

Adolescents Health Seeking Information: A Systematic Review

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ABSTRACT

This study aims to identify adolescents' health information sources and barriers to in-depth decision-making for educators and other stakeholders for adolescents' well-being. A comprehensive literature search was conducted using electronic databases including PubMed, Mendeley, Scopus, and Google Scholar. Thematic analysis was used to categorize findings into common themes related to information sources, and barriers. Data extraction focused on study design, population characteristics, information sources, and barriers to health information seeking. The main sources of information used by adolescents in their daily lives were the Internet, peers and family, and health professionals. Among the barriers, quality of information, health professionals, lack of privacy and confidentiality, and internet literacy were common among adolescents. Adolescents' search for health information is a complex problem that requires an advanced understanding of their requirements and habits. It is necessary to ensure that information is reliable, promote digital literacy, and create conditions that give teenagers the confidence to responsibly seek out and use health information through various platforms. By giving these factors top priority, we can assist teenagers in making knowledgeable health decisions and promoting healthier lives as they enter adulthood.

Keywords: Health-seeking information, adolescents

INTRODUCTION

The period between childhood and adulthood, known as adolescence, lasts from 10 to 19. It is a particular time in human development and a crucial moment to establish the groundwork for long-term health (world health organization, 2024). Adolescence is a specific time that makes kids prone to risky behaviour. Therefore, preventive measures and health promotion are essential in this critical age (hakimee et al., 2023).

Decision-making starts early in life. Wrong and right decisions make or break life, especially health. With decision comes great responsibility. Therefore, it was essential to identify health-seeking information among adolescents. There is limited research on adolescents' health information needs, particularly those from underserved communities (okoniewski et al., 2014). It is, therefore, essential to explore the existing literature and studies

to identify how much is available to make decisions to develop further programs to enrich health information for adolescents. This study's findings will help educators provide concise and quality information through various platforms for adolescents. As stated above, health information needs among adolescents are limited; this review aims to catalogue health information sources and barriers to in-depth decision-making for educators and other stakeholders for adolescents' well-being. This review aims to identify adolescents' health information sources and barriers to seeking health information.

LITERATURE REVIEW

Adolescent Health

With 1.2 billion teenagers between the ages of 10 and 19, the world is currently home to the largest generation of adolescents in history. Their growth and development have effects that span generations. Adolescents, especially the most disadvantaged ones, can reach their full potential when they get the support of loving families, supportive adults, and programs and policies sensitive to their needs (UNICEF, 2024).

The term "adolescent health" describes the variety of methods used to protect, identify, or manage the health and well-being of young individuals. It addresses social, cultural, and environmental aspects while concentrating on teenagers' unique health issues and developmental requirements. Adolescent health issues are primarily psychological as opposed to biological (Gaub, 2022). Public health is becoming increasingly concerned with teenage health since rates of morbidity and mortality are rising in Western nations. It is imperative to move toward a quality-of-life strategy to enhance the well-being of adolescents (Raphael et al., 1996).

Source of Health Information

Sources of health information include those providing convenience, confidentiality, tolerability, and access to medical knowledge. Based on these traits, users complementarily use multiple sources when looking for information (Erin et al, 2012). Internet and medical experts are the primary health information providers and users in Greece, and they express high levels of satisfaction and trust (Chengbo et al., 2022). Newspapers, television, neighbours, and medical professionals are among the health information sources older individuals in Western China use. These sources positively impact health literacy (Effie, 2015). Healthcare professionals such as physicians, nurses, and chemists are the go-to sources for health information among Nigerians living in urban areas. Leaders in the community, friends, and family are less preferred sources (Ezika et al, 2018). In South India, community health centres, Anganwadi centres, physicians, nurses, Panchayat libraries, pharmacies, relatives, and posters are some of the places where senior citizens can obtain health-related information (Bhadrashetty & Maheswarappa, 2014).

With 96.6% having at least one information source, adolescents in Canada mostly get their sexual health information from their schools, parents, the Internet, friends, and medical experts (Rotermann, 2024). The primary sources of health information for teenagers in Jamaica include the Internet, radio, television, and parents. Adolescents in urban areas depend more on these sources than rural ones (Harrison et al, 2023).

Motivations for Seeking Health Information

Adolescents are worried about violence, diseases associated with sexual activity, and the impact of physical activity. Thus, they look for health information on high-risk behaviours. They use online and medical sources, and they place a high emphasis on information correctness and reliability (Hakimee et al, 2023). Adolescents are motivated by decision difficulty, outcome confusion, and reward magnitude to seek out social information in uncertainty. They actively seek out peer pressure to help them make risky choices (Slagter, 2023). Adolescents value their opinions and seek out health information. Their top interests are in sleep, mental health, physical exercise, and self-perception, all of which are in line with international guidelines for health promotion (Anne-Laure et al, 2024).

Challenges and Barriers

Adolescents who are experiencing social isolation may find it particularly difficult to access mental health services due to stigma, worries about confidentiality, expense, and lack of awareness about available resources (Filia et al, 2023). Teenage girls in Rasht face obstacles when trying to get knowledge on sexual health, including community discouragements, family, cyberthreats, and individual barriers. These highlight the importance of community activities and educational support (Khodadadi, 2023). Due to the complexity of permission, confidentiality regulations, and electronic health data, adolescents encounter difficulties while attempting to obtain confidential care (English, 2022). Adolescents are discouraged from seeking health information because of fear of rejection, shame, and invasion of privacy. Although anonymous, online resources might not be a suitable substitute for medical advice from a doctor because of false information (Gazibara et al, 2020).

Future Research Directions

To improve adolescent health promotion programs, future research should concentrate on examining gender-specific differences in the behaviours of teenagers who seek out health information and on addressing information quality challenges (Hakimee et al, 2023). This is an important direction for future research as it aims to look specifically at gender preferences in health-seeking information. To ensure credibility and relevance, future research should concentrate on co-designing treatments for teenagers' lifestyle health information needs and looking into regulating online health information (Raeside, 2022). Future studies should also concentrate on developing secure online forums for teenagers, promoting doctor-patient

dialogue on delicate health issues, and examining the variables influencing teenagers' online health information-seeking habits (Gazibara et al, 2020).

METHODS

Systematic reviews have a well-established logic. Due to the overwhelming volume of information available, researchers, policymakers, and health care providers need to effectively integrate the available data and provide knowledge that allows for informed decision-making (Mulrow, 1994). The following steps were taken for consideration to investigate.

Search Strategy

A comprehensive literature search was conducted using electronic databases including PubMed, Mendeley, Scopus, and Google Scholar. Keywords included "adolescents," and "health information seeking". Inclusion criteria were: empirical studies focusing on adolescents, articles published in the last 15 years, and studies in English.

Study Selection

Studies were screened based on relevance to the health-seeking information focus on sources of information and barriers and methodological quality. Data extraction focused on study design, population characteristics, information sources, and barriers to information seeking.

Data Analysis

Thematic analysis was used to categorize findings into common themes related to information sources, and barriers.

RESULTS AND DISCUSSION

Thematic Analysis

Using the thematic analysis, the various sources of health-seeking information were identified. They are discussed below.

Sources of Information

For sources of information regarding health information, most adolescents prefer three groups which were identified in the thematic analysis. The groups or themes identified as group 1 (theme: Health Professionals), group 2 (theme: Internet), and group 3 (theme: Peers and family).

Health Professionals

From the articles identified, the authors reported and recorded the following verbatims for health professionals. A1 article reported that Physicians scored 4.01 out of 5,

“‘Physician’ (4.01 score out of 5) and ‘the internet’ (3.95 score out of 5) were the most important sources for obtaining health information related to high-risk behaviours” (A1).

Another article A9 recorded that a *“Few (26.88%, 271/1008) asked their doctor about health information found online” (A9).*

Another article coded as A8 reported that *“A total of 347 students (49.4%) perceived that they search for online health information after visiting a physician” (A8).*

Internet

Of all the articles screened and reviewed, most reported that the Internet is one of the most used sources of information for seeking health information among adolescents. The highlighted words show the usage of the internet.

An article coded A1 reported that along with a physician, the internet is scored 3.95 out of 5, *“‘Physician’ (4.01 score out of 5) and ‘the internet’ (3.95 score out of 5) were the most important sources for obtaining health information related to high-risk behaviours” (A1).*

An article coded A3 highlights the Internet as one of the sources of health information for seeking information on puberty for girls, *“Girls get this information (puberty) from a variety of resources such, the Internet,” (A3).*

Article coded A4 reports, *“The adolescent female students use the Internet to seek for information on general sex education (n = 120, 100%), sexual hygiene (n = 71, 59%), abstinence from premarital sex (n = 68, 57%), avoidance of sexual abuse (n = 67, 56%)” (A4).*

Article coded A7 also refers to the Internet as a choice for health-seeking information, *“The most important sources to obtain health information related to high-risk behaviors were “the Internet” with a mean score of 3.69 and “virtual social media” with a mean score of 3.49 out of 5” (A7).*

Another article with code A9 reports that a high percentage of seeking health information, *“In all, 97.32% (1162/1194) respondents used the internet, of which 87.44% (1016/1162) had used the internet to find health information” (A9).*

An article with code A11 reports that *“More than one in three (38%) indicated that they used the computer and Internet to search for health information” (A11).*

The article code A12 reports *“The main source of information media used by adolescents in their daily lives was online media (97.3%), with Instagram being the highest proportion (66.0%)” (A12).*

Article coded A14 reports *“The large majority (85.2%) have Internet at home, with 76.3% in their room”* (A14).

Peers and Family

Peers and family also have been reported to be a strong source of information for adolescents. Article A6 shows that *“Adolescents find informal sources more useful and experience higher levels of comfort accessing informal support, especially from their best friends and mothers”* (A6).

Another article A11 reported that *“Four in five adolescents (81%) indicated they turned to parents, teachers, and other adults while around half read a book/went to the library (56%) or turned to siblings and friends (50%) for information about health and disease”* (A11).

Article coded A13 shows that *“Nine (50%) children consulted family and friends for information”* (A13).

Barriers to Information Seeking

The barriers to getting health information for adolescents are a huge problem. Some themes identified for this study are discussed below. The groups or themes identified as group 1 (theme: Quality of information), group 2 (theme: health professionals), group 3 (theme: lack of privacy and confidentiality), and group 4 (theme: Internet literacy).

Quality of Information

Article coded A1 reports that *“The most common barrier to health information seeking experienced by adolescents is ‘difficulty in determining the quality of information found’”* (A1).

Another coded article A2 reports, *“Collectively, our results highlight and confirm the importance of providing comprehensive, medically accurate sexual health information to adolescents”* (A2).

Article coded A3 reports *“The process of information seeking is so problematic for them because they are faced with content”* (A3).

Another coded article A7 reports *“From the perspective of adolescents, the most important criterion for the evaluation of information quality was ‘the trueness and correctness of the information’”* (A7).

Health Professionals

One of the barriers to seeking health information was the health professionals’ attitude, an article coded A15 records that *“Results Findings show that the barriers of access to sexual reproductive health services and information were negative health workers’ attitudes”* (A15).

Lack of Privacy and Confidentiality

When it comes to privacy and confidentiality, adolescents take it seriously. An article coded A15 records, *“Results Findings show that the barriers of access to sexual reproductive health services and information were lack of privacy and confidentiality”* (A15).

Internet Literacy

Access to the Internet may not be a problem but Internet literacy is a problem in many cases with adolescents and article coded A3 records that, *“The process of information seeking is so problematic for them because they are faced with mainly lack Internet literacy and search skills”* (A3).

Seeking Experience

Through the search, some seeking experiences were identified which will help to understand how adolescents go through while seeking health information. Adolescents prefer the Internet for its privacy and wealth of information while seeking information. Article A4 reports that, *“Their preference for the Internet includes its privacy (n = 115, 96%) and wealth of information (n = 111, 92%)”* (A4). It is also found that *“Boys are more likely to engage with sexual health information in a positive way than girls”* (A4). And it was found that *“Disease information seeking was positively related to health anxiety”* (A5).

These are key points to take note of while deciding on health literacy programs for adolescents. Privacy, wealth of information of the internet, boys seek sexual health information in a positive way, and health anxiety relates to disease information seeking.

CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

In Conclusion, adolescents' search for health information is a complex problem that requires an advanced understanding of their particular requirements and habits. Teenagers are going through a very important developmental stage, and they are turning more and more to online digital platforms, and peer and family networks for health information. With the source of information also comes barriers that break their accessibility. Various elements, such as internet literacy, privacy and confidentiality, trust on the quality on information, and other perceived barriers, might impact individuals' engagement with health-related topics. This emphasizes the need for materials and platforms that are age-appropriate, accurate, and easily available. To effectively address these problems, it is necessary to ensure that information is reliable, promote digital literacy, and create conditions that give teenagers the confidence to responsibly seek out and use health information. By giving these factors top priority, we can assist teenagers in making knowledgeable health decisions and promoting healthier lives, which will ultimately improve their resilience and general well-being as they enter adulthood.

The study is limited to a literature search focusing on studies from the last 15 years



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which are conducted in English. The keywords to study are limited to health-seeking information and adolescents which includes sources of information, barriers, and seeking experience.

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