Educational intervention may help medical students adapt care for patients needing nonstandard care

September 14 2010

Fourth-year medical students who participated in an educational intervention were more likely to seek, identify and incorporate into care patient circumstances that may require variation from standard care, compared to students in a control group, according to a study in the September 15 issue of *JAMA*, a theme issue on medical education.

"Clinical decision making requires 2 distinct skills: classifying patients' conditions into diagnostic and management categories that permit the application of best-evidence guidelines, and individualizing or contextualizing care for patients when their circumstances and needs require variations from the standard approach to care. Contextualization is the process of identifying individual patient circumstances (their context) and, if necessary, modifying the plan of care to accommodate those circumstances," the authors write. A contextual error occurs when a physician does not identify contextual factors, such as access to care, that may demand an alternative approach.

Alan Schwartz, Ph.D., of the University of Illinois at Chicago, and colleagues evaluated an educational intervention designed to increase physicians' skills in identifying patient context and to decrease the rate of contextual errors. The study included fourth-year medical students (n = 124) in internal medicine subinternships at the University of Illinois at Chicago or Jesse Brown Veterans Administration Medical Center between July 2008 and April 2009 and between August 2009 and April

2010. The intervention consisted of 4 weekly case-based 1-hour sessions designed to help the students develop knowledge and skills in contextualizing patient care. There were 65 students who participated in the intervention, and 59 students in the control group. Outcomes were assessed using four previously validated standardized patient encounters performed by each participant.

The researchers found that students who participated in the contextualization workshops were significantly more likely to probe for contextual issues in the standardized patient encounters than students who did not (90 percent vs. 62 percent) and significantly more likely to develop appropriate treatment plans for standardized patients with contextual issues (69 percent vs. 22 percent). "There was no difference between the groups in the rate of probing for medical issues (80 percent vs. 81 percent) or developing appropriate treatment plans for standardized patients with medical issues (54 percent vs. 66 percent)," the authors write.

Also, students who participated in the intervention group were much more likely to write an appropriate treatment plan in the contextual variant than students in the control group (67 percent of encounters vs. 24 percent).

"Medical students are typically trained to identify biomedical red flags that may alter their diagnosis and management of patients but are rarely trained to identify contextual red flags that may be equally vital in providing appropriate care. Similarly, practicing physicians are tracked for adherence to quality measures, such as the Healthcare Effectiveness Data and Information Set, that do not incorporate contextual issues; hence, deficits are unlikely to be addressed," the researchers write.

"Yet contextualization of care is an important skill for physicians. Not considering patient context in management plans may result in harms of

a magnitude equal to not appreciating a biomedical finding. Moreover, several contextual factors such as access to care, religion, and socioeconomic status, are associated with health disparities, and not identifying and integrating patient context in clinical decision making may worsen these disparities. The skills required for contextual probing and contextualization in treatment planning are teachable, but students may not acquire them through current medical school curricula. Curricula and activities that emphasize contextualization may be warranted."

More information: *JAMA*. 2010;304[11]:1191-1197.

Provided by JAMA and Archives Journals