



Evaluation of Nurses' Practices regarding Electronic Nursing Documentation

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Abstract:

Objective: This study aims to evaluate nurses' practices regarding electronic nursing documentation

Methodology: 40 nurses have been selected to be included for a pre-experimental sample using a non-probability (purposive) method between November 20, 2021, and March 1, 2023.

Results: the findings of the study showed that nurses' practices were inadequate in all items except in data entry for time and date with marital status and level of awareness were moderate, it means that nurses' practices need to be improved and developed by an interventional program. There is no relationship between age, gender and years of employment variables and nurses' practices.

Conclusions: Practices of nurses regarding electronic nursing documentation were inadequate and moderate.

Recommendations: A training courses should be provided for nurses to emphasize the practical implementation of the electronic nursing documentation in the future.

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تقويم ممارسات الممرضين المتعلقة بتوثيق التمريض الإلكتروني

المستخلص

الهدف: تهدف الدراسة الى تقويم ممارسات الممرضين فيما يتعلق بتوثيق التمريض الإلكتروني
منهجية البحث: تم اخيار (٤٠) ممرضًا للعينة ما قبل التجريبية باستخدام طريقة غير احتمالية (هادفة) للفترة ٢٠ تشرين الاول ٢٠٢١ الى ١ آذار ٢٠٢٣.
النتائج: بينت نتائج الدراسة ان ممارسات الممرضين تجاه توثيق التمريض الإلكتروني بأنها غير كافية ومتوسطة ماعدا ادخال بيانات الوقت، التاريخ، الحالة الزوجية ومستوى الوعي فهذا يعني أن ممارسات الممرضين بحاجة إلى تحسين وتطوير ممارساتهم من خلال برنامج تداخلي. لا توجد علاقة بين متغيرات العمر والجنس وسنوات الخدمة و ممارسات الممرضين.
الاستنتاجات: ان ممارسات الممرضين تجاه توثيق التمريض الإلكتروني كانت غير كافية ومتوسطة.
التوصيات: يجب توفير دورات تدريبية للممرضين للتأكيد على التطبيق العملي لتوثيق التمريض الإلكتروني.
الكلمات المفتاحية: توثيق التمريض الإلكتروني.

Introduction

Nursing documentation is the process by which a nurse keeps a record of patient care. It is important in the field of nursing for accurate, planned nursing documentation to be used as evidence of the continuity and quality of care that nurses should provide the good results of this care, as well as any treatment and training. The major responsibility of nursing documentation is patients' information transport to other health care providers, promote professional autonomy⁽¹⁾.

Nursing documentation is an important element for the exchange of nursing care data and in the planning of nursing interventions. "Communicating nursing care during the patient's complete hospitalization is a difficult task to achieve within complex patient cases⁽²⁾.

Shortage of pure guidelines for fill up documentation, repeated at documentation, and the routine systems and institutional policies usually related with protection precise documentation⁽³⁾.

A nurse maintains a record of patient treatment through a procedure known as nursing documentation. The use of precise, specified nursing documentation as evidence of the scope and standard of care that nurses should give the results of that care, as well as

any therapy and training, is important in the field of nursing.⁽⁴⁾

With increasing information technology and expanded nursing roles into more specialized areas of practice, nurses require a method of documentation that is quick and efficient, since the present study showed inadequate practices toward electronic nursing documentation.⁽⁵⁾

Using well designed computer technology to document care at the point of contact can improve the speed and quality of documentation, resulting in more time for direct patient care⁽⁶⁾.

Methodology

Using a non-probability (purposive) sample of (40) nurses with different educational levels, a pre-experimental design has been used to evaluate the practices of nurses regarding electronic nursing documentation between November 20, 2021, and March 1, 2023. The study instrument was constructed check list and composed of (25) items regarding electronic nursing documentation. The validity of checklists was determined by content validity and after receiving commends from 10 experts checklists were revised. The content validity of the instrument was established through a panel of (10) experts

The study instrument's stability is verified by test-retest (Inter-rater) procedure according to (10) nurses' responses, the Pearson correlation coefficient is calculated and was a good measure for the study. One-way ANOVA and the T test were used to evaluate the data.

The Al-Russafa Health Directorate / Ibn Al-haitham Teaching Hospital in Baghdad city in which the research is being conducted. Inclusion criteria included male and female nurses who are working in ophthalmic wards for more than one year in electronic nursing documentation, while exclusion criteria included nurses who refused to participate in the study and who has less than one year of

experience in electronic nursing documentation.

After getting approval from college of Nursing / University of Baghdad ,Nurses, who have participated in the study, have signed consent form for their agreement for sharing in the study and the participants informed that their participation is involuntary and the information will be treated confidentially and used for the research purposes only.

The data are collected from the nurses through the utilization of the study instrument (observational check list). Each nurse spends approximately (45) minute to have the check list completed.

Results

Table 1. Demographic characteristics of nurses (No.=40)

Age group	Fr.	%
20-24 years	4	10.0
25-29 years	3	7.5
30-34 years	9	22.5
35-39 years	10	25.0
40-44 years	7	17.5
more than 44	7	17.5
Gender	Freq	%
Male	19	47.5
Female	21	52.5
Educational level	Freq	%
Nursing School	4	10.0
Nursing Preparatory	24	60.0
Nursing Institute	12	30.0
Years of employment	Freq	%
3-5 years	6	15.0
6-8 years	11	27.5
9-11 years	6	15.0
12-14 years	12	30.0
15-17 years	4	10.0
18 more than	1	2.5
Training sessions	Freq	%
Yes	12	30.0
No	28	70.0

F= Frequency, %= Percentage

The majority of the study's sample (25%) were at age (35-39), as shown in the table above and the

female of the sample size was (2.5%). Also, the educational level was (n=24; 60%) were nursing preparatory school graduate. Regarding years of experience (n=12; 30%) of the research sample were between (12-14) years. Finally, (n=28; 70%) of the research sample did not participate in the training sessions regarding electronic nursing documentation.

Table 2. Nurses' practices toward electronic nursing documentation items

Practice related questions	Correctly applied		Incorrectly applied		Not applied		M.S	Eva.
	Fr.	%	Fr.	%	Fr.	%		
1.The nurse entered the patient's age on the electronic form	7	17.5	0	0	33	82.5	1.35	Inadequate
2. The nurse entered the patient's gender on the form.	1	2.5	0	0	39	97.5	1.05	Inadequate
3.The patient documented the patient's drug allergy	0	0	0	0	40	100	1.00	Inadequate
4.The nurse inserted a dormitory for the private patient	0	0	0	0	40	100	1.00	Inadequate
5.The nurse entered the marital status of the patient	16	40	0	0	24	60	1.80	Moderate
6.The nurse documented the date and time the patient was admitted to the hospital in the form	16	40	0	0	24	60	1.80	Moderate
7.The nurse entered all the above data into the patient's entry form	15	37.5	0	0	25	62.5	1.75	Moderate
8. Did the nurse enter the patient's data in the forms in sequence, starting with the entry form and ending with the disease progress notes form?	11	27.5	0	0	29	72.5	1.55	Inadequate
9. Did the nurse enter the patient's level of awareness in the electronic form?	14	35	0	0	26	65	1.70	Moderate
10.The nurse applied SOAPIE to the patient and entered the data electronically	6	15	7	17.5	27	67.5	1.48	Inadequate

F= Frequency, **%**= Percentage, **M.S**= Mean of Score, **Eva**= Evaluation.

This table shows that the nurses' practices toward electronic nursing documentation was described as inadequate since mean of score was between (1-1.33).

Table 4. Relationship between nurses' practice and demographic characteristics

Variable	Domains	M	F	Sig
Age	D7	0.015	1.327	0.276
Educational level	D7	0.020	1.764	0.186
Years of employment	D7	0.003	0.232	0.946
Variable	Domains	df	t	Sig
Gender	D7	38	1.442	0.158
Training courses	D7	38	0.241	0.811

M= Mean, **F**= Frequency, **Sig**= Significance

Regarding nurses' practices and its relationship with demographic characteristics this table shows that there is no significant difference between age, gender and years of employment variables and nurses' practices.

Discussion

The role of technology continues to expand with the goal of improving quality and patient outcomes.

The nurses' practices toward electronic nursing documentation were inadequate and moderate.

This study is supported by a study in which the findings suggest that the implementation of a basic EHR may result in improved and more efficient nursing care, better care coordination, and patient safety.⁽⁷⁾

Also, this study is in agreement with the same study which showed Nurses working in hospitals with basic EHRs consistently reported that poor patient safety and other quality outcomes occurred less frequently than reported by nurses working in hospitals without an EHR⁽⁷⁾. This study is supported by another study in which The Panel of the study consists of a permanent group of Nursing Assistants (NAs) and Registered Nurses (RNs), who are prepared to fill in a postal questionnaire twice a year on average. Which concluded that The implementation strategies for EPR need to take account of the job characteristics of the intended future users. If implementation is to be successful, it is important that the users understand the beneficial effects of EPR on the quality of care⁽⁹⁾.

This study is supported by a study which confirmed that providing good nursing care is a central goal of nursing. EHRs are to provide

better nursing care. This analysis provides the nurses a new perspective by helping them to understand all the components within the concept of EHRs in nursing practice⁽¹⁰⁾.

This study is confirmed by another study in which the study group did consistently better on the knowledge tests. The findings show that the implementation program had a positive impact on nursing documentation, and that the VIPS model increased the nurses' understanding of the nursing process.⁽⁸⁾ The implementation strategies for EPR need to take account of the job characteristics of the intended future users. If implementation is to be successful, it is important that the users understand the beneficial effects of EPR on the quality of care⁽⁹⁾.

There is another study which supports the present study in which The findings show that the implementation programme had a positive impact on nursing documentation, and that the VIPS model increased the nurses' understanding of the nursing process.⁽⁸⁾

This study is in agreement with another study which showed that results of study indicated that nurses– midwives' knowledge assessment before the implementation of an educational program for study sample was moderate related to immediate newborn care in delivery room. in which there were high significant differences in participants' knowledge at pretest and posttest before and

after the implementation of education program for study sample. Socio- demographic and profession alvariable were no significant effect on their knowledge. The study findings showed that program had been an effective method of increasing the nurses- midwives' knowledge about immediate newborn care in delivery room.⁽¹²⁾.

The researcher opinion regarding nurses' practices toward electronic nursing documentation is to provide adequate practices for nurses toward electronic nursing documentation since their response were inadequate and moderate either by providing periodic training courses or certain interventional programs.

Conclusions

Practices of nurses regarding electronic nursing documentation were inadequate and moderate, There was no relationship between nurses age, gender, and years of employment and practices which means that there is no affect of age, gender and years of employment variables on nurses practices regarding electronic nursing documentation. The objectives of this study was to evaluate the nurses' practices regarding electronic nursing documentation and Determine the relationship between nurses' practices and nurses' demographics (age, gender, educational level, years of employment and training courses.

Recommendations

This study suggests that the nursing staff need to be well trained and educated about the electronic documentation to improve nursing staff practices and skills by performing a training courses or certain interventional programs.

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