

Navigating Digital Health Resources: A Qualitative Study of Non-Medical University Students' Online Information Seeking

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ABSTRACT

The internet has become a primary source of health information, significantly influencing individuals' health perceptions and behaviors. University students, as digital natives, frequently turn to online platforms for health-related queries. However, research often overlooks the specific experiences of students not enrolled in healthcare disciplines, who may lack formal medical training to critically evaluate online content. This qualitative study aims to explore the experiences, perceptions, and challenges faced by non-medical university students when accessing health information online. Understanding their information-seeking behaviors, credibility assessment strategies, and the impact of online resources on their health decisions is crucial for developing effective health literacy programs and informing healthcare providers, including nurses, on how to guide this population toward reliable information sources and enhance patient-provider communication.

KEYWORDS

Digital health resources, online health information seeking, non-medical university students, health information literacy, qualitative study, information behavior, digital literacy, e-health, health education, web search.

INTRODUCTION

In the contemporary digital age, the internet has emerged as an indispensable and often preferred conduit for health information, fundamentally reshaping how individuals access, interpret, and engage with health-related knowledge [25]. This pervasive reliance on online resources extends across various demographics, with young adults, particularly university students, being prominent users due to their inherent digital literacy and constant connectivity. These "digital natives" frequently consult online platforms, search engines, social media, and health forums for answers to their health concerns, ranging from minor ailments to more significant health conditions [25].

While the accessibility of online health information offers numerous benefits, such as convenience, empowerment through knowledge, and reduced perceived barriers to seeking help, it also presents substantial challenges. The vast and unregulated nature

of the internet means that alongside credible sources, a significant amount of inaccurate, misleading, or even harmful information exists [25]. For individuals without a foundational understanding of medical science, discerning reliable information from misinformation can be a formidable task, potentially leading to anxiety, self-diagnosis errors, or delayed professional medical consultation [8].

Despite the widespread phenomenon of online health information seeking, a notable gap exists in the literature concerning the specific experiences of university students who are not pursuing nursing or other healthcare-related disciplines. Much of the existing research tends to focus on general populations, specific patient groups (e.g., cancer patients [5, 9, 10, 12, 14, 19, 23]), or the perspectives of healthcare providers themselves [20, 26]. While studies highlight the importance of quality nursing care and effective patient-provider communication in fostering patient satisfaction

and adherence [1, 4, 7, 11, 15, 17, 21, 27], these insights are often derived from direct clinical encounters. There is a pressing need to understand how non-medical students, as future patients and healthcare consumers, navigate the complex online health landscape and how this impacts their health literacy and subsequent interactions with the healthcare system.

Understanding the online health information-seeking behaviors of non-nursing students is critical for several reasons. Firstly, it allows for the development of targeted health education programs that equip these students with the necessary critical appraisal skills to evaluate online health content effectively. Secondly, it provides valuable insights for healthcare professionals, including nurses, on the types of information students are accessing, their common misconceptions, and how best to address these during consultations. Nurses play a vital role in patient education and advocacy [4, 20], and being aware of patients' online information sources can enhance the quality of care and patient satisfaction [1, 17]. For instance, if patients are seeking information online due to perceived "missed care" or unmet information needs [15], understanding their online habits can help nurses proactively address these gaps. Ultimately, this study aims to contribute to a more holistic understanding of health information access among a significant segment of the young adult population, paving the way for more informed and effective public health interventions and improved patient-provider communication [25].

METHODS

This study will employ a qualitative, phenomenological research design to deeply explore the lived experiences and perceptions of non-nursing college students as they access health information online. This approach is chosen to capture the nuanced, subjective meanings individuals ascribe to their online information-seeking behaviors and challenges.

Participants and Setting: Participants will be recruited through purposive sampling from a large, diverse university campus. The target population will be undergraduate and postgraduate students enrolled in academic programs outside of nursing, medicine, or other allied health professions. Recruitment will occur through flyers posted in non-health faculty buildings, university student forums, and direct outreach to student organizations. Eligibility criteria will include: (1) being an enrolled university student aged 18 years or older, (2) not being enrolled in a nursing, medical, or allied health program, (3) having accessed health information online at least once in the past six months, and (4) providing informed consent. A sample size of 15-20 participants is anticipated, aiming for data saturation where no new themes emerge from the interviews.

Data Collection: In-depth, semi-structured interviews

will be the primary method for data collection. Interviews will be conducted individually, either face-to-face in a private university setting or via secure video conferencing, based on participant preference and logistical feasibility. Each interview is expected to last approximately 60-90 minutes. An interview guide will be developed to facilitate discussion, ensuring consistency while allowing for flexibility to explore emergent themes. Example questions will include:

- "Can you describe a recent time you looked for health information online? What was the health concern?"
- "What websites or platforms do you typically use when searching for health information?"
- "How do you decide if the health information you find online is trustworthy or accurate?"
- "What challenges or frustrations have you encountered when trying to find health information online?"
- "How has the information you found online influenced your health decisions or behaviors?"
- "Have you ever discussed online health information with a healthcare provider, like a doctor or nurse? If so, what was that experience like?"
- "What would make it easier or better for you to find reliable health information online?"

All interviews will be audio-recorded with the participants' explicit permission and transcribed verbatim. Detailed field notes will also be taken during and immediately after each interview to capture non-verbal cues, contextual observations, and initial analytical thoughts.

Data Analysis: The transcribed interview data will be analyzed using thematic analysis, following the six-phase approach outlined by Braun and Clarke. This method allows for the identification, analysis, and reporting of patterns (themes) within the qualitative data. The phases include:

1. Familiarizing with the data: Reading and re-reading transcripts, listening to audio recordings, and reviewing field notes to gain a comprehensive understanding.
2. Generating initial codes: Systematically coding interesting features of the data that relate to the research question.
3. Searching for themes: Grouping codes into potential themes and sub-themes.

4. Reviewing themes: Refining themes to ensure they are coherent, distinct, and accurately represent the data. This involves checking themes against the coded extracts and the entire dataset.

5. Defining and naming themes: Developing a detailed analysis of each theme, describing its essence and the story it tells.

6. Producing the report: Weaving together the analytical narrative with compelling data extracts to illustrate the themes.

Qualitative data analysis software (e.g., NVivo) will be utilized to assist in organizing, coding, and managing the large volume of textual data. To ensure trustworthiness, measures such as researcher reflexivity, peer debriefing, and rich, thick description of findings will be employed.

Ethical Considerations: Ethical approval will be obtained from the university's Institutional Review Board. Informed consent will be secured from all participants prior to their involvement, ensuring they are fully aware of the study's purpose, data collection procedures, their right to withdraw at any time without penalty, and measures taken to ensure anonymity and confidentiality. All collected data will be de-identified and stored securely.

RESULTS

While specific results are contingent upon the completion of data collection and analysis, based on the study's design and existing literature concerning online health information seeking, several key themes are anticipated to emerge from the perspectives of non-nursing college students. These themes will illuminate their complex relationship with digital health resources.

Anticipated Themes:

1. Initial Access and Convenience as Primary Drivers: Students are expected to highlight the ease and immediate accessibility of online platforms as the primary reasons for seeking health information there. The convenience of searching from personal devices, often discreetly, will likely be a significant factor, especially for sensitive health topics.

2. Challenges in Credibility Assessment: A recurring theme is anticipated to be the difficulty students face in evaluating the trustworthiness and accuracy of online health information. They may describe strategies used (e.g., checking source URLs, looking for professional affiliations, cross-referencing multiple sites), but also express frustration with conflicting information, biased content, or sources that appear credible but are not. This aligns with the general challenge of navigating vast online data [25].

3. Emotional and Psychological Impact: Online health information seeking may evoke a range of emotions. Students might report increased anxiety or fear due to alarming information ("cyberchondria"), or conversely, a sense of relief and empowerment from finding relevant information. The impact on self-diagnosis and the potential for increased health-related worries are likely to be discussed.

4. Influence on Health Behaviors and Decisions: Participants are expected to describe how online information has influenced their health behaviors, such as deciding whether to seek professional medical help, trying home remedies, altering lifestyle choices, or even self-medicating. This theme will shed light on the direct practical consequences of their online searches.

5. Preference for Specific Platforms and Formats: Students may express preferences for certain types of online platforms (e.g., official health organization websites, university health services sites, social media groups, blogs, video platforms) and formats (e.g., short videos, infographics, detailed articles). The perceived relatability and ease of understanding of content will likely play a role in these preferences.

6. Role of Online Information in Patient-Provider Interactions: Students might discuss how online information shapes their expectations for healthcare encounters or influences the questions they ask healthcare providers. Some may report positive experiences where providers engaged with their online findings, while others might describe feeling dismissed or invalidated. This theme will highlight the interface between digital self-care and professional medical care, and how it impacts patient satisfaction, a key aspect of quality care [1, 17, 25].

7. Desire for Guidance and Reliable Resources: Despite their digital proficiency, students are anticipated to express a desire for clearer guidance on identifying reliable online health resources. They may suggest the need for university-based health literacy programs or explicit recommendations from healthcare providers on trustworthy websites. This indicates a potential role for nurses and other healthcare professionals in providing structured health education and consultation [4, 20].

These anticipated themes are consistent with the broader landscape of digital health literacy and the unique characteristics of young adult populations. The qualitative depth of this study will provide rich narratives that illustrate these experiences, offering valuable insights for health educators and healthcare providers to better support non-medical students in their online health information journeys.

DISCUSSION

The anticipated findings of this qualitative study will provide crucial insights into the complex landscape of online health information seeking among non-medical university students. The expected themes, such as the convenience of access, challenges in credibility assessment, emotional impacts, influence on health behaviors, platform preferences, and the role of online information in patient-provider interactions, underscore the multifaceted nature of this phenomenon. These insights are particularly vital for healthcare professionals, including nurses, who are increasingly encountering patients whose health perceptions and decisions are shaped by digital sources.

The pervasive reliance on online platforms due to their accessibility highlights a fundamental shift in how individuals, especially young adults, approach health concerns. This necessitates that healthcare providers, including nurses, acknowledge and adapt to this reality. Understanding the "digital patient" means recognizing that students may arrive at consultations with pre-existing information, accurate or otherwise, gleaned from the internet. This can significantly impact patient satisfaction with nursing care [1, 17], as unmet information needs or a perceived lack of engagement with their online findings can lead to dissatisfaction [15]. Nurses, through effective communication and consultation [4, 25], can play a pivotal role in guiding students to reliable information and addressing any misconceptions.

The anticipated challenges in credibility assessment among non-medical students emphasize a critical need for enhanced health literacy education. While students are digitally savvy, their ability to critically appraise health information may lag. This points to an opportunity for universities to implement comprehensive health literacy programs that specifically teach students how to evaluate online sources, understand scientific evidence, and differentiate between credible and questionable content. Such programs could be integrated into general education curricula or offered through university health services.

The emotional and psychological impacts, such as anxiety or empowerment, further highlight the importance of a supportive and non-judgmental approach from healthcare providers. When students present with self-diagnoses or concerns derived from online searches, nurses can leverage their caring behaviors [7, 12, 17, 27] to validate the student's efforts to seek information while gently guiding them toward accurate understanding and appropriate care. This aligns with the principles of person-centered care [3] and can significantly improve patient trust and satisfaction [11].

The influence of online information on health behaviors and decisions underscores the direct public health implications. If students are making health choices based on unreliable online content, it poses risks to their well-

being. This study's findings can inform public health campaigns and educational initiatives aimed at promoting responsible online health information seeking. Furthermore, understanding preferred platforms and formats can guide the development of health promotion materials that are more likely to reach and resonate with this demographic.

Limitations: As a qualitative study, the findings will provide rich, in-depth insights but may not be generalizable to all university students or broader populations. The self-reported nature of the data may also introduce recall bias. Future research could consider mixed-methods approaches to quantify these experiences across larger samples or conduct intervention studies to test the effectiveness of health literacy programs.

Implications for Nursing Practice: The findings will strongly advocate for nurses to be proactive in discussing online health information with their patients, particularly young adults. Nurses can inquire about patients' online sources, validate their efforts to be informed, and provide guidance on reliable websites and resources. Integrating health literacy education into nursing consultations can empower patients to make informed decisions. Furthermore, nursing education programs should emphasize the importance of digital health literacy for nurses themselves, equipping them to navigate online information and effectively counsel patients in this digital age. Ultimately, by understanding how non-medical students access health information online, nurses can enhance their patient-centered care, improve communication quality [25], and contribute to better health outcomes for this vital population.

CONCLUSION

This qualitative study aims to provide a nuanced understanding of the experiences of non-medical university students in accessing health information online. The anticipated findings will reveal the critical role of convenience, the persistent challenges of credibility assessment, the emotional impacts of online searches, and the influence on health behaviors. These insights are paramount for developing targeted health literacy interventions that empower students to critically evaluate digital health resources. Moreover, the study's results will offer invaluable guidance for healthcare providers, especially nurses, enabling them to better understand and engage with patients who are increasingly informed (or misinformed) by online content. By bridging the gap between online information seeking and professional healthcare, this research contributes to fostering a more informed, empowered, and healthier generation of university students.

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