

HEALTH LITERACY: IMPACT ON OLDER ADULTS

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Introduction

Health Literacy is a nationwide issue that affects the population as a whole; however certain populations are more at risk than others. Understanding health Literacy is a national issue. It has been reported that approximately 90 million adults in the United States have inadequate or marginal literacy skills that would impede upon appropriate understanding and assimilation of health information, as reported by the National Adult Literacy Survey (NALS). A large portion of the adult population is unclear about personal health facts, and this poses a unique dilemma for health professionals who dedicate their careers to health education and care. With close to half the population lacking adequate health information, how can the health of the public be improved?

The term health literacy became recognized in 1998, when the American Medical Association began to address limited patient literacy as a barrier to effective health treatment¹. The definition of health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. This definition was first developed for the National Library of Medicine and is currently utilized by Healthy People 2010². The movement is fairly new, and momentum is increasing. National efforts exist to amplify awareness for physicians, medical staff and patients; however this knowledge deficit has many contributing factors which will take time to overcome or manage. Patient barriers

to health knowledge are individual, technological and social, and certain special populations are effected more than others.

Decreased health literacy may be especially potent for the elderly. With age-related decline, as well as potential chronic illness, this population is left more susceptible to increased morbidity due to inadequate communication. The concept of health literacy should be addressed specifically for the elder population in order to decrease potential health disparities which may arise from inadequate management of chronic illness due to lack of appropriate understanding of health care advice.

In order to reduce disparities and enhance the quality of older adult care, the need for a national standard protocol must be addressed which considers the dimensions of this population to better communicate health information. The greatest number of individuals our nation has ever experienced is reaching later life. This issue must be addressed to safeguard against a potential health care crisis.

The Scope of the Challenge

Currently, 35.6 million residents are 65 and older in the United States, and 34.4 percent suffer from a chronic condition which limits life activities³. This group is ever growing and depends upon physician recommendation for appropriate care of their chronic illness/es. The IOM report on ***Health Literacy: A Prescription to End Confusion*** identifies chronic disease and self-management as a key emerging issue in the health system context. Chronic care involves an ongoing process of patient assessments, adjustments to treatment plans, and reassessments to measure change in patient health status. This interaction between patient and physician is essential for appropriate care of chronic illness⁴. Tertiary care is complex and improvement of patient health relies upon self-management, therefore it is of the utmost importance that patients understand the process, and how to effectively navigate the health system for optimal health status.

For the elderly, a decrease in literacy skills does not necessarily indicate a lack of education. It is possible that as some individuals age, their vision decreases, and they choose not to read as

much, therefore their reading skills are compromised. Also, studies have shown that as we age, information processing time has the potential to marginally decrease⁵. Visual aids and reading level are two main tactics addressed in response to a strategy for health literacy improvement. These areas encompass the entire population, and coupled with alternative ways of interaction may increase effectiveness of message delivery for elderly individuals. Alternative methods include active listening, creating an environment that is non-judgmental or “shame-free” and encouraging the patient to participate in teaching by providing them with a notepad⁶. Improved patient/physician interaction methods are also beneficial in the assessment process, to develop trust and relax the individual.

It is in the best interest of health care organizations and their physicians to acknowledge and actively create health literacy educational programs for strategic purposes. A great potential exists for those who are the most ill to be the least able to understand medical advice, and therefore create an even greater compromise of health which may increase the cost of health care⁷. In the coming years, our society will experience a shift in population demographics of 65 years and older. A solid standard should be in place to support and advance education of the aging population.

Review of Select Studies

Three epidemiological studies were examined. All considered functional health literacy as the independent risk factor, and the subjects were 65 years and older. The three outcome variables studied were hospital admission, preventative health utilization and self-assessed health status along with health related activity limitations. Each study assessed literacy using a multiple standard measurement tools, including the Short Test of Functional Literacy in Adults. All three studies were performed in the same four cities within the United States. And the results were similar for each: Inadequate literacy is an independent risk factor for hospital admissions, lower use of preventative services and lower self-reported health status along with activity related limitations^{7,8,9}.

In particular, Baker et al.⁷ found that the adjusted relative risk for hospitalization was (RR=1.29;95% CI=1.07, 1.55), education was not a risk factor but other predictors of

hospitalization included number of chronic illnesses, older age and worse reported physical health. In another study, Scott et al.⁸ found that multivariate analyses of OR was significant for all four preventative services measured, which include influenza vaccine, mammogram within 2 years, pneumococcal vaccine and pap smear, also found that education was not a significant predictor of preventative service utilization and that subjects with inadequate health literacy were more likely to have one or more chronic illness, be of older age, have a lower income, non-white and possess one impairment in an instrumental activity of daily living. The third study by Wolf et al.⁹ found multivariate analyses of OR showed significant association between inadequate health literacy and limitations of instrumental activities of daily living, activities of daily living, limitations due to physical health and pain associated with normal work activities. Also, found that subjects with marginal or inadequate health literacy were older, lower annual income, African American or Hispanic, and possessed fewer years of education. Findings indicated and were consistent with previous cross-sectional studies that health literacy is independently associated with worse health, as well as consistent with prospective studies indicating that health literacy is an independent predictor of hospitalization.

All three studies show that inadequate literacy is a risk factor for increased illness, and possibly increased physical impairment. From the analyses of Baker et al, Scott et al. and Wolf et al., it is indicated that an important risk factor for decreased literacy is advanced age. Also, Baker et al. and Scott et al. both found chronic illness as predictors for hospitalization and less preventative service utilization. And lastly, the Scott et al. and Wolf et al. studies agree that other important risk factors are lower income, along with decreased physical mobility due to impairment. These findings are consistent with data from the National Center for Health Statistics which report that 45.1 percent of individuals aged 75 and older possess at least one limitation caused by a chronic condition³.

These findings significantly support a movement to increase awareness, and develop a special protocol for individuals 65 and older with chronic disease. With a large portion of our population advancing into the later stages of life, these results make an even more significant point in

relation to caring for those of advanced age, by helping them understand how to care for themselves.

Available health literacy resources

In the text which follows, medical school education and physician support materials are described according to their context. Two schools are mentioned which include health literacy education for their medical schools. Other academic institutions do offer geriatric rotations for medical students, however it was not discovered that health literacy was specifically mentioned in the geriatric context or specifically otherwise. Also, the Accreditation Council for Graduate Medical Education, did not indicate specific health literacy requirements for graduate medical students¹⁰. This review is not all encompassing, however the selected national programs and private health literacy efforts have been chosen for comprehensiveness.

The University of Virginia began devising a health literacy program in 2000 with the assistance of the American Medical Association Foundation grant. Curricula has been developed and implemented into all four years of medical school. UVA was the first university to create a health literacy curriculum and offers their program as a model resource for other educational institutions. The UVA website is specifically designed as an academic resource in health literacy program development¹¹.

The Harvard School of Public Health offers two classes of Health Literacy for graduate medical students titled **Communication Strategies for Health Education and Health Promotion, as well as Communicating in Health Care Settings**¹². Also, HSPH houses health literacy research through a Health Literacy Studies (HLS) emphasis within the university. This program is engaged with the National Center for the Study of Adult Learning and Literacy (NCSALL).

Healthy People 2010 recently issued a report in July of 2003: **Communicating Health: Priorities and Strategies for Progress**. This document has been created in order to meet objective 11-2 of the Healthy People 2010 report, and includes leading indicators to identify, address, and progress toward resolving issues of low-literacy patient populations throughout health care

systems¹³. This document is key in the process of developing internal and external health system awareness of potential patient barriers, and indicates national progress.

Professional and Federal organizations are working toward disseminating more information to physicians about health literacy. The American Medical Association Foundation has devised tool kits for physicians to assist in improving patient communication. The ***Health Literacy: Help Your Patient Understand*** kits include a detailed comprehensive guide to patient education, as well as an instructional video. This guide includes suggestions such as creating a shame-free environment for patients, identification of potential low-literacy individuals and educational material about health literacy for the physician¹. The Foundation will donate kits to non-profit facilities that dedicate educational hours to health literacy. The AMA and AMA Foundation have been and continue to be, leading national advocates of the need for improved health literacy.

The National Institute on Aging has also created a manual exclusively dedicated to clinician communication with older individuals. This publication is titled ***Working with your Older Patient: A Clinician's Handbook***. The text does not overtly address health literacy by term, however the second chapter focuses upon communication, i.e. clarity of language, active listening, and sensitivity to possible patient impairment. Chapter 6 in the handbook is dedicated to **Supporting Patients with Chronic Conditions**. This portion of the text provides many communication ideas which include utilizing many avenues of communication, taking extra time to explain, providing patient with a notepad to copy down answers to questions¹¹. This is the most specific text available which addresses tangible remedies for patients of an advanced age.

Health Literacy from A to Z: Practical Ways to Communicate Your Health Message

addresses similar issues as the NIA handbook⁶. This text is specifically designed for clinicians and is textually structured much like a reference manual. Osborne dedicates a chapter for discussion of older adults which goes beyond the previously mentioned text to include gerogogy, an educational model for teaching older adults. The gerogogy model emphasizes message length, demonstration, adjusting teaching pace, tying message to previous experience with individual, repetition and concreteness of message⁶.

Conclusion

It is evident that progress is taking place in the movement to increase awareness about health literacy, however this concept is lacking in physician education, especially with regard to the elderly. A stronger movement could exist, however it was not overtly detectable in the literature. This is an area, which must be addressed for future adequate care of the elder population.

Literature about health literacy is growing rapidly. This is may be a product of the initiative to improve health communication as described in Healthy People 2010, and also the topic is fairly new. The most succinct examples of health literacy, relating to elder interaction and care, were found through the NIA Clinician's Handbook and the **Health Literacy from A to Z** text . Both efforts specifically addressed the 65 and older population and the need for improved communication efforts. These texts offered simple alternatives for improved patient/physician exchange which ,if adopted, could enhance patient self-care, thereby decreasing the progression of chronic illness, and in turn reduce health disparities and physical impairment.

Through research and discussion, evidence indicates health literacy does impact health in the 65 years and older population. The studies examined showed that inadequate health literacy is an independent risk factor for increased hospitalization and decreased utilization of preventative services, as well as increased physical limitations. These findings strongly support the need for development of an elder communication protocol, which would address these barriers and risk factors, in order to decrease health disparities and improve health care quality.

Though there is evidence of a growing body of literature related to health literacy, not enough material exists pertaining specifically to the elder population, and as found physician education does not overtly address the communication needs of older individuals with regard to health literacy. This finding may simply be a product of term utilization, however it is unclear. A specific body of literature for addressing issues of elder communication would be a significant step in health improvement and quality. It is recommended that a national effort be considered to actively move toward establishing standard measures to implement within our health care system that address elder health literacy and issues of communication.

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