Challenges in Health Information Seeking and Librarian's Role

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Abstract

Background: In recent years, millions of individuals around the world have relied on various methods and information sources to obtain new information; a significant part of the users' activities is related to the activities of searching for their information needs. An increasing number of individuals use the Internet to have access and search for health information, and the amount of health information provided on the Internet has increased dramatically. As the amount of information increases, the complexity of the information also increases. Whenever complex information is presented, expertise is required to retrieve useful information.

Objectives: Fulfilling information needs is not only limited to printed sources; the existence of wide communication networks has made it possible for users to satisfy their information needs in different ways without time and place restrictions. One of the information needs noticed by different individuals is the need to have access to health and health information. Individuals are looking for information to make an informed decision, and they refer to various information sources. The purpose of this article was to examine the new challenges associated with health information search and then to emphasize the role of librarians in this process.

Methods: A comprehensive search of relevant texts, articles, and studies related to health information seeking and the role of librarians was conducted. The selection criterion was defined as studies that provided insights into the challenges faced in this area.

Results: Scientific sources indicate that access to health information from multiple sources leads to the emergence of challenges, such as information overload, information anxiety, health anxiety, uncertainty, cyberchondria, information avoidance, and self-isolation.

Conclusions: This study emphasizes that health information seeking is a complex task, primarily due to the abundance of online information and varying levels of digital literacy. Librarians serve as valuable allies in this process, providing expertise, guidance, and access to reliable resources. By recognizing the challenges and leveraging the librarian's role, efforts can be made to ensure that individuals have access to accurate health information, ultimately leading to better health outcomes.

Keywords: Health Information Seeking, Information Overload, Information Anxiety, Health Anxiety, Uncertainty, Cyberchondria, Information Avoidance, Self-isolation

1. Background

Internet searches and retrieval have changed dramatically in recent years due to the Internet becoming a source of information. There is access to so much information at your fingertips. Consequently, these changes have made it easier for users to have access to information on the Internet network; it exposes them to many challenges and opportunities. Health communication researchers are paying close attention to online health information, which is an emerging field.

The Pew Research Center and other organizations estimate that numerous individuals use the Internet for health information research. Researching real or imagined symptoms on the Internet and believing what they read are some of the individuals' addictions to the Internet (1). Today, individuals refer to several sources of information in order to make an informed decision. In the absence of accurate, patient-friendly informational resources, the risk of uninformed decision-making, anxiety/stress, failure to comply with recommended follow-up care, or pursuing unnecessary medical care is likely to occur (2). The proliferation of health information has led to multiple health anxiety disorders,

cyberchondria, and self-isolation as a result of information overload, psychologically and behaviorally; this has resulted in adverse outcomes. The purpose of this article was to illustrate the challenges librarians face in health information search while emphasizing the role librarians play.

In order to understand the challenges faced by individuals in seeking health information and the role of librarians in addressing these challenges, it is essential to examine the evidence surrounding this topic. This section focuses on the process of evidence acquisition, including the identification and selection of relevant studies and sources that contribute to our understanding of the issues at hand. By examining the existing body of scientific literature, we can gain insights into the various challenges encountered in health information seeking and the crucial role played by librarians in mitigating these challenges. Thanks to the availability of extensive communication networks, meeting information needs has evolved beyond traditional printed sources. This advancement enables users to have access to information in various ways without limitations of time and place. There is a noticeable increase in the demand for health-related information as individuals seek to make informed decisions about their well-being. In this context, this article examined the emerging challenges in health information seeking and emphasizes the vital role of librarians in assisting users in navigating this process effectively.

2. Methods

The authors conducted a comprehensive search of relevant texts, articles, and studies related to health information seeking and the role of librarians. The selection criteria were defined to include studies that provided insights into the challenges faced in this area. The authors organized the findings based on common themes and discussed various challenges encountered in health information seeking. The authors also examined the librarian's role in addressing these challenges and supporting users in having access to accurate and reliable health information.

3. Results

The findings of scientific sources suggest that having access to health information from various sources can give rise to a range of challenges. These challenges include information overload, where individuals feel overwhelmed by the sheer volume of information available. Information anxiety might lead to feelings of stress and worry when faced with complex or contradictory health information. Health anxiety can emerge when individuals constantly seek health-related information, leading to heightened concerns about their well-being. Uncertainty might arise due to the conflicting or inconclusive information found, making it difficult for individuals to make informed decisions. Cyberchondria, a term used to describe excessive online health searching, can exacerbate health anxiety and fuel unwarranted concern over potential health issues. Information avoidance refers to the deliberate avoidance of health information to alleviate anxiety or fear. Lastly, some individuals might resort to self-isolation as a coping mechanism to deal with the stress and uncertainties associated with health information seeking. The aforementioned findings highlight the importance of addressing these challenges in health information seeking and underscore the need for informed guidance from information professionals, such as librarians, to help individuals navigate the vast sea of health information effectively and make well-informed decisions about their health.

4. Discussion

4.1. Information Anxiety

We are living through one of the most anxious periods any of us can remember, whether facing issues as public as a pandemic and political upheaval or as personal problems. Although information anxiety and library anxiety might seem similar, they have different definitions and impacts on library patrons. Information anxiety is a broad term that encompasses several degrees of intensity and can be caused by many factors; however, library anxiety is a term used to describe nervous emotions associated with libraries. Information anxiety can be caused by some factors, such as the overwhelming amount of information available, fear of missing out on important information, or lack of knowledge about how to have access to information. On the other hand, library anxiety is often caused by several factors, such as fear of asking for help, fear of being judged, or feeling intimidated by the library environment. Although information anxiety can impact library patrons' ability to find and use information effectively, library anxiety can impact their willingness to seek help from librarians or use library resources.

Academic librarians can work to minimize the effects of both information anxiety and library anxiety by providing a welcoming and supportive environment, offering assistance and guidance to library patrons, and promoting information literacy skills. Information

anxiety is one of the concepts that was first used by Francis Bacon in 1915 and later was formally proposed by Chard Workman (3). Fear and apprehension caused by the abundance of information, the inability of humans to have access to all information, unawareness of published information, and the lack of logical order cause information anxiety (3). Information anxiety is the pressure felt to maintain a level of information awareness in the face of ever-increasing amounts of information. Information anxiety arises from the growing gap between what we understand and what we think we need to understand. Information anxiety is the black hole between data and knowledge. It happens when the information does not tell us what we want or need to know (3).

4.2. From Information Overload to Information Avoidance

Information has been perceived as an overload by humanity for almost as long as recorded information has existed. In the late twentieth century, ubiquitous digital information caused more significant concern about too much to read than ever before. The meaning of information overload is defined as a large amount of potentially helpful information that hinders rather than helps. Although its causes and proposed solutions have changed, its essential nature has not. Experiencing too much information through different media or sources leads to information overload (4). Information overload is defined as occurring when the information processing demands on an individual's time to perform interactions and internal calculations exceed the supply or capacity of time available for such processing (5).

Various names have been used to describe the phenomenon of information overload, including information overabundance, information pollution, information fatigue, social media fatigue, social media overload, information anxiety, library anxiety, infostress, infoxication, reading overload, communication overload, cognitive overload, information violence, and information assault. Coping strategies, such as filtering, retreating, queuing, and "satisficing", appear to be the most effective, and this problem is exacerbated when multiple channels and formats are used to communicate information (6). The ways to prevent overload, both at the individual and social levels, have been presented.

There might be a way to overcome information overload by finding a conscious balance between consuming and understanding information (7).

Research has paid considerable attention to the phenomenon of information overload as a result of the development of online communication channels and the significant amount of available health information

(8, 9). Time pressure also reinforces information avoidance behaviors due to social network fatigue (10). A person suffering from this disorder is prone to the overconsumption of information, distraction, inability to make decisions, fatigue and sleeplessness, anxiety over social isolation, and loss of identity (11).

4.3. Uncertainly

Information scientists have long identified uncertainty as a fundamental element of information seeking and searching, ranging from Belkin's Anomalous State of Knowledge to Kuhlthau's association between affective states and information-seeking stages. Uncertainty underlies all aspects of health information-seeking and information science (12). In his definition of uncertainty, Kuhlthau described it as a state of anxiety and low confidence (13). There is vagueness or unclearness about a topic associated with these symptoms. Uncertainty arises at the outset of the information-seeking process due to a lack of understanding or comprehension (14). concept of information regarding uncertainty. This definition is inaccurate since knowledge is Early on in the process of looking for information "Uncertainty regarding human needs"generally have been the subject of some studies. It is common to anticipate the presence of worry. Information-seeking starts with uncertainty brought on by a lack of comprehension, a misinterpretation, or a constrained concept. Nevertheless, uncertainty might be seen as a preliminary phase of the information-finding process (15, 16). Moreover, a large number of studies examined the relationship between uncertainty and information-seeking (12, 17-20). The connection between perceived uncertainty and patients' information-seeking behavior is one area of research that has drawn interest from researchers in various disciplines. Uncertainty is closely related to the concept of information, and it can be controlled by obtaining appropriate and timely information (21).

4.4. Health Anxiety and Cyberchondria

Since physical health is essential to survival, it is not surprising that most individuals sometimes worry about their health (22). There is a greater likelihood of these thoughts and concerns in individuals with serious diseases or at risk of contracting them; however, there are individuals without being in danger or suffering from a specific disease who have severe worry and anxiety about their body and health, and they consider simple physical symptoms as a serious illness (22); these individuals have health anxiety or the more severe form of hypochondria or cyberchondria. Health anxiety increases when online

search for health-related information, according to studies (23-28). Furthermore, excessive health-related concerns may eventually lead to excessive behaviors, such as frequent visits to doctors and online searches for health-related information. Even momentary anxiety relief can result in this vicious loop (29). An individual with hypochondria experiences excessive or irrational worry about getting a particular condition. Therefore, cyberchondria is a condition that is most likely caused by using computers and other phobias connected to the Internet (30).

Cyberchondria, one of the above-mentioned challenges, is a condition where a person obsessively searches the Internet for health information; however, rather than finding answers to their worries, they find out that they have a dreadful illness, which makes them feel even more nervous. The distress caused by the preoccupation is intense enough to cause time lost from work or social obligations. Cyberchondria and hypochondria are related words. A cyber is an electronic device, computer network, or internet-based computer use (3). Cyberchondria is defined by excessive and recurrent online health information consumption and search, brought on by and magnifying health worry. At the same time, the phrase "health anxiety" refers to a mental illness marked by discomfort over one's health (31, 32). Cyberchondria is characterized by constant worries about one's health and a fixation on having a disease. The term refers to excessive or repetitive online searches for health-related information that are motivated by worry or anguish about one's health. Medical checkups by healthcare experts and diagnostic tests do not adequately guarantee good health. Although there is disagreement about the definition of cyberchondria, it is largely acknowledged that it is related to health concerns. Although it is not a specific type of psychopathology, cyberchondria is conceptualized as a failed reassurance-seeking behavior and is a behavioral manifestation of health anxiety and hypochondriasis (1, 17).

Some strategies that might reduce the risk of developing cyberchondria include the clear presentation of online health information, innovative, evidence-based algorithms relating symptoms and diseases, categorization of health websites based on information quality, and improved online health information literacy. It is essential to control cyberchondria to be aware of its sources, objectives, and effects and any factors that might contribute to its maintenance. Health anxiety and hypochondriasis have been successfully treated using these techniques (1). Constant urges to use the Internet to read more about a health issue are signs of cyberchondriac

behavior. Anxiety and a dislike of ambiguity are predictors of cyberchondria in earlier studies. In addition, exposure to a large number of information sources (conventional or nonconventional) can also be other predictors of cyberchondria (33). Cyberchondria might, therefore, be viewed as a byproduct of the Internet, as online resources provide a wealth of knowledge on virtually any topic. Additionally, examining the effects of this change in the patient-physician interaction will assist many stakeholders, including information system designers, healthcare practitioners, and policymakers, in comprehending the influence of cyberchondria on users' health behavior (34).

The future might see an uncontrollable rise in cyberchondria as the use of the Internet, and the spread of false information both rise significantly. In order to preserve a healthy and long-lasting online experience, future research might concentrate on researching information systems that can help in the prevention and treatment of cyberchondria. Educating individuals that medical issues should not be resolved solely by seeking information online is crucial but rather by consulting qualified healthcare providers (35). To use health information on the Internet effectively, users need to have a sufficient degree of eHealth literacy (36-38).

4.5. Role of Librarians

Individuals who seek out health information might feel more confident about living healthy lives; however, this does not mean that they will automatically alter their health-related behaviors. Since the services of librarians, particularly clinical librarians, have benefited the medical and academic communities (39), it is anticipated that the services of librarians to the general public will also be beneficial in educating and changing the behavior of seeking out health information in order to improve the level of society's health. As advocates for knowledge and health, librarians appear to have a new role (40, 41). It is very important for librarians to be aware of emerging phenomena related to users' information behavior and to help them overcome the obstacles and challenges they face when using technology.

One of the critical responsibilities of a clinical librarian or clinical information assistant in the medical area is teaching information skills. The clinical librarian who works in a clinical setting is the clinical information assistant. For the clinical information assistant, several broad functions, including those in education, research, and clinical settings, have been established today (31, 39, 42-44). Given that training is one of a clinical information assistant's responsibilities (44), a clinical information assistant must have a thorough awareness of patients'

informational requirements. Meeting information demands is critical; nevertheless, it is also crucial to figure out ways to lessen elements that impact information behavior, such as information anxiety. As "custodians of information", librarians see it as their responsibility to educate the public about information anxiety and how to deal with it by giving them the resources they need (45).

4.6. Conclusions

The present article highlights the potential risks of seeking health information online, such as encountering rumors and confusing information, and mental disorders, such as health anxiety and cyberchondria. These issues can lead to misdiagnosis and physical harm. The authors suggest that stakeholders and medical website owners should understand the advantages and disadvantages of online health resources to enhance the community health system. They emphasize the importance of addressing cyberchondria's detrimental effects on patient-doctor relationships and healthcare systems. Future research should focus on preventing and treating cyberchondria while promoting eHealth literacy. Coping mechanisms, such as filtering, withdrawing, queuing, and efficient information management, can help prevent information overload. Social media's impact on human behavior and its association with cyberchondria requires further investigation, and intervention techniques should aim to reduce information overload while conveying trustworthy health information.

Footnotes

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