

# Issues in Teen Technology Use to Find Health Information

Dr. Lesley Farmer  
California State University Long Beach  
1250 Bellflower Blvd., Long Beach CA 90840  
USA  
Lesley.Farmer@csulb.edu

## Abstract

*Teens need and want information about health issues. Even though teens tend to prefer asking people for help, increasingly they access digital resources because of the Internet's availability, affordability, and anonymity. Teen health information interests vary by age, gender, social situation, and motivation. This paper discusses several issues about how teens access and seek that information, how teens use technology for seeking health information, and offers recommendations to insure optimal library services to address health information needs of all teens.*

**Key Words:** gender, health, information seeking, Internet, social media

Teens need and want information about health issues. Even though teens tend to prefer asking people for help, increasingly they access digital resources because of the Internet's availability, affordability, and anonymity. Teen health information interests vary by age, gender, social situation, and motivation. This paper discusses several issues related to teen technology use for seeking health information, and offers recommendations to insure optimal library services to address health information needs of all teens.

To investigate this issue, I reviewed the professional literature available through several database aggregators: CINAHL, ERIC, ejournals, Academic Search, and Dissertations Abstracts. Because the advent of social media has expanded the dissemination and interaction with health information, I limited my review to research published since 2007. I focused on the population of youth between 12 and 18 years old within the United States. Furthermore, I focused on information seeking behaviors more than information receiving efforts; that is, intentional information seeking rather than passive consumption of other-initiated information disseminators.

## Teen Information Seeking Behaviors

Seeking health information is a normal teen task, part of their maturation processes. Such seeking is part of teens exploration of themselves and the world around them (Agosto & Hughes-Haseell, 2006). The range of health information sought by teenagers demonstrates varied needs: illnesses, accidents, chronic conditions, STDs (including HIV/AIDS), nutrition, fitness, sexual activity, pregnancy, and mental health issues. The most popular topics deal with sexual health and drugs (Eysenbach, 2008). Teens tend to seek information out of need or fear, such as a personal problem, rather than as a proactive effort to be healthy, such as eating nutritionally (Larsen & Martey, 2011). Nor did they tend to look for pain management advice (Henderson, et al., 2013); it should be noted that those who did seek such information tended to be female risk-takers or self-medicators. As another instance, teens seldom used the Internet to find contraception or abstinence information. On the other hand, they would look for information that might avoid "genes as destiny" syndrome or counteract past poor health choices. Some may also seek health information to address some kind of social stigma that is health-based, such as acne (Lariscy, Reber, & Paek, 2011). However, a lack of guaranteed privacy makes teens wary about accessing LGBT or HIV information (Magee et al., 2012).

Mental health provides an interesting lens for information seeking. A third of teens experience mental health difficulties, and more than ninety percent of them search for help online because they are more comfortable seeking information anonymously, and they are also technologically comfortable. Such online assistance can lower mental health stigma (Burns, Durkin, & Hons, 2009). Nevertheless, youth are cautious about computerized therapy, so mental health professionals need to learn how to engage teens effectively online (Stallard, Velleman, & Richardson, 2010). In researching online suicide prevention communities, Greidanus and Everall (2010) discovered that trained crisis interveners provided social support and referrals for offline services. Successful online teen help-seekers started supporting their traumatized peers online, thus developing an online support community. In another study of online mental health services, Havas et al. (2011) found that teens wanted a website that targeted them, which included self-tests and anonymous help.

### ***Barriers to Health Information***

Several barriers to health information exist (Yager & O'Keefe, 2012). Teens can be ignorant about some aspects of health and do not have a sound knowledge base on which to determine the validity of health advice. Nor does it help that filtering software further limits students' access to valuable online health information (Gray et al., 2002). Some teens are struggling readers or may have language barriers. Even so-called digital natives may have technology deficiencies or have poor physical access to technology. Those in rural areas have the added problem of the "last mile" of hard-cable Internet connectivity. Rural populations are also more likely to lack a connection with health professionals (Boyd et al., 2011), although teens in general do not know how to choose and contact health professionals independently from their parents (Eysenbach, 2008; Manganello, 2008). Teens are particularly sensitive to issues of social stigma or acceptance as well as gossip (Lariscy, Reber, & Paek, 2011). Personal educational background also impacts information seeking strategies. In addition, attitudes and expectations about health are culturally contextually; for instance, in some cultures, health is a private concern, and in other cultures, hospitals are a place to die rather than to get well (Rushing & Stephens, 2011). In addition, notable subgroups at higher risk in terms of health information seeking include youth with special needs such as disabilities, LGBT, teenage parents, rural youth, illiterate teens, poor teens, and teens of color (e.g., Latinas) (Dobransky & Hargittai, 2012; Roncancio, Berenson, & Rahman, 2012).

### ***Decision-Making***

In terms of the health information decision-making process, teens intentionally seek information in order to solve a problem that challenges personal abilities (Cornally & McCarthy, 2011). They prefer interpersonal interaction, and want information about and support from service providers, which becomes a strengthened relationship with health professionals later on (Santor, 2007; Ybarra & Suman, 2008). On the other hand, health professionals sometimes discount the social and emotional ramifications of teen's health problems, which drives teens to peers and the Internet for advice (Lorence & Park, 2007). Overall, teens tend to prefer seeking information informally from friends and family; next in preference are formal school-based sources. Both sources are generally preferable to the Internet (Dowdy, 2012; Whitfield et al, 2013). Interestingly, at the same time that school-based sex education was provided less often, teen use of the Internet increased (Jones & Biddlecom, 2011); nevertheless teens often questioned the reliability of online information about sexual health.

Of course, even if teens obtain accurate, valid health information, there is no guarantee that they will follow that advice (Ye, 2010). Part of teen's growing independence is their realization that they can make decisions for themselves, even if those decisions are not in their own best interests. They also tend to have less faith in adults, and want to challenge them as well as assert their own individual authority (Eysenbach, 2008). To that end, then,

librarians can leverage this window of opportunity to help teens gain expertise in analyzing information, synthesizing it, and acting on it with discernment (Bergsma, 2008).

### ***Technology Impact***

Proportionally, teens use the Internet more than any other age group; three-fourths of older teens seek online because of its convenience, anonymity (fear of stigma), affordability, social networking opportunities, and potentially personalized information (Edwards-Hart & Chester, 2010). They also like online self-tests and anonymous help (Burke & Hughes-Hassell, 2007). Unfortunately, younger teens are less apt than older teens to seek online health information, including on sexual topics, even though they experience greater risks if sexually active (Pierce, 2007). On the other hand, online information may be inaccurate (including from peers), and teens often have poor searching and evaluation skills (Skopelja, Whipple, & Richwine, 2008). Particularly since health issues constitute only five percent of all information that teens seek online, and many have limited health savviness, then it can be even harder to discern the quality of Internet-delivered health information (Eysenbach, 2008). In a study of teen health literacy by Ghaddar et al. (2012), researchers found that exposure to credible sources of online health information was associated with greater health literacy, which can serve as a useful strategy for librarians to employ. Furthermore, youth tend to generalize the quality of Internet sources rather than compare and prefer specific sites based on relative authority (Eysenbach, 2008). Sometimes there may be too much information to sift through, and other times there is a dearth of information (e.g., few online resources address deaf issues). In addition, access to digital resources remains inequitable, as noted above, and filtering software limits information seeking in schools. Issues of privacy and confidentiality also exist (Burke & Hughes-Hassell, 2007).

It should be noted that the motivation for seeking health information impacts the searching strategy. For instance, as sexual activity increases, information becomes more relevant and needful (Whitfield et al, 2013). As another example, teens are more likely to view pro-drug websites than anti-drug websites, even in the face of strong anti-drug media campaigns. Indeed, teens who have had been given prior drug prevention information are more likely to be curious and seek drug information. Youth with drug-using friends and who have more unsupervised time are more likely to use the Internet, and to access pro-drug digital resources. They tend to want to find information that confirms their existing stances (Belenko et al., 2009).

In any case, when teens do find useful health information, they are more likely to improve and strengthen relations with health professionals. Interestingly, teens and other people will search for health information even if they intend on seeing a health professional because it helps them feel more prepared to discuss health issues with medical personnel. Patients may also search for health information after meeting health professionals in order to confirm the new knowledge (Bell, Orange, & Kravitz, 2011; Eysenbach, 2008).

### ***Gender Issues***

Several gender issues emerge from teen health information seeking practices. Females are twice as likely as males to seek health info online, largely because of male peer norms and perceptions of male sexuality, which translates into denial of health problems (Beamish et al, 2011; Gahagan et al., 2007). On the other hand, females have less access to technology, and less technology skills, than males have (Lorence & Park, 2007). Females are more likely than males to seek information on behalf of family or close friends (Abrahamson et al., 2008; Zhao, 2009). Females are more concerned than males with violence and victimization relative to sexuality information Goldman & McCutchen, 2012). Girls are less likely than boys to view pro-drug websites (Belenko et al., 2009). On the other hand, girls are more likely than boys to seek information about weight loss, and they often use unhealthy practices learned online such as binge self-purging (Lax & Berenson, 2011; Smith, Massey-Stokes, & Lieberth, 2012).

## Libraries' Role in Seeking Health Information

Librarians can serve as an important mediator in teen health information seeking behaviors, several of which were noted by Crutzen (2010). Here are recommendations derived from the literature:

- Identify teens' health interests.
- Locate/provide social media sources (Lariscy, Reber, & Paek, 2011).
- Provide developmentally appropriate health websites (Burke & Hughes-Hassell, 2007).
- Provide community resources referrals.
- Provide health-related programming.
- Teach how to search.
- Teach how to evaluate information.
- Teach/facilitate health literacy, and collaborate with health educators.
- Identify health information mediaries.
- Tailor communication to teens: use text messaging, promote word of mouth, use videos (Crutzen, 2010).
- Personalize information (Burke & Hughes-Hassell, 2007).
- Use self-tests.
- Use incentives.
- Use reminders.
- Link health issues.
- Link with community-based interventions.
- Align with cultural and gender expectations.

An interesting approach to addressing teen health information is to train teens as peer health Internet navigators. In an online project about mental health resources, participants increased mental health awareness. In that project, girls were shown to be more informed and able to talk about mental health issues (Beamish et al., 2011). Peer coaching also improves self-efficacy and reinforces the concept of networked intelligence (Eysenbach, 2008).

Some ineffective approaches include: one-size-fits all, discussion boards, ask-the-expert "walls," and health education that does not address social influences. At the least, librarians need to understand the developmental and social cognitive issues behind information seeking behaviors (Paek & Hove, 2012). The more that they can connect with youth, gain their trust, and personalize the information task, the more effectively librarians can serve teens (Ye, 2010).

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### **Biographical note**

Professor **Lesley Farmer** coordinates the Librarianship program at California State University Long Beach. She earned her MLS at UNC Chapel Hill and her doctorate at Temple University. In 2011 Dr. Farmer won ALA's Phi Beta Mu Award for library education. Dr. Farmer has worked in school, public, special and academic libraries. She serves as IASL VP Association Relations, IFLA School Libraries Section Editor, and Special Libraries Association Education Division Chair. A frequent presenter and writer for the profession, Dr. Farmer's research interests include digital citizenship, information literacy, assessment, collaboration, and educational technology.