



Assessment of Nurses' Knowledge Toward Nursing Diagnosis in Mosul Teaching Hospitals

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Abstract

Background and Aims: Nursing diagnosis is consider a guide, direct the nursing care, and the foundation for goal setting and the basis for nursing interventions. The aim of the present study is to assess the nurses' knowledge toward nursing diagnosis.

Materials and Methods: A descriptive study (cross-sectional design) had been done on nurses' knowledge toward nursing diagnosis which was carried out during the period from the 1st of December, 2019 to 15th of June, 2020, A random sample comprised of (49) nurses who worked in Al – Salam, Al- Jamhurry, and Ibn- Sina Teaching Hospitals in Mosul City - Iraq. The data was collected through constructed Self-administered questionnaire sheet based on literature review. The instrument validity was determined through the content validity, by a panel of experts. The SPSS (version 20) was used for the data analysis. The demographic characteristics of the study samples were reported by using descriptive statistics (frequencies, percentages, mean, and ANOVA test.

Results: The results of the present study showed that less than half of the samples were belonged to (20-25) years old, most of them were male, majority of them (73.5%) were married. Also, nearly half of them were had secondary nursing graduate and less than (5) years. And also showed that there are no significant differences between nursing demographical characteristics and their knowledge at p-value=0.005.

Conclusions: The study concluded that the general level of the knowledge among the participants was more than half (55.1%) had poor knowledge, while (16.3%) had good knowledge regarding nursing diagnosis.

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Recommendations: Based on the results, there is strong need for continuing nursing education program for all nurses in the hospitals under the supervision of qualified staff in order to increase their ability to use nursing diagnosis and to improve the quality of care.

Keywords: Nurses, Knowledge, Nursing diagnosis.

Introduction

The nursing process as a tool for provision of care provides a means for evaluating the quality of nursing care that is given to the patients. Therefore it is the foundation and organizational framework that guides professional nursing practice. Professionally, the nursing process is recognized as a model on which nursing standards are based and remains the universally accepted method of scientific nursing practice (Craven and Hirle, 2000). In the united states, the nursing process comprises five steps: assessment, diagnosis, planning, implementation, and evaluation (Ahtisham, 2017).

Nursing diagnosis's goal is to effectively communicate the patient's care needs among the care team members and within the healthcare delivery system Sparks Ralph and Taylor, 2011).

The gist of nursing is the protection, promotion, and optimization of health, prevention of illness and injury, and protected right of people, families and populations in the care (Doenges et al., 2013). Preparing nursing care plans is a scientific problem solving method and includes assessment of patient, selecting nursing diagnosis, determining outcomes, planning, implementation and evaluation (Doenges et al., 2013; Kaya et al., 2004).

The first step of the nursing care plan is to find the right nursing diagnosis. Nursing diagnosis is determination to current or potential health problems of person, family or society. So that, proving the independent decision-making aspect of the profession, is the center of professional nursing care, nurses are important indicators of the health of individual and social responsibility (Junttile et al., 2005; Ay, 2005; Erdemir et al., 2003). The decisions that drive the nursing diagnosis involve cognitive and

interpersonal skills, as well as professional attitudes (Babadag et al., 2004). A true and valid nursing diagnosis will guide the selection of appropriate nursing care results and individual-specific nursing interventions (Lunney, 2010; Kaya, 2010). However, the use of nursing diagnoses in the health care field, and it is seen that the documentation is insufficient in systematic research and then nurses determined that the difficulty and lack to the patient's condition with the correct nursing diagnose lack to determine the etiology, symptoms and signs about the nursing diagnosis (Paan et al., 2011; Muller-Staub, 2006; Lee, 2005). So that, put the accurate nursing diagnosis, brings success in the estimated patient outcomes.

Objectives of the study

- 1- To assess the knowledge of regarded nursing diagnosis among nursing.
- 2- To determine the association between socio- demographical data and their knowledge.

Methodology

Ethical consecrations

The first official permission was obtained from clinical science department director (research councilor) , depending on that permission the researchers team has a second official permission from the Nineveh health office to conduct the present study in Al-Salam, , AL-Jamhuori, and Ibn-Sina teaching hospitals.

Design of the Study

Quantitative research, a "cross- sectional" study was carried out to achieve the objectives of study among the study samples.

Setting of the Study

The present study was conducted in in Al-Salam, Al- jamhurry, and Ibn- Sina teaching hospitals in Mosul city.

Sample of the Study

A non – probability purposive sample of (49) nurses, were included in the study.

Criteria of the Study Sample

1. Male and female nurses.
2. Nurses who accepted to participate in the study.

Tool of the Study:

To fulfill the objectives of the study a closed-ended questions structured knowledge questionnaire was prepared based on a comprehensive review of relevant literatures to evaluate the nurses knowledge. It consists of two parts:-

Part One: Related to the nurses demographical characteristics sheet which include (age, gender, social status, level of education, area of work, and years of experience).

Part Two: Questionnaire to Assess Nurses' Knowledge related to nursing diagnosis, this part involves of (20) items. Each item has three option yes, no, and uncertain. All items were measured by nominal scale of normal which was given a score of three for the correct answer, and two for uncertain, and one for the wrong answer. The knowledge mean of scores was rated into (3) knowledge levels, according to the three-point likert scale = $(\text{Maximum} - \text{Minimum}) / \text{groups} = (3-1) / 3 = (0.66)$ this is the interval value which was the added value to the three levels as in the following: 1–1.669 (Poor), 1.67–2.33 (Average), and 2.34 – 3 (High). The SPSS

Results

Table (1): Distribution of the study samples according to their demographical characteristics.(n=49)

Demographic data	Variable	
	Frequency	Percent
Age		
(20-25) years	17	34.7
(26-30) years	13	26.5

(version 20) was used for the data analysis. The demographic characteristics of the study samples were reported by using descriptive statistics(frequencies, percentages, and mean)and ANOVA test .

Validity of the study tools

The content validity of the knowledge test tool was established in consultation with a panel of (9) experts in different specializations. All of them agreed that the questionnaires were clear, relevant, and adequate. Minor changes were employed based on their recommendations and suggestions.

Conducting the Pilot Study

A purposive sample of (6) nurses was selected from the same hospitals. The sample of the pilot study was excluded from the original samples. The subjects for the pilot study possessed the same characteristics as that of the sample for final study.

purpose of the Pilot Study

1. To identify the barriers that may be encountered during the data collection process.
2. To find out whether the contents of the questionnaire were clear, applicable, and understandable by the participants of the study or not.
3. To estimate the time required for data collection and answering the questions.

Data Collection

Data were collected through direct interviews of the samples, by using a constructed questionnaire to the period from 1st December, 2019 to 15th of June, 2020.

(31-35) years	10	20.4
36 years and above	9	18.4
Total	49	100%
Gender		
Male	34	69.4
Female	15	30.6
Total	49	100%
Social status		
Single	12	24.5
Married	36	73.5
Divorce	1	2.0
Total	49	100%
Level of education		
Secondary nursing graduate	21	42.9
Institute of nursing graduate	13	26.5
College of nursing	15	30.6
Total	49	100%
Area of work		
Medical units	31	63.3
Surgical units	18	36.7
Total	49	100%
Years of experiences		
Less than 5 years	23	46.9
(6-10) years	8	16.3
(11-15) years	11	22.4
(16-20) years	1	2.2
More than 20 years	6	12.2
Total	49	100%

According to table (1), highest percentage (34.7%) of nurses their age ranged from (20-25) years old.(69.4%) of them were male.

According to their social status (73.5%) were married. Regarding to level of education that

(42.9%) of the nurses have up to secondary nursing graduate. And (63.3%) of them were working in the medical wards. As regard to the year of experience (46.9%) of them had a working less than five years.

Table (2): Distribution of the study sample by their responses to the knowledge items.

Items of knowledge	Rating	Frequency	Percentage	M.S	Assessment
1.Nursing diagnosis is one of the steps of nursing process	Yes	22	44.9	2	Average
	No	22	44.9		
	Uncertain	5	16.2		
2.ND consider the cornerstone of the nursing process	Yes	13	28.6	1.77	Average
	No	25	51.0		
	Uncertain	10	20.4		
3.ND depend on what the nurse see in terms of signs and symptoms.	Yes	14	28.6	1.61	Poor
	No	24	49.0		
	Uncertain	11	22.4		
4.ND focuses on the patient and the extent of his physiological and psychological desirability.	Yes	12	24.5	1.63	Poor
	No	22	44.9		
	Uncertain	15	30.6		

5. ND focuses on patient care while medical diagnosis on pathology or medical condition.	Yes	19	38.8	2.47	Good
	No	16	32.7		
	Uncertain	14	28.6		
6. The goal of ND is to describe the patient's health status.	Yes	6	12.2	1.61	Poor
	No	25	51.0		
	Uncertain	18	36.8		
7. ND is deduces based on the(problem, causes, signs and symptoms).	Yes	9	18.4	1.65	Poor
	No	25	51.0		
	Uncertain	15	30.6		
8. Actual diagnosis is a type of ND and focuses on the patient's problem present on the time of nursing intervention	Yes	8	16.3	2	Average
	No	18	57.1		
	Uncertain	13	26.6		
9. Health promotion diagnosis is a type of ND.	Yes	8	16.3	1.59	Poor
	No	28	57.1		
	Uncertain	13	28.6		
10. ND is found to find out the patient's needs.	Yes	8	16.3	1.61	Poor
	No	27	55.1		
	Uncertain	14	28.6		
11. ND is used in all surgical and medical cases.	Yes	21	42.9	2.18	Average
	No	21	42.9		
	Uncertain	7	14.2		
12. ND is helps to choose the appropriate nursing intervention.	Yes	8	16.3	1.55	Poor
	No	30	61.2		
	Uncertain	11	22.5		
13. ND is provides important information about the patient's condition.	Yes	20	40.8	2.36	Good
	No	17	34.7		
	Uncertain	12	24.5		
14. ND can create standard nursing care.	Yes	17	34.7	2.12	Average
	No	17	34.7		
	Uncertain	15	30.6		
15. ND is a tool for identifying any change required in the nursing care plan.	Yes	9	18.4	1.57	Poor
	No	30	61.2		
	Uncertain	10	20.4		
16. ND contribute to develop the appropriate plan to deal with the patient's condition.	Yes	9	18.4	1.63	Poor
	No	27	55.1		
	Uncertain	13	26.5		
17. ND is a tool for assessing the quality, competence and information of the nursing staff.	Yes	16	32.7	1.92	Average
	No	22	44.9		
	Uncertain	11	22.4		
18. ND depend on determining the extent of the patient's deterioration.	Yes	16	32.7	1.65	Poor
	No	26	53.0		
	Uncertain	7	14.3		
19. ND is based on reliable scientific source and medical terminology.	Yes	20	40.8	2.37	Good
	No	17	34.7		
	Uncertain	12	24.5		
20. ND documented in a way that facilitates the estimation of expected outcomes and care plan.	Yes	8	16.4	1.55	Poor
	No	30	61.2		
	Uncertain	11	22.4		

As shown in table (2) of overall knowledge that the (55%) of the nurses had poor, (35%) average, and (15%) high.

Table (3): Distribution of respondents by their overall knowledge (n= 49).

Level of knowledge	Frequency (F)	Percentage (%)
Poor	27	55.1
Average	14	28.6
Good	8	16.3

Table (3) indicated that 27(55.1%) of the nurses had poor of knowledge, while 14(28.6%) of them had average and 8(16.3%) had high knowledge regarding nursing diagnosis.

Table (4): Association between the level of knowledge with selected demographic variables. (n=49)

Variable		Sum of Squares	df	Mean Square	F	Sig.
Age	Between groups	15.897	17	.935	.649	.825
	Within groups	44.633	31	1.440		
	Total	60.530	48			
Social status	Between groups	2.014	17	.118	.431	.965
	Within groups	8.517	31	.275		
	Total	10.531	48			
level of Education	Between groups	15.540	17	.914	1.084	.409
	Within groups	26.133	31	.843		
	Total	41.673	48			
Area of work	Between groups	11.519	17	.678	.671	.719
	Within groups	27.583	31	.890		
	Total	41.673	48			
Years of experience	Between groups	26.477	17	1.557	.752	.729
	Within groups	64.217	31	2.072		
	Total	90.694	48			

Table (4) shows that there are no significant differences between nurses knowledge and their demographical characteristics at p value = 0.05.

Discussion

Part One: Discussion of the demographic variables of the study samples.

Throughout of the data analysis, In relation to the age the results of the present study showed; that less than half of the nurses belonged to the

age group between (20-25) years, This contrasted the findings of the study none in Kenya nursing work force which showed that majority of nurses were aged between (40-49)years (Wakapa et al., 2014). On gender the study appeared that majority of the respondents were male. These results are

differ, compared with a study done in the Kenya nursing work force which showed that out of the 16,371 nurses in the public non-tertiary sector, 76% are women, meaning only 24% are men (Wakapa et al., 2014).

According to level of education, our study revealed that nearly half of the nurses had secondary nursing education. Similar findings were also observed in a study in Naivasha on the implementation of the nursing process which showed that the majority of the nurses had a diploma (Mangare et al., 2016). With regard to the years of experiences a nearly half of them had less than (5) years. This findings are in line with the study done by Grace (Grace et al., 2017).

Part two: Discussion of the Nurses' Knowledge score regarding nursing diagnosis.

In order to assess the effect of nurses' knowledge through scoring analysis for mean of score, the current study shows that more than half of the samples (55.1%) had poor knowledge score, and only (16.3%) had good knowledge score. This results was disagree with a study carried out in two hospitals in Saudi Arabia which revealed that majority of nurses had good knowledge of the nursing process from attended colleges as well as from seminars and workshops (Mahmoud and Bayoumy, 2014a). Also, our results also contrast with a qualitative study done in Brazil which revealed that nurses had theoretical knowledge on the meaning of the steps the nursing process after training and they were competent to carry them out successfully (Enfermagem, 2012). On the other hand, this

findings indicated that their knowledge were inadequate, and nurses must be able to expand their knowledge of this area through ongoing education, Journal, and seminars. Consequently, teaching programs for nursing staff constitute an important part. These programs are urgently designed to assess nursing staff in developing and enhancing the skills needed to provide high standards of care to their patients.

Part three: Discussion the associated between the nurses' knowledge with selected demographic variables.

The results of the current study indicated that the selected demographic variable had shown no statistical significant association with the nurses knowledge scores. This findings could be concluded that the questionnaire tool which used was suitable and can be generalized on the studied population even through variations in studied subjects socio- demographical characteristics variables.

Conclusions

The study concluded that the general level of the knowledge among the participants was inadequate regarding nursing diagnosis, and there is no significant association of nurses knowledge with their demographical data.

Recommendations

Based on the results, the study recommended that there is strong need for continuing nursing education programs for all nurses in hospitals under the supervision of qualified staff to increase their ability to use nursing diagnosis and to improve the quality of care provided .

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