

Including Elderly Patients in Decision Making via Electronic Health Literacy

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INTRODUCTION

Informed decision making based upon health literacy and electronic health literacy that creates patient involvement in medical treatments is known to play an important role in the improved quality of care and treatment costs (Health Policy Briefs, 2013). The Dartmouth Center for Informed Decision Making defined IDM (informed decision making) as a high quality decision made by the patient, who can assess the information and its values. When this decision is made through SDM, shared decision making, while maintaining PCC (patient centered care) can lead to financial savings of resources and provide better results and higher patient satisfaction levels. Today, many doctors joined the Choosing Wisley campaign initiated in 2002 by the American Board of Internal Medicine by sharing information in an attempt to identify the major factors leading to superfluous medical tests, and also encouraged conversations with patients to try and minimize unwarranted treatments, thereby reducing costs within the health system. (Cassel and Guest 2012). The process currently under discussion today is called ISDM, or informed shared decision making (Bot., 2014), by which the doctor and the informed patient reach a decision together, in accordance with the preferences and values of the patient. Informed decision making is not based only upon accessible information (Bekker, Winterbottom & Mooney, 2009), but recognizes the importance of understanding the decision making process. Researchers explain the model of the decision making process (Hogarth, 1988; Simon, 1988; Baron, 1994; Payne & Bettman, 2004) in which decision making is an active process that requires people to combine external information with the thoughts and feelings of the individual, thus selectively integrating external information so as to present an internal mental representation of the decision with regard to the problem at hand. Therefore, the internal representation of the original information becomes very significant (Legrenzi, Girotto, Johnson-Laird, 1993). The individual is not aware of the selections he has made regarding the external information. These choices are dependent upon the amount of attention given to the information at hand (Abhyankar, Bekker, Summers & Velikova, 2007; Lipkus, 2007). Health related issues have a considerable impact on the lives of senior citizens and their well-being. A decrease in the health of an individual is detrimental to the quality of life, and as life expectancy rises, so the need for suitable solutions for the elderly becomes more imperative. We presume that the intuitive process used when operating a tablet, combined with the understanding of the elderly that information could significantly improve their quality of life will lead users to the maximizing of the advantages embedded in digital information. Interaction with the tablet encourages and allows for a deep involvement of the user with the tool and material content presented within. In this paper we will provide insights into the need to support the development of cooperation in health-related decisions, based upon health literacy and electronic health literacy, used with tablets technology among

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senior citizens. This trend is also supported by the Committee on Quality of Health Care in America, 2001. Health literacy relates to the ability of the individual to search for, and comprehend, the medical information needed to make decisions (Nutbeam, 2008).

BACKGROUND

Health Literacy and E-Health Literacy

Research shows that individuals with high levels of health literacy have difficulty understanding medical information, and make less use of services that could assist them in preventive actions (Schillinger et al., 2004; Mancuso et al., 2006). Following the introduction of information technologies to the field of medicine, (Oh, Rizo, Enkin & Jadad, 2005), researchers (Norman & Skinner, 2006) promoted the concept of e-health literacy. This concept describes the ability of the patient to search for, find, understand and assess medical information from digital information sources, and then apply this information to make decisions about medical problems. E-health literacy has been highlighted as a vital factor in society today, as the world today is run by technology (Xie, 2012). Therefore, the internet is considered to have great potential to improve health literacy.

The Growth Rate of the Elderly Population and Its Health in Israel

The elderly population continues to grow and constitutes an increasing percentage of the general population in OECD countries (OECD, 2001). As the years progress, the ratio of the elderly (aged 65+) to the general population increases more and more. According to the population forecast of the Central Bureau of Statistics publicized in 2007, the number of senior citizens is expected to reach 1.367 million people by 2030. This means an increase of 93% in the figures recorded at the end of 2007. This rate of increase is 2.5 times greater than the general population's growth over the same time period (Facts and Numbers, 2009). Analysis of the Central Bureau of Statistics' population census for 2010 shows that as age rises, reports of poor health also rise, with the senior citizen sector (65+) representing 55% of all those reported to be in poor health, a high percentage considering that the elderly comprise only 14% of the general population.

The internet is considered to have great potential to improve health literacy. But one must bear in mind that the elderly members of the population lag behind in internet use (Zickuhr, 2010). Thus, this paper will present a significant proposal to increase the use of digital information sources through the use of tablet technologies among the elderly during the medical decision making process.

The internet has already become an important source of medical information (Bylund et al., Fox, 2007; Huntington et al., 2007). However, patients with low levels of health literacy such as the elderly sector of the population, also have low levels of e-health literacy (Xie, 2008), and there is a growing need to deepen the understanding of interventional methods that will make medical information more accessible to the elderly sector.

Use of the Internet among the Elderly

Based on data from the Central Bureau of Statistics, in 2010, the number of the elderly (65+) within the general population stood at 14.7% and only 6.6% of the internet-user sector was from the elderly popula-

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