

Running Head: Socioeconomic Barriers

Addressing Socioeconomic Barriers to Women's Health Care:

Can the Internet Help?

LaKesha Anderson

George Mason University

Catherine K. Wright

George Mason University

Abstract

Since mid-1990s women, historically excluded from many medical studies, have become more relevant in health studies. This emerging interest in modern women's health coincided with the availability of the Internet, which is empowering women to take a more active role in their health. Literature suggests an overall acceptance of the recent shift towards "e-health." However, it should be noted that there are significant barriers preventing the groups who could benefit most from access to online health information from actually receiving information. This paper looks at those barriers, as they are created by socially constructed factors such as race, class, and sexual orientation, while also providing background on how the shift towards e-health is impacting women's health care.

Addressing socioeconomic barriers to women's health care: Can the Internet help?

It has only been since the mid-1990s that women have become relevant in health studies, having been excluded from previous medical training and clinical trials (“How Far We’ve Come,” 1999; Sargent & Brettell, 1996). The recent interest in women’s health studies stems from the work of feminist scholars and health professionals dedicated to empowering women to take a more active and informed role in their health care. This re-emerging interest in women’s health coincided with the availability of a new form of mass media, the Internet, to the public. According to Parrott and Condit (1996), traditional media (television, radio, and books) have historically ignored women’s health or reported only breaking or outdated news on the topic. Additionally, Parrott and Condit (1996) claim that traditional media are limited in what information they can provide women seeking health care information. For instance, newspapers often report only new and sensational information; magazines tend to focus on the dramatic and timely; and books tend to be quickly outdated (Parrott & Condit, 1996). Therefore, the Internet, with its ability to report both current and archival information, is a new form of mass media deserving attention by researchers.

By gaining a better understanding of Internet trends in health care, mass media scholars can begin closing the knowledge gap that exists for women using mass media to seek health-related information. The Internet has changed the way in which consumers seek information. While used for nearly 20 years in the private sector (prior to its availability to the public in the 1990s), the Internet sparked a demand for personal computers and made once inaccessible information available to numbers of people throughout America (Edworthy, 1999). With information so easily accessible, it is important that scholars study how online messages are being conveyed and interpreted by the target audience, particularly how these messages impact

minority women and lesbians. This paper investigates the relationship between women's health and the Internet while exploring socioeconomic disparities to healthcare.

Socioeconomic Disparities to Health Care

While it is important to the success of the women's health movement that women are now being included in scientific health research, it is equally important to understand the obstacles facing the movement in the United States in order for researchers and medical professionals to begin eliminating gender discrimination in health care practices. While the long history and remarkable accomplishments of the women's health movement should be recognized, women and health professionals must realize that it may be years before clinical studies can provide the information needed to gain a clearer understanding of how diseases manifest in women. Although the women's health movement has empowered many women with the resources and information they need to demand equal access to health care, there are women who are nevertheless denied these basic rights because of class, race, and/or gender oppression. According to Williams and Collins (1995), "racial and socioeconomic inequality in health is arguably the single most important public health issue in the United States" (p. 380-381).

Although gender oppression is a common critique among white women, race and class oppression are not. American health systems are largely focused on the health care issues facing the majority population (Green, 2003). In fact, most health care systems and organizations reflect a white, middle-class perspective to health care, an attitude that resulted in many minority populations forming their own women's health alliances, encouraging white women to confront the link between health care and race and class discrimination (Morgen, 2002). Gary, Sigsby, and Campbell (1997) claim that access to adequate health care depends on

a multitude of factors including “economics, access, levels of acculturation and assimilation, education, language competency, and the level at which cultural diversity is acknowledged and respected” (p. 145). Unfortunately, minority populations are more socioeconomically disadvantaged and more likely to live in poverty, work in more hazardous jobs, live in more polluted areas, have lower educational levels, and are less likely to have insurance coverage than white populations (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Talsma, 2002; Stone & Dula, 2002; Pappas, 1994; Nickens, 1991; Williams & Collins, 1995; Bobinski, 2003).

Many scholars have addressed health care disparities, most often focusing on those facing African-American (Lurie, 2002) and Latino populations (Balsa, Seiler, McGuire, & Bloche, 2003). Unfortunately, it is all too common that nonwhite populations experience racism and sexism in the examining room. In fact, physician prejudice is one of the most frequently cited explanations for disparities in health care (Bobinski, 2003; Balsa et al, 2003). African-Americans are particularly likely to receive less satisfactory care than whites (Bobinski, 2003). Members of this racial group are less likely to receive high-technological procedures despite being the most effective means of managing many illnesses (Shelton, 2000). Shelton (2000) says that African-Americans are also less likely than whites to have access to surgical procedures, be hospitalized, and have routine tests conducted, such as having blood drawn. Scholars claim African-American’s decreased access to medical research and technology is only one of the many problems hindering the advancement of minority health care. There is a long history of racial discrimination in medicine toward African-Americans (Boulware, Cooper, Ratner, LaVeist, & Powe, 2003). Boulware et al. (2003) claim that this history is one of the reasons why many African Americans distrust the medical system. In fact, some studies suggest

that African-American's knowledge of the Tuskegee incident specifically impacts their trust in medical research and may cause them to refuse participation in medical studies (Shavers, Lynch, & Burmeister, 2000; Shavers et al., 2001).

According to Balsa et al. (2003), even unbiased physicians may unintentionally revoke patients of their right to receive adequate medical care. Those physicians who "communicate less well" with minority patients may increase both their uncertainty and the patient's uncertainty about their illness (Balsa et al., 2003, p. 203). Also, language barriers and cultural differences may cause some physicians to make decisions about treatment that they would make differently for white patients (Balsa et al., 2003). Unfortunately, researchers have not fully explored the link between racial and ethnic attitudes and access to health care (Boulware et al., 2003; Balsa et al, 2003). One such project that is focused on addressing this topic is the Racial and Ethnic Approaches to Community Health demonstration project, being facilitated by the US Department of Health and Human Services in response to the Federal Race Initiative (Ma'at, Fouad, Grigg-Saito, Liana, McLaren, Pichert, Shapiro, Troutman, 2001). Called REACH 2010, the project seeks to eliminate health disparities faced by various racial and ethnic groups. The project focuses on reducing barriers to six particular health issues: infant mortality, breast and cancer screenings, cardiovascular diseases, diabetes, HIV and AIDS, and immunizations (Ma'at et al., 2001). Despite this much-needed effort to reduce disparities to health care for minority populations, much more attention is needed before racial and ethnic disparities to health care can be properly understood and addressed.

As Williams and Collins (1995) point out, it may be difficult to measure the level of health disparity in many populations because they are excluded from research. For instance, married women are typically associated with the economic stature of their husbands while

single women are often affiliated with the status of their fathers, regardless of whether the women are employed (Williams & Collins, 1995). Additionally, medical communities largely assume that patients are heterosexual; therefore, lesbian women may avoid the health care system because they dread discussing sexual orientation with physicians or because they fear discrimination (Endometriosis Research Center, 2003). Moreover, physicians may neglect to recognize the differing attitudes of multi-cultural patients. Physicians often treat non-American females who access health care in the United States the same as they would an American female patient, which can create problems if women are not active participants in their health care because of culturally-imposed standards regarding the roles of women (Kielich & Miller, 1996) as compliant and submissive.

Barriers to adequate health care exist for all socioeconomically disadvantaged populations. However, health care organizations rarely act as change agents and many majority class members deny discrimination as being a problem (Stone & Dula, 2002). Therefore, scholars and medical professionals must continue to address these issues, advocating for the acceptance of diversity in health care. Until women are provided access to quality health care information that specifically meets the needs of women, it is crucial that women's health advocates continue providing relevant information and support to women of all backgrounds through traditional and emerging media, as media act as "translators" for women, determining what is important, credible, and valuable (Parrott & Condit, 1996, p. 7). While each form of media has both strengths and weaknesses, according to Parrott and Condit (1996), each form of mass media should be supplemented with another. Therefore, it is important to study the women's health from a feminist perspective as it emerges in all media. Because much work has focused on the messages women receive in traditional media such as newspaper, television,

radio, and books, it is important to study the health messages being sent by new forms of mass media, particularly the Internet.

The Internet: Redefining Health Communication

The original premise of the Internet was to allow a network of computers to share information. From the beginning of the Internet, communication between geographically distant locations was a priority. “The [original] net was designed with direct exchanges in mind. Getting computers to cooperate via intelligent programs is not a new invention” (Barkai, 2001, p. 42). First used by academics and the military, the ability to share information among people, across great distances via the Internet has eventually come to be adopted by millions of people.

Over 202 million people in America have Internet access (“Internet World Stats,” 2006). According to the U.S. Census Bureau (2006), in 2005 the projected population was 296.4 million people. The promising news is that approximately two-thirds of the U.S. population has access to the Internet, through home, work, school, or public libraries. Nguyen, Carrieri-Kohlman, Rankin, Slaughter, and Stulbarg (2004) believe there is a trend that suggests the Internet “will become a pervasive and accessible form of media in the years to come” (p. 201). The troubling news is that the population discussed in this paper is in the one-third that is most likely to not have access, or constant access, to the Internet and its resources.

Studies estimate that between 93 and 113 million American adults have used the Web to get health or medical information (Nguyen et al., 2005, p. 201; Fox, 2006, p.8) and 17 million people said they “played a crucial or important role as they helped another person cope with a major illness” (Madden & Fox, 2006, p. 1). Fox and Rainie (2006) noted there are more than 17,000 health-related websites (p. 5). Additionally, 21 million people who sought health information from websites were swayed by the information they discovered (p. 3).

Within the Pew research noted here, little delineation between race, ethnicity, or sexual preference was made. In order to better understand the underserved populations, noting who regularly used the Internet to seek health information would be helpful just as it would to also note who was not. Articles, such as Fox and Rainie (2006), state that women are more inclined to seek information online regarding health issues than are men (p. 6). Most often this is because women often seek information for a child, rather than solely seeking information regarding a medical issue for themselves.

The digital divide has been cited by numerous people as the means by which certain demographic classes are unable to access the Internet as easily as others. Fox (2005) noted that “certain groups continue to lag behind [in getting access]: Americans age 65 and older, African-Americans, and those with less education” (p. 6). Kadel (2006) reported that even if students of lower income start off with equally distributed computing resources, “the gap between rich and poor widens as students move through their school years” (p. 34).

Leaffer (2006) warned that “disparities in the availability of Internet access and variations in the level of computer sophistication among users” may prevent equal access to information online (p. 53). She continued by disclosing that “ironically, the individuals best able to use the Internet to research health topics...were in one of the demographic niches least prone to serious medical problems” (p. 55).

Despite the dire-sounding news regarding the digital divide, there is hope for underserved populations. Fox and Rainie (2006) discovered that “the seeking of health information is equally compelling to all racial and ethnic groups” (p. 9). They also noted that information found does not correlate with income and discovered that those seeking information were more likely to belong to a minority populations than be from households where the income

was less than \$50,000 (p. 9, 20). If this trend continues, it is feasible to extrapolate that more and more of the underserved populations will have access to the Internet and its information.

Leaffer (2006) described the Internet as having the most significant impact on health care. One of the main reasons people seek health information online is for the convenience of the search for information (Fox & Rainie, 2006). People feel they can find information online that is either not available to them through traditional means or that supplements information they were given to them by their physician's office or pharmacist. Another reason is the attractiveness of anonymity. Research finds that the ability to search for health information online without providing identifying information is particularly attractive to both women and minorities. As Fox and Rainie (2006) explain, "For African-Americans and Hispanics, the Web's appeal might lie in the fact that it is especially empowering to them when they can get information to supplement information from sources such as doctors, clinics, or hospitals" (pp. 10-11).

Women and minorities, as they find their voices, have discovered that there is a wealth of information online. They use this information to supplement as well as to learn. Hines (2001) discovered that the availability of health information on the Internet has resulted in patients seeking information at increased rates. Supporting this idea is a study conducted by Fox and Fallows (2003) which found that 80% of adult Internet users have sought health-related information online, making health-information seeking the third most popular online activity. Milio (2001) cites health information as being the most explored news topic by Internet users.

According to Kerwin (2002), the Internet has the potential to greatly enhance the way people seek health-related information and in turn improve the overall quality of user's health care. Additionally, the Internet serves as a method of empowering patients by providing

increased access to continually updated health care information (Waldo, 1998; Crandall, Zitzelberger, Rosenberg, Winner, & Holaday, 2001). Though there are numerous benefits of web-based health information, scholars point out there may be limitations associated with Internet health care information.

One concern voiced by Nguyen et al. (2004) is that although underserved populations may have access to the Internet in public places, “consumers may be reluctant to conduct transactions in public settings” (p. 206). There is also some concern from physicians and health-care providers that patients might overwhelm the healthcare worker with information from the Internet. Alexander and Ziebland (2006) wrote:

There has been considerable debate about the possible advantages of the wide availability on the web of information about health issues. Debate originally focused on the dangers of members of the public seeking their own health information on the net – commentators were concerned that the public would be misled, that they would swamp healthcare professionals with ‘sheaves’ of printouts from the internet, that they would make unreasonable demands and that professional relationships would be changed for the worse (p. 389).

It does not appear that patients have overwhelmed the healthcare system with unreasonable demands. In fact, of those using the Internet for health-related information, 70% say the knowledge they gain influences their medical decisions (Hawkins, 2001). This means that prudent healthcare professionals need to recognize that service users are increasingly going to access the internet, whether or not patients choose to tell providers that they are doing so (Alexander & Ziebland, 2006, p. 389).

Savvy providers have done just that. An immense amount of health-related information is available online; educational literature, health databases, and interactive tools are easily accessible to web users (Brooks, 2001). Many independent and group physicians are hiring web programmers and software developers to design websites that provide information to the general public and allow patients to access medical records (Brooks, 2001; Deye, Kahn, Jimison, Renner, Wenner, & Gabello, 1997). As a result, health care information is empowering patients to take an equal part in their medical interactions with physicians (Ziguras, 2000, p. 37).

Bundorf, Wagner, Singer, and Baker (2006) noted:

Internet-based resources are likely to become an increasingly important tool in reaching patients. This creates an opportunity for providers to respond proactively by encouraging the use of Internet-based tools to provide information to and to communicate with patients in beneficial ways” (p. 833).

Lastly, Macias, Lewis, and Smith (2005) confirmed health care resources online include thousands of health and medical information websites, chat rooms, and communities that target individuals seeking information on specific health and medical concerns as well as those seeking support (p. 210).

Why The Internet?: Women-Friendly Territory

Communication apprehension may also result in women turning to the Internet. Booth-Butterfield, Chory, and Beynon (1997) report that women who suffer from communication apprehension tend to avoid open discussions about health issues. Less assertive women may also turn to the Internet for information. Searching for information on the Internet can alleviate these problems, as those with apprehension are free to seek information anonymously. “While anonymity has an appealing power, as highlighted earlier, at the same it can be counter-

productive insofar as it has a limited capacity to translate private experience and understandings into meaningfully visible, and thus publicly recognised, terms” (Orgad, 2005, p. 153).

Nevertheless, posting on bulletin boards online or chatting in chat rooms enables reticent patients to freely seek both support and information from online sources.

Women may find the Internet offers a community that encourages discourse and satisfies their interpersonal needs while allowing them to briefly transcend power structures (Jackson et al., 2001; Gersch, 1998) and socioeconomic discrimination (The Boston Women’s Health Book Collective, 1998). Leaffer (2006) stated that people gain empowerment when they have the ability to access information about health, medicine, and pharmaceuticals (p. 53).

Support, found in various forms, “offers numerous sites for quick, easy, and relatively cheap communication with fellow-sufferers. A strong sense of coalition, collaboration, and networking often emerges from patients’ online experience” (Orgad, 2005, p. 150). Alexander and Ziebland (2006) found that both females and males who have been diagnosed with cancer “have been shown to meet some of their unmet support and information needs by using the Internet” (p. 389). Additionally, Orgad (2005) found that “participants often consider their engagement in online sites as a way of breaking the silence and overcoming feeling such as fear, uncertainty [and] confusion” (p. 146). However, this may not be true for women with significant barriers to access.

Lesbian women may be particularly more reliant on alternative forms of information as physician homophobia can result in mistreatment or misdiagnoses. Makadon (2006) writes about his disappointment during a routine medical exam, in which he explains there was little discussion about his sexual orientation. Makadon (2006) says “otherwise knowledgeable providers are often uninformed about basic issues that are essential to providing high-quality

care to [the gay and lesbian] population” (p. 895). More importantly, there is a reported lack in “lesbian-specific research and...misconceptions about risk...can negatively affect both the ability of lesbians to seek health care and access to treatment itself” (p. 896).

Most researchers agree that the Internet provides people with increased access to information, but some question the confidentiality, quality, and reliability of these resources (Edworthy, 1999; Okamura et al., 2002; Haddow, 2003; Kerwin, 2002; Waldo, 1998; Brooks, 2001; Hawkins, 2001). In fact, Lueg, Moore, and Warkentin (2003) report that although there are potential benefits to patients, using the Internet to acquire health research has not been as successful as was expected. This is due in part to Waldo’s (1998) claims that the public is concerned about the accessibility and security of the Internet. Low-income and unemployed individuals, as well as those who suffer with neurological disorders, may be unable to access the Internet (Edworthy, 1999) while rural and less affluent populations may be less likely to have access to reliable and secure Internet service (Milio, 2001).

Conclusion

Since the mid-1990s, the Internet has created a means through which people could access information regarding medical issues. They could not only seek information, but they could also share it. In the past decade, the search for information has blossomed to the point that health information is searched for at a rate of 85 times per second (Leaffer, 2006, p. 56).

The Internet is the fastest-growing form of mass media, yet little research has been conducted on motives for Internet usage. Researchers claim online health information is an empowering tool for consumers, enabling them to take a more active role in their health care. However, questions concerning the quality of Internet information abound. Physicians, though, claim that patients typically benefit from information found online. In part, it is because these

same physicians are the ones putting information onto the Internet so that their patients, and possibly others, can find pertinent information.

These are among the plethora of reasons why it is important that researchers examine the content of websites dedicated to female conditions. It is particularly important to study the how this move towards Internet health research impacts those who may be more inclined to search the Internet due to issues that hinder physician-patient interactions such as race, class, sexual orientation, or even religion.

In the early 20th century, “there was hardly any infrastructure for women to discuss their condition with fellow-sufferers, to exchange, for instance, information about treatment, or share feelings of uncertainty, shame, pain, or anxiety” (Orgad, 2005, p. 155). A century later, while not in a perfect world, it is papers like this that will hopefully increase awareness of these issues among the health and information technology professionals, as well as communication specialists, so that women and disadvantaged minorities will have a solid infrastructure through which they can easily find the information they need.

References

- Alexander, J. & Zeibland, S. (2006). The web – bringing support and health information into the home: The communicative power of qualitative research. *International Journal of Nursing Studies*, 43, 389-391.
- Barkai, D. (2001). *Peer-to-peer computing: Technologies for sharing and collaborating on the net*. Intel Corporation.
- Balsa, A.I., Seiler, N., McGuire, T.G., & Bloche, M.G. (2003). Clinical uncertainty and healthcare disparities. *American Journal of Law & Medicine*, 29, 203-220.
- Betancourt, J.R., Green, A.R., Carrillo, E., & Ananeh-Firempong, O. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports*, 118, 293-303.
- Bobinski, M.A. (2003). Health disparities and the law: Wrongs in search of a right. *American Journal of Law & Medicine*, 29, 363-381.
- Booth-Butterfield, S., Chory, R., & Beynon, W. (1997). Communication apprehension and health communication and behaviors. *Communication Quarterly*, 45, 235-251.
- Boulware, E.L., Cooper, L.A., Ratner, L.E., LaVeist, T.A., & Powe, N.R. (2003). Race and distrust in the health care system. *Public Health Reports*, 118, 358-366.
- Brooks, B.A. (2001). Using the internet for patient education. *Orthopaedic Nursing*, 20, 69-77.
- Bundorf, M. K., Wagner, T. H., Singer, S. J., & Baker, L. C. (2006). Who searches the internet for health information? *Health Research and Educational Trust*, 41, 819-836.
- Crandall, C., Zitzelberger, T., Rosenburg, M., Winner, C., & Holaday, L. (2001). Information technology and the national centers of excellence in women's health.

Journal of Women's Health & Gender-Based Medicine, 10, 49-55.

Deye, D.L., Kahn, G., Jimison, H.B., Renner, J.H., Wenner, A.R., & Gabello, W.J. (1997).

How computers enrich patient education. *Patient Care*, 31, 88-100.

Endometriosis Research Center. (2003). *Woman2Woman*. Retrieved October 16, 2003

from <http://www.endocenter.org/woman2woman.htm>.

Edworthy, S.M. (1999). World wide web: Opportunities, challenges, and threats. *Lupus*, 8, 596-605.

Fox, S. (2005, October 5). Digital divisions. Pew Internet & American Life Project.

Retrieved December 14, 2006 from [http://www.pewinternet.org/pdfs/PIP_](http://www.pewinternet.org/pdfs/PIP_Digital_Divisions_Oct_5_2005.pdf)

[Digital_Divisions_Oct_5_2005.pdf](http://www.pewinternet.org/pdfs/PIP_Digital_Divisions_Oct_5_2005.pdf)

Fox, S. (2006, October 29). Most internet users start at a search engine when looking for

health information online. Very few check the sources and date of the information they find. *Pew Internet & American Life Project: Online Health Search 2006*, 1-22.

Retrieved December 14, 2006 from

http://207.21.232.103/pdfs/PIP_Online_Health_2006.pdf

Fox, S. & Fallows, D. (2003). Internet health resources: Health searches and email have become

more commonplace, but there is room for improvement in searches and overall internet

access. *Pew Internet & American Life Project*. Retrieved October 16, 2003 from

<http://www.pewinternet.org>.

Fox, S. & Rainie, L. (2006, November 26). The online health care revolution: How the

Web helps Americans take better care of themselves. *Pew Internet & American*

Life Project: Online life report. Retrieved December 14, 2006 from

http://www.pewinternet.org/pdfs/PIP_Health_Report.pdf

Gary, F., Sigsby, L.M., & Campbell, D. (1997). Feminism: A perspective for the 21st century.

Issues in Mental Health, 19, 139-152.

Green, A. (2003). The human face of health disparities. *Public Health Reports, 118*, 303-309.

Haddow, G. (2003). Focusing on health information: how to assess information quality

on the internet. *The Australian Library Journal, 52*, 169-178.

Hawkins, J.A. (2001). Patient internet usage potentially dangerous. *Physician*

Executive, 27, 7.

Hines, S. E. (2001). Enhancing your practice: Sharing decision making with patients.

Patient Care, 7, 21-35.

How far we've come. (1999, December). *Harvard Women's Health Watch, 6*, 2.

"Internet World Stats." (2006). Internet usage statistics for the Americas. Retrieved

December 14, 2006 from <http://www.internetworldstats.com/stats2.htm#north>.

Kadel, R. (2006, April). Equity in ed tech. *Learning & Leading with Technology, 33*,

34-35.

Kerwin, K.E. (2002). The role of the internet in improving health care quality. *Journal of*

Health care Management, 47, 225-237.

Kielich, A.M. & Miller, L. (1996). Cultural aspects of women's health care. *Patient Care,*

30, 60-86.

Leaffer, T. (2006, May-June). The digital health-care revolution: Empowering health

consumers. *The Futurist, 40*, 53-57.

Lueg, J.E., Moore, R.S., & Warkentin, M. (2003). Patient health information search: An

exploratory model of web-based search behavior. *Journal of End User Computing, 15*,

49-62.

- Lurie, N. (2002). Addressing health disparities: Where should we start? *Health Services Research, 37*, 1125-1128.
- Ma'at, I., Fouad, M., Grigg-Saito, D., Liana, S.I., McLaren, K., Pichert, J.W., Shapiro, L.D., & Troutman, A. (2001). REACH 2010: A unique opportunity to create strategies to eliminate health disparities among women of color. *American Journal of Health Studies, 17*, 93-101.
- Macias, W., Lewis, L. S., & Smith, T. L. (2005). Health-related message boards/chat rooms on the web: Discussion content and implications for pharmaceutical sponsorships. *Journal of Health Communication, 10*, 209-223.
- Makadon, H. J. (2006, March 2). Improving health care for the lesbian and gay communities. *Massachusetts Medical Society, 354*, 895-897.
- Milio, N. (2001). The internet, public health, and the globalization of just about everything. *Journal of Epidemiology & Community Health, 55*, 74-80.
- Morgen, S. (2002). *Into our own hands: The women's health movement in the United States, 1969-1990*. New Jersey: Rutgers University Press.
- Nguyen, H.Q., Carrieri-Kohlman, V., Rankin, S. H., Slaughter, R., & Stulbarg, M. S. (2004). Supporting cardiac recovery through ehealth technology. *Journal of Cardiovascular Nursing, 19*, 200-208.
- Nickens, H.W. (1991). The health status of minority populations in the United States. *The Western Journal of Medicine, 155*, 27-33.

- Okamura, K., Bernstein, J., & Fidler, A.T. (2002). Assessing the quality of infertility resources on the world wide web: Tools to guide clients through the maze of fact and fiction. *Journal of Midwifery & Women's Health, 47*, 264-268.
- Orgad, S. (2005). The transformative potential of online communication: The case of breast cancer patients' Internet spaces. *Feminist Media Studies, 5*, 141-161.
- Pappas, G. (1994). Elucidating the relationship between race, socioeconomic status, and health. *The American Journal of Public Health, 84*, 892-894.
- Parrott, R.L. & Condit, C.M. (Eds.). (1996). *Evaluating women's health messages*. Thousand Oaks, CA: Sage Publications
- Sargent, C.F. & Brettell, C.B. (1996). *Gender and health: An international perspective*. New Jersey: Prentice Hall.
- Shavers, V.L., Lynch, C.F., & Burmeister, L.F. (2000). Knowledge of the Tuskegee study and its impact on the willingness to participate in medical research studies. *Journal of the National Medical Association, 92*, 563-572.
- Shavers, V.L., Lynch, C.F., & Burmeister, L.F. (2001). Factors that influence African Americans' willingness to participate in medical research studies. *Cancer, 91*, 233-236.
- Shelton, D. L. (2000). African-American health: Study in black and white. *American Medical News, May 1, 2000*. Retrieved March 24, 2004 from:
<http://www.ama-assn.org/amednews/2000/05/01/hlsa0501.htm>
- Stone, J.R. & Dula, A. (2002). Wake-up call: Health care and racism. *Hastings Center Report, 32*, 48.
- Talsma, J. (2002). Physicians can help bridge gap in health-care disparities. *Ophthalmology Times, 27*, 1.

U.S. Census Bureau. (2006). Population Finder. Retrieved December 14, 2006 from
[http://factfinder.census.gov/servlet/SAFFPopulation?_submenuId=population_0&
_sse=on](http://factfinder.census.gov/servlet/SAFFPopulation?_submenuId=population_0&_sse=on)

Waldo, B.H. (1998). It's time to adopt internet technology. *Nursing Economics*, 235, 325-330.

Williams, D. R. & Collins, C. (1995). U.S. socio-economic and racial differences in
health: Patterns and explanations. *Annual Review of Sociology*, 21, 349-386.

Ziguras, C. (2000). From patients to consumers. *Arena Magazine*, 37.