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COMPUTER LITERACY IN PRE- REGISTRATION NURSING

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Abstract

Introduction: Computer and information literacy are critical to the future of nursing. The ability to use Information and Technology effectively is an increasingly important skill for nursing students. This study was designed to survey Computer literacy in pre- registration nursing.

Methods: This study is descriptive – analytical research and population included 60 pre- registration nursing. The checklist was used for data gathering included 7 skills in using of information technology. Questions were evaluated on the base of positive or negative answers, in a way that score one were given to positive answers and score zero to negative answers and then was calculated each person's score in each domain. All the survey results were compiled and analyzed with the SPSS using descriptive and analytical statistical method and variance test.

Findings: Findings showed that the rate of skill in using information technology students in semester 3 &5 was higher than students in semester 1 & 7. Also mean score of male higher in all skills except Word and PowerPoint than female. Rate of skill in using information technology in all skills were 60%.

Key words: Information Technology, Computer literacy, pre- registration nursing

Introduction: Nowadays, information and communication technology (ICT) has focused on in all contexts of educational system and its all processes. Its aim is to facilitate teaching and learning process and promote the quality of learning in human (1). The ability to use Information and Technology(IT) effectively is an increasingly important skill for nursing students (2-4)..During the past decade, IT has been rapidly integrated into healthcare. Furthermore IT-based computer used for Consequently, nursing programs have had to meet the challenge of educating students to deal with advancing technology, from clinical information systems to computerized medical equipment(4-7).

The findings showed that a gap exists in relation to knowledge and skills and computer applications. Changes in knowledge, skills and resources, and information management in the electronic environment has been created(8). Education and training necessitate to promote students skills and knowledge about using computer because the computer literacy in students are not fair(8).

Nurses, as the largest group of health staff who spend a lot of time in the care of patients are key participants in the process these changes. Information technology and the Internet make it possible for students that provide access to the fastest time of the most recent scientific information. It is important for students in developing countries because these countries overcome lack of information makes the Internet. Also the use of technology has become a central part of the practice of professional nursing. Graduates of nursing programs today must be able to use IT tools, such as clinical information systems, that all healthcare Information technology is central to quality nursing care(2, 9) .The implementation of evidence-based practice requires nurses and nursing students to be computer literate. (4, 10) Students may be entering nursing programs with basic skills in word processing and e-mailing, but educators need to ensure graduates are leaving the program prepared with other experiences that integrate the use of databases, and statistical analyses packages. These programs may help them to deal with technologies that are still essential to professional nursing practice(7, 11) .It is essential to support their student experience and also to give them the basics of the Informatics skills that they will need in practice (8, 12) .

In a study by Dee & Stanley in 2005 in relation to the information-seeking skills among two groups of nursing students and clinical nurses was showed that both groups of nursing students and clinical nurses lacked the skills to search for information resources(7).

Carol A study examining the relationship between Internet literacy among students before the beginning of the semester in 2004 Showed that over 50% of students did not use the Internet at all, before the start of semester are also low in basic computer skills(4) .

This study was designed to survey Computer literacy in pre- registration nursing.

Methods: This cross - sectional study designed and conducted on community college students in semester one, three, five and seven. During the first semester at the School of Nursing and Midwifery, 2014-2015 were enrolled at census, 60 pre- registration nursing participated in this study. Instrument for collect research data was questionnaires and checklists based on Microsoft enterprise technologies Eller Center and the books were in the information technology (IT). The check list of seven skills: to set up the computer (2 items), works with Windows (21 items), Word (26

items), Power Point (13 items), Internet (13 items), network connectivity (3 items) and E-mail (15 items) stands as yes and no questions were valued. In this study, we used direct observation to collect data according to the Check list, researcher prepared a list of people requested seven skills to issues in the Check list is intended to do and how to work with students directly observed, Check list were completed Where did the correct item options were yes and those who did wrong or did the Checklist was assigned a score. The scores were calculated separately for each area: Data were analyzed by descriptive statistics with the help 16 SPSS software was used Thus, the results of research into frequency tables, statistics and indicators order to answer research questions. ANOVA was used to compare students in terms of skills Use IT

Results: The present study was conducted to determine the technology, nursing students. A total of 60 subjects participated in the study, 31 male and 29 female.

It seems that more attention is the information technology in the past two semesters. First semester nursing students still did not pass the information technology department or are serving Table 1 showed that there was Mean Sum word, score Sum email score and Sum PowerPoint score in semester 3 and 5 were higher than semester 5 and 7. But Sum internet score were high in semester 5 and 7. Table 2 showed that there was significant different between male and female student in connection. Score of male in skill were higher than female. Also Sum internet score in semester 5 and 7 were higher than 1 and 3. These results indicate the important role clinical agencies can play in assisting nursing programs to improve faculty and student motivation, knowledge, and skills for learning IT. Strategic planning has been recommended as a valuable tool for nursing to move faculty and curricula(7) .Mastering IT essentials should be a basic faculty competency and is necessary for the profession to keep rapidity with the information revolution in health care(13).

Students who are enrolled in nursing programs may in some basic skills such as word and mail (email) must have the ability to But it seems more personal preferences and interests, not a nursing education program. To achieve the goals of nursing education should be based on evidence-based information management and provide training. In study was designed to describe and compare nursing students' self-reported experience with computer software and hardware during an 8-yearperiod. A great increase in self-reported experience and ownership was noted during the 8-year period By Carol 2005, nearly all nursing students are entering nursing programs with basic computer skills in word processing, E-mail and the WWW. Nearly all of today's students start the program with a personal computer, whereas only40% of graduating students owned computers in 1997. ICI is applied in education for educating nurses,

students, patients and caregivers (8, 15). IT is necessary for effective communication with learning new skills, strategies and behavior(16,17).

Conclusion: The use of technology has become a central part of the practice of professional nursing. Graduates of nursing programs today must be able to use IT tools. It is essential for nurses who have the skills needed in all aspects of Information Technology .Students must understand the application of ICT in real life not only learn the theory content. In addition to learning basic skills such as SPSS and search databases are also taught. And of course, the instructor should ensure that students can make use of this information

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Table (1): Mean score and SD of sum of 7 skills in semester 1,3,5,7.

7
D
70
06
.5
34
32
.4
57

Table (2): analyze variance of sum of 7skills and gender.

Skills	Semester		Gender	
	F	P	F	P
Sum windows score	1.759	.167	.518	.475
Sum word score	2.05	.118	.003	.957
Sum PowerPoint score	2.48	.071	.0311	.861
Sum connection score	2.03	.121	5.15	.027
Sum internet score	3.175	.032	.126	.724
Sum email score	.447	.721	.325	.571

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