

PUBLIC HEALTH

Illiteracy as a public health issue

Epidemiology: Residents of Ontario learned recently that 29% of the province's grade 10 students had failed either the reading or writing component of a standardized literacy test,¹ calling into question the quality of high school education in the province as well as the validity of the standardized test used to measure this performance. Undoubtedly, postmortem debate will identify a few fatal flaws in this newly administered instrument that will need to be corrected before the next exam, but the estimate that 29% of 15-year-olds lack literacy skills is consistent with estimates from the 1994 International Adult Literacy Survey (IALS).² It indicated that 22% of Canadian adults, the bulk of whom were older than 50 years, fell into the lowest level of literacy, which means that they may have difficulty identifying the correct amount of medicine to give a child from the information found on the packaging.² The IALS researchers were careful not to call these adults illiterate; the notion that individuals are either literate or illiterate has been replaced by the recognition that literacy skills fall along a

continuum, running from quite limited to very high.

There are several types of literacy. Prose literacy is the ability to understand and use information from texts such as news stories and fiction, whereas document literacy is the ability to locate and use information from documents such as job applications and transportation schedules. Numerical literacy is the ability to balance a chequebook or complete an order form. To package these varied skills into the binary outcome of "pass or fail," as the provincial test has done, too starkly paints the shades of literacy in black and white, and knocks the self-esteem of many Ontario teenagers in the process.

Self-esteem is intrinsically tied to illiteracy. A recent qualitative study of the perspectives of adults with low literacy skills³ revealed how much patients feared that their poor reading skills would be exposed. "I don't tell anybody or say anything [about my illiteracy]," said one. "They might think I'm a bad person."³ However, the consequence of nondisclosure in a health care setting is uninformed consent. "A lot of times I thought, 'My God, I am signing my life away,'" said another study participant.³

The participants felt that doctors and nurses should be aware of patients' reading ability and use that knowledge to transfer information more effectively. They also indicated that they would not have the courage to volunteer this information and recommended that the responsibility for initiating discussions about reading ability reside with health care professionals.³

Clinical management: It is important that health care providers not assume that patients with poor literacy skills are easily recognized, since most patients try to hide this information. Some experts⁴ recommend that clinicians assess the reading ability of patients by using word-recognition screening tools such as the Wide Range Achievement Test⁵ or the newly developed Rapid Estimate

of Adult Literacy in Medicine.⁶ (An adapted example of the latter test, along with instructions on how to administer it, is available at the University of Virginia Health System Web site.⁷) However, there is some evidence that the experience of being directly screened with these tools embarrasses patients with low levels of literacy.^{3,8}

Prevention: Physicians can take some universal precautions to prevent uninformed patient consent arising because of unrecognized illiteracy. In the United States the National Work Group on Literacy and Health recommends that physicians reduce their reliance on written material.⁴ When written communication is deemed essential, it should be created at the fifth grade level or lower. The Canadian Public Health Association has compiled a directory of agencies and resources that provide health education material written in plain language (www.pls.cpha.ca).⁹ — *Erica Weir, CMAJ*

References

1. McCarten J, Higgins M. 29% flunk provincial literacy test. *National Post* 2001 Mar 7. Available: www.nationalpost.com/search/story.html?F=/stories/20010307/493662.html (accessed 2001 Apr 11).
2. *Reading the future: a portrait of literacy in Canada*. Ottawa: Statistics Canada, Human Resources Development Canada and the National Literacy Secretariat; 1996. Available: www.nald.ca/nls/ials/introduc.htm (accessed 2001 Apr 11).
3. Brez S, Taylor M. Assessing literacy for patient teaching: perspectives of adults with low literacy skills. *J Adv Nurs* 1997;25:1040-7.
4. Communicating with patients who have limited literacy skills. Report of the National Work Group on Literacy and Health. *J Fam Pract* 1998;46:168-76.
5. Wilkinson GS. *WRAT3: Wide Range Achievement Test 3*. Wilmington (DE): Wide Range Inc; 1993.
6. Davis TC, Long SW, Jackson RH, Mayeaux EJ, George RB, Murphy PW, et al. Rapid Estimate of Adult Literacy in Medicine: a shortened screening instrument. *Fam Med* 1993;25:391-5.
7. *Tips on developing patient education*. Charlottesville (VA): University of Virginia Health System. Available: www.hsc.virginia.edu/medctr/depts/patient-ed/provider/read.html#realm (accessed 2001 Apr 11).
8. Kefalides PT. Illiteracy: the silent barrier to health care. *Ann Intern Med* 1999;130(4 pt 1):333-6.
9. Sibbald B. Can your patients understand you? *CMAJ* 2000;163:1039. Available: www.cma.ca/cmaj/vol-163/issue-8/1039.htm



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