Chapter VI
The Integrative Model of E–Health Use

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ABSTRACT

This chapter overviews an integrative model of e-health use that connects social disparities at the population level with individual characteristics related to the amount and type of online health information usage, thus providing an account of the ways in which societal disparities play out in individual e-health usage patterns. Based on an overview of the literature on e-health disparities, we suggest that social-level disparities are manifested in the form of individual-level differences in health information orientation and health information efficacy, which in turn influence the amount and type of online health use. Exploring the underlying social structures that enable individual-level access, motivation, and ability to utilize the Internet for health and how these structures interact with individual motivation and ability advances our understanding of the Internet, the digital divide, and health disparities.

INTRODUCTION

Since its early history in the 1960s, the Internet has grown to contain some 80 million Web sites with a projected 137 million Americans using the Internet as of June 2005 (Fox, 2005a). Obtaining health information is one of the most widespread uses of the Internet. This category increased 59
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percent between 2000 and 2003 (Madden & Rainie, 2003), and the most current Pew Internet and American Life Project data (Fox, 2005b) indicates that eight in ten Internet users have gone online to search for health-related information. Other uses of the Internet for health include, but are not limited to, participating in online support groups, consulting with health professionals, purchasing medication, and different levels of involvement in telemedicine and/or telehealth projects (Cline & Haynes, 2001; Dutta-Bergman, 2004c).

In addition to the sheer volume of individuals using the Internet for health purposes, health-focused Internet use patterns have quickly evolved from consumers viewing static information-based pages to engaging in interactive health management initiatives. These developments support the need for scholars to investigate issues related to the Internet and its increasing use for health-related outcomes. In addition, in 2001, approximately 47% of consumers reported having used the health information gathered from sources beyond their doctor in a treatment decision (Cline & Haynes, 2001). This active consumer participation in health-related decision making marks a dramatic shift in the conceptualization of the patient from a passive receiver of health services to an active collaborator or co-participant in health care decision making (Eysenbach & Diepgen, 1999; Marks & Lutgendorf, 1999). Increasingly, researchers are addressing the role of e-health use in the context of medical decision making because its usage ultimately influences the health of the consumer by impacting the quality of the health-care decision, knowledge of and access to healthcare resources, confidence in the decision, the quality of care received, and the quality of health outcomes associated with the health-care decision (Brody, Miller, Lerman, Smith, & Caputo, 1989; Cotten & Gupta, 2004; Pontes & Pontes, 1996).

One of the areas of growing interest in healthcare is the role of the digital divide in the realm of health outcomes, particularly in the context of access to and utilization of health resources (Dutta-Bergman, 2004b). Several lines of work explore the intersections between the research areas of digital divide and health disparities, suggesting that the distribution of health disparities mirror the distribution of communication technologies; furthermore, the distribution of health information seeking and processing skills also tend to map the broader patterns of differences in health (Dutta, Bodie, & Basu, 2008). For instance, studies continually show that when compared to Whites, racial and ethnic minorities are less likely to have access to healthcare and are more likely to be impacted by and die from most major diseases (e.g., cancer, diabetes) (Bassett & Krieger, 1986; Feldman & Fulwood, 1999; Smith & Kington, 1997). This is even more discouraging considering that the majority of chronic diseases are preventable (CDC, 2004). Racial and ethnic differences in health disparity are mirrored by an equally troubling disparity in access to and use of online health information (Talosig-Garcia & Davis, 2005) and other e-health services (Hsu et al., 2005).

The purpose of this chapter is to explore the role of individual and situational differences in the motivation and ability to use the Internet for health purposes and to show how these differences relate to similar differences in health status and well-being, reflecting broader patterns of socio-structural disparities. We examine the Integrative Model of E-Health Use (IMEHU) (Dutta-Bergman, 2006) and extend its theoretical ambit and practical implications by exploring the underlying social structures that enable some individuals access and motivation to utilize the Internet for health and how these structures interact with individual motivation and ability. In the process, we advance our understanding of the intersection between the Internet, the digital divide, and the impact such an interlope has on health disparities. Furthermore, we extend current understanding of the digital divide literature by suggesting that the question of usage goes beyond simple access/inaccess to the realm of patterns of usage and skills needed to use health-based technologies.