

Issues in Teen Technology Use to Find Health Information

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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. This paper presents a critical literature review of studies of teens' online health information-seeking and discusses several issues related to teen technology use for seeking health information. The results indicate that teen health information interests vary by age, gender, social situation, and motivation. Several issues about how teens access and seek that information are discussed. The paper concludes with recommendations to insure optimal library services to address the health information needs of all teens.

Introduction

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. This paper presents the results of a critical literature review of teens' online health information-seeking and discusses several issues related to teen technology use for seeking health information, focusing on gendered issues. It also offers recommendations to insure optimal library services to address the health information needs of all teens.

Study Methods

To investigate this issue, I reviewed the research literature available through several database aggregators: CINAHL, ERIC, ejournals, Academic Search, and Dissertation Abstracts. Because the advent of social media has expanded the dissemination and interaction with health information, I limited my review to peer-reviewed research published since 2007. The most relevant search terms were *teen** (or *adolescen**), *gender*, *health*, *information seeking* (*information behavior* was less successful), *Internet*, *technology*, *social media*, *librar**. I also searched under terms for specific health issues: *sexual activity*, *pregnancy*, *nutrition*, *fitness*, *mental health*, *illness*, *accidents*.

The core set of articles retrieved through combining the terms *teen**, *health*, *information seeking**, and *technology* or *Internet* totaled 33. I reviewed each article to make sure that the research focused on the population of youth between twelve and eighteen years old within the United States. Furthermore, the studies had to address

intentional information-seeking rather than passive consumption of information disseminated by health providers or the health industry. This winnowing process narrowed the number of studies to 21 acceptable articles. Repeating the same terms (found in the abstract, title, or subjects) to retrieve relevant sources in ProQuest’s Dissertations and Theses, I netted 20 more studies, with 12 unique to that database and satisfying the other criteria. I revised my searching terms to address specific health issues in order to retrieve additional studies, resulting in 7 relevant hits. The final number of acceptable sources was 40.

Teen Information-Seeking Behaviors

Seeking health information is a normal teen task, part of the maturation process. Such searching is part of teens’ exploration of themselves and the world around them.¹ Teen health information interests vary by age, gender, social situation, and motivation. The range of health information sought by teenagers demonstrates varied types of information needs regarding 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 or drugs.² Teens tend to seek information out of need or fear, such as having a personal problem, rather than as a proactive effort to be healthy, such as eating nutritionally.³ Nor do they tend to look for pain management advice;⁴ it should be noted that those who do seek such information tend to be female risk-takers or self-medicators. Another example is that teens seldom use the Internet to find information about contraception or abstinence.⁵ Yet they will look for information that might help them avoid a “genes as destiny” syndrome or to 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.⁵ However, a lack of guaranteed privacy makes teens wary about accessing LGBT or HIV information.⁶

Mental health is a major focus of teens’ information-seeking. A third of teens experience mental health difficulties, and more than 90 percent of them search for help online because they prefer seeking information anonymously and are also technologically comfortable. Such online assistance can lower the stigma of having mental health issues.⁷ Girls are more informed and communicative about mental issues, while boys feel that they will suffer a social stigma if they seek help; the expectation of youthful masculinity is such that boys are supposed to deal with problems by themselves.⁸ Nevertheless, youths are cautious about computerized therapy, so mental health professionals need to learn how to engage teens effectively online.⁹ In researching online suicide prevention communities, Greidanus and Everall discovered that trained crisis interveners can provide social support and referrals for offline services.¹⁰ Some successful online teen help-seekers have started assisting their traumatized peers on the Internet, thus developing an online support community. In another study of online mental health services, Havas et al. found that teens want a website that targets them specifically, which can include self-tests and anonymous help.¹¹

Barriers to Health Information

There are several barriers to seeking health information.¹² 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.¹³ Some teens are struggling readers or may have language barriers. Even so-called digital natives may have technology deficiencies or 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 to health professionals,¹⁴

although teens in general do not know how to choose and contact health professionals independently from their parents.¹⁵ Teen males are particularly sensitive to issues of social stigma or acceptance as well as gossip.¹⁶ Personal educational background also impacts information-seeking strategies. In addition, attitudes and expectations about health are culturally and contextually influenced; for instance, in some cultures health is considered a private concern or hospitals are thought of as a place where one goes to die rather than to get well.¹⁷ In addition, notable subgroups at higher risk in terms of health information-seeking include youths with special needs: teens with disabilities, GLBT teens, teenage parents, rural youths, illiterate teens, poverty-stricken teens, and teens of color (e.g., Latinas).¹⁸

Decision-Making

In terms of the health information decision-making process, teens intentionally seek information in order to solve a problem that challenges their personal abilities.¹⁹ Girls in particular prefer interpersonal interaction and want information about and support from service providers, which can lead to strengthened relationships with health professionals later on.²⁰ However, health professionals sometimes discount the social and emotional ramifications of teens' health problems, which can drive teens to peers and the Internet for advice.²¹ Overall, teens tend to prefer seeking information informally from friends and family; next in preference are formal school-based sources.²² Interestingly, at the same time that school-based sex education was being provided less often, teen use of the Internet increased.²³ Nevertheless, teens often question the reliability of online information about sexual health, especially males, preferring to rely on family, friends, and school resources for credible information.

Of course, even if teens obtain accurate, valid health information, there is no guarantee that they will follow that advice.²⁴ Part of teens' 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, a situation that particularly applies to teenage boys.²⁵ 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 for themselves.²⁶

Technology Impact

Proportionally, teens use the Internet more than any other age group; three-fourths of older teens seek health information online because of its convenience, anonymity (lessening the fear of stigma), affordability, social networking opportunities, and potentially personalized information.²⁷ They also like online self-tests and anonymous help.²⁸ 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. And if they do seek health information online, it may be inaccurate (including from peers), which is compounded by the fact that teens often have poor searching and evaluation skills.²⁹ Particularly since health issues constitute only 5 percent of all information that teens seek online and teens may have limited health savviness, it can be even harder for them to discern the quality of Internet-delivered health information.³⁰ In a study of teen health literacy by Ghaddar et al., 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.³¹ Furthermore, youths tend to generalize about the quality of Internet sources rather than compare them, and they tend to prefer specific sites based on relative authority.³² 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.³³

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.³⁴ 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, although girls are more likely to view the anti-drug sites. Teens who have had been given prior drug-prevention information are more likely to be curious and seek drug information. Youths 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.³⁵

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 their new knowledge.³⁶

Gender Issues

Several gender issues emerge from teen health information-seeking practices. On the one hand, females are twice as likely as males to seek health information online, largely because of male peer norms and perceptions of male sexuality, which translate into denial of health problems.³⁷ On the other hand, females tend to have less access to technology and fewer technology skills than males have.³⁸ Females are more likely than males to seek information on behalf of family or close friends.³⁹ Females are also more concerned than males with violence and victimization relative to sexuality information.⁴⁰ However, girls are less likely than boys to view pro-drug websites.⁴¹ They are more likely than boys to seek information about weight loss, and they often use unhealthy practices learned online such as bingeing and self-purging.⁴²

Libraries' Role in Seeking Health Information

Librarians can serve as important mediators in teen health information-seeking behaviors, as noted by Crutzen.⁴³ Three substantial studies developed recommendations for librarian assistance in helping teens successfully seek health information, focusing on the incorporation of technology.⁴⁴ Together these studies suggest that librarians should

- Identify teens' health interests.
- Locate/provide social media sources.
- Provide developmentally appropriate health websites.
- Provide community resources referrals.
- Provide health-related programming.
- Teach teens how to search effectively.
- Teach teens 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.
- Personalize information.
- 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. Peer coaching also improves self-efficacy and reinforces the concept of networked intelligence.⁴⁵

Some ineffective approaches include using one-size-fits-all approaches, 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.⁴⁶ The more that they can connect with youths, gain their trust, and personalize the information task, the more effectively librarians can serve teens.⁴⁷

Conclusion

As they have to cope with their developing bodies and health-related social situations, teens have great need for accurate, relevant health information. Many teens are comfortable with technology and seek health information online as a convenient and relatively anonymous way to get background health information and possibly diagnose health concerns. Their preliminary research helps them interact with health professionals to address their problems. However, teens do not necessarily have good searching techniques, and they may have a limited health knowledge base, which hinders their ability to evaluate the quality of information that they access.

Youth-serving librarians need to consider all means to deliver health information and to engage teens through formal and informal education. In collaboration, they could link health issues, health providers, and developmentally appropriate resources. In any case, they should get to know their teen audiences and their health interests.

Particularly with expanding technology tools, aspects of teen health information behaviors merit further research. Researchers can examine the impact of social media on teens’ behaviors of locating and exchanging health information. Similarly, researchers can determine how health providers and the health industry use social media to provide information and services, as well as influence teen health behavior. Also deserving study are how teens use mobile devices in seeking health information and how health professionals leverage such teen engagement. These investigations should disaggregate findings by gender, socioeconomic factors, and age (i.e., younger versus older teens). It would also be useful to determine what impact these social media uses have on subsequent health behaviors of teens.

Researchers can investigate concerted efforts by health providers and the health industry in informing and persuading teens about health information. What messages, in what formats, attract teens? Can such findings be

disaggregated by gender, culture, and socioeconomic factors, and then analyzed to optimize teen awareness, engagement, and decision-making?

In addition, researchers can focus on librarians' role in teens health information behaviors. How do formal and informal information educational efforts compare in engaging and informing teens? What efforts between school and public libraries positively impact teen health information-seeking behaviors? What kinds of instruction are more impactful: targeted just-in-time or ongoing content instruction? What information literacy skills are most helpful: generic ones or health-specific ones?

As teens grow up, their health interests and needs change. Simultaneously, teens are trying to assert their individuality and independence from their families. At this critical time in teens' lives, research-based practices by librarians can help teens cope with, and prepare for, healthy life choices.

Notes

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