



## Self-reported eHealth literacy among undergraduate nursing students in South Korea: A pilot study



Hyejin Park <sup>a,1</sup>, Eunjoo Lee <sup>b,\*</sup>

<sup>a</sup> Florida State University College of Nursing, 98 Varsity Way, P.O. Box 3064310, Tallahassee, FL 32306, United States

<sup>b</sup> Kyungpook National University, College of Nursing, Research Institute of Nursing Science, 680 Gukchaebosan Ro, Daegu, South Korea

### ARTICLE INFO

#### Article history:

Accepted 28 October 2014

#### Keywords:

eHealth literacy  
Nursing students  
Internet  
Health information

### SUMMARY

**Background:** With the Internet being the preferred primary source for information seekers, 9 out of 10 Internet users report that they have looked online for health information in South Korea. Nurses as well as nursing students need to be knowledgeable about online health information resources and able to evaluate relevant information online in order to assist patients and patients' families' access.

**Study Objective:** The purpose of the study was to assess eHealth literacy among undergraduate nursing students in South Korea. The specific aims were to: 1) identify the self-reported eHealth literacy levels, and 2) determine differences in levels of eHealth literacy between pre-nursing and nursing students.

**Methods:** This study used a descriptive comparison design. One hundred and seventy-six undergraduate nursing students in South Korea participated. Participants were asked to complete the eHealth Literacy Scale. Collected data were analyzed using a descriptive statistical method and t-tests.

**Results:** Participants responded that the Internet is a useful or very useful tool in helping them make health-related decisions. Furthermore, participants felt that it is important to be able to access health resources on the Internet. The majority of the participants either agreed or strongly agreed that they felt comfortable using the Internet with awareness of what information is available and of their skill to find information. Only a few respondents agreed or strongly agreed that they had the ability to differentiate between a high quality and a low quality health resource on the Internet. Students enrolled in nursing scored higher means in all eHealth literacy items than students enrolled in pre-nursing. Six out of ten eHealth literacy items showed significant differences between two groups.

**Conclusion:** Findings from this study provide fundamental data for education administrators and educators to begin supporting students with appropriate education programs to enhance their eHealth literacy.

© 2014 Elsevier Ltd. All rights reserved.

### Introduction

Because the Internet has become a primary source of health information, numerous eHealth information resources that assist consumers in discovering knowledge have been created in order to enhance personal health management and illnesses prevention (Stellefson et al., 2011). Even though numerous eHealth information resources are readily available over the Internet, a wide range of skills is required to access the information and, more importantly, transform that information into knowledge that can be applied to a personal health circumstance (Gilmour et al., 2008). The skills and ability to seek, find, understand, and appraise health information from electronic resources and apply such knowledge to address or solve a health problem is called eHealth literacy (Norman and Skinner, 2006a).

People with a low level of eHealth literacy experience difficulties in accessing eHealth information (Norman and Skinner, 2006b). Health professionals are in an important position to assist those patients developing the eHealth literacy. Nurses are especially well positioned to educate patients and families about how to access eHealth information and how to evaluate the reliability of that information. This eHealth literacy intervention allows patients to become empowered and effective in the management of their health conditions (Brown and Dickson, 2010). This type of intervention, however, requires nurses to be eHealth literate (Brown and Dickson, 2010). Gilmour et al. (2012) also stated that eHealth literacy is the required informatics competence for nurses because nurses who are more adept at this skill are able to provide better support to patients and families by enabling them with the skills to retrieve relevant, high quality online health information. It is then particularly important that nursing students as future health professionals have the knowledge and skills to conduct advanced eHealth information searches and to evaluate eHealth information (Stellefson et al., 2011). Moreover, a plentitude of Internet health information exists, but the quality of online health information varies. Some Internet sites

\* Corresponding author. Tel.: +82 53 420 4934.

E-mail addresses: [hpark5@fsu.edu](mailto:hpark5@fsu.edu) (H. Park), [jewelee@knu.ac.kr](mailto:jewelee@knu.ac.kr) (E. Lee).

<sup>1</sup> Tel.: +1 850 644 5345; fax: +1 850 644 7660.

**Table 1**  
General characteristics (n = 176).

|                            |                         | Frequency | Percent |     |
|----------------------------|-------------------------|-----------|---------|-----|
| Age                        | 20–25                   | 169       | 96      |     |
|                            | 26–30                   | 7         | 4       |     |
| Gender                     | Female                  | 159       | 90.3    |     |
|                            | Male                    | 17        | 9.7     |     |
| Academic class             | Pre-nursing             | 92        | 52.3    |     |
|                            | Sophomore               | 92        | 52.3    |     |
|                            | Nursing                 | 84        | 47.7    |     |
|                            | Junior                  | 44        | 25      |     |
|                            | Senior                  | 40        | 22.7    |     |
| Internet use hours/day     | 1–1 h                   | 72        | 40.9    |     |
|                            | 1 h 1 min–2 h           | 53        | 30.1    |     |
|                            | 2 h 1 min–3 h           | 28        | 15.9    |     |
|                            | 3 h 1 min to 4 h        | 7         | 4       |     |
|                            | Over 4 h                | 16        | 9.1     |     |
|                            | Home                    | 157       | 89.2    |     |
| Main Internet use location | Libraries               | 2         | 1.1     |     |
|                            | Others (e.g. Starbucks) | 17        | 9.7     |     |
|                            |                         |           |         |     |
| Level of eHealth literacy  |                         |           |         |     |
|                            |                         |           |         |     |
| High                       | >27                     | 90        | 51.1    |     |
| Low                        | ≤27                     | 86        | 48.9    |     |
|                            | Min                     | Max       | Mean    | SD  |
| eHealth literacy           | 14                      | 37        | 27.06   | 4.2 |

even provide low quality information (Anselmo et al., 2004; Schmidt and Ernst, 2004; Norman and Skinner, 2006b; Stelfson et al., 2011). Stelfson et al. (2011) stated that online information from reputable health organizations, such as governmental agencies, provide higher quality information than opinions from non-verified public commentators, or commercial sites from the private sector. Thus, patients should be taught to identify health information sites and discriminate between high and low quality health information. These skills will help patients avoid making health decisions using low quality information (Norman and Skinner, 2006b).

However, it is unclear what South Korean nursing students' current level of eHealth literacy is. Therefore, eHealth literacy levels among South Korean nursing students should be assessed. The results from the study should be utilized as fundamental data for the development of nursing curriculum in order to enhance the competency of eHealth literacy among nursing students.

The purpose of the study was to assess eHealth literacy among undergraduate nursing students. The specific aims were to: 1) determine the levels of self-reported eHealth literacy, and 2) identify differences in levels of eHealth literacy between students enrolled in pre-nursing and nursing programs. By doing this, we can find weakness in the eHealth literacy skills of nursing students and address those weaknesses by developing new nursing curriculum.

## Background

Internet access is steadily increasing regardless of demographic differences of age, income, and educational level among health consumers in the U.S. (Fox, 2011). Eight out of ten Internet users report that they have looked online for health information at least once in the U.S.

(Fox, 2011). Studies reported that 66% of adults in Europe seek online health information (Taylor, 2002; Chou et al., 2009). In Korea, a study reported that 84% of the Internet users among older adults had experience searching online health information (Ryu and Ha, 2004). Overall, nine out of ten Internet users searched for health information on the Internet (Song et al., 2002). As Internet health information becomes increasingly accessible in the world, eHealth literacy is required of patients as well as health professionals.

## eHealth Literacy: Patients and Health Professionals

As the Internet provides plenty of health information, patients are required to be eHealth literate in order to have benefits from eHealth information (Van der Varrt et al., 2013). A study, however, recognized that many patients have insufficient skills to use eHealth information and that they especially have difficulties in formulating a search query, evaluating the quality of the information, and scanning a website for relevant information (Van der Varrt et al., 2013). These difficulties pose challenges for patients with low eHealth literacy and, ultimately, influence their health outcomes. Several studies show the influence of eHealth literacy on health outcomes. Xie (2011a, 2011b) stated that people who have low eHealth literacy are facing a double jeopardy in managing their health. Mitsutake et al. (2012) also noted that people with high eHealth literacy are more likely to have important health knowledge and seek out screening tests to prevent cancer than those who have low eHealth literacy. These evidences confirm that eHealth literacy skills are essential for patients to prevent disease and to assist them to take a more active role in health care related decisions. According to Fox (2006), people lacking eHealth literacy need to be educated by health professionals to improve their eHealth literacy skills. Indeed, some studies show that people who have education interventions increased their eHealth literacy and experienced positive changes in their health-related behavior and decision making (Xie and Bugg, 2009; Xie, 2011a, 2011b).

eHealth literacy is also required of health professionals so that they are able to help patients and families find up-to-date, reliable, and quality health information (Eberhart-Phillips et al., 2000; Anselmo et al., 2004; Ivanitskaya et al., 2010). Ivanitskaya et al. (2011) stated that eHealth literacy is a critical skill set for health professions seeking reliable and valid health information as not all eHealth information is high quality. Importantly, nurses especially must have eHealth literacy skills since it is necessary in order to assess patients' use of eHealth information and correct patients' misconceptions about their illness due to incorrect interpretations of online information (Gilmour, 2007).

eHealth literacy is important not only to nurses but also to nursing students (Stelfson, Hanik, Chaney, Chaney, Tennant, Chavarria, 2011; McDowell and Ma, 2007; Brown and Dickson, 2010). In other words, the ability to find the best available health information from online, critique the quality of information, and then use it to advise patients' health decision making are essential skills to utilize into point of care. Several studies, however, identified that students in health majors lack the necessary skills to execute successful health-related searches on the Internet (Hanik and Stelfson, 2011; Ivanitskaya et al., 2006, 2010, 2011; Redmond, 2007). Studies recognized that most college

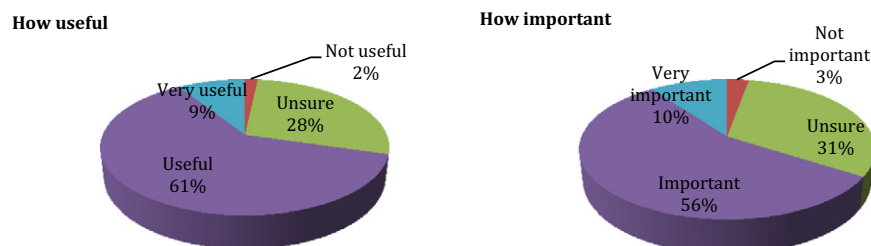


Fig. 1. Participant responses of how useful Internet is in making decisions and important to access health resources.

Download English Version:

<https://daneshyari.com/en/article/10316414>

Download Persian Version:

<https://daneshyari.com/article/10316414>

[Daneshyari.com](https://daneshyari.com)