An Empirical Note on Health Information Digital Divide: A Study of Indian Patients

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ABSTRACT

Availability of healthcare information on internet has made it possible for patients or their relatives to search for such information. This study was undertaken to find answers to such questions. In all 754 respondents participated in the survey. The variables selected from literature survey and exploratory study are Health Information Digital Divide, Income, Having E-mail id, access to internet, geographical location, Education, family-type, age and gender. As the data is categorical the significance of difference has been calculated using Chi-square test. Later discriminant analysis was conducted to predict patients who make online health information search and the ones who do not. The result show that Income, Having E-mail id, access to internet, geographical location, Education and gender are significant factors that determine the propensity of people for online healthcare search. Age and family-type, however, were found to have no impact on such a behavior. Using discriminant analysis 94.5 percent patients who make online health information search could be correctly predicted.

KEYWORDS
Access to Internet, Age and Gender, E-Mail ID, Education, Family-Type, Geographical Location, Health Information Digital Divide, Income

INTRODUCTION

Human societies across the globe have had a great divide between the rich and the poor – “Haves” and Have-nots”. Earlier the divide was rooted in land – those who possessed it and those who were landless. Natural resources, industry, technology, language consolidated the divide in favour of “Haves.” It is a human endeavor to bridge this gap. Arrival of information technology has once again emerged as another factor in the divide. A digital divide implies socio-economic inequality in access to, use of, or impact of information and communication technologies (ICT) (US Department of Commerce, 1995). How does the digital divide affect healthcare information search is an important concept to ensure reasonable healthcare for all? Availability of healthcare information on internet has made it possible for patients or their relatives to search for such information. Considering the delicate nature of such an information as well as its great need felt by the society it is important to know who are these people who actively search for online healthcare information and also those who are unable to do so. This study was undertaken to find answers to such questions.

Literature Review

Healthcare, along with agriculture, remains the core concerns for human societies as these are most elemental to life itself. Consequently, hence how the digital divide affects health care is an important question. Further Information is considered a vital resource in health condition improvement because...
it is “the first step to every healthy choice” (Gann, 1986) and it is “on a continuum between health education and health promotion” (Rolinson, 1998).

Digital divide is conceptualized on the basis of attributes that distinguish to describe the divide. Most common happen to be income, education, age, geographic location, race, gender, age, skills, awareness, political, cultural and psychological attitudes and motivation (Hilbert, 2011; Mossberger, Tolbert & Gilbert, 2006; Lawton & Tait, 2007; Wang, 2001; Guillen & Suárez, 2005; Wilson, 2004; Carr, 2007; Wilson, Wallin & Reiser, 2003; Brinson, 2002; Losh, 2004), economic (McLaren & Zappalà, 2002), political (Hung, 2004) and cultural (Press, Foster, Wolcott et al., 2002). Further digital divide is a dynamic phenomenon in a sense that as a gap closes, the other gaps open up (van Dijk, 2002; van Dijk and Hacker, 2003). As the access gap is being narrowed skill and usage gaps have cropped up.

Online Health-information: Healthcare has been affected because of the digital revolution we have experienced in last 3 decades. Before the advent of the Internet, healthcare providers were the sole and legally authorized individuals with access to gain, interpret, analyze and convey health information. This naturally resulted in their having exalted status in their relations with patients or health consumers (Giddens, 1991; Goldsmith, 2000; Hardey, 1999). Internet has at once opened the floodgates of information at the disposal of patients and common men. It, therefore, needs to emphasis that, healthcare consumers seeking online information do not portray merely a change in transition in the way they seek information, or just an opportunity to avail what they could not earlier, but a dynamic shift in their empowerment vis-a-vis their own health. (Cotten, 2001; Diaz, 2001). They have far greater ability to actively understand and influence their health status (D’Alessandro & Dosa, 2001), assume more responsibility for their own health, and participate in health care decisions (Anderson, Rainey & Eysenbach, 2003). This ability, though, has brought forth certain misgivings (Henwood, 2003) yet is being hailed as a right to information and physicians are being implored to treat patients as individuals and not as treatment opportunities’ (Gann and Needham, 1992). Even Information professionals, advocate empowerment of people through accessible health information (Calvano, 1996). Health information is promoted as essential in healthcare as it is believed to provide both direction and rationale for guiding strategic health behaviors, treatments, and decisions (Kreps, 2001)

More and more patients are now accessing internet increasingly for finding answers to their queries on health issues – disease state, symptoms, precautions and medication options as also are able to self-diagnose, investigate their conditions, share experiences with other patients and care-givers, and gain knowledge about treatment options. Access to healthcare information has been generally acknowledged as a positive development despite the traditional and contemporary misgivings in this regard and consequently it is important to identify the manner and extent of digital divide in accessing online information on healthcare by the patients. Demographic factors have been found to be critical by various researchers who identify age, gender, geographical location, income, education and language as the prime barriers that perpetuate digital divide across the globe. Influence of digital divide in the general population has been a focused area of research. (Cotten, & Gupta, 2004; Kalichman, Weinhardt, Benotsch et al., 2002).

Van Dijk and Hacker (2003) explains the reason for digital divide as in terms of access to digital resources being a multi-faceted phenomenon comprising mainly of four factors namely psychological, material, skills and usage, that regulate access.

In India Internet today is the foremost source of uninterrupted and instant information. (Cotten & Gupta, 2004). It is economical and is available widely across the country and hence in India also, a large majority of people use net regularly and they also search health related information available online. As in the developed countries the developing countries people too are searching out their health-care related queries by consulting doctors. In recent years, Indians have also developed greater awareness for their healthcare. Due to the emergence of internet the health information seeking behavior of the patients has totally altered. Regular online search is becoming common and accepted. Since it is effortless to use, hence very frequently people visit online and search information related