What's at stake in nutrition education during med school

JUL 23, 2015

Staff News Writer

While physicians encourage patients to make healthy food choices, only 27 percent of U.S. medical schools actually offer students the recommended 25 hours of nutritional training, according to a recent perspective piece in Academic Medicine. Hear why experts say improving health outcomes may require physicians in training to move from the classroom to the kitchen.

The big picture: Nutrition and the health of the nation

“In an era when rates of obesity, diabetes and other lifestyle-related disease challenge medical educators and governments worldwide, it is necessary to consider novel educational strategies, both didactic and experiential, whereby current and future health professionals can be prepared to proactively advise and teach patients enhanced self-care skills,” the authors of the perspective wrote.

A recent study from Diabetes Care revealed that more than 86 million American adults have prediabetes, the precursor to type 2 diabetes—and these increased burdens on the health care system break down to a national cost of roughly $322 billion.

Still, many chronic illnesses, such as type 2 diabetes, are preventable, the authors wrote. They cited instances when simple lifestyle changes—such as not smoking, limiting alcohol use, being physically active and maintaining a healthy diet—reduced patients’ chances for coronary heart disease by 82 percent.

So while the country’s rate of chronic illness may be daunting, medical educators are looking at how they can change these trends on what they are calling a “societal scale.”

That’s where creating courses in medical schools on self-care, nutrition, cooking and life skills can make a difference. If medical schools teach students how to adapt healthy lifestyle and self-care skills in training, the authors argue, they’ll know how to impart this information to their patients.
The current state of nutrition in medical education

Modern medicine maintains the importance of proper nutrition, yet on average, U.S. medical schools only offer 19.6 hours of nutrition education across four years of medical education, according to the perspective authors. “This corresponds to less than 1 percent of estimated total lecture hours,” they wrote. “Moreover, the majority of this educational content relates to biochemistry, not diets or practical, food-related decision making.”

A lack of external incentives that support schools teaching nutrition also deepens this educational void, the authors note. Current United States Medical Licensing Examination tests evaluate “biochemical knowledge and information relating to nutritional deficiencies, but no standardized patient examination tests the knowledge or skills of medical trainees to advise a patient seeking guidance with regard to evidence-based diet and lifestyle modification,” they wrote.

Training at the postgraduate level has followed suit, they said. They pointed to how the word “nutrition” isn’t included in board examination requirements for internal medicine certification, and cardiology fellows don’t need to complete a single requirement in nutrition counseling.

How to innovate nutrition education

Despite the low rate of nutrition education in medical schools, the authors of the perspective offer a hopeful consideration for educators: Most students in the beginning of training actually value nutritional knowledge.

In fact, among entering medical students, “71 percent think nutrition is clinically important. Upon graduation, however, fewer than half believe that nutrition is clinically relevant. Once in practice, fewer than 14 percent of physicians believe they were adequately trained in nutritional counselling,” the authors wrote.

Improving this outcome and maintaining students’ interest in nutrition will require schools to think “outside of the box” about creative integrations between core curriculums and nutritional content.

Some schools already are addressing this need through interactive courses that explore the impact of social determinants on access to whole and nutritious foods. For instance, the New York University School of Medicine, a member of the consortium of schools in the AMA’s Accelerating Change in Medical Education initiative, recently conducted a neighborhood food project in which students canvassed 30 neighborhoods across Manhattan to investigate the availability and cost of basic foods in local grocery stores and restaurants.


Copyright 1995 - 2021 American Medical Association. All rights reserved.
Armed with neighborhood maps that they created as part of their research, students recorded characteristics and costs of local food sources in each neighborhood, noting advertising for foods and beverages. This information has been compiled in a database that faculty will use to further analyze the impact of food environments on childhood disability.

Other schools, such as the Pritzker School of Medicine at the University of Chicago, have taken a more direct skills-building approach to national education. This school is simulating “teaching kitchens,” where medical students study the value of food in a culinary setting.

**Interested in exploring similar solutions at your school?** Read the second post of this two-part series, which features an expert-approved list of recommendations to help educators develop their own nutrition education curriculums.


Copyright 1995 - 2021 American Medical Association. All rights reserved.