

Health and Adult Literacy

Health has long been a popular topic in adult education, and a substantial body of research has demonstrated that education is a major determinant of health (Rudd, Moeykens, and Colton 2000; Unesco Institute for Education [UIE] 1999). In the last decade the links between health and literacy have received even more attention. This *Brief* identifies some forces behind this trend, explores the health-literacy connection, and describes practices for embedding health education and promotion into adult literacy programs. Although the focus is on the United States, it is recognized that this is also a significant issue in other countries, where the practices might differ.

Trends Affecting Health and Literacy

Managed health care today emphasizes outpatient procedures, shorter hospital stays, and complex health consumer decisions. Patients and their families have increased responsibility for understanding medical instructions, following procedures, and interpreting health-related information and forms (Fisher 1999). The process, sometimes daunting for people with adequate literacy skills, can seriously compromise the health and safety of persons with low literacy skills as well as the 13.9 million U.S. residents with limited English proficiency (Villaruel, Portillo, and Kane 1999).

The National Adult Literacy Survey estimated that nearly 50% of adults have very limited reading and quantitative skills and 21-23% would score on the lowest of five literacy levels (Rudd, Moeykens, and Colton 2000). For older adults, limited literacy may be combined with sensory impairments (Murphy et al. 1993). However, researchers consistently find that the reading level of written health materials is well above the abilities of many adults, typically 8th-10th grade or higher. These materials include prescription information, hospital discharge instructions, and legal papers such as informed consent or living will documents (Hohn 1997; Rudd, Moeykens, and Colton 2000).

Another concern is the health information (and misinformation) that can be acquired through television and other electronic media (Freebody and Freiberg 1997). In addition, "access to the Internet and subsequent technologies is likely to become essential to gain access to health information, contact health care organizations and health professionals, and receive services at a distance" (U.S. Department of Health and Human Services [DHHS] 2000, online, n.p.). Thus, in the context of health, "literacy" means more than being able to read a prescription label; it also includes critical abilities to interpret media messages, as well as the capacity to access and use technologies that deliver health information.

In fact, "health literacy" is emerging as a distinct concept. The American Cancer Society (1999) defines it as "the capacity to obtain, interpret, and understand basic health information and services and the competence to use such information and services in ways that enhance health" (online, n.p.). Characteristics of a "health-literate" person include health-related critical thinking and problem solving, responsible citizenship, self-directed learning, self-advocacy, and communication skills (UIE 1999; U.S. DHHS 2000).

The Health-Literacy Connection

Numerous studies show that population groups with the poorest health status are also those that have the highest poverty rates and the least education. "Higher incomes permit increased access to medical care, enable one to afford better housing and live in safer

neighborhoods, and increase the opportunity to engage in health-promoting behaviors" (U.S. DHHS 2000, online, n.p.). Life expectancy is lower and the incidence of chronic diseases higher among the lowest income groups (ibid.). Low income is often associated with work in hazardous occupations, lack of health insurance, and less access to screening and preventive measures such as immunizations (Hohn 1997; Norton 1997; Rudd, Moeykens, and Colton 2000).

The *Healthy People 2010* report (U.S. DHHS 2000) concludes that closing the health literacy gap is a fairness and equity issue. Among the solutions proposed in both the health education and literacy education literature are the following: improve the readability of health materials, improve health communications, change individual behaviors, and use empowering participatory approaches. Each of these is discussed next, with implications for practice.

Readability of Health Materials

Research points to a mismatch between health materials and readers. In addition to readability levels that are too high, other problems include too much information, no provision for reader interaction, and no explanation of uncommon words (Doak, Doak, and Root 1996). Just as years of schooling do not equate with literacy level, word recognition does not guarantee comprehension (ibid.). The difficulty level of materials can be assessed with standard reading formulas such as Fry's. However, Doak et al. offer an instrument that goes beyond readability. Their Suitability Assessment of Materials evaluates such attributes as content, literacy demand, graphics, print size, font, layout, color contrast, learning stimulation, and cultural appropriateness.

Ideas for rewriting materials include shorter sentences; simple, clear, and culturally relevant graphics; no jargon; active voice; and user-friendly layout (Doak, Doak, and Root 1996; Murphy et al. 1993). When planning written materials, Doak et al. recommend defining and involving the target audience, limiting the objectives and message, incorporating interactivity, and testing and revising.

Improving Health Communications

Although simplifying materials can improve their readability, studies show that easy-to-read medical instructions actually increase compliance more for better readers than for those with limited literacy skills (Doak et al. 1996; Rudd et al. 2000). Better written materials alone are thus not sufficient. The gap between medical specialist and lay knowledge and the contrast between everyday speech and the formal language of health professionals and insurance forms suggest a need to improve the communication skills and techniques of health providers (Freebody and Freiberg 1997; Rudd et al. 2000). Accrediting agencies for health care organizations now recognize this need and evaluate agencies on how well patients understand their health care instructions (Doak et al. 1996; Villaruel et al. 1999).

Adult literacy educators can play a role in closing this gap from both sides. They can collaborate with health professionals by providing training in appropriate and culturally sensitive ways to work with low-literate adult clients (Nurss 1998). Teachers of English as a second language may find opportunities to serve as bilingual interpreters, cultural mediators, or other roles outlined by Villaruel et al. (1999). Through such techniques as group discussion or role play, educators can help adult learners develop the skills to communi-

cate assertively and confidently with their health care providers (Sissel and Hohn 1996).

Participatory Literacy and Health Education

Simplifying written materials, helping people read better, and improving the way doctors and patients talk to each other all play a role in improving health and literacy. However, both the literacy and health fields recognize that “the problems are too complex to be addressed by any one approach” (Hohn 1997, p. 14). The focus of much health education and promotion has been on individual lifestyle and behavior change. Now, however, the concepts of health and health promotion are being more broadly defined to include political, social, economic, and environmental factors that affect health (Sissel and Hohn 1996; UIE 1999). Reframing the concept of health makes clearer the role of culture in medical care. Different cultures have different understandings of health and sickness as well as medical traditions and practices. The culture of Western health care typically assumes a white, middle-class world view and health needs; cultural differences may thus be perceived as deviations from norms of healthy behavior (Hohn 1997; Sissel and Hohn 1996).

The view of literacy as a set of social practices underlies popular and participatory approaches to adult literacy education. Freebody and Freiberg (1997) point out that literacy and health both involve sets of social practices. Key elements of participatory approaches that integrate literacy and health education are as follows (Hohn 1997; Sissel and Hohn 1996):

- Community processes that create and sustain power sharing, enabling learners to develop new beliefs about their efficacy to change their lives and environment
- A psychologically and physically safe and respectful atmosphere in which to discuss personal health issues
- Learner selection of health topics that affect them and their families
- Active learning—e.g., learners engage in drama, art, and storytelling; create materials; and develop the skills and knowledge for self-advocacy related to health
- Critical thinking and problem solving
- Language and literacy development reinforced by health education

Hohn (1997) and Sissel and Hohn (1996) describe a program that illustrates these methods. In Operation Bootstrap, a Massachusetts community-based literacy program, a Student Action Health Team composed of adult learners, a facilitator, and a health educator determined which content areas to address, evaluated and selected appropriate materials, and designed instruction by the health educator and peer educators. Their initial topics were cancer detection and family violence, topics that were relevant, engaging, and motivating. They used a breast and cervical cancer detection kit developed by Project HEAL (Health Education and Adult Literacy), which employs empowering teaching and learning methods within “the context of cultural, informational, and emotional issues, and is a model of the way any health issue might be approached” (Sissel and Hohn 1996, p. 64).

An important component of participatory literacy is critical literacy, an essential ability in the electronic environment. Cowles (1997) provides a resource for teaching literacy learners to find and evaluate health information on the Internet < novel.nifl.gov/susanc/healthhome.htm >. She includes a lesson guide, health scenarios, and worksheets for developing search strategies and critically examining the information retrieved for authority, accuracy, and relevance. Another web-based resource is the compendium developed by World Education’s Health and Literacy Initiative (Irvine 1999). It is organized by the following categories: materials development and assessment, curriculum guides and lessons, readers, bibliographies and

databases, and organizational resources. The compendium contains examples of participatory approaches and curricula and is indexed by subject, format, language, and reading level.

Adult educators, health educators, health care providers, and literacy learners should collaborate in order to increase awareness of health and literacy issues, develop appropriate materials and programs, and ensure that adult learning principles underlie health education and communications. “Embedding health education in adult literacy in an approach where active learning is connected to the realities and concerns of people’s everyday lives, supported through the naturally occurring social webs of literacy classrooms and processes that create and sustain power-sharing, provides a rich and meaningful learning forum for health” (Hohn 1997, p. 111).

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