University of Arizona Researcher Develops New Tool for Rapid Assessment of Health Literacy Skills

Low health literacy, the ability to understand and act on health information, affects 90 million U.S. adults

From: Arizona Health Sciences Center  December 6, 2005
Office of Public Affairs, (520) 626-7301

Thanks to research efforts led by Barry D. Weiss, MD, professor of family and community medicine at The University of Arizona College of Medicine, health-care providers soon will have access to a new tool designed to assess a patient’s health literacy skills quickly and simply. Knowing if a patient can understand and act on health information enables the physician and nurse to tailor their communication and enhance patient understanding.

Dr. Weiss and his team of UA researchers, working in collaboration with colleagues at the University of North Carolina, have developed the Newest Vital Sign, the first instrument of its kind. A simple, six-question assessment based on an ice cream nutrition label, the Newest Vital Sign (NVS) enables the health-care provider to assess an individual’s health literacy skills – the ability to read, understand and act upon health information – quickly and accurately. It is the only such rapid assessment tool developed in Spanish, as well as English. Reports issued by the Institute of Medicine, the Agency for Healthcare Research and Quality and the American Medical Association in 2004 indicate that as many as half of all adults in the United States have low health literacy. They lack the skills needed to function adequately in today’s complicated health-care environment. Difficulty in navigating the complexities of health care, from interpreting instructions for medications and self-care regimens to understanding insurance and informed-consent documents, often leads to other problems, including non-compliance with health-care instructions, failure to seek preventive care, longer hospital stays and higher health-care costs.

In the clinical paper, “Quick Assessment of Literacy in Primary Care: The Newest Vital Sign,” to be published in the Dec. 6 issue of Annals of Family Medicine, Dr. Weiss explains that current literacy screening instruments for health-care settings either take too much time to administer for routine use or are available only in English. The Newest Vital Sign, on the other hand, can be administered in only 3 minutes and is available in Spanish and English. During an office visit, the Newest Vital Sign can be used to assess health literacy skills at the same time the patient’s other vital signs, such as blood pressure, are taken. The patient is given the ice cream nutrition label by the nurse or physician, and then is asked a series of questions about it. Based on the number of correct answers given, health-care providers can assess the patient’s health literacy level and adjust the way they communicate with the patient to ensure understanding.

“Many physicians are unaware of the large number of patients who have limited health literacy. The Newest Vital Sign instrument can help them to find out the situation in their own practice,” says Dr. Weiss. “Low health literacy is a silent epidemic, so
providers need a simple and fast way to identify those patients in their practice at greatest risk.”

According to the non-profit Partnership for Clear Health Communication, a coalition of national organizations working to promote awareness of and solutions for low health literacy, literacy skills are a stronger predictor of a person’s health status than age, income, employment status, educational level and racial or ethnic group. While ethnic minority groups are disproportionately affected by low literacy, the majority of those with low literacy skills in the United States are white, native-born Americans. Health information often is difficult to understand, but some people are especially vulnerable in a health-care situation, including the elderly, recent immigrants (who may be highly literate in their own language), people with chronic disease and those with low socioeconomic status.

Profound social and economic effects are associated with this condition. Costs to the American health-care system caused by excess hospitalizations and emergency care, errors by patients in their self treatment and other problems associated with limited health literacy, are estimated to be between $58 billion and $73 billion per year. One study found that patients with a lower-than-third-grade reading level averaged more than $10,000 in annual Medicaid costs, while the Medicaid program spent less than $3,000 on those with better than third-grade reading levels.

The U.S. Department of Health and Human Services (HHS) recognizes health literacy as an important issue, and it is a priority on U.S. Surgeon General Richard Carmona’s agenda. In a statement issued last April, former HHS Secretary Tommy Thompson said, “Health literacy can save lives, money and improve the health of millions of Americans. It goes to the core of our health-care system. Improving the ability of Americans to obtain, process and understand basic health information is essential to our strategy on prevention.”

Research and development of The Newest Vital Sign was funded by Pfizer, Inc. The instrument will be available to medical and public health providers at no cost. To read Dr Weiss’ report, visit the Annals of Family Medicine Web site, (www.annfammed.org/) and view the November-December issue.

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