

Patient's Participation in Nursing Care: an Integration of Orem's Theory to the Nursing Process at Two Public Hospitals in Kenya

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Abstract

Patient participation in health care is regarded as a primary condition for quality care. However the traditional paternalistic perception among the health care workers is a major barrier to patient participation and non-involvement in their own care. This was a quasi-experimental study 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 and also its integration with Orem's theory, would improve patients participation in nursing care. Data was collected during the pre-test and post-test from the nurses and the patients they were nursing to determine level of patient involvement in 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 to determine the difference between pre-test and post-test, Chi square test was used ($p \leq 0.05$). Study findings revealed that during pretest 80.1% (n=117) of the nurses agreed that patients should be involved in decision making. The post-test findings showed a higher percentage with (92.9%) agreeing that patients should be involved in decision making regarding their care and 76.2% (n=96) reporting that they involved patients in decision making. Achi-square test used to determine the relationship between the pretest and post-test outcomes showed a significant difference ($p < 0.05$). Significant difference ($p < 0.05$) was also found on whether nurses involved patients in clinical decision making. From the patient perspective during the pretest 51.9% (n=138) reported that they were involved in the decisions about the care and during post-test, 75.9% (n=198) reported involvement which was statistically significant ($p > 0.05$). On the integration of theory to the nursing process the findings showed that there was significant difference ($p < 0.05$) in the experimental group (Kiambu) on whether nurses enquired about patient perspectives in care and their perspectives on patient involvement in decision making while there was no significant difference ($P > 0.05$) in control group (Thika). The study concluded that inclusion of nursing theory to the nursing process improved the level of patient participation in their own care Therefore the nursing management should establish policies

to incorporate nursing theory to the nursing process to improve patient involvement in their care which is key to the provision of quality nursing care.

Keywords: Quality; Patient participation; Nursing process; Nursing theory

Introduction

Today in every health-care system there is great emphasis for quality improvement considering the growing patient awareness and public pressure to do so. In the “Vienna Recommendations on Health Promoting Hospitals” issued in 1997, the WHO recognized the necessity of encouraging the active and participatory role for all patients in order to improve their health status and improve the quality of the health care system [1].

The desire for health care quality is not a recent concept. Komashie, et al. (2005) [2] in their work stated that early evidence of healthcare quality can be traced to the works and efforts like the Hippocratic Oath, the work of Ignaz Semmelweis and Florence Nightingale which shows cases of professional concern for quality.

According to these early professionals, the pursuit of healthcare quality came out of a concern for better health or lost lives as perceived to occur as a result of lack of quality. However the consideration of patients/customers’ needs and involvement in decision making pertaining their care has become the primary concern of health care institutions in the recent years [2].

Patient participation in health care is regarded as a primary condition for quality care. However lack of information and lack of recognition of their role have been found to be significant aspects for patients’ non participation in health care [3]. In a study to evaluate patients’ participation in clinical decision making, Florin, et al. (2006) [4] found that, Registered nurses did not successfully involve patients in clinical decision making. The nurses were also not aware of their patients’ perspectives and tended to overestimate patients’ willingness to assume an active role in the care. In another study carried out in Swedish hospital, inadequate quality of care was identified especially on information given about treatment, examination results and opportunities for patient to participate in decisions related to care and information on self-care [5].

By patients participating in the decision-making process of care, they exercise their most critical rights in health care. Patients are rejecting the passive role where by decisions are made by nurses, independent of their input. Patients want to assume responsibility of care early and relinquish the sick role sometimes imposed on them by health workers.

Therefore the objective of the study was to establish whether training of nurses on the integration of Orem’s theory (which emphasis self-care) to the nursing process would improve the level of patient participation in nursing care.

Literature Review

Patient Participation in Care

While evaluating the relationship between the patient and the health care worker, Emanuel, et al. (1992) [6] found out that in many cultures this followed a “paternalist” model where all decisions relating to patient care rely entirely on the knowledge of the health worker, and the patient has been traditionally a passive spectator in his or her own healing process.

Paternalistic practices, wherein providers confer a treatment or service upon a person or persons without their consent, ostensibly by reason of their limited autonomy or diminished capacity, are widespread in healthcare and in societies around the world. In the United States, paternalism in health and human services is widespread and probably increasing with newly emergent forms. Numerous issues surround paternalistic practices [7].

Humanist considerations state that every human being is endowed with will and with a right to self-determination [8]. By participating in the decision-making process, the patient exercises his or her most fundamental

rights. Like any consumer, the patient may demand quality services [9]. By continuously evaluating the service and sometimes lodging complaints toward it, the patient-consumer can improve the health care system.

In healthcare, paternalism is commonly framed in terms of the conflict between the primary obligation of physicians, nurses, and other provider-practitioners to abide by the principle of beneficence in their practice and the assertion of the rights of persons who are receiving services to make autonomous decisions about their lives. Often embedded in the discussions of the conflict of ethical principles in paternalism is an assumption that the recommended interventions of healthcare professionals are encompassed by and represent beneficence with regard to the care of people's health [7].

The world health organization emphasized that improved quality outcomes cannot be delivered by health-service providers alone. Communities and service users are the co-producers of health and hence they have critical roles and responsibilities in identifying their own needs and preferences, and in managing their own health with appropriate support from health-service providers. Therefore service users need to influence both quality policy and the way in which health services are provided to them, if they are to improve their own health outcomes [10].

Although quality nursing care is vital to patients' outcome and safety, meaningful improvements have been disturbingly slow [11]. Murray, et al. (2001) [12] added that health care workers' beliefs, attitudes, and behavior can have a major effect on patient participation. They found out that the main obstacle to patient participation in care was the refusal of health care workers to abandon their traditional role and to delegate power. Hewison (1995) [13] also added that nurses exercise almost absolute power and control over patients and consider them unable to make decisions. Therefore this traditional perception is a major barrier to patient participation and non-involvement in their own care.

Nursing Process and Nursing Theory

The nursing process has been the foundation and organizational frame work that guides professional nursing practice in the provision of quality nursing care. 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 [14]. Also according to George, et al. (2002) [15],

the nursing process has been the label applied to an underlying principle that provides order and direction to nursing care.

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 [15]. 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 frame work for the nurses to be responsible and accountable for the care they provide.

However according to Pearson, et al. (2005) [16] the nursing process by itself is an essentially empty approach to care. On its own, the nursing process steps requires that the nurses should carry out assessment of the patient first but tells them little about what to assess, in the next step it requires nurses to plan but says little about how to plan, it asks nurses to intervene but fails to say in what ways, it advocates evaluation but does not specify when and how.

Therefore in many are a soft heir work, nurses have been expected to introduce the nursing process [17] without a set guideline about how to apply it. Unfortunately the nursing process has been used uncritically to organize nursing care around a set of medical understandings of people and their needs without incorporating a nursing theory [18].

Pearson, et al. (2005) [16] added that nursing can be compared to a package of goods which is to be delivered. The process of assessment, diagnosing, planning, implementation and evaluation is merely a means of ensuring the nursing care is delivered. The package or nursing itself is the model (or theory) which guides the nursing process. A nursing theory is a picture or representation of what nursing actually is. It represents the actual nursing care which is provided to the client.

This was further emphasized by Alligold, (2002) [19]. In her work she noted that evolution of nursing theory has been a search for nursing substance and that nursing has made remarkable achievements in the last century that has contributed to its recognition as an academic discipline and as a profession. She further stated that this movement towards theory-based practice has made contemporary nursing more evidence based by shifting

the nursing focus from avocation calling to an organized profession.

The desire for knowledge-base to provide direction for the professional nursing practice had been realized in the first half of the twentieth century and many theoretical frame works have been developed by nurses ever since. The main goal for this is to make nursing a recognized profession and also to ensure delivery of quality care to patients as professionals [19]. Among the many nursing theorists who have contributed development of theoretical frameworks is Dorothea Orem.

Orem's Theoretical Model

Orem's theoretical model was developed by Dorothea Orem in 1959. Orem (2001) [20,21] states that "the condition that validates the existence of a requirement for nursing in an adult is the health associated absence of the ability to maintain continuously that amount and quality of self-care that is therapeutic in sustaining life and health, in recovering from disease or injury or in coping with their effects. With children, the condition is the inability of the parent or guardian associated with the child's health status to maintain continuously for the child the amount and quality care that is therapeutic."

The self-care deficit theory developed by Orem is a combination of three theories; theory of self-care, theory of self-care deficit and the theory of nursing systems. Its introduction was radical shift from the prevailing notion of nursing, where nursing care was considered to be 'care for' the patient, and when patients made few decisions regarding nursing therapy. The model emphasized individual responsibility in provision of care [22]. Therefore by adopting the theory the nurse recognizes the important role of the patient not just as the recipient of care but also as partner in the recovery process

In health care, self-care fundamentally affirms that people and families should be allowed to take initiative and responsibility and to develop their own potential in matters regarding their health [16]. This can be achieved if nurses apply Orem's theory to the nursing process which is the basis for scientific nursing practice and also would enhance the patients self-care abilities

The integration of Orem's theory to the nursing process by nurses is anticipated that nurses would assess the patients' self-care abilities and self-care deficit needs, ensure participation in their own care depending on their abilities so that they can resume the responsibility of self-care early and hence reduce their dependence on nurses.

Integration of Nursing Process and Orem's Theory

The Orem's theory presents a method to determine the self-care deficits and then to define the roles of the patient or nurse to meet the self-care demands throughout the steps of the nursing process. By determining the patients self-care deficit the nurse gives the patient an opportunity to carry out the activities they are able to do while the nurse only does for the patient what they are unable to do. This therefore provides an opportunity for the patient to participate in the care. As the patient self-care abilities improves, the role of the patient in self-care increases and the dependency on the nurse decreases. The integration of the nursing process and nursing theory is as shown in (Figure 1)

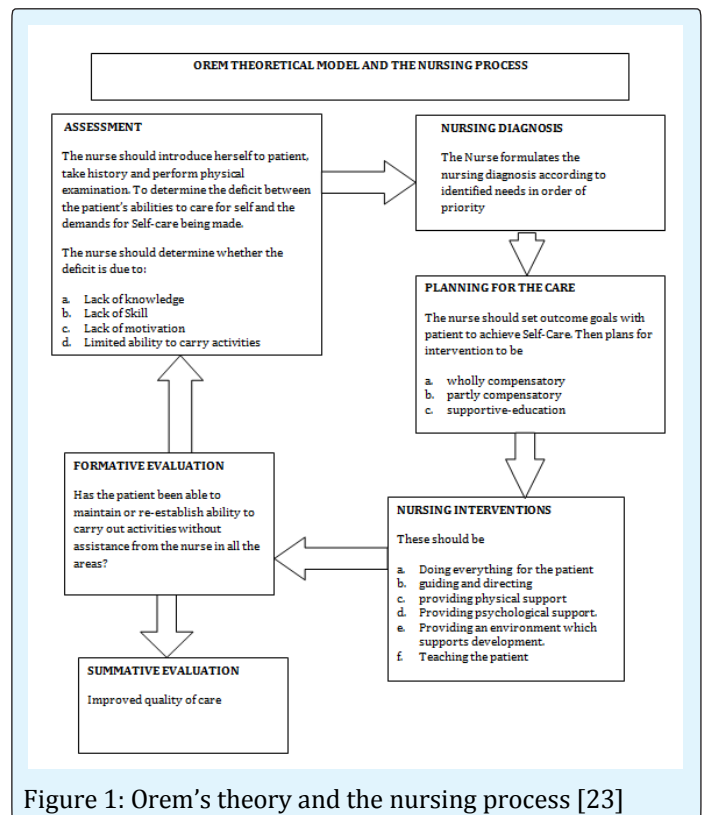


Figure 1: Orem's theory and the nursing process [23]

During the assessment stage the nurse should seek of information from the patient which will enable her to make decisions about planning and implementation of care. This will through history taking and physical examination. The nurse then needs to determine the person's self-care and dependent care agency. Finally she needs to calculate whether or not there is a self-care or dependent-care deficit including its magnitude and the

primary reason for it. These may include identifying whether an individual possess the knowledge necessary to respond to self-care demand and assessing his or her motivation, development and past experience [23]. Following this a decision can be made about the need for nursing intervention. The nurse must also assess whether the individuals' present state allows for safe involvement in self-care. Finally the nurse assesses the patient potential for re-establishing self-care in the future.

Though Orem did not identify this step, this will be critical before a plan of care can be arrived at. The nursing diagnosis will be derived from data gathered during the assessment. The main outcome of care is to establish the patient self-care ability. Depending on the nursing diagnosis the nurse should establish the nursing outcome and also the expected patients' outcome.

During the planning and goal setting phase all goals will be patient centered. The long term goal is the restoration of balance between self-care abilities and self-care needs. Also during this phase the care measures that will be used in order to meet the therapeutic self-care demand and the means that will be used to meet particular self-care needs are specified. The evaluates whether nursing intervention is to be wholly compensatory, partly compensatory or Supportive – educative. This will vary depending with the improvement of the patient

During intervention phase, Orem's model assumes that patients are willing and able to adopt certain roles and that they desire to achieve self-care. Orem identifies 5 methods of helping that a nurse may use; Acting for and doing for others, Guiding others, Supporting another, Providing an environment promoting personal development in relation to meet future demands or teaching another. Therefore, the aim of intervention will be to maintain or re-establish self-care through patient involvement.

As the patient improves and develops self-care ability the role of the nurse becomes mainly supportive educative. The nurse remains available to respond to the patients concerns and also prepares the patient as she/he nears discharge.

Finally the nurse should evaluate the care. Formative evaluation, focus on the extent to which the balance between self-care abilities and self-care demands has been maintained or re-established. By setting goals that are patient centered nurses put themselves in a position

to evaluate what patients have achieved at the end of specified periods of time, rather than whether or not nursing intervention has been carried out. Hence moving from nursing interventions that are wholly or partly compensatory to those that are broadly supportive-educative would also indicate effective nursing care.

Nurses who accept the concept of self-care as a basis for practice consequently value the patients' rights to meet their own self-care needs. It becomes apparent that promoting self-care is indeed a radical approach to healthcare. It means that instead of telling patients or clients what to do and doing things for them, the nurse actually works towards enabling them to make decisions and do things for themselves except when this is impossible.

Methodology

Study Design

This was aquasi-field experimental study which was carried out among nurses in two public hospitals. One was an experimental group and the other was a control group. The study involved a baseline study in both hospitals where nurse were evaluated on how they ensured patient participation in their care. The patients who were being nursed by the nurses were also asked to indicate their level of participation for comparison. This was followed by an intervention phase where nurses in the experimental group were trained on use of nursing process and application of Orem's theory in the steps of the process and the control group was trained on the nursing process alone. After eight months, a post test was done to evaluate the level of patient participation in care. Nurses and the patients were evaluated the using the same process as at pretest to determine whether there was any significant difference on the variables assessed to determine the level of patient involvement in care.

Study Area

This study was carried out in Kiambu Hospital (experimental group) and Thika Hospital (control group) which are the main hospitals in Kiambu County, Kenya, which are within 16 kilometers and 40 Kilometers from Nairobi city respectively. The hospitals offer both in-patient and outpatient services.

Study Participants

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, gynecology and pediatric wards. All the nurses working in these wards (80 Nurses from Kiambu hospital and 90 nurses from Thika hospital) were selected for the study. This is as shown in Tables 1 and 2.

WARD	Kiambu Hospital	
	Registered Nurses	Enrolled Nurses
Male surgical	7	7
Female surgical	7	6
Male Medical	7	6
Female surgical	8	5
Gynecology ward	6	8
Pediatrics ward	7	6
Total	42	38

Table 1: Experimental group study population.

WARD	Thika Hospital	
	Registered Nurses	Enrolled Nurses
Male surgical	7	7
Female surgical	7	6
Male Medical	6	9
Female surgical	11	5
Gynecology ward	11	2
Pediatrics ward	14	5
Total	56	34

Table 2: Control group study population.

Patients Sampling

In order to determine whether nurses were involving patients in nursing care, stratified random sampling was used to select 136 patients from Kiambu and 134 from Thika hospital. This is shown in Tables 3 and 4.

Wards/Units	Average number of patients daily	Sample Size
Male Surgical	37	24
Female Surgical	32	21
Male Medical	27	17
Female Medical	23	15
Pediatrics' ward	74	48
Gynecology ward	17	11
Total	210	136

Table 3: Kiambu Hospital patients sample size.

Wards/Units	Average No. of Patients Daily	Sample Size
Male Surgical	41	26
Female Surgical	24	16
Male Medical	26	17
Female Medical	28	18
Pediatrics'	65	42
Gynecology Ward	23	15
Total	207	134

Table 4: Thika Hospital patients sample size.

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. Patients admitted in the medical, surgical, and gynecology ward for at least three days were included in the study in both pre-test and post-test. Mothers with babies admitted for at least three days in the pediatric ward were included.

Exclusion Criteria

Those nurses who did not consent to participate and student nurses were excluded from the study. Patients who had been admitted for less than three days and those who did not consent to participate were also excluded in both pre-test and post-test.

Data Collection Process

During the baseline study, questionnaires were administered to the nurses in the medical, surgical, pediatrics and gynecology wards (in both the experimental and control groups) to evaluate level of patient participation. Another questionnaire was also administered to the patients (plus mothers with sick babies in pediatric ward) who had been admitted in these wards for at least three days to evaluate their participation in nursing care. This provided the baseline data for later comparison. After three months of training the nurses and five months of follow up data collection was done. The questionnaires were administered to the same nurses and also to the patients who were being nursed by those nurses to determine whether there was any significant difference in level of patient's participation in nursing care.

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. A total of 132 patients from Kiambu and 134 patients participated in the study during the pre-test.

During the posttest, 130 patients' questionnaires from Kiambu and 131 from Thika were analyzed.

Patient Participation in Care

Nurses involvement of patient in decision making: In order to evaluate whether there was a change on the level of patient participation, nurses were asked whether patients should be involved in decision making regarding their care and whether they involved them. During pretest 80.1%(n=117)agreed that patients should be involved in decision making, though out of these, only 61% stated that they involve patients in decision making. The post-test findings showed a higher percentage (92.9%) agreeing that patients should be involved in decision making regarding their care and 76.2%(n=96)reporting that they involved patients in decision making.

Achi-square test was used to determine the relationship between the pretest and post- test outcomes. A significant difference ($p < 0.05$) was found on whether the nurses enquired about the patients perspective in care with majority in post-test stating yes. On whether patient should be involved in decisions regarding their care, this was also statistically significant ($p < 0.05$) indicating a change of perspective between pre-test and post-test. A significant difference ($p < 0.05$) was also found on whether nurses involved patients in clinical decision making. This is as shown in Table 5.

Variable		Pretest	Post-Test	Statistical test
Do you enquire about patients' perspective in care?	Yes	78.1% (114)	89.6% (112)	χ^2 value =6.451 df=1 p=0.011 ($p < 0.05$)
	No	21.9% (32)	10.4 % (13)	
Should patients be involved in decision regarding their care	Yes	80.1% (117)	92.9% (117)	χ^2 value =9.105 df=1 p=0.003 ($p < 0.05$)
	No	19.9%(29)	7.1% (9)	
Do you involve patient in clinical decision making	Yes	61%(89)	76.2 % (96)	χ^2 value =7.213 df=1 p=0.007 ($p < 0.05$)
	No	39%(57)	23.8% (30)	

Table 5: Relationship between pre-test and post-test on patient involvement in decision making

Areas that nurses involve patients during their care: Nurses were asked to indicate the areas they involve patients during their care. In both study groups they

mainly involved patients in giving medication and when obtaining consent for surgical procedures. This is as shown in (Figure 2)

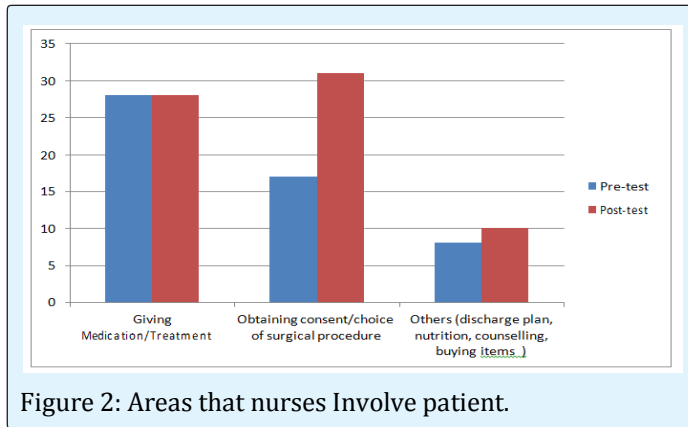


Figure 2: Areas that nurses Involve patient.

Patient's response on their involvement in nursing care: From the study findings the number of the patients who reported that did not know the name of the nurse who was taking care of them decreased from 81.5% during the pre-test to 60.5% post-test respectively. During the pretest 51.9% (n=138) reported that they were involved in the decisions about the care. During post-test 75.9% (n=198) reported involvement in decision making. On whether nurses asked the patient about their perspectives in care, 47% (n=125) and 71.3% (n=186) indicated yes during the pre-test and post-test respectively. This is as shown in (Table 6)

Variable	Study Group		
	Pre-Test % (N)	Post-Test % (N)	
Knows the name of the nurse taking Care of him or her	Yes	18.5% (49)	39.5% (103)
	No	81.5% (216)	60.5% (158)
Involved by the nurse in the decision pertaining to their care	Yes	51.9% (138)	75.9% (198)
	No	48.1% (128)	24.1% (63)
Patient asked about their perspective in the care by the nurse	Yes	47% (125)	71.3% (186)
	No	53% (141)	28.7% (75)

Table 6: Patient involvement in care.

Patients perspectives on their involvement in care: Patients were asked to indicate their perspectives on their involvement in the care by the nurses on a five point scale from strongly agree to strongly disagree in both pre-test and post-test. When patient were asked whether the nurse introduced herself or himself to them, majority disagreed (77.4% and 54.4%) with this statement. Also majority of the patients (46.8% and 41.9%) disagreed that the nurses did all the procedures without involving them in the care. There was also common agreement in both pre-test and post-test that the nurse informed patient of their responsibility in the recovery process (54.1% and 70%), demonstrated to them what to do (53.8% and 71.3%) and that the nurse enquired about the patient progress in care (81.6% and 86.5%).

The chi-square test of significance was used to

determine whether there was any significance difference between the pre-test and post-test on the above variables. The analysis showed that there was a significant difference ($p < 0.05$) on whether the nurse introduced herself or himself to the patient. There was significant difference ($p < 0.05$) on whether the nurse informed patient of their responsibility in the recovery process, demonstrated to them what to do in the recovery process and involvement in decision making between the pre-test and post-test. On whether the nurse explained fully the nature of treatment, majority agreed in both studies but there was no significant difference ($p > 0.05$). There was common disagreement in both pre-test and post-test that the nurse did all the procedures without involving patient but there was no significant difference ($p > 0.05$). This is as shown in (Table 7)

Variable		Study Group		Statistical Test
		Pre-Test % (n)	Post-Test % (n)	
Nurse introduced herself or himself to me	Neutral	8.6% (23)	9.6% (25)	χ^2 value=36.611 df=2 P=0.000 ($p < 0.05$)
	Strongly disagree and disagree	77.4% (206)	54.4% (142)	

	Strongly agree and agree	13.9% (37)	36%(94)	
Nurse explained fully the nature of my treatment	Neutral	16.9% (45)	13.5% (35)	χ^2 value=1.365 df=2 P=0.505(p>0.05)
	Strongly disagree and disagree	16.2% (43)	15.4% (40)	
	Strongly agree and agree	66.9% (178)	71%(184)	
Nurse informed me of my responsibility in the recovery process	Neutral	14.3% (38)	10.4% (27)	χ^2 value=14.291 df=2 P=0.001(p<0.05)
	Strongly disagree and disagree	31.6% (84)	19.6% (57)	
	Strongly agree and agree	54.1% (144)	70%(182)	
Nurse demonstrated to me what to do	Neutral	13.2% (35)	8.0 % (21)	χ^2 value=17.215 df=2 P=0.000(p<0.05)
	Strongly disagree and disagree	33.1% (88)	20.7% (54)	
	Strongly agree and agree	53.8% (143)	71.3% (186)	
Nurse did all the procedures without involving me	Neutral	16.2% (43)	20.4% (53)	χ^2 value=1.960 df=2 P=0.375(p>0.05)
	Strongly disagree and disagree	46.8% (124)	41.9% (109)	
	Strongly agree and agree	37%(98)	37.7% (98)	
Nurse allowed me to make decision about my care	Neutral	20.3% (54)	23.1% (60)	χ^2 value=69.147 df=2 P=0.000(p<0.05)
	Strongly disagree and disagree	61.3% (163)	28.1% (73)	
	Strongly agree and agree	18.4% (49)	48.8% (127)	
Nurse enquired about my progress in care	Neutral	8.3% (22)	6.2% (16)	χ^2 value=2.415 df=2 P=0.299(p>0.05)
	Strongly disagree and disagree	10.2% (27)	7.3% (19)	
	Strongly agree and agree	81.6% (217)	86.5% (225)	
I did most of the activities without the assistance of the nurse	Neutral	7.9% (21)	15.0% (39)	χ^2 value=6.718 df=2 P=0.035(p<0.05)
	Strongly disagree and disagree	62.4%(166)	46.8% (146)	
	Strongly agree and agree	29.7% (79)	28.8 (75)	
Discussed with the nurse activities I can do and those I cannot do	Neutral	21.8% (58)	21.5% (56)	χ^2 value=47.546 df=2 P=0.000(p<0.05)
	Strongly disagree and disagree	53.4% (142)	26.9%(70)	
	Strongly agree and agree	24.8% (66)	51.5% (134)	

Table 7: Patients' perspectives on their involvement in the care.

Differences between experimental group (Kiambu) and control group (Thika) on how nurses involved patients in care: As shown in table 8, the findings showed that there was significant difference ($p < 0.05$) in Kiambu on whether nurses enquired about patient perspectives in care and their perspective on patient

involvement in decision making while there was no significant difference ($P > 0.05$) in Thika. On whether the nurses involved patients in decision making, there was no significant difference ($p > 0.05$) in both hospitals. This is as shown in (Table 8)

Variable		Kiambu		Thika		Statistical Test Kiambu	Statistical Test Thika
		Pre-Test % (n)	Post-Test % (n)	Pre-Test % (n)	Post-Test % (n)		
Do you enquire about patients' perspective in care?	Yes	71% (49)	94.6% (55)	84.4% (65)	85.5% (59)	χ^2 value = 11.494 df = 1 p = 0.001 ($p < 0.05$)	χ^2 value = 0.034 df = 1 p = 0.854 ($p > 0.05$)
	No	29% (20)	5.4% (3)	15.6% (12)	14.5% (10)		
Should patients be involved in decision regarding their care	Yes	71% (49)	96.5% (56)	88.3% (68)	89.9% (62)	χ^2 value = 14.058 df = 1 p = 0.000 ($p < 0.05$)	χ^2 value = 0.089 df = 1 p = 0.766 ($p > 0.05$)
	No	29% (20)	3.5% (2)	11.7% (9)	10.1% (7)		
Do you involve patient in clinical decision making	Yes	62.3% (43)	77.2% (44)	59.7% (46)	75.4% (52)	χ^2 value = 3.231 df = 1 p = 0.072 ($p > 0.05$)	χ^2 value = 4.024 df = 1 p = 0.045 ($p > 0.05$)
	No	37.7% (26)	22.8% (13)	40.3% (31)	24.6% (17)		

Table 8: Differences between Kiambu and Thika hospitals on how nurses involved patients in care.

Differences between experimental group (Kiambu) and control group (Thika) on patients' perspectives about level of participation in the care: On the patient's perspectives about the level of participation in their own care, the study findings showed there was significant difference ($P < 0.05$) on the way the nurses involved the patient in their own care on all the variables evaluated for both hospitals. Majority of the patients (72% in Kiambu and 82.1% in Thika) had disagreed that the nurses introduced themselves to them during the pretest. However during the post-test, though still majority (60.8% and 48.1%) of the patients disagreed with this statement the decline was statistically significant

($p < 0.05$). On whether nurses explained fully to the patients the nature of treatment, majority of the patient agreed to this statement during the pre-test in both hospitals. However during the posttest, an increase was noted in Kiambu in the number of patients who agreed to the statement, and this was statistically significant ($p < 0.05$). In Thika however, there was a decline which was also significant ($p < 0.05$). The same trend was observed on whether nurses enquired about patient progress with a positive change in Kiambu and a decline in Thika on the number of patients who agreed to the statement and this also was statistically significant ($p < 0.05$). The findings are shown in (Table 9)

Variable		Kiambu		Thika		Statistical Test Kiambu	Statistical Test Thika
		Pre-Test % (n)	Post Test % (n)	Pre Test % (n)	Post Test % (n)		
Nurse introduced herself or himself to patient	N	15% (21)	10.8% (14)	1.5% (2)	8.4% (11)	χ^2 value = 12.345 df = 2 P = 0.002 $p < 0.05$	χ^2 value = 34.476 df = 2 P = 0.000 $p < 0.05$
	SD&D	72% (96)	60.8% (79)	82.1% (110)	48% (63)		
	SA&A	11% (15)	28.5% (37)	16.4% (22)	43% (57)		
Nurse explained fully the nature of my treatment	N	22.9% (30)	8.5% (11)	11.2% (15)	18% (24)	χ^2 value = 19.967 df = 2 P = 0.000 $p < 0.05$	χ^2 value = 9.128 df = 2 P = 0.010 $p < 0.05$
	SD&D	21% (28)	10% (13)	11.2% (15)	20.9% (27)		
	SA&A	56.1% (67)	72.3% (94)	77.6% (104)	60.5% (78)		

Nurse informed me of my responsibility in the recovery process	N	25.8% (34)	6.9 % (9)	3.0% (4)	13.8 % (18)	χ^2 value=19.325 df=2 P=0.000p<0.05	χ^2 value=20.509 df=2 P=0.000p<0.05
	SD&D	23.5%(31)	20.8 % (27)	39.6% (53)	18.5 % (24)		
	SA&A	50.8% (67)	72.3% (94)	57.5%(77)	67.7% (88)		
Nurse demonstrated to patient what to do	N	25% (33)	5.4 % (7)	15%(20)	10.7 % (14)	χ^2 value=20.072 df=2 P=0.000p<0.05	χ^2 value=25.519 df=2 P=0.000p<0.05
	SD&D	20.5%(27)	21.5 % (28)	45.5% (61)	19.8% (26)		
	SA&A	54.5% (72)	73.1 % (95)	53%(71)	56.2 % (91)		
Nurse allowed me to make decision about my care	N	28% (37)	19.4 % (25)	12.7% (17)	26.7% (35)	χ^2 value=39.223 df=2 P=0.000p<0.05	χ^2 value=38.435 df=2 P=0.000p<0.05
	SD&D	53% (70)	24.8% (32)	69.4% (93)	56.9% (74)		
	SA&A	18.9% (87)	55.8 % (72)	17.9% (24)	42% (35)		
Nurse enquired about my progress in care	N	14.4% (19)	6.2 % (8)	2.2% (3)	6.2 % (8)	χ^2 value=14.719 df=2 P=0.001p<0.05	χ^2 value=9.804 df=2 P=0.007p<0.05
	SD&D	19.7%(26)	7.7 % (10)	0.8% (2)	6.9 % (9)		
	SA&A	65.9% (87)	86.2 % (112)	97% (129)	86.9% (113)		
Discussed with the nurse activities I can do and those I cannot do	N	38.6% (51)	22.5 % (29)	5.2% (7)	20.6% (27)	χ^2 value=14.022 df=2 P=0.001p<0.05	χ^2 value=57.786 df=2 P=0.000p<0.05
	SD&D	28% (37)	21.7% (28)	78.4% (105)	32.1% (42)		
	SA&A	33.3% (44)	55.8 % (72)	16.4% (22)	47.3% (62)		

Table9: Difference between Kiambu and Thika on patients' participation in care.

Key: N=Neutral, SD=Strongly Disagree, D=Disagree, A=Agree, SA=Strongly Agree

Discussion

In providing patient education activities, nursing enhances the patients' participation in their own care, a practice that is frequently discussed and encouraged now a days. The patient's satisfaction with the educational information by itself represents a nursing care quality indicator. The findings of this study revealed that Majority of the nurses enquired about patients perspectives in care in both the pre-test and post-test. On whether patients should be involved in decision making regarding their care 80.1% (n=117) agreed, though only 61% stated that they involve patients in decision making in the pre-test. During the post-test, 92.9% (n=117), agreed that patients should be involved in decision making regarding their care, while only 76.2% (n=96) reported to be involving patients in decision making.

These findings are comparable to a study carried out to evaluate patients' participation in clinical decision making by Florinetal which found out that, Registered nurses did not successfully involve patients in clinical decision making. A study in Germany also found the need to involve patients in decision making since several factors influenced patients' perception of individualized care. However, only the decision-making process can be

actively influenced by nurses. Therefore, nurses should been courage to promote shared decision-making regarding patients' nursing care.

The nurses we real so not aware of their patients' perspectives and tended to over estimate patients willingness to assume an active role in the care. In another study carried out in Swedish hospital, inadequate quality of care was identified especially on information given about treatment, examination results and opportunities for patient to participate in decisions related to care and information on self-care [5]. Another study of application of Orem's theory to patients found out that using the nursing agency to facilitate decision-making, patients will feel invested in their health care, thus resulting in better outcomes [24].

In the current study nurses were asked to indicate the areas they involve patients during their care. In both study groups they mainly involved patients in giving medication and when obtaining consent. This indicates that the medical model still has an influence in the nursing care because most of the decisions on treatment and consent are in the alleviation of pathological problems hence the need to increase training of nurses on the nurses process which is patient centered

According to Aggleton, et al. (2000) [18] the medical model of care views a person as a complex set of anatomical and physiological system. Within this model much of a person social behavior and many psychological processes are thought to have their origins in physiological and biochemical activity. Therefore the intervention focuses not on the whole person but on the physiological or anatomical part perceived to have malfunctioned. Hence the patient has no role in the care since the evaluation mainly involves examining the extent to which the prescribed interventions (in this case medications) have been successful in meeting the goals set for physiological or anatomical part deemed have a malfunction.

Conclusion

Summary of Findings

The application of the nursing process in patient care is key to the provision of patient centered care. The utilization of nursing process revealed significant difference on the level of nurses' involvement of patients in decision making. On the other had the application of nursing theory to the nursing process revealed significant change on nurses' perspective about patient involvement in the care. Therefore use of the nursing process is important in improving patient participation in care while integration of theory to the nursing process further improves the participation.

Study Recommendations

The nursing management should establish policies to incorporate nursing process in the care of patients to improve the level of patient participation which is key to patient centered care and also the integration of nursing theory to the nursing process. This will improve patient involvement in their care and also shift nursing from the influence of medical mode that has influenced nursing practice for many years.

The nursing regulatory bodies should also formulate policies that will require all hospitals adopts a nursing theory relevant to their area of specialty. This will clearly define who the patient is, the role of nursing, the environment in which care is provided and the understanding of health. Therefore in providing care using the nursing theory, the nurse will provide holistic care to the patient and in contrast to nursing a diseased system or physiological alteration which has been influenced by the medical model.

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