NURSES AND COMPUTER-BASED NURSING DOCUMENTATION SYSTEM AT HOSPITALS OF BASRA CITY CENTER

LUAAYABDULWAHEDSHIHAB, ABDUKAREEMALIQASSIM & ISRAA HUSSIN ABD

College of Nursing, University of Basrah, IRAQ

ABSTRACT

The study was conducted at three governmental hospitals and another private one in Basra city center. A descriptive design was carried out through the period October 19th 2014 to December 26th 2014. The study aims to assess, investigate nurses' knowledge and their acceptance regarding computerized documentation firstly, to assess hospitals' awareness toward computer –based nursing documentation system secondly. The sample represents 100 nurses who work at these hospitals from different educational levels (preparatory, institute, college of nursing). A questionnaire was prepared which comprised 10 items related to the subject of study. Researchers collected the data through the application of structural interview. Data collection was initiated from the 30th of October to the 30th of November 2014. Data were analyzed through the application of frequency and percentage. The study concluded that there is no adoption and application of computer programs in nursing fieldat Basra center hospitals (private and governmental) and they depend on paper documentation up to date and this is due to the policies of these hospitals. The study recommended that the policies of these hospitals have to adopt and applicate computer-based nursing documentation system as a part of their policies and involvenurses in more educating courses about computer particularly this documentation system.

KEYWORDS: Nurses and Computer-Based Nursing Documentation System

INTRODUCTION

Introduction: Most larger hospitals have been using computerized documentation even in smaller community hospitals (*6*). Computerized clinical record systems are rapidly being developed as a way to manage the huge volume of information required in contemporary health care (*7*).

The study of nurses' attitudes toward computers began in the late 1960s (*4*). Many studies examined the effects of computers in nursing and the nurses' attitudes toward computer(*1*). Evaluating nurses' attitudes towards computer use is an area that has received much attention in the literature (*12*). Software programs allow nurses to enter assessment data quickly. Although implementing a computerized system is expensive and requires much planning and education, such systems significantly increase patient safety. The nurse may use the computer to review previous nursing assessments and interventions, print a current plan of care, or retrieve data from other disciplines (*5*).

Nurses with little computer experience are likely to be skeptical and uncertain about what computers do and how they can help. (**3**)

Nurses need to know how to correct charting errors on a computer. The transition from paper to computer presents challenges for nursing staff, one of challenges of computerized documentation is inclusion of the nursing process(*6*). Nursing documentation accompanies the nursing process and is an important part of clinical

documentation.Much progress is being made in computerization of nursing function (*3*).

Statement: Nurses and computer-based nursing documentation system at hospitals of Basra city center.

Objectives

- To assess and investigate the quality of nurses' computerized documentation system and their acceptance.

- To assess the awareness of hospitals' administrations toward computerized documentation system.

REVIEW OF LITERATURE

Purposes of Computerized Documentation

- **Nurses Use Computers to**
    - Store the client data base.
    - Add new data
    - Create and revise care plans.
    - Document client progress (**7**)

Principle

Principles of good documentation are easier to accept and adopt if nurses keep in mind the purposes of the record.

- **Confidential:** Nurses are required legally and ethically to keep all the information in the patient record confidential (confidentiality means keeping information private).

- **Accurate:** Entries must be accurate. Nurses must chart only observations that they have seen.

- **Complete:** Obviously, not every observation is recorded, but information about the nursing process must be complete.

- **Concise:** Good charting is concise and brief. In narrative, use partial sentences and phrases; drop the patient's name and terms referring to the patient.

- Use abbreviations but only those that are commonly accepted and approved by your facility.

- **Organized:** Each entry must clearly show a logical and systematic grouping of important information by problem or occurrence. Computerized charting provides templates that organize data entry and required fields to ensure that important information is not omitted.

- **Timely:** Point of care documentation has become increasingly common.

- **Legible:** In a computerized documentation system, legibility is not a problem since data is typed into a computer(**5**).

Nursing Entries on the Client Record

- Plan of care

- Client care summary

- Nursing progress notes

- Admission entries.

- Nursing – discharge summary.

- Medication administration record.

- Incident report.

- Documentation of care in different settings **(9)**

Considerations during Computerized Documentation

- **Data Standards:** include length of fields, how dates and times are shown, and binary data.

- **Vocabularies:** The most commonly used are the combinations of North American Nursing diagnosis Association (NANDA) nursing diagnosis. Nursing interventions, and Nursing Outcomes Classification (NOC) nursing outcomes.

- **Security:** includes privacy, confidentiality, and protection against data loss.

- Legal issues electronic signatures.

- **Costs:** include planning, hardware, software, and training for all nurses (**10**)**.**

Computerized Documentation and Nurses' Time

It is generally believed that improved accuracy and quality of documentation, efficiency in communications, and better accessibility to and retrieval of a patient's data are benefits of clinical information systems. The more difficult question is whether electronic documentations systems improve efficiencies in nursing time. In an early review of evaluation studies of six information systems, Hindrickison and Kovner found that computerization only saved time in indirect activities such as organizing and keeping track of orders. However, more recent studies report a decrease in time spent by nurses when charting by computer as compared to paper charting. (4)

CHAPTER THREE

Methodology

A descriptive design was carried out to assess and investigate the quality of nurses' computerized documentation and their acceptance, and to assess the awareness of hospital's administrations toward computerized documentation system. The study was conducted at three big governmental hospitals of Basra city center (Basra General, Al-Taalimy, IbnGaswan) and other private one for the period of October 19th 2014 to December 26th 2014. A purposive sample of (100) nurses was selected (males & females) from different educational levels ; preparatory, institute, and   college of nursing) who work at these hospitals. A questionnaire was designed and constructed for the purpose of study. The questionnaire was comprised of (10) items related to the subject of study. Data were collected by the researchers through structural interview with the nurses and by the use of questionnaire. Data collection was begun from the 30th of October to the 30th of November 2014 at the setting of study. Data were analyzed through the application of frequency and percentage

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RESULTS & DISCUSSION OF RESULTS

Table 1: Distribution of Samples according to Their Educational Level

X3	F	Percentage
0	56	**56**
1	32	32
2	12	12
Total	**100**	**100**

The majority of sample represents educational level of preparatory school of nursing.

Table 2: Level of Acceptance for Samples according to Their Educational Level

X3	X6
0	91.071%
1	87.5%
2	91.666%

The highest level of acceptance represents educational level of college

Table 3: Level of Knowledge for Samples Regarding Computerized Documentation According to Their Educational Level

X3	X7
0	54.464%
1	82.812%
2	100%

The highest level of knowledge represents educational level of college

The increase in availability and use of computer networks and the internet are producing a changing climate in education as well as in health care. This increased use of computers in health care prompts a need to increase nurses' computer knowledge (**12**).

Table 4: Level of Hospitals' Administrations Awareness toward Computerized Documentation

X5	X8
0	45.588%
1	41.666%
2	33.333%
3	8.333%

The highest level of awareness representsAltaaleemy hospital's administration

DISCUSSION

Table No.1: Data analysis of educational levels had revealed that most of these subjects represent preparatory school of nursing (56%). This finding can be interpreted that the major source of graduates is preparatory schools of nursing The primary pathway to professional nursing, as compared to technical-level practice, is the four-year bachelor of science in nursing (B.S.N) degree (2).

Table No.2: Data analysis revealed that nurses who represent the educational level of college (baccalaureate degree) have the highest level of acceptanceregarding computerized documentation system (91.666%). This finding can be interpreted that nurses with educational level of college are more interested than others in the application of computerized documentation system in nursing field. .

Table No.3: Data analysisrevealed that nurses who represent the educational level of college (baccalaureate degree) have the highest level of knowledge about computer science generally and computerized documentation system particularly (67%). This finding can be interpreted that nurses with educational level of college are more qualified than others to applicate computer programs in nursing feild.

Table No.4: This table shows that the highest level of awareness for hospitals' administrations toward computerized documentation system represents Altaaleemy hospital administration .

This finding explains that the administration staffs of this hospital are more qualified for adoption of using computer and applicating its programs in nursing field.

CONCLUSIONS & RECOMMENDATIONS

Conclusion: This study revealed that there is no adoption and application of computer programs in nursing fieldat Basra center hospitals (private and governmental) and they depend on paper documentation up to date and this is due to the policies of these hospitals.

Recommendation: The study recommended that policies of these hospitals have to adopt and applicate computer-based nursing documentation system as a part of their policies and involve nurses in more educating courses about computer particularly this documentation system

Symbols

Table 5

X3	X5	X6	X7	X8
O = preparatory 1=institute 2 = college	Awareness	Acceptance	knowledge	Hospital 0 = Altaleemy hospital 1= Basra general hospital 2 = Ibngazwan hospital 3 = private hospital

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