

# **Educational intervention to improve secondhand smoke awareness, competency, and screening among health professions students**

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# Disclosures

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# Secondhand Smoke Exposure

- Frequently correlated with alcohol use
  - e.g., in bars, bowling alleys, clubs, parties, etc.
- Most medical school curricula do not adequately address the topic of SBI for tobacco use, SHS exposure, and/or problematic drinking



# Study Purpose

- To introduce a practical, easily-implemented educational intervention for health professions students, addressing:
  - Consequences of SHS exposure
  - Skill-development in screening and brief intervention

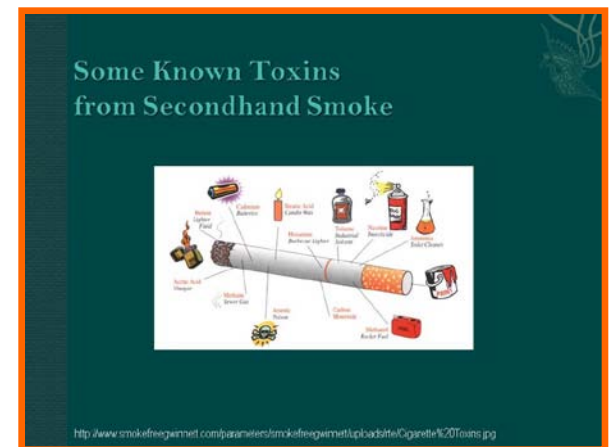


# Intervention Components

- Secondhand Smoke lecture series
- Standardized patient cases
- Brief intervention (motivational interviewing) instruction/demonstration

# SHS Lectures

- All available online or DVD
- <http://www.psychiatry.ufl.edu/Education/Secondhand-smoke/>
- Short (5-10 minute) segments covering:
  - General knowledge
  - Pediatric complications
  - Adult complications
  - Public health implications
  - Hookah



# Standardized Patient Cases

- Library of 10 standardized patient cases developed for medical student instruction and testing
- Cases are formatted so that actors may present as a 'patient' with a medical condition related to SHS exposure.



# Motivational Interviewing Demos

- Clinical instruction DVD (available online)
  - <http://www.youtube.com/user/MerloLab>
- Demonstrates how practitioners can implement MI strategies in behavior change counseling



The screenshot shows a YouTube video player interface. At the top, the YouTube logo is visible. Below it, there are navigation links for 'Search', 'Browse', 'Movies', 'Upload', 'Create Account', and 'Sign In'. The video is from 'MerloLab's Channel' and is titled 'The Effective Physician: Motivational Interviewing Demonstration'. The video player shows a doctor in a white coat sitting on a bench, talking to a patient in a purple top. The video has 9,569 views and was uploaded on Nov 25, 2009. Below the video player, there are links for 'Info', 'Favorite', 'Share', and 'Flag'. At the bottom of the page, there is a URL 'http://www.youtube.com/user/MerloLab' and the date '9/19/2011'.

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The Effective Physician: Motivational Interviewing Demonstration

From: MerloLab | Nov 25, 2009 | 9,569 views

Demonstration of the motivational interviewing approach in a brief medical encounter. Produced by University of Florida Department of Psychiatry. Funded by Flight Attendant Medical Research Institute Grant #63504 (Co-PIs: Gold & Merlo).

View comments, related videos, and more

<http://www.youtube.com/user/MerloLab>

9/19/2011



# Demonstration Videos

- <http://www.youtube.com/user/MerloLab#p/u/3/URiKA7CKtfc>
- “The Ineffective Dentist” & “The Effective Dentist”
- “The Ineffective Physician” & “The Effective Physician”
- “The Ineffective Pharmacist” & “The Effective Pharmacist”

# Method

- *Participants*

Students in the University of Florida College of Medicine.

- *Measure*

Secondhand Smoke Competency Exam—Revised.

The SHS Competency Exam—Revised consists of 10 multiple choice items designed to assess SHS knowledge and 2 items assessing intent to screen patients for SHS exposure.

- *Analyses*

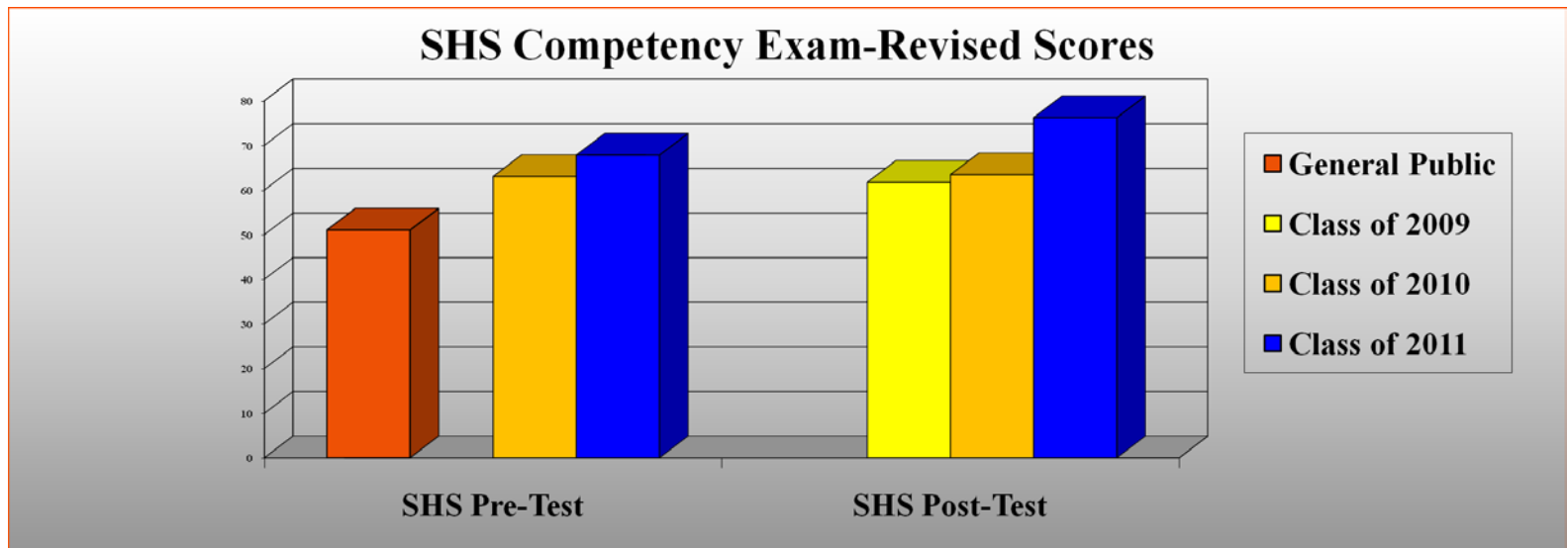
The Class of 2009 served as the post-test-only control condition;

The Class of 2010 served as the no-treatment control condition;

The Class of 2011 served as the experimental group, receiving pre-test, intervention, and post-test

# Results

- Control group students did not improve SHS Competency scores across their second year of medical school (pre-test  $M= 63.0\%$ ; post-test  $M= 63.4\%$ ;  $t = 0.60$ ,  $p = .55$ ).
- Scores improved (pre-test  $M=68.8\%$ ; post-test  $M= 76.2\%$ ) for the group who received the intervention ( $t = 4.21$ ,  $p < 0.001$ )



# Qualitative Results

- At pre-test, a minority of students indicated no intention to screen patients for SHS exposure (e.g., *“Patients are usually aware of risks already”*)
- At post-test, 100% of students planned to screen
  - *“It takes only a second to ask, and you could save people many comorbidities.”*
  - *“Although the risk of disease secondary to primary tobacco use is well known, I think it is more likely that individuals at risk for diseases or with diseases associated with SHS are more likely to not fully understand the risks of SHS. In that setting, education might be beneficial.”*
- Students generally responded favorably to the education materials
  - *“I knew that SHS was bad, but I was oblivious to the breadth of illnesses it can cause, especially in children who cannot protect themselves. These lectures were concise and to the point. They should be seen and understood by everyone, especially those who are going into the health profession.”*

# Next Steps

- Educational packets being prepared for national distribution to medical schools
- Other resources available online
- Hope to make resources available on MedEdPortal and/or other outlets



Thank you!

Questions?

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