The Knowledge of Students in Nursing College about Nursing Process

معارف طلبة كلية التمريض عن العملية التمريضية

Dr. Dergham Majeed Hameed Al- Ftlawy /Lecturer/ PhD **.**College of Nursing, University of Kufa.

الخلاصة

أجريت دراسة مقطعية في كلية التمريض جامعة الكوفة لتقيم معارف طلاب كلية التمريض حول العمليات التمريضية من (15) تشرين الثاني (2011) إلى (30) كانون الثاني (2011) .

أهداف الدراسة: تهدف الدراسه إلى تقيم معارف طلبة كلية التمريض (25 طالب من كل مرحله) حول العمليات التمريضية (nursing process) وهدفت الدراسة أيضـا لمعرفة العلاقة المعنوية مـابين معرفة الطلبة حول العمليات التمريضية (nursing process) ومعلوماتهم الديموغرافية. .

طريقه البحث: أخذت عينة قدرها (100) طالب وطالبة من كلية التمريض جامعة الكوفة وبواقع (4) مراحل دراسية سحبت 25 طالب وطالبة من كل مرحلة دراسية. وتم جمع المعلومات من الطلبة من خلال تنظيم استمارة استبيان تتكون من (30) فقرة تناولت في محتواها العمليات التمريضية (nursing process) وباستخدام طريقة قياس لاكرت لجمع تلك المعلومات وأن البيانات التي جمعت في البحث تم تفسيرها من خلال استخدام الإحصـاء الوصفي (التكرار والنسبة المئوية) ومن خلال استخدام الإحصـاء ألاستنتاجي (معامل الارتبـاط بيرسون ومربع كاي).

نتائج البحث: ووضحت النتائج عدم وجود علاقة معنوية بين معلومات الطلبة وبعض المواصفات الديموغرافية مثل (الجنس، والتحصيل العلمي) وفي نفس الوقت هناك علاقة معنوية ما بين معلومات الطلبة وبين بعض المعلومات الديموغرافية مثل(المرحلة الدراسية للطالب، وعمر الطالب).

الاستنتاجات: أن معارف ألطلبه حول العمليات التمريضية تزداد بتقدم المرحلة الدراسية للطالب

التوصيات: أوصت الدراسـة أن المعـارف المتعلقـة بالعمليـات التمريضية تـزداد بتقدم بـرامج تثقيفية حـول العمليـات التمريضية وزيادة المعلومـات في المنهج الدراسـي حـول العمليـات التمريضية و عمل كتيب يتضمن تلك المعلومـات المرحلة الدراسـة وأوصـت الدراسـة بتطوير معارف الطلبة من خلال زيادة القراءة النظرية ويجب توفير المصادر للمساعدة في فهم العمليات التمريضية.

 Abstract

Across-sectional study was carried out at the college of nursing in the university of kufa; during the November (15) to December (30) 2011.

The study aims to assess the knowledge that providing from the college of nursing to the students and assess the level of knowledge in the students about the nursing process, and identifying the relationship between these knowledge and the students' demographic.

Methodology: The sample of the study includes are (100) students from the college of nursing in the university of kufa. The sample classified into (4) stages (25) students from each stage.

The data were collected through the use of questionnaire type likert scales, which consisted of (30) questions about the steps of nursing process.

The data were analyzed through the application of descriptive statistical analysis that include (frequency, and percentage), and the application of inferential statistical analysis that included (the person correlation coefficient, chi-square).

The results of the study indicated that there were non-significant relationship between the knowledge of students and some their demographic characteristics such as the gender & back ground, but there was significant relationship with the class (stage) of the students in the college of nursing and the age of them.

The study concluded the knowledge of students about nursing process increase whenever long study them in the college of nursing. Based on the research of the study

the study recommended apply education program to student undergraduate in nursing college, Increased the amount of information in curriculum in nursing college about nursing process and a booklet about nursing process should be designed and distributed to all students in college of nursing.

Key words: nursing process, college of nursing.

INTRODUCTION

The nursing process is an organizing framework that links the process of thinking with actions in nursing practice. it was based on theory developed by Ida Jean Orlando in the

late 1950s. and the nursing process is the most effective and practical, yet most misunderstood nursing theory. It takes time for students and new nurses to become comfortable with its use. All nursing personnel take part in the nursing process; however, the registered nurse (RN) has the primary responsibility. [1]

The purpose of the nursing process is to identify a client's health status and actual or potential health care problems or needs, to establish plans to meet the identified needs.

The nursing process consists of six steps: assessing, diagnosis, outcomes, planning, implementing and evaluating [2,3].

Nursing process define as a systematic, logical method of providing individualized nursing care that aimed to identify a client's health status and actual or potential healthcare problems or needs, to establish plans to meet the identified needs, and to deliver specific nursing interventions to meet those needs, [4].

In the same time the nursing process revealed as a systematic method whereby nurses can make clinical decisions and delineate a course of action based on analysis of available data. The nursing process is continual and cyclic. Evaluation of the outcome incorporates a feedback loop leading to further assessment, decision making, and implementation of care.[5]

It is a deliberate problem-solving approach for meeting people's health care and nursing need. Although the steps of nursing process have been stated in various ways by different writes, the common components.[6]

The importance of nursing process come from it is the review process is designed to help nurse stage focused on getting the best results in the most efficient way, the nursing process emphasizes the need to not only treat problems, but also maximize health by managing risk factors and by encouraging health behaviors, principles of nursing process push nurse to acknowledge patterns and intuitive hunches then to look for evidence that supports your intuition [7]

For this reason the nursing process is the framework for providing professional, quality nursing care. It directs nursing activities for health promotion, health protection, and disease prevention and is used by nurses in every practice setting and specialty. "The nursing process provides the basis for critical thinking in nursing"[8]

Aims of study:

To Assess the student's knowledge in college of nursing about nursing process., and to Identifying the relationship between the student's knowledge and their demographic characteristics.

METHODOLOGY :

- **Design of the studying:** A cross-sectional design of the study was conducted on students' knowledge in the college of nursing - university of kufa about nursing process.
- **Setting of the studying:** The study was conducted on students college of nursing, university of Kufa all the four stages . during the period November 15 to December 30, 2011.
- **The sample of study:** sample of the study was select by using the stratified method. The samples were consisted of (100) students, (25) students from each stage.
- **Data collection:** The data was collected from the students in the college of nursing during the time of their study them in college of nursing, by using the questionnaire type likert scale

- Study instrument: The instrument of study (questionnaire) designed by researcher to collect the data of nursing process by used the likert scale The questionnaire consisted of following parts:

Socio-demographic data: Include (Age, Gender, Information about college that include: stage of the study, educational back ground).

Questionnaire: includes questions about nursing process. That can be divided into 6 steps (define the nursing process, assessment, diagnosis, planning**,** intervention, and evaluation), the answer of question **:** Includes five answers in the likert scales are: (Strongly agree, Agree, Uncertain, Disagree, Strongly disagree) [9].

- Validity of the instrument: The check list give to the (5) expert in same branch of the nursing process, and the instrument of study was acceptable from them.

- Reliability of the instrument: Reliability was conducted through the test-retest exam and the person correlation coefficient (r =0.85)

- Data analysis: the data of the study analysis by:

 The frequency distribution to the level of the knowledge about the nursing process with the gender of the students. **Chi-square tests and Sample correlation coefficient.**

RESULTS

Table (1): Distribution of demographic data of the study sample:

Variables		Percentage
Age	**18-19**	20
	20-21	24
	22-23	23
	24-25	21
	26-27	12
	Total	100
Gender of students	**Male**	33
	Female	67
	Total	100
Class of students	**First class**	25
	Second class	25
	Third class	25
	Fourth class	25
	Total	100
Background of student	**Secondary school**	76
	Institute	24
	Total	100

This table indicated that most of student graduated from secondary school (76%) the research take equal sample from each stage (25%) and the majority of sample was (25%) and the age of sample (47%) of them was range between (20) years to (23) years

Table(2): Frequency of students' knowledge about nursing process and percent of it.

Knowledge of students	Frequency	Percentage
Mild	34	34
Moderate	30	30
High	36	36
Total	100	100

This table indicated that about (30%) from students were moderate with knowledge, about nursing process while (36%) of students have high knowledge.

Table (3): association of the student age and level of knowledge about nursing process.

Age of students	Knowledge						Total
	Mild	Percentage	Moderate	Percentage	High	Percentage	
18-19	11	11	6	6	6	6	23
20-21	12	12	8	8	7	7	27
22-23	11	11	7	7	7	7	23
24-25	1	1	6	6	8	8	15
26-27	1	1	3	3	8	8	12
Total	34	34	30	30	36	36	100
x^2obs. = 19.742	Df. = 8		x^2crit. = 20,090		P. $\leq$ 0.01		

(x^2= Chi-square, obs. = observation, df= degree of freedom, crit. = critical)
This table show there was significant association between the age of students and the knowledge about nursing process.

Table (4): Association between the gender of students and the level of knowledge about nursing process

Gender of students	Knowledge						Total
	Mild	Percent	Moderate	Percent	High	Percent	
Male	9	9	10	10	14	14	33
Female	23	23	20	20	22	22	67
Total	34	34	30	30	36	36	100
x^2obs= 0.599		df= 2		x^2crit = 9.210		P >0.01	

(x^2= Chi-square, obs. = observation, df= degree of freedom, crit. = critical)

This table revealed that there is no significant association between the gender of students and the knowledge about nursing process.

Table (5): The relationship between class of students and the level of knowledge of them about nursing process.

Class of students	Total knowledge						Total
	Mild	Percent	Moderate	Percent	High	Percent	
First class	14	14	7	7	4	4	25
Second class	8	8	8	8	9	9	25
Third class	8	8	9	9	80	80	25
Forth class	4	4	6	6	15	15	25
Total	34	34	30	30	36	36	100
X^2obs. = 13.556		df. = 6		x^2crit. = 16.812		P. ≤ 0.01	

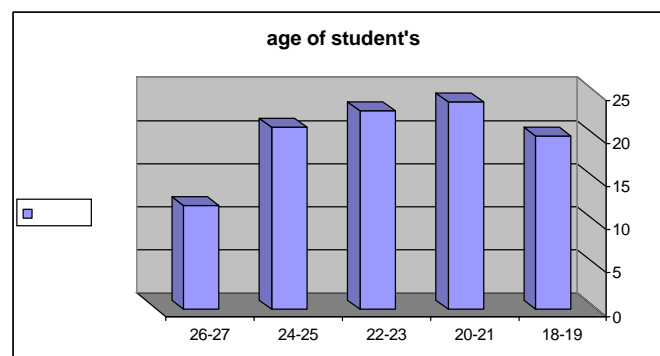(x^2= Chi-square, obs.= observation, df= degree of freedom, crit.= critical)

This table indicated that there is significant association between the class of students & the knowledge about nursing process.

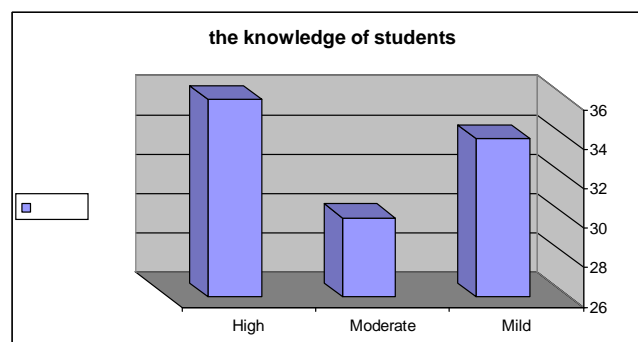**Table (6):Association between the background education level of student and the total knowledge about nursing process.**

Education level Background of student	Knowledge						Total
	Mild	Percent	Moderate	Percent	High	Percent	
Secondary school	23	23	22	23	31	23	76
Institute	11	11	8	11	5	11	24
Total	34	34	30	34	36	34	100
x^2obs. = 3.435		df. = 2		x^2 crit. = 9.210		P > 0.01	

(x^2= Chi-square, obs. = observation, df= degree of freedom, crit. = critical)

This table shows there is no significant association between the background and the knowledge of students about nursing process.

Figure (1): Percentage of students according to the age.

There is more percentage of students' age (20-23) was (47%) and the last age was (26 – 27) (12%).

Figure (2): Percentage of students according to the total knowledge about nursing process

There is most percentage of students are high level in knowledge and less it moderate level.

DISCUSSION:

Part I: discussion of nurse's demographic characteristics from the results of study

The characteristic of sample from the college of nursing in university of kufa is (100) students, about (76) female and (33) male, the age of female and male students to range from (20-23 years),this result agreed with Al-Mansory (2005)[11], the college of nursing include large age because the college accept the students graduate from the institute, (table -2- and figure -1-) the background of them whether high secondary school (76%) or institute (24%), (table -6-) and the knowledge of the female and male approximately to approach one another but the differentiation in the total knowledge in the results of study (table -4-). Back to the number of female in the study is larger than the number of male in the study, because the number of female as general larger than male in college of nursing.

Part II: Assess of student's knowledge about nursing process

Generally, the level of knowledge is high in this study (table -1- and figure -2-), this results agree with the study done by Al- Hakkak (2004) [12] revealed that there was a significant association between the nurses' knowledge and level of education to nurses at Baghdad hospitals, where as the knowledge of students appear high in the fourth class (high 58% and mild 10%) and less than in the first class (high (4%) and mild 14%) (table -5-), this results agree with Al- Ftlway (2006) [13], he revealed that the nurses graduate from nursing college have good knowledge. in the same time this result assurance by Taylor and others (2011), they indicated that the nursing process conceder the major guidelines for nursing practice. the nursing process which integrates both the art and the science of nursing[14]. In addition the nursing process considered is systemic, rational method of planning and providing individualized nursing care utilizing all aspects of critical-thinking and problem solving, [15].

Part ш: Association between nurse's knowledge and demographic characteristics.

The significant relationship between the knowledge of students and class (table -5-),this result agree with finding of the information listed [16] who noted a strong association between level of education and nurses' knowledge, also significant associations between the knowledge of them and the age group (table -3-) this result agree with the result of [17] and the non-significant relationship with the gender (table -4-), and with the background of them(table -7-)this agree with the opinion of (17) found no significant differences between genders regarding total of nursrs' knowledge[17]. and this finding was agreement with result of study done by [18].the researcher suggest the nurse must have good knowledge about nursing process because the nurses need nursing process to get good decision and apply correct intervention. In the same time, a study the nursing process is used by the nurse to identify the patients' health care needs and strengths, to establish and carry out a plan of care to meet those needs, and to evaluate the effectiveness of plan to meet established outcome [14].

CONCLUSION:

Based on the presented results and discussion, the study has concluded the following:

Larger than (20%) of students are not known the nursing process in completely or correctly, but about (60%) who have knowledge about nursing process in college of nursing - university of kufa., The students' class in the college of nursing and age are very important role that increased the knowledge of students about nursing process. The students graduate from institute doesn't have large knowledge from the students

graduate from secondary school. And In gender, the knowledge of students doesn't have any differentiation between male and female.

RECOMMENDATIONS:
Based on the results of the study the researcher recommended the following:
1) Apply education program to student undergraduate in nursing college.
2) Increased the amount of information in curriculum in nursing college about nursing process.
3) A booklet about nursing process should be designed and distributed to all students in college of nursing.

REFERENCES
1- **Williams, L, and Hopper, P.:** UNDERSTANDING MEDICAL-SURGICAL NURSING**, 2nd edition,** by F. A. Davis Company, United States of America, **2003, P.4.**

2- **Craven, R. and Hirnle, C.:** Fundamentals of nursing /human health, function, 6th Edition, Lippincott Williams and Wilkins, 2009, P. 165-9.

3- **Rosdahl; C. and Kowalski, M.:** Text Book of Basic Nursing, 9th edition, Wolters Kluwer, United States American,2008, pp. 356-81

4- **Miller, A. and Keane**, H.: Encyclopedia and Dictionary of Medicine, Nursing and allied health, 5th ed., Philadelphia, 1997, P. 1641.

5- **Altman, G.; Buchsel P. and Coxon V**: Delmar's fundamental and advanced nursing skills book, A service of Thomson LearningTM , United States of America**,** xiv,2000.

6- **Smeltzer, S.; Bare, B.; Hinkle, J.; and Cheever, K.**: Brunner and Suddarth's Textbook of Medical-Surgical Nursing., Eleventh ed., Walters Kluwer, United States American, 2010, p.29.

7- **Alfaro – Lefevre, R.:** Applying nursing process / a tool for critical thinking, 6th edition, Lippincott Williams and Wilkins, 2006, P.5.

8- **Sue C., and Patricia K.: Fundamentals of Nursing: Standards & Practice, Second Edition,** by Delmar, a division of Thomson Learning, Inc.**,** United States of America**, P.83.**

9- **Polit, D. and Hungler, B.**: Nursing Research Principle and Methods, U.S.A., Philadelphia, 6th ed., 1999.

10- **Armitage, P.; Berry, G.; and Matthews, J. :** Statistics methods in medical research, 4th edition, Great Britain, MPG Books Ltd, 2002.

11- **Al-Mansory, A.** : Assessment of Nurses' Knowledge concerning Peritonitis – Dialysis Associated in Baghdad Teaching Hospitals, non published dissertation of master in nursing college, university of Baghdad, 2006, P.87.

12- **Al – Hakkak, F. :** Effectiveness of nursing education program on nurse's knowledge and practice in hemodialysis units, unpublished master thesis, college of nursing, university of Baghdad, 2004.

13- **Al – Ftlawy, D. :** Effectiveness of an educational program upon nurses' knowledge about complications reduction at the peritoneal dialysis units, non published dissertation of Doctorate in nursing college, university of Baghdad, 2006, P57.

14- **Taylor; C., Lillis; C., LeMone; P, and Lynn;** P.: Fundamentals of Nursing The Art Science of Nursing Care,7th edition , Walters Kluwer, United States American, 2011, pp. 189-91.

15- **Gebbie; K. and Lavin; A.:** Classification of Nursing diagnosis, American Journal of nursing, 1994, 74, pp. 250-3.

16- Yazigi, A and Zahr, K.: The effect of Education and Written Material on Compliance of Pediatric Client, University of California, and School of Nursing. Int. Nurse, Vol. 26, No. 3, 1998, P.213.

17- Al-Bayati, E.: Assessment of Knowledge, Practices and Attitudes of Patients with heart failure. non published dissertation of master in nursing college, university of mosul, 2006, P.71.

18- Al – Gannem, A.: Evaluation of nursing Practices Concerning Intravenous Therapy, Unpublished Master Thesis College of Nursing, University of Baghdad, 2001, p.86.