

# Appraisal Skills, Health Literacy and the Patient-Provider Relationship: Considerations as the Health Care Consumer Turns to the Internet to Inform their Care

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## *Abstract*

*Health care consumers increasingly obtain health information from the Internet to inform their health care; the health care consumer, who also has the role of patient, maintains the right to access information from sources of their choosing for this purpose. However, noteworthy considerations exist including information appraisal skills, health literacy and the patient-provider relationship. Awareness and education are warranted to assist the health care consumer in achieving proficiency as they turn to the Internet for health information.*

*Keywords: consumer health information, patients, Internet, usability of health information*

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## **Introduction**

The current Internet landscape offers health care consumers copious websites devoted to providing health information. A potential benefit resulting from consumer access to health information on the Internet is the possibility that patients become more informed about their health and associated care decisions. In addition, it would seem that a patient armed with health information could ideally become a more active participant in their health care. Noteworthy considerations exist, however, including information appraisal skills, health literacy and the patient-provider relationship.

## **The Health Care Consumer and Landscape of Internet-based Health Information**

Consumers may feel empowered when they turn to the Internet for health information. Despite potential empowerment related to this type of information seeking, a culture of omission on the part of health care consumers exists in which they neglect to inform their physician about health information they have reviewed. The former is problematic because health care consumers obtaining health information from the Internet too often rely on this information to formulate a first opinion about their health; when they present themselves as patients to their physicians, they are ultimately considering the professional medical advice they receive as second opinions (1).

This article defines health care consumer as individuals seeking and obtaining health care in regions of the world where freely exercised consumerism exists. In addition, this definition assumes that the Internet is available to these consumers and sources of information on the Internet are not restricted.

Health care consumers have become active participants in their health care, resulting in a patient population seeking more information about diagnoses and treatment options. It is suggested that in fact, health care consumers are largely encouraged and often expected to be well informed and responsible (2). Current literature demonstrates that consumers are obtaining health information from online sources (3 – 8). With online health information readily available and a consumer population turning to these sources, it seems relevant to examine noteworthy considerations that result from this phenomenon. While health care consumers deserve respect for their right to obtain information to inform their care, challenges exist within this context.

Health information defined, for the purpose of this article, is information about diseases and medical conditions, as well as their diagnostic, prognostic and treatment considerations available on websites hosted by for-profit and non-profit organizations, as well as government agencies.

The Internet has evolved into a commonly used tool for those seeking all types of information. Therefore, it should be no surprise that health information is widely available to health care consumers through this medium. In recent years, there has been an increase in health-related websites (2). Through abundant sources offering health information via the Internet, such information is readily available to health care consumers.

### **The Quality of Online Health Information**

The quantity of health information available online is increasing. Whether consumers seek information related to medications, treatments and/or diagnoses, it is worthy to question if the information sought to inform their health care is valid. It is noteworthy that online health information as described in this article is generally non-refereed. Health care consumers too often lack the ability to accurately assess the quality of online health information, yet explore this type of information in isolation as a means render a diagnosis (1).

Reliable health information may enhance the ability of health care consumers to be knowledgeable participants in their own care; however, the quality of online health information, as argued by some scholars, is questionable (2, 3, 9). Websites offering health information to consumers may also display a variety of information. For example, some of the information may be useful and valid, yet there are often links for advertisers and sponsors; meanwhile, the website may be constructed in a fashion that makes it difficult for the lay consumer to discern where reliable health information ended and an advertisement for a product began (1).

The accuracy and appropriateness of online health information is worthy of consideration. Certainly, some sources of health information on the Internet offer more credibility; academic institutions and governmental websites come to mind as sources that are more authoritative. Despite the existence of trustworthy sources offering health information to consumers, many individuals lack the ability to discern credibility among sources of online health information.

Indeed, health care consumers exist within the celebrated principle of autonomy. As capable patients, they can make health care decisions based on whatever information they choose. However, this fact does not eradicate concern from the equation. Considering varying quality among health information on the Internet, the challenge to health care consumers becomes their ability to fine-tune their information appraisal skills.

### **Appraising Internet-based Health Information**

Compounding the issue of quality (or lack thereof) of online health information, the information appraisal skills of health care consumers is lacking. One study (4) examined the influence of inaccurate online health information. In their study, 59 percent of participants believed they could locate websites with accurate health information when in fact, the websites contained inaccurate information. While the population examined in this study was of secondary school age, their experience is still noteworthy because they are of ideal age to utilize technology.

Other researchers (10) examined consumer experiences with seeking online health information. Their study concluded that lay individuals do indeed experience difficulty conducting online health information searches. The authors point out that access to health information does not necessarily empower health care consumers. In terms of obtaining and evaluating online health information, difficulties exist for lay individuals.

Another research study (8) notes that the appraisal skills of health care consumers are important because it reflects their ability to select and assess online health information pertaining to medications. The researchers noted that opinions on credible sources of information varied among participants. Many respondents reported limited awareness on how they found and evaluated online health information. The researchers found that online health information not subject to quality control further challenged appraisal skills of respondents.

Adding to the complexities arising from non-referred Internet sources providing health information and consumers challenged with comprehending such information, certain demographic characteristics may place some health care consumers at unique risk. Another published study (6) found that socioeconomic status influenced the ability for patients to determine credible sources of online health information. Those of higher socioeconomic status demonstrated greater ability than those of lower socioeconomic status to evaluate sources of online health information for trustworthiness. If certain health care consumers are already challenged in their pursuit of health care services, but also cannot adequately inform themselves, they may experience disenfranchisement in their role of health care consumer.

With the literature suggesting that health care consumers generally lack appropriate information appraisal skills, health care consumers may find themselves at risk. There are potential consequences when inaccurate health information informs crucial health care decisions; for example, compromised safety and long-term health of a patient is possible. In addition, patients experience insecurity related to discussing medical information with skilled health care providers and fear that they will appear as a “cyberchondriac” in the eyes of their physician (1). A continued environment in which patient’s desire empowered consumerism, yet hesitate to engage

in information sharing with their health care provider, is one in which unknown and misunderstood aspects of the patient-provider relationship exists.

### **Views from Physicians**

Limited research has examined views of health care providers in regards to patient access to Internet-based health information. While provider views on the issue of patients presenting for health care services with Internet-based health information is not implicit, some research exists.

Available research suggests that physicians recognize the reality of health care consumers obtaining health information from the Internet, for example. However, physicians report concerns about this phenomenon (2, 7). Views by physicians on this topic are relevant because Internet health information has the ability to influence patient safety, health care quality and health outcomes, as well as the patient-provider relationship.

A group of researchers (11) sought to understand the influence of online health information on routine medical consultations from a physician perspective. Their study found that physicians may perceive online health information as problematic. Specifically, the participants felt that online health information contributed to misinformed patients, confusion, distress or patients being inclined to self-diagnose and self-treat.

Aside from the risks to the safety and well-being of patients as expressed in the previously mentioned study, the potential challenge to patient-provider relationships is a worthy consideration. Another group of researchers (7) studied the influence that online health information has on physician-patient relationships. The researchers reiterated that the quality of online health information is paramount. While they acknowledged that accurate and relevant information is beneficial, that which is inaccurate is harmful. Their findings concluded that physicians acquiesce to requests by patients because of the patient obtaining online health information supporting their requests; participants suggested that they were even likely to acquiesce in instances where there was potential harm to the patient. Physicians did this, in part, due to the fear of damaging their relationship with their patient.

In their medical education and training, physicians are not necessarily prepared to educate and mentor patients into the role of informed health care consumer. Because many patients neglect to inform their physician about health information they view prior to office visits, the views of physicians and their understanding of the uses of online consumer health information are increasingly relevant.

### **Health Literacy**

Health care professionals and advocates should have an interest that health care consumers can obtain quality health information, appraise it and use it as a tool to enhance their role as a member of the medical team who is equipped for constructive participation in conversations about their health care.

Lacking health literacy among adults receives attention in current literature. Most patients lack knowledge, experience, and subject matter objectivity related to health information; the former attributes are associated with lacking health literacy skills (1). Succinctly defined, health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (12). Low health literacy is problematic and presents challenges to health care quality and outcomes (13, 7). The literature has reported on health literacy, as well as multidimensional factors resulting in health literacy challenges (15, 16, 17). Regardless which factors we consider, inadequate health literacy compounds the issue of lacking information appraisal skills among health care consumers. Health literacy also provides another consideration in the context of the changing patient-provider relationship resulting from health care consumers increasingly active in their own health care.

The need to enhance the role of patients as members of the health care team warrants awareness and education to ensure optimal information appraisal skills and improved health literacy for health care consumers.

### **Awareness, Education and Furthering the Conversation**

In an environment where health care consumers turn to various sources on the Internet to inform their health care, information appraisal skills and health literacy concerns exist. In addition, the engaged role of patients continues to modify the patient-provider relationship. Increasing the understanding of these issues warrants education for health care consumers.

Health care professionals may be familiar with the previously mentioned issues, yet health care consumers may not. While government agencies often play a role in informing the public about relevant health care topics, the influential nature of these issues deserves due diligence from health care organizations and private practitioners to inform health care consumers on ways to be successful self-advocates and informed consumers. . At all levels of health care delivery, solutions advancing awareness and education for the health care consumer may include (but are not limited to) promotional/informational print pieces intended for the health care consumer, online tutorials/courses, classroom style presentations and focused conversations with patients. Physicians and other primary health care providers can also provide education to their patients during health care encounters. These professionals can offer clarification on the differences between symptoms and diagnoses, as well as suggest credible sources of online health information (1).

In addition to introductory work on the awareness and education front, conversations and research in academia are necessary. In the long-term, the ability to assess awareness promotion and education efforts for their relevance and success is important. These efforts will indicate necessary areas for improvement and proven best practices to ensure the health care consumer population better understands seeking and obtaining credible health information on the Internet, as well as considerations in terms of using this type of information when making health care decisions and interacting with physicians and other health care professionals.

## Conclusion

Patients are autonomous agents. The vast reach of the Internet provides health care consumers with easy access to health information. Health information hosted on the Internet comes from a variety of sources with varying intents.

The ability for health care consumers to embrace the role of informed patient is important; in many regards, this is already occurring and could very well be the norm in the future. Given this trend, it is important to consider existing issues within the context of health care consumers turning to the Internet for health information to inform their health care. Currently, information appraisal skills, health literacy and the evolving patient-provider relationship bring about reasons to consider how we can help health care consumers achieve competence in locating, assessing and using Internet-based health information.

At a minimum, awareness and education geared toward the health care consumer may help individuals achieve proficiency in terms of obtaining health information, assessing it for credibility and using it appropriately to inform their care; ultimately, improving these skills has the ability provide results that are more favorable for the consumer in their patient care experiences. Furthermore, ongoing discourse and research in academia will help ensure that these experiences can only improve for the health care consumer.

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