Medical Student Health Habits & Their Effect on Patient Outcomes

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My MSA: The Big Picture

- Evaluate health habits of students at University of Colorado School of Medicine
  - Nutrition
  - Physical Activity

- Determine if habits differ by class (MS II, III, & IV), and if so, WHY
Why study medical student health?

- Healthier personal practices significantly predict the frequency with which medical students report counseling patients about preventive interventions, such as diet and exercise\(^1,2\)

- Medical students’ perceptions of the importance of prevention is directly related to their own health habits\(^3\)

- Physicians with better personal health habits also report more preventive counseling\(^4\)

- “Active physicians prescribe activity”\(^5\)
Preventive Counseling is Good for Patients

- Diet and exercise are two modifiable health behaviors with the potential to prevent substantial morbidity and mortality\(^6\)
The Good News

- Physicians\(^7\) and medical students\(^8\) have healthier lifestyles and lower mortality rates than the general public.

- Among U.S. medical students, personal physical activity levels are higher than those of age-matched peers in the general population\(^2\).
The Bad News

- Diet (↓ consumption of fruits and vegetables) AND exercise have BOTH been shown to decline during medical school\textsuperscript{9,10,11}

- The perceived relevance of nutrition\textsuperscript{9} and physical activity\textsuperscript{2} counseling by students also declines throughout medical school

- “The attrition of interest in prevention during undergraduate medical training is cause for concern; future clinical practice will be strongly motivated by their perceptions.”\textsuperscript{3}
Our Study (COMIRB #10-0695)
Data Collection: Fall/Winter 2010

- Collect survey data from MS II, III and IV students at CU-SOM
  - Demographic information (age range, ethnicity, gender)
  - Potential specialty the student is considering (primary care, subspecialty, undecided)
  - Healthy Doc Fruit and Vegetable Screener (8 questions)
  - Healthy Doc Physical Activity Screener (3 questions)
    - Validated tools for determining data on physical activity & fruit/vegetable intake
  - Self-assessment questions:
    - How do you feel that your nutrition and/or physical activity habits have changed since beginning medical school? (No change, improved, worsened)
    - If you feel that your nutrition and/or physical activity habits have worsened, why do you think this is the case? (less free time, increased stress, less sleep, financial restrictions for healthy food choices, etc.)
Data Analysis and Completion: Spring 2011 - 2013

- Statistically compare data between classes
  - Hypothesis: health habits of MSII > III > IV

- Evaluate student-provided reasons for WHY their habits have changed since starting medical school

- Also compare data by gender, age, potential specialty

- Determine next steps (future research / programs at CU-SOM)
Significance

- “Medical schools should identify health issues and assess preventive health perceptions among students in order to facilitate the adoption of preventive practices by future physicians”\(^3\)

- **What is needed at CU-SOM?**

- Studies have shown that training / health promotion interventions may improve medical students’ personal health behaviors\(^{12}\)
References