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Assessment study of the importance of computer technology in nursing health care

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Abstract

The current study is a descriptive study conducted at the College of Nursing at the University of Basra for the period from October 2021 to April 2022. Electronic health records help nurses communicate more efficiently by eliminating most misinterpretations of written and verbal orders. As well as nurses can create and manage electronic health records and update them, as needed. The collected data analyzed to observed the percentage and mean of score and significance. result showed that the percentage of male was (35%), female (64%), secondary school was (24%), medical institute (35%). Bsc. (29%). 1-5 years of experience was (59%), 6-10 years (14%). 11-15 years (8%). more than 15 years (12%).

On other hand 50% of questions answers were significant concerning use of computer technology in health and 90% of the participants offer to use computer technology in nursing work. The evaluation of computerization at work was mainly influenced by the positive aspects and satisfaction with computer use so the study indicates the needs of nurses to use computer technology in the field of health care, record information and communicate with regard to determining treatments and following up on the patient's health status. Field of study in computers, public health.

Keywords: Detailed Study; Information Technology; Health Staff; Information Health

1. Introduction

Computers enable better communication across different hospital departments, allowing them to quickly share updates or medical research. Doctors and nurses can also access the internet for information shared by their peers on conditions they are perhaps unfamiliar with, but others in their profession have treated [1]. With the use of IT in health care, electronic records can be structured from a basic data summary in order to create systems that are based on the best evidence and that support clinical decision, which can contribute for patients' quality of life and safety and speed up decision-making, thus harmonizing actions [2]. Although there are studies focused on computer use for teaching and nursing practice, recent publications which assess the perception of nurses on computer use are not usually found [3]. Nursing information systems could act as a reference to aid memory and a learning tool to increase knowledge of patient care [4]. Easy access to information with the computer was one of the factors that stood out and was related to quicker decision-making and care, as well as fewer displacements within the service. This is due to the fact that, when forms are filled in manually, the information systems and the way data are transferred and moved require more time and human resources [5]. Computer use speeds up the care process, as a result of less time spent with displacements of staff between different services. This is important because, in some pathological conditions such as severe sepsis and septic shock, the speed of therapeutic suitability is essential for the patient's survival. [6].

In addition, the decreased displacement of staff reduces the transit of persons within the hospital, and this is recommended as a measure of infection control related to health care. [7] stated that computer use allows for a better and closer care of patients and relatives; as a result, it is possible to improve reception and listening, which are elements that are part of humanized and patient-oriented care. The difficulty in using desktop computers is due to the distance

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between the machine and the patient, which requires nurses to move away to take notes, thus preventing them from doing it where care is being provided. Even if nurses stick to the fact that data accuracy is ensured, by reviewing each patient's observations, using desktop computers is still a problem because of the time wasted in displacements between the nursing room and the patient's bed. In that sense, a possible alternative is the use of palmtops with wireless remote access[8].

Moreover, it is important to observe that the consolidation of nursing notes takes place at one single moment. Although this does not seem to be a major concern for Nurse 8, it can result in greater risks of mistakes in information about patients and failure to indicate the exact moment of intervention, which can consequently raise doubts regarding data legitimacy [9]. Information is significant at all levels of healthcare services, from patient and health unit management to policymakers, managers, and healthcare providers . The use of the Internet has become a priority for humans and for all ages, now in our society most people use the Internet in terms of social Communication, games, education and business [22].

2. Methodology

This study was across-sectional Involving (102) nurses (male and female in Basra hospitals). To achieve the aim of the questionnaire was designed translated to Arabic language to Assessment of nurses' knowledge of the Importance of using computer technology in the field of nursing 'The project Implemented In the College of Nursing - University of Basra - Basra Hospitals (Basra Teaching Hospital and Al-Fayha Teaching Hospital). One hundred and two nurses know how much nurses care about the electronic documentation of their patients Questionnaire was comprised of questions taken by written. Before Introduction this items distributed for teachers of college. It divided In to Main parts, the first parts was to identify the socio- demographic characteristic include gender, education level, years of experience, the second part is eighteen paragraphs of a questionnaire to Assessment of nurses' knowledge of the Importance of using computer technology in the field of nursing. All nurses answered (18) questions through a paper questionnaire and sent the questionnaire on the Internet via social media For data analysis, Frequency, percentage mean of score were observed.

3. Results and discussion

Tablet 1 The frequent and percentage regarding Demographic information

	F	%
Gender		
Male	36	35%
female	66	64%
Education level		
Nursing secondary school	25	24%
Diploma	36	35%
Baccalaurean	30	29%
High study	1	0.9%
Years of experience		
1-5	61	59%
6-10	15	14%
11-15	9	8%
15	13	12%

The use of computer technology provides quick access to important information about health or illness, Therefore record on the electronic health record personal health-care story, the treatments they carry out for, and response and progress toward health care goal for monitoring and for ready access by other team members,so that Information is

significant at all levels of healthcare services, from patient and health unit management to policymakers, managers, and healthcare providers[10]. Nurses in one study perceived that the computerized nursing care plan and nursing record were inflexible and inappropriate [11], and other studies have suggested that electronic patient records were unable to support individualized patient care [12,13].

Table (1) showed that the percentage of male was (35%). While female was (64%), the percentage of nursing secondary school was(24%). While medical institute was (35%). While nursing college was (29%). While high study was (0.9%), the percentage 1-5 years was (59%). While 6-10 years was (14%). While 11-15 years (8%). While more than 15 years (12%).

Table 2 The importance of computer technology in nursing development

NO	Questionnaire	Yes		No		MS	S
		F	%	F	%		
1	Do you record on the electronic health record the client personal health-care history?	49	48%	51	50%	1.46	NS
2	Do you Obtain information to ensure the best care is provided?	70	68%	30	29%	1.66	S
3	Are the nurses Review data about current and past health situation helps them to monitor recovery process over time?	57	55%	41	40%	1.51	S
4	Do you Access clinical knowledge?	51	50%	37	36%	1.36	NS
5	Do you use computers similar to those that you use at home or at work?	45	44%	54	52%	1.41	NS
6	Are you use software programs to support the work of nurses ?	56	54%	28	27%	1.37	NS
7	Do you use a small hand held computer known as Personal Digital Assistants ?	52	50%	48	47%	1.49	NS
8	Have you variety of computer devices in use ?	41	40%	34	33%	1.13	NS
9	Are Mobile computers uses work from a wireless system which enables them to retrieve and store information remotely from the main computer?	58	56%	44	43%	1.56	S
10	Do you use A mobile or handheld computer allows nurses to access your chart or record,?	54	52%	50	49%	1.54	S
11	Do computers and related information technology help you to provide new care?	45	44%	57	55%	1.44	NS
12	Do computers help you about your health or illness and your treatment plan?	46	45%	52	50%	1.411	NS
13	Is help computers help you to search drug ?	90	88%	12	11%	1.88	S
14	Do you enter the same health care information and notes into the paper graph?	72	70%	31	30%	1.71	S
15	Do AI nurses and other members of the healthcare team use a computer?	22	21%	82	80%	1.23	NS
16	Is widespread use of computers usually important to all members teem?	77	75%	24	23%	1.74	S
17	Do some healthcare organizations have patient portals rich in useful information?	76	74%	25	24%	1.73	S
18	Does you offer to use computer technology in nursing work?	91	89%	11	10%	1.89	S

Similar results were found in a study carried out with 34 nurses of ICUs from a general hospital in São Paulo, in which it was observed that computer use resulted in more time available for planning and active participation of professionals in direct care of patients, as time spent with bureaucratic activities and obtaining information was reduced. This is due to the fact that, when forms are filled in manually, the information systems and the way data are transferred and moved require more time and human resources [13].(Hannah et al., 2009).

Most of nurses participated the questionnaire offer using of different types of computer technology that related to it different clinical services, such as hospital management systems [14], medical patient record systems [15], and nursing information systems [16]. Abundant literature supports HIS applications and suggests that they have the potential to enhance quality of care and administrative efficiency, with various benefits claimed such as saving time spent on paper-based record keeping [17,18] improving completeness of patient care records; facilitating quality assurance and research, improving the accuracy of documentation; increasing the speed of information transfer [19,20] facilitating the storage and retrieval of healthcare records], and providing up-to-date clinical information to help prevent errors [21]. In short, it is suggested that time-saving, completeness, accuracy, accessibility, and real-time usability are the main benefits of implementing HIS in healthcare management

4. Conclusion

The study indicates the needs of nurses to use computer technology in the field of health care, record information and communicate with regard to determining treatments and following up on the patient's health status. Field of study in computers, public health.

Compliance with ethical standards

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Disclosure of conflict of interest

No conflict of interest.

Statement of informed consent

There are no individuals involved in my research, but rather the work was in my university laboratory

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