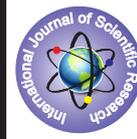


The Impact of Applying Orem Self-Care Nursing Theory on the Clinical Practice on University Nursing Students, Khartoum State, Sudan.



Nursing

KEYWORDS:

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ABSTRACT

Background: To successfully perform as a nurse one must have a foundation of theory rooted in their philosophy that drives their actions. Without the driving force of theory in their practice. **Material and Methods:** This is Interventional research study aimed at determining the impact of applying nursing theory on the third year students nurse during the academic year (2014 – 2015) at Bahri University. Elneelain nursing students were enrolled as a control group. The sample size was the total coverage consisted of 218 students (133 were represented the study group and 85 were represented the control group). The data were collected using a pre designed questionnaire and observational checklist were used to monitor the student's clinical performance (pre and post training program). The data was analyzed using statistical package for social sciences (SPSS). The results showed that the students were acquired knowledge after intervention specially in relation to the ability to designed nursing care plan for any patient and the self care requisites and the student's considered the Orem was the best suited in the Sudan (98.5 , 99.2% and 81.9%) respectively compared to the control group (00.0%, 00.0% and 00.0%). **Results:** showed that the students practical skills improved after Orem theory graded as. 30.1% for Excellent, 45.1% for very good and 24.8% good. While control group showed poor performance. **Conclusion:** The results concluded that the knowledge and practice for all study group acquired the skills of applied Orem theory in the practice. The study recommended that all nursing schools in Sudan should adopt Orem nursing theory in the curriculum and in clinical practice.

Introduction - Background: Nursing practice is a key factor of patient survival and health care. The nursing profession has identified a problem-solving the process that combines the most desirable element system ,using the scientific method .Systemic accumulation of essential to progress in any profession, however theory and practice must be constantly interactive. Theory without practice is empty and practice without theory is blind.(Orem 1959). The benefits of nursing quality assurance has been recognized by nurses practicing in varied areas of health care services with different needs and problems.

Problems Statement: There are advantages to having a single universal model for nursing because it further the development of nursing as a profession. It would give all nursing a profession frame work enhancing communication and research . It would also promote understanding about the nurses role in non traditional nursing setting such as independent nurse practitioner practice self-help clinic .Most disciplines have several conceptual models which allow members to explore phenomena in different viewpoints. Models increase an understanding of the nature of nursing and its scope. The model foster development of the full scope and potential of discipline. A conceptual model frame work proposed a different view of the meta paradigm concept . It's also gives clear and explicit direction to the areas of nursing practices ,education and research.

Worldwide studies: The significance of the utilization of Orem's model in practice has been explicit since the publication of the first edition of Nursing: concepts of practice (orem. 1971).Early use of the theory into practice began with the work of nursing development conference group (NDCG)(1973) The group initiated their adventure into theory based practice by integrating the developing concepts of the model into their clinical the conceptualizations evolved. They were incorporated into nursing care.The reality of nursing was further addressed by NDCG members who were in positions in which they could assert control on nursing systems. (Backscheider, 1971). Members of the NDCG valued their work in practice settings for supporting their conceptualizations to structure practice. The concept of self-care evolved in to a theory as Orem and colleagues discussed and formulating the concept in to a working description of nursing. Orem's model supports nursing through the following three central theories: Nursing is required because of the inability to perform self-care as the result of limitations (Theory of self-care

Deficit).Maturing or mature adults deliberately learn or perform actions to direct their survival, quality of life, and well-being (theory of self-care).The product of nursing is nursing system (s) by which nurses use the nursing process to help individuals meet their self-care requisites and build their self-care or dependent-care capabilities (Theory of Nursing systems)(Orem 1971)..

In the Sudan: Nursing theory was taught for the first time in the Sudan at the year of 1998 for post graduate , nursing students University of Khartoum an introduction of nursing theory . while under graduate student in upper Nile university and the academic of medical science and technology. as introduction of nursing theory course was established in 2002 . But there was no any application of nursing theory in the existing practical setting in the Sudan till now. This study will be the first application of Orem nursing theory into practice in the Sudan.

justification and Rationale: Application of nursing theory into the practice is needed to improve the student's performance. There is no standardized nursing care plan in the existing nursing practice in the Sudan. There must be specific frame-work to guide practice. Absence of unified nursing system, and there is no clear nursing care plan in all practical setting. The delivery of care is always related to the individuality. The students were find difficulties to state the needs and problems of their patients to care for. Application of Orem nursing theory into the practice will promote the patient's care and the student's performance.

Objective:

General Objective: To evaluate the effect of applying Orem self-care theory into the practice of nursing students in Bahri University, 3rd year.

Specific Objective:

specific obj: To assess the knowledge of the students regarding nursing theories and Orem nursing theory.

To implement an interventional teaching program about Orem nursing theory to the study group.

To observe the clinical performance of the students about their application of Orem nursing theory.

To evaluate the effect of application of Orem nursing theory into the performance of the study group

Materials and Methods

Study Design.

This is an Interventional group-control study among third year nursing students at Bahri University and El Neelain University – Khartoum state –Sudan (2009-2010), aimed to evaluating the effect of Applying Orem Nursing theory into practice for nursing students at Bahri University and El Neelain University

Study area.

The study was conducted in Bahri University, Faculty of Nursing sciences, which was established in 2011 after separation of the Sudan to replace the southern Sudan universities (Juba, upper Nile, Bahrelgazal and Rommbake).

Study population:

Third year nursing students ,were selected because the introduction of nursing theory course was given in this year at Bahri University, and El Neelain university students in the same year. **Inclusion criteria.**

All the students were registered and available in the 3rd year in the faculty of nursing sciences at Bahri University and El nelain University during the academic year (2014-2015) studying the pediatrics nursing course in this semester.

Exclusion criteria.

Others Students at the selected colleges were not included in this study.

Sample size.

The sample size was total coverage ,(218 students);133 were represented the study group for Bahri University and 85 students were represented the control group for El Neelain University.

Sampling Technique.

a. Pre intervention phase:

- The permission was taken from both nursing deans at Bahri University and El nelain University.
- Interview questionnaire and observation check list were designed to collected the target data
- Pilot study on 10 nursing students was done to check the validity and reliability of the tools that used and modifications were done.
- The questionnaire was distributed and filled by the students under the researcher's guidance.(pre test befor starting the nursing theory course .appendix I)

B. Interventional phase: (Implementing phase):

- The teaching program was carried out for 3rd year nursing students at Bahri University during semester 6th, and the Orem theory was given in fife lecture (10 hours), Including general introduction of nursing theory, and 6 hours seminars
- Nursing care plan form which was designed by the researcher was distributed to each student to be used in pediatric clinical areas. (appendix 1)
- Nursing care plan was designed for specific patient (scenario) under the guidance of the researcher that help in the application of the theory into practice.(Appendix III)
- Application of the Orem nursing theory under supervised practice three clinical session per week, for 8 weeks in the hospitals, in pediatrics departments .
- Each student was applied the Orem theory on 8 different cases

(one case/ week), used NCP which was designed by the researcher based on Orem theory, under the supervision from more trained collogue in the clinical area.

C. Post intervention phase:

- The Questionnaire was distributed post the intervention program for the students to assess their knowledge
- Each student were evaluated by using an observation check list collected by the clinical supervisors.
- The researcher was collected 8 NCP from each student, and the last one was analyzed to assess their performance and their competency of application of Orem nursing theory into practice

Data collection tools:

Tow tools were used to collect data as following

1–interview structured Questionnaire

A questionnaire was designed by the researcher to collect the data needed in the study. It consists of general information about nursing theory and specific information about Orem nursing theory.

2- Observational Check List

The check list was included Orem Nursing care plan (NCP). Which consist of three categories of self care requisites ,universal self care requests(USCR.), Developmental self care requisites(DSCR) and health deviation self care requisites(HDSCR).

Data analysis:

The data were coded, processed and transferred to computer coding. The descriptive analysis was adopted which includes percentage, frequency distribution, Table and Figures software program: Statistical Package for Social Science (SPSS) was applied.

Table No.(4.1) shows general information about nursing theory a ong study group and in Bahry university and control group in y Elneelain universit

Knowledge about nursing theory	Results							
	Study group				Control group			
	Pre-intervention		Post-intervention		Pre-interventio		Post-interventio	
	Yes %	No%	Yes%	No%	Yes%	No%	Yes%	No%
Is nursing like other sciences need theories	112	21	130	03	73	12	72	13
	84.4%	15.6%	97.7%	02.3%	86.0%	14.0%	84.7%	15.3 %
you heard about nursing theories	68	65	129	4	83	2	84	1
	51.0 %	49.0%	97.0%	3.0%	98.0%	2.0%	98.8%	1.2%

The table showed that all the students study and control group. agree that nursing like other sciences needs theory.(97.4% , 86.0 %).Chisquire:65.947

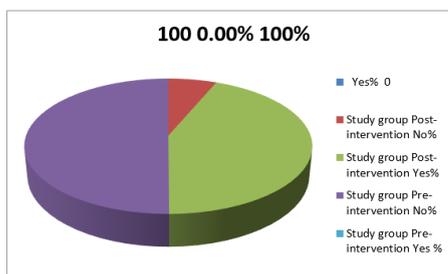


figure showed general information about nursing theory regarding aims of NT.

Chi-square = 1.754E2, df = 1 Asymp. Sig. = .000

Significant increase in knowledge

(table 4.4) shows general information about nursing theory among study group and control group in Bahry and Elneelain university 2012.

N = 133 (study group)

N = 85 (control group)

Knowledge about nursing theory	Results							
	Study group				Control group			
	Pre-intervention		Post-intervention		Pre-intervention		Post-intervention	
	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %
Do you find difficulties in doing NCP for any pt.	89 66.9%	44 33.1 %	3 2.3 %	130 97.7%	26 30.6%	59 69.4%	21 24.7%	64 75.3 %
Mention the causes / factors	89 66.9%	44 33.1 %	2 1.5%	131 98.5%	26 30.6%	59 69.4%	21 24.7%	64 75.3 %
Do you want unified NCP according to specific NT.	44 33.3	89 66.7	131 98.3	2 1.5	2 2.4	83 97.6	28 32.9	57 67.1

The table showed that all the students in the study group wanted unified nursing care plan based on specific nursing theory (98.3%) post intervention.

Chi-square = 22.289, df = 1 Asymp. Sig. = .000

Significant increase in knowledge

Discussion

Nursing theory has the current responsibility of teaching nurses to deal with probability or outcomes nursing priority on concurrent basis, identification of matters of nursing care bases upon validated criteria and the utilization of concurrent criteria to improve patient care. There are advantages to having a single universal model for nursing because: It further the development of nursing as a profession. It would give all nursing a profession frame work enhancing communication and research. It would also promote understanding about the nurses role in nontraditional nursing setting such as independent nurse practitioner practice self-help clinic, however theory and practice must be constantly inter active, theory without practice is empty and practice without theory patient and nurse is facilitated through education, teaching, and support in a beneficial environment, which is maintained by the nurse. The main idea is that individuals are affected "from time to time by limitations" that inhibit their ability to meet their self-care needs. Today Orem is recognized as one of the top-nursing theorist, actively refining the theory, which has now gained worldwide attention, while numerous colleges and schools of nursing have adopted SCDNT in their curricula (McEwen & Wills, 2007). There is no application of nursing theory in any health-care setting, or even concentration in teaching of nursing theory in curriculum of nursing in the Sudan.

Practice knowledge is systematized, validated, and conducive to dynamic processes. Dynamic Knowledge leads the user to acceptance and owning of the theory (Orem, 1988). Allison (1988) noted the dynamic quality of the theory and commented that the SCDNT always keeps the nurse in an action mode. emphasized that today's nurses are committed to an awareness of the relationship between what they know and what they do. From this awareness comes a healthy sense of professionalism. (Allison 1988) Regarding the assessment of the student's skills concerning NCP of specific patient, all the students of study group and control group was find difficulties how to identify patient's problems and needs and they concentrated on the clear sign and symptoms in pre intervention. However all the students in the study group analyzed well and done very well nursing intervention, of the universal self-care requisites, developmental and health deviation self care requisites while no one

of the control group done or even mention, in post intervention, (tables 4.9) (4.10) (4.11). These results were match with the central philosophy of Orem self-care deficit theory: Orem's Theory of Self-care Deficit focuses on the ability of the person to manage and carry out self-care practices that maintain optimal health and wellness. The grand theory is composed of three theories; the theory of nursing systems, theory self-care deficits and theory of self-care. Orem explained how each human possesses the capabilities to perform these activities, leading to a healthy state of both body and mind. These learned behaviors are influenced and shaped by the four concepts of nursing: the person (their personalities, behaviors, and habits), their environment (people they surround themselves with, the quality of the air and water, and food), the nurse, and health (ability or handicaps that interfere with self-care). The theory of self-care is separated into three main components. (Johnson & Webber 2010) self-Care Deficit Nursing Theory is that it can easily be applied to a variety of nursing situations and patients. The generality of its principles and concepts make it easily adaptable to different settings, and nurses and patients can work together to ensure that the patients receive the best care possible, but are also able to care for themselves. (Russel de Lara 2010). All the student of study group were become competent towards the clinical performance with application of Orem theory. These results were matches with study done by Goodwin's programmed instruction for self-care in postsurgical patients graduate students as the University of Texas ventured out to implement the SCDNT in extended-care services and found that the self-care concept was growth-producing for the nurses and the patients and showed the potential for cost-effectiveness (Anna Christensen, Hohon (1997)

Conclusion

Based on the results of this study: The researcher concluded that almost all the students of the study group became knowledgeable with nursing theory in general and Orem nursing theory in specific and more competent in the clinical practice, compared to the control group. Applied of Orem nursing theory into the practice has significant effect.

Recommendations

The researcher recommended by the following:

- 1-Nursing curriculums must be updated to include the nursing theory course and its application into practice to guideline graduated professional nurses in their caring for patients.
- 2- nursing schools should adopted specific nursing theory in the clinical practice
- 3- The decision makers of nursing in the ministries of health higher education should planned strategies to applied specific frame-work in all practical setting using documentation system in nursing care plan
- 4- It is very important for nurses to know the different theories in relation to nursing, as the self care deficit theory by Dorothea Orem which is easy for application in practice.

REFERENCES

1. Abdul, H., 2002, The Academic Implications of the Grand Nursing Theories, International Journal of Nursing, Vol 12 no. 10
2. Akyol A.(2007) Self-care agency and factors related to this agency among patients with hypertension. J Clin Nurs.16(4):679-87.
3. Alligood M R.(2002). Tomey A M. Nursing Theory: Utilization & Application .3rd ed. Missouri: Elsevier Mosby Publications; 4. Alshamsi, M.1995, The complexity of the modern nursing theories, International Journal of Nursing, Vol 8 no. 4
5. Alvare R.(2006) Self-care agency in people suffering from high blood pressure hospitalized in Bogota, Colombia. J Public Health. 8(3):1 Caring in relation to Orem's theory, Bartle J. Nursing Standard. -8.
6. Artinian NT.(2002) Self-care behaviors among patients with heart failure. Heart Long. 31(3):161-72.
7. Armer, J.M., Shook, R.P., Schneider, M.K., Brooks, C.W., Peterson, J., Stewart, B.R. (2009) . 5(37):33-6, 1991 Jun 5-11 Enhancing Supportive-Educative Nursing Systems Reduce Risk of Post-Breast Cancer Lymphedema. Self-Care, Dependence-Care & Nursing. 17:106-15
8. Azadi F.(2004) The study of effect applying participation model on quality of life in

- coronary artery patients [dissertation]. Tehran:Tarbiyat Modarres University;2004.
9. Baghaiy P(2005). Self-care condition in diabetic patients in Kashandiabetic cancer. Feyz.J. :12(1):88-93. [Persian]
 10. Bliss-Holtz J(1996). Nursing Science Quarterly Using Orem's theory to generate nursing diagnoses for electronic documentation..9(3):121-5.