

The UMass Worcester Prevention Research Center, located at UMass Medical School in Worcester, MA, is a member of the CDC's Prevention Research Center (PRC) network. Our work promotes healthy lifestyles through increased opportunities for physical activity, healthy eating and healthy weight. For more information, visit: www.umassmed.edu/prc
@umwprc

Overview

Physicians have an essential and effective role in helping patients stop smoking. Unfortunately, the use of brief and effective tobacco dependence treatment interventions such as 5A counseling by physicians is limited and likely due to inadequate training. Medical students, for example, are rarely prepared to help patients modify their smoking behaviors. Currently, however, it is recommended that competency in tobacco dependence treatment be a core medical school graduation requirement. Yet, no comprehensive tobacco treatment training curriculum has been developed or evaluated for medical students.

Main Questions

- To what degree are medical students using the 5As counseling method (Ask, Advise, Assess, Assist, Arrange) to provide tobacco treatment?
- Is a curriculum with several different types of learning activities that is repeated throughout medical school an acceptable and effective way to teach medical students about tobacco treatment compared to traditional medical school education?

Study

10 U.S. medical schools were randomized to receive either the comprehensive tobacco treatment education, called Multi-Modal Education (MME), or traditional tobacco dependence medical education. MME was composed of an online web-based course, several role-play demonstrations and videos during the 1st and 2nd years, and an enhanced 3rd year clerkship experience where preceptors as well as students were further trained to do tobacco dependence treatment. After completing the curriculum, all students were video-taped as they interacted with a standardized patient and scored on completion of specific tobacco dependence treatment behaviors (i.e. 5As counseling). We hypothesized that students from schools who completed MME would score higher on this behavioral checklist as well as on self-reported skills of these behaviors, compared to students from schools that did not receive MME.

The Bottom Line

Physicians see 70% of adults' smokers every year, therefore, medical students must be prepared to offer counseling and treatment to help patients quit smoking. Medical education should include more intensive and interactive tobacco treatment training throughout all of medical school training. This training will increase both their confidence in their ability to provide effective treatment, as well as increase the likelihood that physicians will routinely provide tobacco dependence treatment to patients.

Contact

Judith K. Ockene, PhD, MEd, MA | Division of Preventive and Behavioral Medicine Department of Medicine | University of Massachusetts Medical School Worcester, Massachusetts | 55 Lake Ave N, Worcester, MA 01655
Judith.Ockene@umassmed.edu

Research Brief Prepared by Julie Goldman

The study was supported by an investigator-initiated grant from the National Cancer Institute (NCI) 5 R01 CA136888. Judith K. Ockene, PhD, MEd, MA is associated with the UMass Worcester Prevention Research Center, a member of the Prevention Research Centers Program. It is supported by the Centers for Disease Control and Prevention cooperative agreement number 5-U48-DP005031.



Spotlight on Results

Medical students who participated in the curriculum with online materials, role-play, and clerkship (MME) were better trained in offering tobacco treatment.

- Students were more likely to complete 27 out of 33 tobacco treatment behaviors on the objective structured clinical examination compared to students who did not receive this curriculum.
- Several Assist and Arrange items were significantly more likely to have been completed by MME students, including suggesting behavioral strategies (11.8% vs. 4.5%), and providing information regarding Quitlines (21.0% vs. 3.8%).
- MME students reported higher self-efficacy or confidence to Assist, Arrange, and provide pharmacotherapy counseling compared to traditional education students.

Call for Action

Medical education should include repeated experiences working with patients who smoke. Training should be integrated throughout all years of medical education and preferably could begin as early as first year.

Source

Ockene JK, Hayes RB, Churchill LC, Crawford SL, Jolicoeur DG, Murray DM, Shoben AB, David SP, Ferguson KJ, Huggett KN, Adams M, Okuliar CA, Gross RL, Bass PF 3rd, Greenberg RB, Leone FT, Okuyemi KS, Rudy DW, Waugh JB, Geller AC. Teaching Medical Students to Help Patients Quit Smoking: Outcomes of a 10-School Randomized Controlled Trial. *J Gen Intern Med.* 2015 Sep 21.