

EVALUATION OF THE IMPLEMENTATION OF NURSING PROCESS AMONG NURSE CLINICIANS

¹Afoi, BB, ²Emmanueul, A, ³Garba, SN, Gimba, SM and Afuwai, V.

¹College of Nursing and Midwifery, Kafanchan, ²Department of Nursing Science, Faculty of Medical Sciences, University of Jos, ³Department of Nursing, Faculty of Medicine, Ahmadu Bello University, Zaria, ⁴Department of Human Anatomy, Ahmadu Bello University, Zaria.

ABSTRACT

This research was carried out in Kaduna State, Nigeria to determine whether Nursing Process is used in patients care or not. Utilizing an ex-post facto research design, a multistage sampling technique was used to select 210 nurses from urban and rural based hospitals from the three (3) senatorial districts of Kaduna State. Self-administered questionnaires were used for data collection. About 78% (163) of the questionnaire was filled and returned. The major findings were that 57.1% of the respondents indicated that Nursing Process is used in patients care in Kaduna state General Hospitals while 14.1% revealed that the use of nursing process started and stopped and 25.8% indicated that it is not used in patients care. The major factors that militated against the implementation of Nursing Process were identified as shortage of nursing staff (54.0%) and insufficient equipment (28.2%) for the implementation of Nursing Process in patients care. Three null hypotheses tested at significant level of 0.05 indicated that, years of experience and qualification does not relate significantly with the implementation of nursing process but rank of nurses relates significantly with the implementation of nursing process. The major opinions advanced by the respondents as a solution to these factors were that more nursing staff should be provided at every duty hours and the provision of basic care equipment for nursing care on patients. It is recommended that Nursing Process forms used in patients care should be adapted rather than adopted to suite the peculiarities of our environment in order to facilitate its full implementation in patients care.

KEYWORDS- Evaluation, Nursing process, Nurse Clinicians

INTRODUCTION

Nursing is an emerging profession with a unique perspective on people, environment and health. It has moved from the medical model which focuses on the treatment and care of pathological illness/disease to a nursing model which emphasizes a holistic care.

The challenge for developing a scientific base for nursing practice in order to improve the practice of its members in rendering services to clients/patients to make the greatest impact has been the basis for evolving a knowledge which is uniquely nursing. Recently, accountability through documentation by nurses has been emphasized during patients care. This underpins the need for the effective implementation of the Nursing process in patients care in Nigerian Hospitals.

According to WHO (2006), Nursing process is an organized sequence of problem solving steps used to identify and to manage the health problems of clients. It is accepted for clinical practice established by the American Nurses Association. Suffice it to say that Nursing process is the pride of the nursing profession.

In many Nigerian Hospitals, the Implementation of the Nursing process by nurse- clinicians leaves much to be desired. Anyebe (1998) asserted that the implementation of Nursing process in health institutions has been rather slow and its acceptance by nurse- practitioners is resisted at worst and haphazardly implemented at best. The drive to this study stems from the fact that nurses maintain that care is at the core of nursing practice (Walsh 2002). The Nursing process helps the nurse to achieve this goal. Nursing process is an adaptable tool which allows only the nurse to respond to the changing needs of patients by focusing less on medical emphasis of disease cure and more on holism of patients health promotion, maintenance and restoration.

Although the Nursing process has been criticized and in some cases replaced by other tools for accountability and documentation it has remained the most contemporary in nursing circles the world over. It is a standard against which professionalism in nursing is measured.

Ford and Walsh (1994) and Walsh (1998 as cited by Walsh, 2002), maintained that the concept of Nursing process is cumbersome. They suggested its prompt replacement with 'Critical Pathway' reason being that it heralds a less cumbersome and more quality oriented approach. Critical pathway from a nursing perspective is a planned care for clients /patients involving all the activities or care to be rendered. It is only signed once the care has been rendered. Only the care which was not initially included in the patient's care is written down. It can however be criticized for its empirical view of patients with the same disease condition which seriously undermines the concept of holistic and individualized care. Similarly Manthey (1980) cited in Walsh (2002), described "Primary and Team Nursing Care" to replace the Nursing process. The Primary and Team Nursing Care is a system where patients are allocated to nurses with the nurse in charge of the team held accountable for the patients from admission to discharge.

Jibril (2005) asserted that there is no hospital in Nigeria where nursing process is fully implemented.

With these antecedents there is no gain saying that the challenge of the utilization of Nursing process the world over is the bane of professional nursing care to clients/patients, families and communities.

STATEMENT OF THE PROBLEM

The professional inputs of a nurse will enable a patient to be discharged on time or enjoy the dying process if the illness will eventually lead to death (Moronkola, 1995). The use of nursing process will enhance a complete care for the patient and family members. Awonusi (2005) opined that the nurses are key elements for global health policy implementation to meet the needs of health for all in the 21st century. That nursing contributions to health services covers the whole spectrum of health care promotion and prevention as well as health research implementation and innovations. This opinion follows global trends of information technology where nurse clinicians are equipped with information and communication technology (ICT) skills in the implementation of nursing process.

Another factor that enhance quality nursing care is staff strength. Developed countries have continued to woe nurses from around the world especially from the African continent. Hussaini (2007), asserted thus "just last month I was in Chelsea Hotel where I watched employment agents interview Nigerian nurses for 600 slots in Barbados, as I am talking to you now most if not all have already spent one month there" international labour organization ILO (2003), in Hussaini (2007) pointed to the fact that nursing personnel working in the countries implementing health reforms face challenges brought about by macro-economic measures that are anti-workers such as downsizing, rightsizing, commercializing, outsourcing and even outright sales of some of the facilities. These can be summarized to be problems around the world that could militate around the utilization of nursing process in patients care.

The Nigerian situation is worsened by a crippled health care system where the absence of facilities, equipment and poor remuneration and motivation of nurse clinicians are seen.

In Kaduna state these challenges abound and the case is worsened by the nurse-patient ratio. Lukman (2007), pointed to the fact that there was 1 nurse to 2,826 patients in 2004. Anecdotal evidence reveal that in both government and private owned secondary health institutions (General Hospitals) the implementation of Nursing process is largely a class room exercise and at best utilized by students seeking to improve their practical knowledge in preparation for examination(s). In hospitals where there are no student nurses on training the forms are made available in the ward only during routine inspection by regulatory bodies otherwise they remain covered with dust in the stores. To this end the implementation of nursing process in General Hospitals in Kaduna State pose a great challenge that makes this research desirable.

To achieve this study the following questions will be answered in the long run:

1. Do nurses in General Hospitals in Kaduna State implement Nursing process in patients care?
2. To what extent is the Nursing process used in patients care?
3. What are the factors that affect the implementation of Nursing process in patients care?

4. What opinion(s) do nurse clinicians hold regarding the use of Nursing process in the General Hospital

OBJECTIVES OF THE STUDY

The study aims to achieve the following objectives:

1. To determine whether nurse clinicians in General Hospital in Kaduna State implement Nursing process in patients care.
2. To determine the extent to which nurses in the General Hospitals in Kaduna State utilize Nursing process.
3. To uncover any factor(s) that affect the implementation of nursing process in patients care.
4. To determine the opinion(s) nurse clinicians hold regarding the utilization of nursing process in patients care in the State General Hospitals.

SIGNIFICANCE OF THE STUDY

At the end of this study the researcher hopes that the result of this study will be used to improve patients care in General Hospitals in Kaduna State and beyond.

The findings will also create awareness to nurse educators to improve in the teaching of Nursing process to students while emphasizing its implementation while working as clinicians.

The findings will stimulate more/further research to unveil the path leading to the full implementation of the Nursing process in Kaduna State and Nigeria at large.

It is also hoped that the findings will assist in solving problems that contribute to non-implementation of Nursing process by nurses in Kaduna State and beyond.

HYPOTHESIS

1. There is no significant relationship between years of experience and the implementation of the nursing process.
2. There is no significant relationship between qualification and the implementation of the nursing process.
3. There is no significant relationship between rank and the implementation of the nursing process.

CONCEPT OF NURSING PROCESS

Various authors describe the nursing process in different ways. According to Laryea (1994 by Oguntade, 2002), Nursing process is a systematic rationale method of planning and providing nursing care. Oguntade sees it as an adaptable tool and a demonstration of an intellectual ability of the nurse in meeting clients' needs. Ojo (2005) defines Nursing process as a scientific systematic method of problem solving forming the organizing frame work for effective nursing practice. These definitions can be summarized by saying that Nursing process is a dynamic process that makes the nurse autonomous during clients patients care among the health team members. It makes the nurse independent while maintaining her interdependence with other health care providers during clients/patients care.

BRIEF HISTORICAL BACKGROUND OF NURSING PROCESS.

The nursing process was produced by the contributions of many individuals. In the early 1960s, Chambers and Komorita wrote some of the first articles on Nursing diagnoses in the American Journal of Nursing. Others that made contributions include Yura, Walsh, Carpenito, Kim, McCfarland, Mclane, Gordon and Campbell each of which has published textbooks of Nursing diagnoses (Ojo, 2005).

The leading force in reviewing and developing Nursing diagnoses is the North American Nursing Diagnoses Association. (NANDA) whose membership includes experts from various nursing disciplines. They meet yearly to review refine and develop new Nursing diagnoses. The Nursing process was developed to give nursing a unique knowledge which makes her autonomous in clients/patients care. It was also intended to offer the nurse a way of thinking related to Nursing care. Unlike the medical diagnoses which focuses on the treatment of diseases, the Nursing diagnoses focuses on the clients/patients health care needs (Ojo 2005)

The Nursing process is central to all nursing care, it encompasses all steps taken by the nurse in caring for a client or patient. The elements/phases of Nursing process are directed towards well-being in the following domains:

- a. Emotional.
- b. Physical.
- c. Spiritual.
- d. Social. (Umanitoba 2005).

This implies that the care is usually congruent with the expectation of the patient.

According to Umanitoba (2005), the phases of Nursing process are five (5), these include:

- i. Assessment: gather and analyse data from patient or relative or significant others.
- ii. Nursing Diagnoses: identify problem and label/state in NANDA language.
- iii. Planning: write out care plan to meet set out goals following diagnoses.
- iv. Implementation: carry out the planned care.
- v. Evaluation: determine the extent to which goals were achieved.

Occasionally (i) and (ii) are merged so that there are four (4) phases of Nursing process. The nursing care plan forms a vital and intergral part of the Nursing process. It is a set of predetermined sequence of activities governing the nursing care of a client/patient, family or community. The elements of a nursing care plan are six (6) these according to umanitoba (2005) include:

- i. Assessment : subjective and objective data from client patient or witnesses.
- ii. Nursing diagnoses: gather information, interpret, cluster and name/label using NANDA language.
- iii. Nursing Objective: expected outcome after intervention which must be Specific, measurable, achievable, realistic, time bound and patient centered.
- iv. Nursing Intervention/Action: order to be implemented by care planner or other care providers
- v. Scientific Rationale: scientific principle guiding every nursing action.
- vi. Evaluation: to determine the extent to which the expected objectives in (iii) were achieved. It helps to start off further assessment since it's a continuous process.

IMPLEMENTATION OF NURSING PROCESS.

While the Nursing process is being successfully implemented in some parts of the world it remains a mirage in other parts of the world. In Australia, New Coast Area Health Services (NCAHS) (2007), in a study of twenty (20) rural hospitals in new South Wales to identify if Nursing care plan was used to enable Nurse- clinicians document intervention and care on daily basis or when patients condition changes over a period of one (1) year, revealed that 80% of respondents said the care plan with all the information were applicable to clinical practice, while 49% indicated need for further improvement of the care plan.

Uduak (1999) in a study in a Specialist Hospital in eastern Nigeria, titled "Evaluating the impact of primary nursing practice on the quality of nursing care: a Nigerian study" revealed a significant improvement in the quality of nursing care with Primary Nursing Practice. The greatest improvement in the quality of nursing appeared to be in the elements that addressed the patients' individual needs. primary nursing is a simplified form of nursing care plan in which patients care is planned and implemented without copious writing which nurses complain is time consuming in Nursing process. In other words its simply an adaptable rather than an adoptable nursing care plan.

Anyebe (1998) in a study of the implementation of Nursing process between 1993 and 1998 in Ahmadu Bello University Teaching Hospital (ABUTH) Zaria revealed that implementation of Nursing process could still not be said to be effective.

Many factors affect the implementation of Nursing process the world over. Walsh (2002) asserted that nursing process developed as a tool for teaching care planning and was then implemented across the whole of nursing, but unfortunately with little research to support such a major step. Walsh (2002), further said that the result has been much criticism and a sense among many nurses that it is all too time consuming. He also identified the opinions of the nurses as saying that the process involves a series of stages which include writing down copious notes by hand to a great deal of documentation which nurses feel they have no time for.

Anyebe (1998) in a study of the factors affecting the implementation of Nursing process in ABUTH Zaria identified the following;

- a. Nurses have a poor or low motivation towards reading.
- b. Resources (books and journals) are not being provided for nurses.
- c. The implementation is expensive and time consuming.
- d. Shortage of nursing staff in ABUTH.

Anyebe concluded that the nurses of ABUTH have a positive attitude towards the implementation of nursing process in clients/patients care.

The findings of the various researches by different researchers above can be summarized that the implementation of Nursing process fully, partially or haphazardly is affected by a number of factors that range from the stage of development and economy to the attitude of the nurses towards its use.

THEORETICAL FRAME WORK

The theoretical framework upon which the Nursing process is based is the systems theory. It consist of phases and elements as mentioned above. Bertalanffy (1968) in Ajayi (2004), said a system consist of two or more connected units which form an organized whole. The units interact with each other towards the attainment of goal(s). he further said the four parts of a system are input, process, output and feedback. Here, the nurse clinicians represent the human resources (input) who will plan and implement (process) the care on the client/patient. The response (output) of the patient to the care implemented will go a long way in determining his recovery or enjoy the dying process (feedback), otherwise a worsening health condition. Bertalanffy (1968) further stated that in a system, build up and break down of its material components take place, to this end feedback arrangements are widely used in Nursing process for the stabilization of certain actions and control and re-communication for others. An open system which Bertalanffy (1968), says allows for import and export of materials- in this case re- assessment, implementation and feedback, satisfy the view of a man (client/patient) as an active personality system.

METHODOLOGY

This chapter presents the research design used in carrying out the research work it also presents the area of study, population, sample and sampling procedures as well as the methods of data collection and analysis.

RESEARCH DESIGN

An exploratory research design was employed in this study.

AREA OF THE STUDY

Kaduna State is one of the oldest states in the northern region, located in the central region of the north. It is geographically located on latitude 10°30" north of the equator and 7°30" east of the Greenwich meridian. Kaduna State is bounded by Katsina and Kano States to the east, Bauchi to the southwest, Niger and Zamfara to the west and Abuja (FCT) and Nasarawa to the south (Nkom 2006).

Kaduna State has a population of 6, 066,562 based on the 2006 census (National Population Commission (2007) in Muogbo.O, Fagbemi S. and Subair G. (2007). The state has 26 operational General Hospitals with three (3) others awaiting commissioning to sum up to 29 altogether. Kaduna State is made up of multi religious and multi ethnic population. There are a total of 1,305 nurses working in all the General Hospitals in the State.

POPULATION FOR THE STUDY

The population for this study comprise of all the 1,305 nurses working in the general hospitals in Kaduna State.

SAMPLE SIZE AND SAMPLING PROCEDURE

A total of 210 nurses were selected for this study drawing 70 nurses from each senatorial district of the state. A probability sampling method was used in this study. The general hospitals were clustered into the three (3) senatorial districts in which the hospitals were stratified into urban based and rural based. A paper basket method was then used to select two (2) hospitals from each senatorial district one being urban based and the other rural based. The following hospitals were selected;

Southern Senatorial District;

- a. General Hospital Kafanchan – urban based
- b. General hospital Kaura –rural based

Central Senatorial District;

- a. Barau Dikko Specialist Hospital Kaduna – urban based.
- b. Dr Gwamna Awan General Hospital Kakuri – rural based.

Northern Senatorial District;

- a. Hajia Gambo Sawaba General Hospital kofar Gaya zaria – urban based
- b. General Hospital Makarfi – rural based.

INSTRUMENT FOR DATA COLLECTION

A self-designed closed ended questionnaire was developed and used to collect the data. The questionnaire focused on the personal data of nurses, the use of Nursing process in patients care, the extent of use of the Nursing process and the factors that affect the implementation of Nursing process in patients care.

METHOD OF DATA COLLECTION.

The data was collected using questionnaires that were self-administered by the researcher.

The kind permission of the Director of Nursing was obtained to administer the questionnaires. Availability method was used with a higher percentage of questionnaires administered in the urban based Hospitals which have a higher population of Nurses.

METHOD OF DATA ANALYSIS

The data was analyzed using descriptive statistical technique in which frequency distribution tables and percentages were employed. Furthermore, chi-square was used to test the stated hypotheses.

RESULTS

Table 1: Respondents' Distribution According to Hospitals

Hospital	Frequency	Percentage (%)
General Hospital Kaura	19	11.7
General Hospital Hunkuyi	12	7.4
Dr Gwamna Awan General Hospital Kakuri	24	14.7
Hajiya Gambo Sawaba General Hospital Kofa	32	19.6
General Hospital Kafanchan	37	22.7
Barau Dikko Specialist Hospital Kaduna.	39	23.9
Total	163	100

A total of 210 questionnaires were administered to the selected hospitals. One hundred and sixty-three (163) were returned responded to, this is attributed to the high number of nursing staff on leave and off duty.

Table 1 shows that 11.7 % of the respondents were from General Hospital Kaura, 7.4% from General Hospital Hunkuyi, 14.7% from Dr Gwamna Awan General Hospital Kakuri and 19.6% from Hajiya Gambo Sawaba General Hospital Kofa. 22.7% respondents were from General Hospital Kafanchan, while 23.9% from Barau Dikko Specialist Hospital Kaduna to represent the highest number of respondents.

Table 2 Socio Demographic Characteristics of Respondents

Socio Demographic Characteristics	Frequency	Percentages (%)
A. Age(Years)		
20 and below	3	1.8
21-30	33	20.2
31-40	45	27.6
41-50	67	41.1
51-60	11	6.7
NO Respond	4	2.5
Total	163	100
B. years in Service		
0-10	70	42.9
11-20	30	18.4
21-30	49	30.1
31-40	10	6.1
No response	4	2.5
Total	163	100
C. Qualification		
Single	39	23.9
Double	77	47.2
Triple	14	8.6
BNSc	1	0.6
No response	32	19.6
Total	163	100
D. Rank		
SN/M	31	19.0
NO	42	25.8
PNO	21	12.9
ACNO	12	7.4
CNO	46	28.2
Others	6	3.7
No response	5	3.1
Total	163	100

A total of 77 Nurses (47.2%) have double qualification among the respondents, 23.9% had single qualification of RN or RM while 8.6% have triple qualification. Only 1 graduate (BNSc.) (0.6%) responded to the questionnaire. The table also shows the ranks of the respondents in which majority (28.2%) are Chief Nursing Officers (CNOs), 25.8% were Nursing Officers (NOs) i or ii, while 19.0% were Staff Nurses and midwives. Also 12.9 % are Principal Nursing Officers (PNOs) while 3.7% belong to ranks other than the ones mentioned above, for example Senior Nursing Officers (SNOs), Senior Nursing Sister (SNSs), Staff Nurses (SNs and Nursing Superintendent.

Majority of the respondents (41.1%) were aged 41-50 years old, this is followed by 31-40 years with 27.6% while 20.2% fall within the age range of 21-30 years. The least (1.8%) were those aged less than 20 years. On the number of years in service majority of the respondents (42.9%) had spent between 0-10 years in the service and those who have spent 11-20 years made up 18.4%. Those who have spent between 21-30 years in service constituted 30.1% of the respondents, while 6.1% have spent between 31- 40 years in service (Table 2).

Table 3 Distribution according to the Implementation of Nursing Process in Patients Care in General Hospitals

Implementation	Frequency	Percentage
Yes	93	57.1
No	42	25.8
Started and stopped	23	14.1
No response	5	3.1
Total	163	100

A total of 57.1% of the respondents said they use Nursing process in patients care in their Hospitals 42 respondents (25.8%) said 'no' they don't use Nursing process in patients care while 14.1% said that they started implementing Nursing process and stopped (Table 3).

Table 4 Distribution According to the Availability of Nursing Process Forms in The Ward

Response	Frequency	Percentage
Yes	97	59.5
No	55	33.7
No response	11	6.7
Total	163	100

The findings in Table 4 revealed that 59.5% responded "yes" that they have Nursing process forms in their wards, 33.7% said they have no Nursing process forms in their wards.

Table 5: Distribution According to Support by Nurses for the Use of Nursing Process in Patients Care

Response	Frequency	Percentage
Yes	151	92.6
No	5	3.1
No response	7	4.3
Total	163	100

From Table, 5 a total of 92.6% of the respondents are in support of the use of Nursing process in patients care. 3.1% said they do not support the use of Nursing process in patients care.

Table 6 Distribution According to Reasons for Not Using Nursing Process in Patients Care

Reasons	Frequency	Percentage
Shortage Of Nursing Staff	88	54.0
Lack/insufficient Nursing process forms	25	14.7
Insufficient equipment for the implementation of Nursing process.	46	28.2
Nurses are not practically And properly exposed to the use of Nursing process	27	16.6
Nurses are not interested in the use of Nursing process in patients care.	17	10.4
Others	10	6.1

Table 6 shows that majority (54%) of the respondents indicated that shortage of staff is the reason why Nursing process is not being implemented, 28.2% said insufficient equipment was responsible, while 16.6% poor exposure of Nurses to practical Nursing process. Others include 14.7% who attributed it to insufficient Nursing process forms. 10.4% said it's due to Nurses' lack of interest in it while 6.1% gave responses other than the ones mentioned.

Table 7: Distribution According to Nurses Opinion on the Possibility of the Implementation of Nursing Process in General Hospitals in Kaduna State.

Response	Frequency	Percentage
Yes	106	65.0
No	7	6.1
Yes but partially	46	28.2
No response	4	2.5
Total	163	100

Table 7 shows that 65.0% of the respondents indicated that the use of Nursing process is possible in their hospital but 28.2% said it is only partially possible while 6.1% said it is not possible.

Table 8: Distribution According to Nurses Suggestions on what can be done to facilitate the Use of Nursing Process in Kaduna State General Hospitals

Suggestions	Frequency	Percentage
Nurses should be encouraged to use the Nursing process in daily patients care.	88	54.0%
In-house workshops for the training and retraining of Nurses about Nursing process	83	50.9%
Basic nursing care equipments should be supplied to all General Hospitals	101	62.0%
Further education for Nurses should be encouraged	71	43.6%
Nurses should develop positive attitude towards understanding and implementing the Nursing process	85	52.1%
There should be more nursing staff on duty at every duty hours	101	62.0%
There should be close supervision of the Nurses on the implementation of Nursing process.	55	33.70%
Journals of nursing and other audio visual software materials should often be provided	35	21.5%
Others	26	16.0%

Respondents had multiple choices here and were at liberty to select more than one option. A total of 62.0% of the respondents opined that for Nursing process to be implemented, there should be more nursing staff at each duty. Another 62.0% suggested the need to supply nursing care equipment. Some (54.0%) suggested that Nurses should be encouraged to use the Nursing process in patients care by all available means, 52.1% suggested that Nurses should develop a positive habit towards understanding and using the Nursing process 50.9% suggested that in-house workshops for Nurses should often be organized for training and retraining of Nurses. Others include 43.6% opined that further education for Nurses should be encouraged, 33.7% suggested that Nurses should be supervised in the implementation of Nursing process to ensure that they use it. Few (16.1%) of the respondents suggested, other ways, other than the ones mentioned above.

Table 9: Chi-square analysis of years of experience on implementation of nursing process.

Years of experience	Implementation of nursing process				Total
	YES	NO	Started & stopped	No response	
0 – 10	40	14	14	2	70
11 – 20	17	7	4	2	30
21 – 30	29	18	1	1	49
31 – 40	5	2	3	0	10
No response	2	1	1	0	4
Total	93	42	23	5	163

Chi- square is 14.35, critical value is 21.03. significant at 0.05. Degree of freedom of 12.

Table 10: Chi-square analysis of qualification on implementation of nursing process.

Qualification	Implementation of nursing process				Total
	YES	NO	Started and stopped	NO RESPONSE	
Single	16	13	9	1	39
Double	54	13	7	3	77
Triple	5	5	3	1	14
BNSc	1	0	0	0	1
No response	17	11	4	0	32
Total	93	42	23	5	163

Chi- square is 16.81. critical value is 21.03 significant at 0.05. DF of 12

Table 11: Chi-square analysis of rank on implementation of nursing process.

Rank	implementation of nursing process				Total
	YES	NO	Started and stopped	No response	
SN/M	18	6	5	2	31
NO	25	8	8	1	42
PNO	11	5	3	2	21
ACNO	6	3	3	0	12
CNO	28	18	0	0	46
OTHERS	3	2	1	0	6
NO RESPONSE	2	0	3	0	5
Total	93	42	23	5	163

Chi- square is 28.41. critical value is 25.0 significant at 0.05. DF of 18

DISCUSSION OF THE FINDINGS

Table 1 shows that the staff strength of the urban-based hospitals is higher than that of rural-based hospitals. However, Dr. Gwamna Awan General Hospital Kakuri takes an exception from this, its staff strength is higher than that of 2 other urban-based hospitals i.e. General Hospital Kofa and General Hospital Kafanchan.

Table 2 reveal that majority of respondents are above 30 years of age with an average age of 39 years. The respondents are mostly youths, hence strong and agile to carry out their responsibilities effectively. The number of years in service is a reflection of work experience of the respondents. The average years of experience is 15 years, meaning that, respondents had had experience enough to render quality nursing care to patients. Furthermore, majority of the respondents have another qualification besides the basic nursing certificate that further prepares them to render better care. However, it was discovered that most of these qualifications are at diploma level. Instead of furthering their education by acquiring university degree in nursing which will better prepare them, they go for diploma specialization making them grow horizontally instead of vertically. The chi-square analysis in tables 9 and 10 shows that years of service and qualifications those not relate significantly

with nursing process implementation because in both cases the calculated chi-square is less than the critical value significant at 0.05.

Majority of nurses said they utilize the nursing process in patient care, but the findings shows that a significant proportion either do not use the nursing process or started and stopped. This implies that the nursing process is partially implemented in general hospitals of the state. This agrees with the assertions of Anyebe (1998) and Jibril (2005). The statistical test in Table 11 suggest that the null hypothesis be rejected meaning that there is a significant relationship between rank of respondents and the implementation of the nursing process. The chief nursing officer (CNO) utilizes the nursing process more than any group. This may be because the work load on them is less compared to the others. The junior nurses (staff nurse/ midwife and the nursing officers) are the next probably because they are just coming from school and still have fresh knowledge of the nursing process and can cope easily with stress.

Some of the reasons why nurses do not fully implement the nursing process are; inadequate nursing process forms and other equipment, some nurses fill it is not necessary, staff shortage, and lack of exposure to the use of nursing process in patient care.

CONCLUSION

Nursing process is partially implemented by nurse clinicians in Kaduna State General Hospitals because of staff shortage, lack of exposure to the use of nursing process, inadequate equipment and lack of interest by nurses.

RECOMMENDATIONS

In view of the findings from this research work, the following are recommended:

- (i) Further studies should be carried out to ascertain whether Nursing process is used in patients care. It is important to find out what the respondents mean when they say that they use Nursing process in patients care.
- (ii) Basic nursing care equipment should be supplied to all General Hospitals.
- (iii) Further education such as the BNSc. and other continuing education programmes should be encouraged especially for those Nurses who have the requirements for such programmes.
- (iv) The existing quality assurance committee of the Department of Nursing Services should in addition to the procedure manual, design an adapted version of the Nursing process form to accommodate the peculiar problems facing the use of Nursing process in patients care in this part of the world.
- (v) Materials such as current journals of nursing, audio visuals on nursing care and a functional quality assurance committee should be set up in each Hospital. This committee should select competent nursing staffs that are practicing bedside nursing not only those occupying administrative positions for intensive training through seminars, workshops and practical exposure for the effective implementation of Nursing process. These Nurses should in turn organize same in their various Hospitals.
- (vi) All Nurses at all ranks should run shifts except the ward heads and Nurses occupying administrative positions who should close at 4pm. This will afford them the opportunity to meet with the afternoon and night duty Nurses for more effectiveness. Also well experienced Nurses will thus be present at all shifts to supervise and instruct on the use of Nursing process in patients care
- (vii) Tutors in the Schools of Nursing should take Nursing process beyond the classroom so that students are guided in its practical use in the wards.
- (viii) Internet facilities should be provided in each Hospital to keep an update on the practice of Nursing.
- (ix) Young and intelligent minds should be used in areas that require reading and research. This can be achieved by organizing annual competitions for all Schools of Nursing in the state on practical Nursing process.
- (x) The use of Nursing process in patients care should be implemented overtime in phases. This should be accomplished by specific, realistic and achievable time frames which should be evaluated at intervals.
- (xi) Project topics such as this research topic and other relevant topics which seek to improve the quality of nursing care should be sponsored by the State Government through her ministry of health. Priority in this regard should be projects undertaken by undergraduates, masters and doctorate degrees students given the quality and educational qualification of their supervisors.

REFERENCES

- Anyebe, E. (2000). A study of the factors affecting the implementation of Nursing process in Ahmadu Bello University Teaching Hospital, Zaria. *The Lamp* vol. 2, No.29 p.32-34.
- Awonusi, B.O. (2005): The challenges and prospects in the nursing profession in the 21st century. Guest lecture delivered at the Nigeria Universities Nursing Students' Association Week, Ahmadu Bello University Chapter on the 3rd September, 2005 at the Blue Seat Lecture Theatre, Ahmadu Bello University Zaria.
- Ajayi, D.A. (2004). Comparative study of student Nurses performance in nursing council final examination. Case study of Basic Schools of Nursing in Kaduna State. Unpublished PGDE project work submitted to the Part-Time and consultancy Unit, Federal College of Education, Zaria, June 2004.
- Bertalanffy,. (1968). General systems theory available at <http://www.is theory. Yorku.ca>.
- Fajemilehin, B.R. (2002). Nursing practice: Its strength and weaknesses in Osun State Nigeria. *African Journal of Nursing and Midwifery* vol. 2, No. 4 pp.56-58.
- Hussaini, L.D. (2007). Consolidated Woes. National Association of Nigerian Nurses and Midwives Newsletter March 2007, vol. 1, pp.1-6.
- Jibrin, A. (2005). Nursing in the 21st century and Beyond (Film). Guest lecture delivered at the Kaduna State Association of Nigeria Universities Nursing Students Week Ahmadu Bello University chapter on 30th July, 2005 at the Assembly Hall, Ahmadu Bello University Samaru, Zaria.
- Lukman, S.M. (2007). Hard Road to Travel .New Nigerian Newspapers, 10th April 2007, p.10.
- Moronkola, O.A. AND Ojedokun, I.M.(2002): Nurses' knowledge and attitude towards utilization of patients (Health) education in Nursing Care in Ibadan, Nigeria. *African Journal of Nursing Midwifery*.vol 4 No 2 pp 22-26.
- Mougbo,O., Fagbemi, S. and Subair, H.(2007): Nigerian 2006 National Census Result All That matters, available at <http://www.google.com.ng>.
- North Coast Area Health Services (2006). Adults patients assessment root, available at <http://www.google.com>.
- Nkom, E.K. (2006): Socio-economic effects of HIV/AIDS spread among Tanker Drivers in Kaduna State. A case study of Marrabam Jos Park. Unpublished project work submitted to the Department of Geography Ahmadu Bello University Zaria for the award of B.Sc. Geography October, 2006.
- Osi, B.(2006). Proposed Nursing Education Reforms: Basis, Process and Outcome. Nursing and Midwifery Council of Nigeria Newsletter vol. 6 No. 13,p.4-7.
- Oguntade, R. (ed) (2002)./ Nursing process: An effective tool for quality nursing care, Ibadan, Creative Books
- Ojo, A.A. (2005). The Nursing process: A lecture delivered to Department of Nursing Science, during a visit to Ahmadu Bello University, Zaria , at Faculty of Veterinary Medicine Multipurpose Hall, 8th February, 2005.
- Uduak, E.A. (1999). Evaluating the impact of primary nursing on the quality of Nursing care. A Nigerian study *Journal of Advanced Nursing* vol. 29, No. 3, pg.680.
- Unmakntaba, J. (2005): The Nursing Process, available at <http://.www.umnamataba.ca/nursing/course/128>
- Welsh, M. (Ed). (2002). Watson's clinical nursing and Related sciences (6th ed). London, Elsevier Limited
- WHO (2006). The Nursing process, available at <http://www.facultuy.ksu.edu.sa/alrousan/documents/medsurg/nursingprocess>

Received for Publication: 12/10/2012

Accepted for Publication: 01/12/2012

Corresponding Author

Emmanuel, A

Department of Nursing Science, Faculty of Medical Sciences, University of Jos,

email-andyemma62@yahoo.com