

Nurses knowledge, Perspectives and Practice of the nursing Process in Two Public Hospitals in Kenya: an Interventional Study

Githemo Grace^{1*}, Anna Karani², Martin Ogutu³ and Hazel Gachoka⁴

¹Lecturer, School of Nursing, Kenyatta University, Kenya.

²Professor, School of Nursing, University of Nairobi, Kenya.

³Associate Professor, University of Nairobi, Kenya.

⁴Lecturer, Jomo Kenyatta University of Agriculture and Technology, Kenya.

*Corresponding author

Githemo Grace, Lecturer, School of Nursing, Kenyatta University, Kenya, E-Mail: githemo.grace@ku.ac.ke.

Submitted: 21 June 2017; Accepted: 27 June 2017; Published: 30 June 2017

Abstract

The nursing process 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. This was a quasi-experimental study (with pre-test and post-test that was carried out from March 2013 to July 2015 in two public hospitals in Kenya. It aimed at establishing whether training of nurses on the nursing process would improve their knowledge, perspectives and practice of the nursing process in patient care. Analysis was performed by use of computer software statistical package for social scientists (SPSS version 22). Descriptive statistics was used to summarize the quantitative data while Chi square test was used to determine the whether there was significant difference between pre-test and post-test. The findings revealed significant difference ($p < 0.05$) in knowledge of the nursing process and on the number of nurses who stated that they utilize the nursing process. However there was no significant difference ($p > 0.05$) on the nurses perspectives towards the nursing process and the number of patients drawn for a care plan. The study concluded that training was effective in improving nursing process knowledge and utilization but not on the perspectives towards the nursing process. This therefore calls for healthcare organizations who intend to use the nursing process as model of providing quality nursing care to plan for continuous training programmes and also develop nursing audit mechanism to ensure its continued utilization and change of perspective.

Key words: Nursing process, Knowledge, Perspectives, Practice

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 can be used in demonstrating nurses' accountability and responsibility while providing care to the client. The nursing process 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 [1].

According to George and Julia (2002), the nursing process has been the label applied to an underlying scheme that provides order and direction to nursing care [2]. The nursing process is also a tool used by many nurses to make decisions while providing care and evaluate the outcomes of nursing actions.

Historically nursing focused more on health problems or specific disease conditions than on persons receiving care. Often nursing care was based on intuition of individual nurses or on order written by a physician. This evolved into the biomedical model of nursing care which still strongly influences nursing practice [3].

Nurses quickly realized that treating patients based upon their disease rather than making a holistic assessment was not a satisfactory way of attending patient care [3]. As part of the movement towards identifying nursing as a profession, a scientific or problem solving approach to nursing practice was identified as the nursing process [4].

According to the Nursing Council of Kenya practice guidelines, the practice of nursing should be based on the scientific application of the nursing process [5]. This has also been emphasized in the current nursing procedure manual that presents the applications of the nursing process to clinical procedures, to enable nurses deliver

effective patient–focused care [6].

However a study carried out in Naivasha hospital Kenya, to evaluate the implementation of the nursing process found out that nurses had difficulties performing all the phases of the nursing process (assessment, diagnosing, goal identification, planning, implementing, evaluation and documentation) although the nurses had reported that they find all of them easy [7].

Therefore the objective of this study was to evaluate the effect of nursing process training on nurses knowledge, practice and perspectives towards the nursing process in two public hospitals in Kenya and also determine the factors that influenced its application

Literature Review

The nursing process

Since the 1970, the nursing process has been the label applied to an underlying scheme that provides order and direction to nursing care. It's as a tool used by nurses to make decisions, predict and evaluate the results of nursing actions [2]. The nursing process is a systematic, rational method of planning and providing care which requires critical thinking skills to identify and treat actual or potential health problems and to promote wellness. It provides a framework for the nurses to be responsible and accountable for the care they provide.

The nursing process is a series of steps that assist the nurse in using theoretical knowledge to diagnose the strengths and nursing care needs of a person and implement therapeutic actions for the purpose of attaining, maintaining and promoting optimal bio psychosocial functioning [8]. It consists of five sequential and interrelated steps or phases: Assessment, diagnosis, planning, Implementation and evaluation. Initially the steps are followed in sequence. After the process has begun, it becomes a continuous cycle.

During assessment, the nurse collects data about the health status of the client. The data is subjective and objective. Subjective data is usually documented in the clients own words. This data includes such things as previous experiences, and sensations or emotions that only the client can describe. The Objective data is obtained by the health team, through observation, physical examination, or/and diagnostic testing.

After assessment the nurse formulates the nursing diagnosis. Health problems or potential health problems are identified and formulated into nursing diagnosis. These form the basis for planning nursing interventions that help prevent, minimize or alleviate specific health issues. Each Nursing Diagnosis requires an Expected Outcome or the anticipated goal of the identified care interventions and actions needed to treat the patients' conditions. Three qualifiers are written in the present tense to predict care outcomes; these are to improve patient's condition, to stabilize patient's condition and to Support Deterioration or Death of patient's condition. The criteria for expected outcome should be specific or focused to the client, measurable to quantify desired response objectively, attainable, realistic and time bound [9].

Pearson and Allan (2005) also stated that the planning phase of the Nursing Process involves the development of a nursing care plan for the client based on the nursing diagnosis [9]. The nursing care plan is a communication tool used by Nurses to care

for their clients. Care plans that are kept up to date are vital tools to provide continuity of care, prevent complications and provide for health teaching and discharge planning. After planning is the Implementation phase where the actual performance of the nursing interventions identified are carried out. The implementations are coordinated with other members of the health care team who have direct care of the client. Nurses provide care to achieve established goals of care and then communicate the nursing interventions by documenting and reporting. The last step which is evaluation is an ongoing process that enables the nurse to determine what progress the patient has made in meeting the goals for care. The outcome criteria provide measures for determining outcomes of care.

Nurses Knowledge, attitude and practice of the nursing process

Knowledge deficiencies may be best understood as simply deriving from an inability to master new knowledge at the rate and complexity it is being produced. Even well intentioned and highly motivated clinicians have to grapple with the volume of evidence that is constantly becoming available [10]. This constant change in the health care system requires that nurses also keep update with the current information.

A study done in Saudi Arabia by showed that knowledge factor influenced the use of nursing process more than other variables [11]. They also found out that the biggest problems currently facing the nursing profession is the implementing the nursing process. Some of the factors that can influence it were variables such as knowledge, profession, attitude and institution. Institutional factor, including work, resources and management, ranked the highest predictive factor in the use of nursing process.

In another study carried out in Nigeria on the factors that affecting the use of the nursing process in health institutions the findings showed that the combination of all the predictor variables which include knowledge factor, institutional factor, professional factor and attitude facto have a positive influence on the use of nursing process while knowledge factor had the highest predictive value on the use of nursing process [12].

In Kenya, a study carried out in Naivasha hospital to evaluate the implementation of the nursing process found out that nurses had difficulties performing all the phases of the nursing process (assessment, diagnosing, goal identification, planning, implementing, evaluation and documentation) although the nurses had reported that they find all of them easy [7].

Methodology

Study design

This was a quasi-field experimental study that involved a baseline study, intervention phase and a post- test.

Study area

This study was carried out in two hospitals (Kiambu and Thika Hospitals). The hospitals are both located in Kiambu County in Kenya and they are the main referral facilities in the county. The hospitals offer both in-patient and outpatient services

Participants and Sampling procedure

The two hospitals were purposely selected for the study where the six main admitting wards were selected for the study. These were male and female surgical wards, male and female medical wards,

gynaecology and pediatric wards. All the nurses working in these wards (80 Nurses from Kiambu hospital and 90 nurses from Thika hospital) were included in the study.

Inclusion criteria

All the nurses working in the surgical, medical, gynecology and pediatric wards during the study period were included in the study. Also only those nurses who consented to participate were included.

Exclusion criteria

Those nurses who did not consent to participate and student nurses were excluded from the study.

Data collection

During the baseline study, questionnaires were administered to the nurses in the medical, surgical, pediatrics and gynecology wards to evaluate their knowledge, practice and perspective towards the nursing process. This provided the baseline data for later comparison. Data collection was done the same way after eight months of follow up after the intervention phase to determine whether there was any significant difference in the nurses knowledge, practice and perspective towards the nursing process

Data analysis

Analysis was performed by use of computer software statistical package for social scientists (SPSS version 22). Descriptive statistics was used to summarize the qualitative data in order to give meaning to the information and for easy presentation and interpretation. Chi-square test of significance was used to determine the relationships between the categorical outcome variables. (Level of significance was set at $p < 0.05$).

Ethical consideration

Authority to carry out the study was obtained from the Ministry of medical service, Ministry of Education Science and Technology, Kenyatta National Hospital/University of Nairobi ethics and research committee and Kiambu & Thika District hospital Medical superintendents. Individual consent was obtained from the study subjects who signed the consent before answering the questionnaires.

Results

Respondents

A total of 69 nurses (86%) participated in pretest and 57 (71%) in the post test in Kiambu. While in Thika 77(85%) participated in the pretest and 69(77%) in the post test.

Demographic characteristics of the nurses

The study findings revealed that majority of the respondents were aged below 40 years comprising of 46.6% (n=68) and 69% (87) during the pretest and post- test respectively. On gender majority were female in both pre-and post-test .On the job title, majority, 63.7% (93) and 77% (97) were registered nurses in the pretest and post-test respectively. Diploma prepared nurses being directly involved in patient care, were the prevailing characteristics among the study sample in both pre and post- test. Higher diploma prepared nurses constituted the least number of nurses. The findings are as shown in the Table 1

Table 1: Demographic characteristics of nurses

VARIABLES	STUDY GROUP		
	PRE-TEST % (n)	POST-TEST % (n)	
Age	40 Years and below	46.6% (68)	69 % (87)
	41-50 Years	37.7% (55)	20.6% (26)
	51 Years and above	15.8% (23)	10.3% (13)
Sex	Male	13% (19)	13.5% (17)
	Female	87% (127)	86.5% (109)
Marital Status	Married	72.6% (106)	57.1% (72)
	Single	20.5% (30)	37.3% (47)
	Widow	5.5% (8)	3.2% (4)
	Widower	0.7% (1)	2.4% (3)
Job Title	Registered Nurse	63.7% (93)	77% (97)
	Enrolled Nurse	36.3% (53)	23% (29)
Highest qualification	Masters	0% (0)	0.8% (1)
	Basic degree	10.3 % (15)	27.8 % (35)
	Higher diploma	4.8 % (7)	5.6% (7)
	Diploma	47.9 % (70)	43.7% (55)

Knowledge and utilization of the nursing process

Respondents were asked to outline the steps of the nursing process and indicate whether they utilized it in nursing care. The data showed that during the pre-test those who outlined the steps of the nursing process correctly were 52.1% in the pretest and this increased to 84.9% during the post-test. The respondents who reported that they utilized the nursing process in patient care during increased from 71.9% during the pre-test to 86.5% during the post test. This is as shown in Table 2

Table 2: Nurses knowledge and utilization of the nursing process

Variable		Pre-test % (n)	Post-Test (n)
Outlined all the steps of the nursing process	Yes	52.1% (76)	84.9% (107)
	No	47.9% (70)	15.1% (19)
Utilize the nursing process in patient care	Yes	71.9% (105)	86.5% (109)
	No	28.1% (41)	13.5% (17)

Number of patients cared for per shift

The nurses were asked the number of patients they cared for per shift. From the findings for both pretest and post-test, majority of nurses indicated that they cared for 31-40 patients which was 32.9% (n=48) and 31% (n=39) respectively, followed by between 21-30 patients who were 30.1% and 17.5%. The nurses who cared for the largest number of patients per shift that is 61 and above were 6.2% and 7.9% during the pretest and post-test respectively. This is as shown in the Figure 1

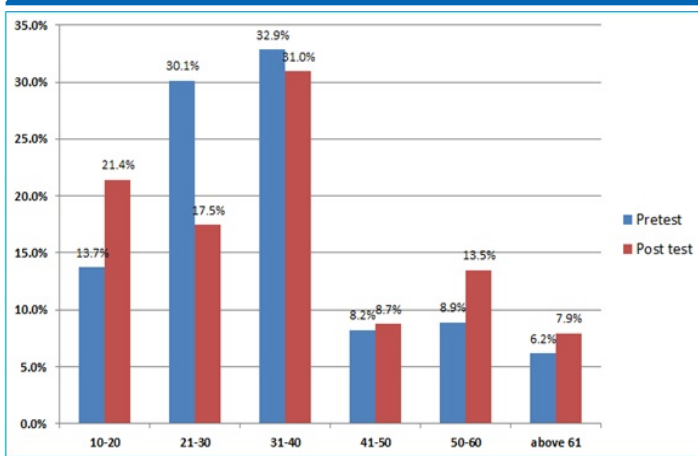


Figure 1: Number of patients cared for per shift

4.1.1 Number of patients drawn for care plans per shift by the nurse

Out of the total number of patients cared for per shift, nurses were asked to indicate the number they drew for a care plan. Surprisingly, the findings revealed majority of the nurses drew care plans for between 0-2 patients in both pre-test and post-test which was 54.8% (80) and 52.4% (n=66) respectively. The least number of nurses 8.2% drew care plans for five patients during pretest. This number however rose to 12.7% during the post test. This meant that the number of patients in the ward did not determine the number of patients drawn for care plan per shift. The findings are shown in the Figure2.

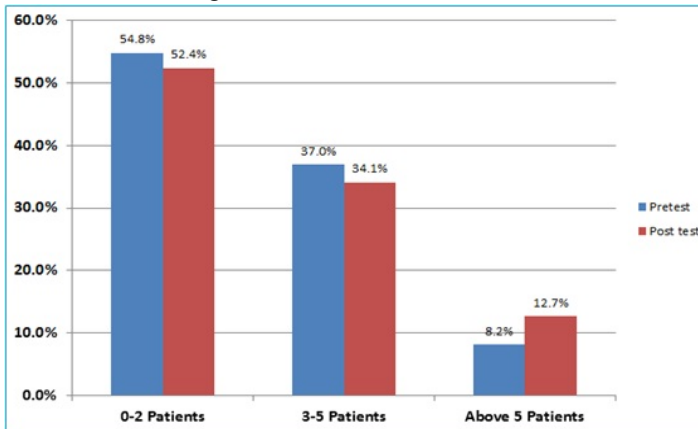


Figure 2: Number of patients drawn for care plans per shift by the nurse

Relationship between pre-test and post-test on utilization of nursing process

A chi-square test was used to determine whether the training on the nursing process brought any significant difference on the knowledge of the steps of the nursing process and the utilization. The findings revealed significant difference ($P < 0.05$) between pretest and post-test. The number of nurses who outlined of the steps of the nursing process correctly rose from 52.1% during the pretest to 84.9% during the post- test. A significant difference ($p < 0.05$) was also observed on the number of nurses who reported to be utilizing the nursing process during the posttest (86.7%) against 71.9% during pretest. This is as shown in Table

Relationship between pre-test and post-test on nursing process utilization

Variable		Pre-test %(n)	Post-Test (n)	Statistical test
Outlined all the steps of the nursing process	Yes	52.1% (76)	84.9% (107)	χ^2 value=33.185 df=1 P=0.000 ($p < 0.05$)
	No	47.9% (70)	15.1% (19)	
Utilize process care the in nursing patient	Yes	71.9% (105)	86.5% (109)	χ^2 value =4.466 df=1 p=0.003 ($p < 0.05$)
	No	28.1% (41)	13.5% (17)	

Nurses perspectives' towards the nursing process

Nurses were asked to indicate their perspectives towards the nursing process and its application on a five point scale ranging from strongly agree to strongly disagree. Those who agreed and strongly agreed were combined together and also those who disagreed and strongly disagreed for accurate use of statistical test. During the pretest 49.3% agreed that nursing process should be applied to all patients while during the post-test those who agreed to the statement decreased to 41.3%. Also during the pretest majority (50%) agreed that formulating nursing diagnosis should not be mandatory, while during the post-test the percentage who agreed to the above statement decreased to 35.8%. Majority of nurses had commonly high agreements in both pre-test and post-test that application of nursing process is cumbersome (56.2% and 56.1%), it should not be mandatory to draw a nursing care plan (49.3% and 44.8%), nursing care plan should be drawn for the very sick patients only (69.2% and 64.8%) and that writing a care plan is a burden to nurses (40.4%, and 40%). This is shown in Table 3

Table 3: Nurses perspectives' towards the nursing process

Variable	Study Group	Study Group	
		Pre-test % (n)	Post-test % (n)
Nursing process should be applied to all patients	Strongly agree and Agree	49.3% (72)	41.3% (52)
	Neutral	6.8% (10)	4.8% (6)
	Strongly disagree and disagree	43.8% (64)	54% (68)
Application of Nursing process is cumbersome	Strongly agree and Agree	56.2% (82)	56.1% (69)
	Neutral	26.7% (39)	28.5% (35)
	Strongly disagree and disagree	17.1% (25)	15.4% (19)
Formulating nursing diagnosis should not be mandatory	Strongly agree and Agree	50.0 % (73)	35.8% (44)
	Neutral	14.4% (21)	24.4% (30)
	Strongly disagree and disagree	35.6% (52)	39.8% (49)
It should not be mandatory to draw a nursing care plan	Strongly agree and Agree	49.3% (72)	44.8% (46)
	Neutral	17.8% (26)	24% (30)
	Strongly disagree and disagree	32.9% (48)	31.2% (39)
Nursing care plan should be drawn for the very sick patients only	Strongly agree and Agree	69.2% (101)	64.8% (81)
	Neutral	8.2% (12)	10.4% (13)
	Strongly disagree and disagree	22.6% (33)	24.8% (31)
Writing a care plan is a burden to nurses	Strongly agree and Agree	40.4% (59)	40% (50)
	Neutral	28.1% (41)	26.5% (33)
	Strongly disagree and disagree	31.5% (46)	33.6% (42)

Relationship between pretest and post-test on nurses' perspectives towards the nursing process

A chi square test was used to determine whether the difference between the variables during pretest and post-test were statistically significant. The findings showed that there was no significant difference ($p > 0.05$) in both the pre-test and post-test on the nurses perspectives about; application of nursing process being cumbersome, it should not be mandatory to draw nursing care plan, nursing care plan should be drawn for the very sick patients

only, nursing process should not be applied to all patients and writing a care plan is a burden to nurses. However there was significant difference ($p < 0.05$) on the variable that formulating nursing diagnosis should not be mandatory majority where by majority of the nurses during the pre-test had agreed to this while during the post-test majority of the nurses disagreed with this statement showing a positive change on the perspective towards nursing diagnosis. This is shown in Table 4

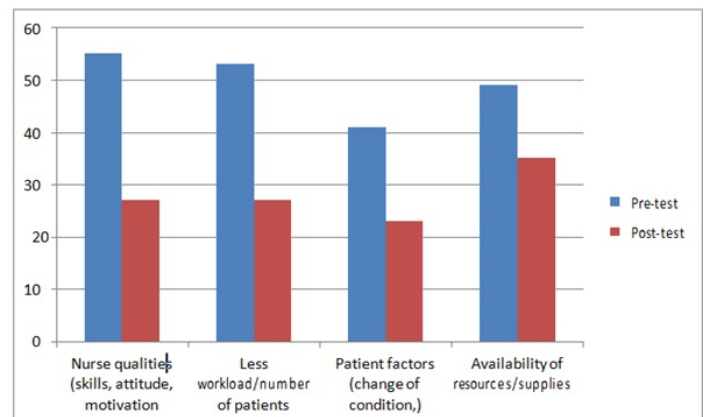
Table 4: Relationship between pretest and post-test on nurses' attitude towards the nursing process

Variable		Study Group		Statistical test
		Pre-test % (n)	Post-test % (n)	
Nursing process should be applied to all patients	Strongly agree and Agree	49.3% (72)	41.3% (52)	χ^2 value=2.2892 df=2 P=0.326($p > 0.05$)
	Neutral	6.8% (10)	4.8% (6)	
	Strongly disagree and disagree	43.8% (64)	54% (68)	
Application of Nursing process is cumbersome	Strongly agree and Agree	56.2% (82)	56.1% (69)	χ^2 value=0.189 df=2 P=0.910($p > 0.05$)
	Neutral	26.7% (39)	28.5% (35)	
	Strongly disagree and disagree	17.1% (25)	15.4% (19)	
Formulating nursing diagnosis should not be mandatory	Strongly agree and Agree	50.0% (73)	35.8% (44)	χ^2 value=6.950 df=2 P=0.031($p < 0.05$)
	Neutral	14.4% (21)	24.4% (30)	
	Strongly disagree and disagree	35.6% (52)	39.8% (49)	
It should not be mandatory to draw nursing care plan	Strongly agree and Agree	49.3% (72)	44.8% (46)	χ^2 value=1.599 df=2 P=0.450($p > 0.05$)
	Neutral	17.8% (26)	24% (30)	
	Strongly disagree and disagree	32.9% (48)	31.2% (39)	
Nursing care plan should be drawn for the very sick patients only	Strongly agree and Agree	69.2% (101)	64.8% (81)	χ^2 value=0.677 df=2 P=0.713($p > 0.05$)
	Neutral	8.2% (12)	10.4% (13)	
	Strongly disagree and disagree	22.6% (33)	24.8% (31)	
Writing a care plan is a burden to nurses	Strongly agree and Agree	40.4% (59)	40% (50)	χ^2 value=0.163 df=2 P=0.922($p > 0.05$)
	Neutral	28.1% (41)	26.5% (33)	
	Strongly disagree and disagree	31.5% (46)	33.6% (42)	

Facilitators and inhibitors of the nursing process

The nurses were asked to write down the factors that they felt facilitated or inhibited the application of the nursing process. The responses were grouped according into four major themes that emanated from their responses. These were nurse's factors, workload, patient factors and resources. The study findings showed that nurses factors like skills, attitude and motivation plus reduced workload were major facilitators of the nursing process while the major inhibitors of the nursing process utilization were lack of resources and increased workload. This shown in the Figures 3 and 4

Figure 3: Facilitators of the nursing process



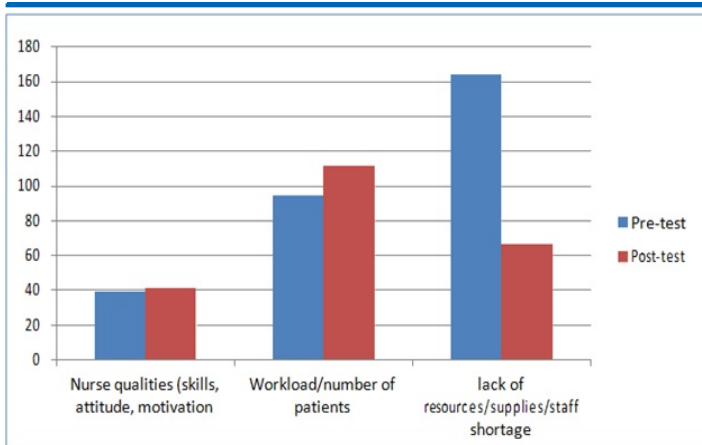


Figure 4: Inhibitors of the nursing process

Discussion

The study findings revealed that majority of the respondents were female and men accounted for only 13% in pretest and 13.5% in the post test. These findings are in line with a study done by the Kenya nursing work force that showed that out of the 16,371 nurses in the public non-tertiary sector, 76% are women, meaning only 24% are men [13]. This shows that the nursing profession in Kenya is still having less male compared to female despite the long existence of nursing as a profession in this country.

The issue of female dominating nursing profession has also been reported elsewhere. Similar findings were reported in Canada by Kellett, M.Gregory, & Evans, [14]. In their study on contextualizing the low numbers of men in nursing, they reported that the proportion of men practicing nursing has persistently remained low despite the relative progress noted in the proportion of women entering professions that were previously the realm of men. This has been significantly attributed to the patriarchal power structures that situate care giving within the realm of the feminine.

On age majority of the nurses in this study were aged below 40 years. This contrasted the findings of the Kenya nursing work force that showed that majority of nurses were aged between 40-49 years [13]. This indicates more younger nurses are joining the nursing fraternity compared to the attrition rate.

On designation majority of the nurses were registered nurses accounting for 63.7% and 77% in the pretest and post-test respectively. These results are comparable to the Kenyan work force finding that revealed that majority of the nurses were registered nurses at 53% [13]. Similar findings were also observed in a study in Naivasha on the implementation of the nursing process. The findings also revealed that majority of the nurses in that study had a diploma [7]. This high number of diploma holders in Kenya could be attributed to the nursing council of Kenya's effort to upgrade the certificate nurses to diploma level.

Nurses knowledge of the nursing process

Safe and high quality health care is underpinned by health care professionals possessing the knowledge, skills and professional attributes which are necessary for their specific clinical specialty and area of practice. Education is crucial as it enables clinicians to learn and put into practice their specialist knowledge, skills and attributes. These elements will be based on clinical standards,

which set the agenda for quality and safety in health care [15].

In this study the nurses' knowledge of the nursing process was used to evaluate the effectiveness of the training. The respondents were asked to outline the steps of the nursing process before and after the training on the nursing process. The data showed that during the pre-test those who outlined the steps of the nursing process correctly were 52.1% in the pretest while the post-test 84.9% outlined the steps and this was statistically significant ($p < 0.05$). This showed that the training had a significant change on the knowledge of the nursing process which is a major prerequisite to its utilization in patient care.

These findings compare with a study carried out in two hospitals in Saudi Arabia which revealed that majority of nurses had good knowledge of the nursing process (NP) from attended colleges as well as from seminars and workshops [16]. It also compares 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 [17].

The relationship between knowledge and use of the nursing process was also identified in a study in Namibia. The study evaluated the relative contributions of the four predictor variables to the use of nursing process (knowledge factor, institutional factor, professional factor and attitude factor). The result concluded that the knowledge factor has the most important influence on the use of nursing process [18]. Hence the importance that training improves the knowledge in provision of quality of care cannot be over emphasized.

Utilization of the nursing process in the care of patients

On utilization of the nursing process the current study showed that during the pre-test, (71.9% reported to utilize the nursing process but during the post-test 86.5% reported that they utilized the nursing process in patient care which was significant ($p < 0.05$). This was supported by a study done in Rwanda that revealed that Knowledge and training will increase the utilization of care plans by nurses' and they will add to the existing quality improvement in clinical practice in the hospitals [19].

The findings also compare with a study carried out among nurses in Najran General Hospital and King Khalid Hospital Saudi Arabia which showed that majority reported confidence inability to apply nursing process and good understanding as well as willingness to apply the nursing process in patients care after training [16]. Therefore training of nurses is a major component in improving the use of the nursing process and hence improving the overall quality of nursing care.

The relationship between knowledge and utilization of nursing process is also supported by a report in Brazil that revealed that many health institutions haven't adopted the nursing process as an organization method of providing care due to poor theoretical and practical knowledge of nurses on the nursing process [17].

According to Mahmoud & Bayoumy (2014a), the use of nursing care plans with in nursing process is geared to move toward a more systematic approach to human needs assessment [16]. They also stated that, nursing care plan support practice modalities

by meeting physical, psycho-logical, social and spiritual needs of patients resulting in quality nursing care. The findings of the current study showed that during the pre-test those who outlined the steps of the nursing process correctly were 52.1%. After the training those who were able to correctly outline all the steps of the nursing process rose to 84.9 % which was statistically significant ($p < 0.05$).

However despite the significance change in knowledge there was no change in the number of care plans drawn for the patients. The findings showed that majority of the nurses drew care plans for between 0-2 patients in both pre-test and post-test which was 54.8% and 52.4% respectively.

Similar findings were also observed in a study conducted in Rwanda which revealed that most nurses (96%) felt that the use of nursing care plans increased the nurses' ability to provide high quality care; but only 16% of the audited files had evidence of a care plan [19].

The inverse relationship between training and practical application of knowledge was also observed in a study conducted in India. The study was on the limits of skills and drills of the practitioners on the interventions to improving obstetric and new born emergency response. The study findings revealed that there was a modest increase in provider knowledge and skills, but the intervention appeared not to have achieved its desired results in improvements in clinical practice, either in the identification of cases in need of emergency intervention or in improved response to identified emergencies. Hence other factors could be contributing to the poor skill application need to be investigated in order to align knowledge to practice.

Contrary to the above findings, study by Adeyemo & Olaogun, (2013) on the factors influencing the nursing process in Nigeria found out that, the introduction of educational programmes enhanced nurses' ability to use nursing process to improve the quality of patient' scare [12].

Conclusion

Summary of findings

From the study findings, the training of nurses on the nursing process showed significant change on knowledge of the steps of the nursing process and also in the number of nurses who stated that they utilize the nursing process in the care of the patients. Number of patients cared for did not determine the number of patients drawn for care plan. On the other hand training did not show significant difference on the nurses' perspective towards the nursing process.

Recommendations

This therefore calls for health care organizations who intend to use the nursing process as model of providing quality nursing care to plan for training programmes that would equip the nurses with the knowledge at the same time identify mechanisms that would change their perspectives. Also nursing audit modalities need to be put in place to ensure the application of knowledge to practice.

References

1. Craven RF, Hirnle CJ (2000) Fundamentals of nursing: human health and function. (3rd edn). Philadelphia: Lippincott

Williams & Wilkins.

- George, Julia B (2002) Nursing theories. The base for professional nursing practice. (5th edn) Pearson education, New Jersey.
- Aggleton P, Chalmers H (1986) Nursing models and the nursing process. London, Macmillan press.
- Christensen Paula J, Kenny W. Janet (1990) Nursing process. Application of conceptual models. 3rd edn St. Louis, CV Mosby.
- Nursing Council of Kenya (2007) Standards of Nursing Education and Practice; Nairobi Chania Printers.
- Nursing Council of Kenya (2008) Procedure manual for nurses; Nairobi: Chania Printers
- Mangare NL, Omondi AL, Ayieko OA, Wakasiaka S, Wagoro MCA (2016) Implementation of the Nursing Process in Naivasha District 5: 152-157.
- Lindberg J (1998) Introduction to Nursing; 3rd edition ; Lippincott, Philadelphia
- Pearson, Allan (2005) Nursing models for practice ; 3rd edition, Butter with Heinmann ; China
- McLoughlin V, Leatherman S (2003) Quality or financing: what drives design of the health care system? Quality & Safety in Health Care 12: 136-142.
- Mahmoud MH, Bayoumy HM (2014b) Barriers And Facilitators For Execution Of Nursing Process From Nurses Å€™ Perspective 2: 300-315.
- Adeyemo FO, Olaogun A.A.A.E (2013) Factors affecting the use of nursing process in health institutions in Ogbomosotown 3: 89-96.
- Wakaba M, Mbindyo P, Ochieng J, Kiriinya R, Todd J, et al. (2014) The public sector nursing workforce in Kenya : a county-level analysis 1-16.
- Kellett P, M Gregory D, Evans J (2014) Patriarchal paradox: gender performance and men's nursing careers. Gender in Management: An International Journal 29: 77-90.
- Baid H, Hargreaves J (2015) Quality and safety: Reflection on the implications for critical care nursing education. Nursing in Critical Care 20: 174-182.
- Mahmoud MH, Bayoumy HM (2014a) Barriers and Facilitators for Execution of Nursing Process From Nurses â€™ Perspective. International Journal of Advanced Research 2: 300-315.
- Enfermagem DE (2012) Nurses' perception in front of the implementation of nursing diagnosis and prescription 6.
- Iita H, Iiping S, Dyk A Van (2016) The level at which registered nurses utilize the nursing process in local-level primary health care practice in Namibia 5: 65-75.
- Banamwana G, Mandy AS (2015) Evaluation of the Use and Value of Nursing Care Plans in Nursing Practice at a Referral Hospital, Kigali, Rwanda :Nurses' Perspectives 2: 4314.

Copyright: ©2017 Githemo Grace et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.