LETTERS TO THE EDITOR

VALIDATING A SINGLE-QUESTION HEALTH LITERACY TEST AMONG AFRICAN AMERICANS

Dorothy L. Faulkner, PhD, MPH

To the Editor:

Health literacy (HL) is the degree to which individuals can obtain, process, and understand basic health information and services needed to make appropriate health decisions. The negative health consequences of poor HL support the call for HL screening in the clinical setting. Despite the ongoing debate about screening, some providers may choose to screen, and use this information to implement enhanced communication techniques.[1]

The single question (SQ), "How confident are you filling out medical forms by yourself?" (5-extremely, 4-quite a bit, 3-somewhat, 2-a little bit, 1-not at all) may serve as a rapid screening test, since it performed well against longer gold standards in validation studies.[1] However, there is a dearth of information about the SQ's performance among African Americans, even though they suffer disproportionately from poor HL.[2]

With approval from the Institutional Review Board of the New York Medical College, the SQ's performance was evaluated at a local "safety net" clinic that provides primary care services in underserved communities. Eligible individuals were English-speaking, self-identified African American adults seeking care (September - November 2008). To determine patient interest in the study, interviewers approached patients in the waiting areas. Those willing to learn more were escorted to a private section, where the interviewer assessed eligibility, sought informed consent, and conducted an interview (administration of the SQ, demographic items, and the Rapid Estimate of Adult Literacy in Medicine [REALM], a valid and reliable medical word recognition test).[3,4] Each participant was compensated $5. Analyses were performed using STATA version 8 (Statacorp LP, College Station, Texas). The SQ (poor HL = codes 1–4; adequate HL = code 5) was evaluated against the REALM gold standard (poor HL = 0–60 score; adequate HL = 61–66 score).

There were 250 participants (67% female; 41% Medicaid; mean age 44 ± 18 years). Based on the REALM, 111 patients (44%) had poor HL; and 139 (56%) had adequate HL. Among the 111, 72 had poor HL according to the SQ. Thus, the SQ's sensitivity was 65% (72/111). Among the 139, 85 had adequate HL according to the SQ, for a specificity of 61% (85/139). The kappa statistic (k) estimates SQ-REALM agreement, after adjusting for chance agreement.[5] Here, k was 26% (95% CI = 14%–38%). In conclusion, the SQ showed only a slight amount of discriminatory ability. Therefore, the SQ should not serve as a rapid screening test in this population, at this time.

REFERENCES

1. Powers BJ, Trinh JV, Bosworth HB. Can this patient read and understand written health information? *JAMA*. 2010;304:76–84.
2. Paasche-Orlow MK, Parker RM, Gazmararian JA, Nielsen-Bohlman LT, Rudd RR. The prevalence of limited health literacy. *J Gen Intern Med*. 2005;20:175–184.
3. 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;25:391–395.
4. Mancuso JM. Assessment and measurement of health literacy: an integrative review of the literature. *Nurs Health Sci*. 2009;11:77–89.
5. Szklo M, Nieto FJ. *Epidemiology: Beyond the Basics*. 2nd ed. Sudbury, MA: Jones and Bartlett Publishers; 2007.

From the New York Medical College, School of Health Sciences and Practice, Department of Community Health and Health Studies and the Lehigh Valley Health Network.