EDITORIAL

The Tower of Babel and health outcomes

s science continues to evolve, the language of medicine evolves with it and, by default, becomes more multifarious and divergent. On one hand, this enables better communication among specialists, but it also creates wider chasms between the expert and the "uninitiated" professional.

Even more troubling is the consequent growing disconnect between health care professionals and their patients. At times, even the best educated and most informed patient may find medical and dental terminology problematic, a problem that may be even more evident in highly specialized health care settings. For those with low literacy, this disconnect actually may become a matter of life and death.

Several studies have evaluated, assessed and confirmed the detrimental effects of inadequate health literacy on health outcomes. Patients who have a low overall literacy rate generally demonstrate poor knowledge of health-related information, show little ability to control the chronic diseases afflicting them, rarely maximize benefits from available preventive health services, and are more likely to have higher age-adjusted rates of both morbidity and mortality compared with patients who have higher levels of literacy. Poor or inadequate health literacy has been defined as the inability to "obtain, process and understand basic health information and services needed to make appropriate health decisions."^{1,2}

Inadequate health literacy is a major barrier to optimal health. It has been estimated most recently that more than 90 million Americans lack the ability to understand basic health information.³ It also has been reported more than one-third of the Englishspeaking and more than one-half of the Spanish-speaking Medicare population in the United States may have inadequate or marginal health literacy.⁴

Almost 50 million Americans do not use English as their primary language at home.⁵ The number of people in the United States with a mother tongue other than English increased by more than 15 million between 1990 and 2000 and is most noticeable in areas with growing Hispanic communities, such as California and specific cities like Miami. Another population at risk is the elderly. A study conducted in public hospitals showed that as many as 80 percent of patients older than 60 years have low literacy rates.⁶ Another study found a nearly twofold increase in mortality among elderly people with limited literacy.⁷

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Identifying people with low literacy rates is a difficult task.⁸ There are specific tests that can measure literacy levels, but it would be unrealistic to expect those tests to be administered in dental settings. Inadequate literacy sometimes can be deduced from patient behavior, such as when patients constantly claim they cannot read something because they "forgot" their reading glasses or cannot adequately fill out a health history form without the help of a staff or family member. In other cases, the patient simply may have a discernibly low level of education.

Problems associated with poor health literacy can be ameliorated, if discovered. Use of medical jargon should be avoided. Commonly used terms and phrases should be substituted for dental and medical terminology. Patients also should be asked to repeat the information they are given to ensure understanding. This is especially important when prescribing medications, as the comprehension of medication use and potential side effects is a great concern for patients with low literacy.9

It also is important to assist patients to improve their understanding of questions and directives. This needs to be done in a nondemeaning fashion that creates a sense of selfempowerment, encouraging patients to understand that they play an important role in their own health care. For health care professionals practicing in non-English-speaking communities, it is advisable to learn basic communication skills and to have required medical history forms and other important documents translated into other languages.

The strong association between chronic diseases (such as heart failure, cardiovascular disease and diabetes mellitus), low literacy and adverse health outcomes offers an opportunity for oral health care professionals to play an important role in both primary and secondary prevention. Helping patients access and understand resources at their disposal, as well as

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monitoring critical markers of chronic diseases, will improve the overall health of dental patients greatly.

It is not possible to evaluate the effect of low literacy on oral health from existing literature. However, extrapolating from the medical literature, it is evident that patients with low literacy likely would have more oral disease. Most are less likely to have regular access to preventive oral health care. They are less likely to enjoy the benefits of routine dental office visits and maintenance. As a result, when they do visit a dentist, they are likely to show signs of more progressive disease. They need definitive emergency care, rather than long-term treatment options.

The American Dental Association, through its Council on Access, Prevention and **Interprofessional Relations** (CAPIR), has recognized the need to address the problem of health literacy and has embarked on a major initiative to help improve communication between patients and dental team members. CAPIR has proposed a 12-member National **Oral Health Literacy Advisory** Committee to advise the council on interventions and strategies designed to improve national oral health literacy.

This is an important and deserving cause that should be supported by us all.

2. Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs, American Medical Association. Health literacy: report of the Council on Scientific Affairs. JAMA 1999;281(6):552-7.

3. Carmona RH. Health literacy: a national priority. J Gen Intern Med 2006;21(8):803.

4. Gazmararian JA, Baker DW, Williams MV, et al. Health literacy among Medicare enrollees in a managed care organization. JAMA 1999;281(6):545-51.

5. Flores G. Language barriers to health care in the United States. N Engl J Med 2006;355(3):229-31.

6. Williams MV, Parker RM, Baker DW, et al. Inadequate functional health literacy among patients at two public hospitals. JAMA 1995;274(21):1677-82.

7. Sudore RL, Yaffe K, Satterfield S, et al. Limited literacy and mortality in the elderly: the health, aging, and body composition study. J Gen Intern Med 2006;21(8):806-12.

8. Baker DW. The meaning and the measure of health literacy. J Gen Intern Med 2006;21(8):878-83.

9. Davis TC, Wolf MS, Bass PF, et al. Low literacy impairs comprehension of prescription drug warning labels. J Gen Intern Med 2006;21(8):847-51.

^{1.} Selden CR, Zorn M, Ratzan S, Parker RM. Current bibliographies in medicine 2000-1: Health literacy. Bethesda, Md.: National Library of Medicine; 2000.