

The Role of Health Literacy in Narrowing the Treatment Gap for Hypercholesterolemia

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The article by Meza and Webster¹ confirms that patients are interested in finding out the result of laboratory testing to determine their cholesterol level. Although the process of laboratory test result notification has not been extensively studied or reported, it is probably not surprising to most of us that the authors found most patients are interested in and more satisfied with care when they are informed. Perhaps it is also not surprising, albeit disappointing, that not all patients are notified of their laboratory test results. As the authors point out, if patients are not aware of their test results, they lack information that may help motivate behavioral changes leading to improved health.

Despite the medical profession's great success in understanding the epidemiology, pathophysiology, and molecular biology of hypercholesterolemia, the number of patients with high blood cholesterol who are either aware of their cholesterol level or are receiving diet or drug therapy remains quite low.² Although one of the goals of *Healthy People 2000*³ was to increase to 75% the proportion of adult patients screened for high blood cholesterol in the last 5 years, only 9 of 50 US states attained a cholesterol screening rate >75% in 1999.⁴ Are physicians not screening adequately for hypercholesterolemia, or is it that their patients are being screened but are not being counseled about their test results? The latter possibility seems most likely, as Meza and Webster¹ point out, demonstrating the healthcare system's particular problem with regard to cholesterol screening and treatment.

In 1995, a National Heart, Lung, and Blood Institute survey revealed that although 74% of all

adult patients were screened for high cholesterol, only 20% were informed of their high cholesterol value, and only 10% were being treated with dietary or drug therapy.² Thus, despite overwhelming clinical trial evidence supporting the benefits of cholesterol screening and treatment, only a small percentage of patients with high blood cholesterol were actually informed, treated, or at goal cholesterol levels. This large treatment gap suggests a major breakdown in our healthcare system with possible causes including fragmentation of care, inadequate patient-physician communication, and low health literacy.

There is emerging interest in health literacy, and it is interesting to consider how health literacy relates to patients' understanding of health information, such as the results of a cholesterol screening test. A recent bibliography for the National Library of Medicine defines health literacy as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.⁵ A population that is health literate is able to make more appropriate decisions for improving its health and well-being. Adequate health literacy implies that patients can understand oral and written information about their medical conditions, follow written and numerical directions regarding their therapeutic regimens and diagnostic tests, ask pertinent questions of medical personnel, report prior conditions and treatments, and solve problems that arise during the course of their care. Although the study by Meza and Webster focused on the process of information giving, it does not address patients' health literacy as it relates to cholesterol screening. What does "cholesterol screening" mean to patients? How do they interpret the numerical results of their screening? Moreover, how does their understanding actually relate to their health behavior?

In 1993 the National Adult Literacy Survey (NALS) found 40 to 44 million Americans, about one

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fourth of the adult population, are functionally illiterate.⁶ These adults struggle to determine the expiration date on a driver's license. Another 50 million have only marginal literacy skills, meaning they have difficulty entering background information on a Social Security application. Of these 90 million Americans with limited literacy, only 15% were born outside the United States and 5% described themselves as having a learning disability.

The impact of limited literacy on health and healthcare is being documented in a growing body of literature. In the largest study of functional health literacy in America, more than one third of English-speaking patients and 61% of Spanish-speaking patients at 2 large public hospitals had inadequate or marginal health literacy.⁷ Forty-two percent of patients did not understand directions on a pill bottle for taking medication on an empty stomach, 26% could not understand information on an appointment slip, 43% did not understand the rights and responsibilities section of a Medicaid application, and 60% could not understand a standard informed consent form. A follow-up study found patients with inadequate health literacy were twice as likely to have been hospitalized during the previous year than were literate patients.⁸ A recent study of community-dwelling Medicare managed care patients in 4 US cities found 34% of English-speaking and 54% of Spanish-speaking senior citizens had inadequate or marginal health literacy.⁹

The Council on Scientific Affairs of the American Medical Association (AMA) convened an expert panel in 1999 to report on health literacy.¹⁰ This report describes consequences of inadequate health literacy, implications for practicing physicians, tips for communicating with patients, research issues, and health literacy as a policy issue. As a result of that report, the AMA adopted as policy several statements, including their recognition that limited health literacy is a barrier to effective medical diagnosis and treatment. The AMA Foundation's current national signature program, "Partnership in Health—Improving the Patient-Physician Relationship through Health Literacy," is working to bring heightened awareness to this overlooked and costly problem.

How can we improve the health literacy of our patients with regard to cholesterol screening and treatment? One of the basic steps in motivating patient dietary and behavioral change is to improve the patient's knowledge, attitudes, self-efficacy, and self-management skills. The cardinal theme of the National Cholesterol Education Program¹¹ has been

that all Americans should "know their cholesterol number" and that with the guidance of healthcare professionals, individuals can make any necessary changes in diet, exercise, and weight to control their cholesterol. Can patients with low or normal health literacy interpret a cholesterol value without input or discussion with a healthcare provider? Patients in the study by Meza and Webster preferred receiving test results in the mail over discussion with their healthcare provider, but do all patients really have the knowledge and skills necessary to interpret a cholesterol value, modify their existing health behavior, and learn lifelong self-management skills? The answer to this question is probably no.

How can we improve the health literacy of our patients with regard to cholesterol screening and treatment? Additional research is clearly needed to improve health literacy as it relates to dietary changes, weight changes, physical activity, and medication compliance. For patients to be able to comprehend and process basic health information about high cholesterol, we healthcare providers must understand the most effective ways to communicate health information to our patients. Only then can they make more informed decisions about healthy behavior and lifestyle. The recognition of low health literacy in our patients accompanied by an enhanced ability to communicate effectively will begin to narrow the treatment gap seen with one of this nation's most preventable diseases—that of cardiovascular disease.

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