling behaviors
- Interestingly, reported frequency in counseling on both smoking cessation and alcohol use decreased following the rotation; and, although not significantly, confidence in counseling on nutrition decreased. This may have been due to an increase in sick or acute visits over the Fall and Winter times.
- There was evidence supporting students having very similar, overall healthy behaviors
- Students also had fairly high levels (average scores over 3/5) of reported frequency and confidence in counseling on healthy behaviors prior to the rotation
- Future research should...
 - strive to increase the sample size of third-year medical students
 - Consider includes adding a piece of in-home lifestyle coaching for medical students to perform with patients during the rotation

WORKS CITED

1. Centers for Disease Control and Nutrition. (2019). Division of nutrition, physical activity, and obesity: Defining the problem, preventing chronic health diseases, improving the public's health. Retrieved from <https://www.cdc.gov/nccdphp/dnpao/division-information/aboutus/index.htm>
2. Frank, E., Carrera, J. S., Elon, L., & Hertzberg, V. S. (2007). Predictors of US medical students' prevention counseling practices. *Preventive Medicine*, 44(1), 76-81. doi:S0091-7435(06)00325-2 [pii]
3. Frank, E., Dresner, Y., Shani, M., & Vinker, S. (2013). The association between physicians' and patients' preventive health practices. *CMAJ : Canadian Medical Association Journal*, 185(8), 649-653. doi:10.1503/cmaj.121028 [doi]
4. Wells, K. B., Lewis, C. E., Leake, B., & Ware, J. E., Jr. (1984). Do physicians preach what they practice? A study of physicians' health habits and counseling practices. *Jama*, 252(20), 2846-2848.
5. Xu, J. M. D., Sherry L. Murphy, B. S., Kenneth D. Kochanek, M. A., Brigham Bastian, B. S., & Elizabeth Arias, P. D. (2018). Deaths: Final data for 2016. *National Vital Statistics Reports*, 67(5), 1.