RESEARCH ARTICLE

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Nurses' Perceived Challenges in the Management of Hospitalized Cancer Patients in a Comprehensive Cancer Center in Southeastern Nigeria

Peace N Iheanacho, Hope C Opara*, Juliana C Ifezulumba, Ngozi Omotola, Justin A Ingwu, Agnes N Anarado

Abstract

Objective: Nurses' challenges in poor-resource countries like Nigeria have been understudied. This study determined nurses' perceived challenges in management of hospitalized cancer patients in a comprehensive cancer center in southeast of Nigeria. **Methods:** The descriptive study included 133 registered nurses working in medical-surgical and oncology wards. A 37-item questionnaire included seven (7) questions on socioeconomic, 16 questions related to nurse's knowledge, and 14 questions related to cancer treatment and the hospital facility. A significant challenge was defined as a mean score of more than 3 in a Likert scale 5 points. **Results:** Challenges included a shortage of nurses (inadequate numbers of skilled nurses in oncology and other wards with mean±sd score (4.73±0.58), lack of continuing education on current trends in the management of cancer (4.03±0.45), and lack of oncology trained nursing experts for job mentoring (4.24±0.77). Others were managing patients facing chemotherapy related side-effects (3.06±2.12), high cost of treatment borne by cancer patients (4.41±0.68) and exorbitant hospital bills (4.72±0.48), non-availability of drugs (4.09±0.87) and institutional policy bottlenecks affecting subsidizing treatment costs (4.09±0.84). Cancer care affected mainly by inadequate and functional equipment (4.24±0.55), and with no staff remuneration (4.53± 0.85). **Conclusion:** Nurses' Perceived Challenges were related to professional, institutional, and those related to patient.

Keywords: cancer patients- challenges- nurses- nursing care- Nigeria

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Introduction

Cancer is the leading cause of morbidity and mortality worldwide (Bray et al., 2018; Maree and Mulonda, 2017; Siegel et al., 2016). The incidence of cancer has continued to increase steadily worldwide (Jalai et al., 2017). According to Ferlay et al., (2019) estimations showed that in 2018, approximately 18.1 million new cancer cases and 9.6 million cancer deaths were recorded in the world. It is expected that new cases will increase with the highest percentage and burden occurring in developing countries by 2030 (Maga et al., 2017). While a diagnosis of cancer was once considered a death sentence, in recent years, cancer survival statistics have dramatically improved with more than 50% of newly diagnosed patients surviving beyond 5 years after diagnosis (Jalai et al., 2017). This improved survival rate can be attributed to early diagnosis and treatment, more aggressive and effective treatments, increased awareness of cancer, and the need for screening. With this shift in the survival rate of cancer, there is also an increase in the older population needing nursing care.

Care of cancer patients requires a multidisciplinary approach and oncology nurses are responsible for coordinating the delivery of care and helping in the development of the multidisciplinary treatment plan (Grassi et al., 2017). Nurses are at the forefront of cancer care as they make up the professional group that stays the longest hours with the patients at all stages of the cancer trajectory (Alzoubi et al., 2019; Banerjee et al., 2016). The supportive nursing care of patients with cancer can be stressful, challenging, and emotionally demanding, requiring advanced communication and counseling skills, and specialist knowledge in both the theory and practice of cancer care (Al zoubi et al., 2019).

Nurses, especially those without any specialized oncology training, often feel inadequate in meeting the challenge of cancer care due to a lack of competence, education, and skills (Araújo et al., 2015). Studies also reported that shortage of adequately trained oncology experts has led to limitations in capacity and the quality of care provided (Maree et al., 2017) as many nurses

*Department of Nursing Sciences, Faculty of Health Science and Technology, University of Nigeria, Enugu Campus, Nigeria. *For Correspondence: hope.opara@unn.edu.ng*

report that they did not receive any education or training in palliative care during both their academic education and in the clinical setting (Hassankhani et al., 2020). Nurses in cancer care wards offer care for the entire course of management of patients with cancer and assist in a peaceful death, (Al zoubi et al., 2019). Therefore, holistic care that aims at improving patient's quality of life becomes a priority (Maga et al., 2015).

A lot of factors contribute to the experiences and outcomes of cancer care. Literature showed poor outcomes of cancer management with evidence of survivors having unmet psychological needs (Kamisli et al., 2017). The multifaceted factors may include institutional policies, lack of communication skills, inability to cope with patients' frustrations, and cultures that negate treatment and dysfunctional health system (Maree et al., 2017). Challenges faced by nurses caring for cancer patients in poor resource countries like Nigeria have been understudied and this gap underpinned this study. Eliciting these challenges and giving attention to their impact on the quality of nursing care will help managers and policymakers in improving nurses' working environment to enhance better productivity.

Objectives of Study

To identify the professional, treatment regimen, organizational, and individual cancer patients' challenges that impacted nursing management of cancer patients in the study center.

Materials and Methods

Design/Sample

A descriptive cross-sectional design was adopted for the study from June to August 2018. The study population was all the nurses in oncology and non-oncology wards where cancer patients were hospitalized (a total of 11 wards). From a total of 200 nurses, a sample of 133 was calculated using the Taro Yamane formula (Uzoagulu, 2018) for finite populations. Proportionate, stratified random sampling was used to enlist one hundred and thirty three (133) nurses who participated in the study from the different wards.

The Instrument for Data Collection

A researcher-developed validated questionnaire made up of 37 items was used for data collection. The questionnaire included seven (7) questions that elicited information on demographic characteristics of respondents such as sex, age, educational status and attendance to oncology training.

Professional/ Individual factors which are conditions inherent in professional nursing practice or arising from the patients that may influence care were measured through 16 questions (nurses' knowledge of cancer management protocol, team spirit, nurse-patient ratio and attendance to continuing education programmes; issues with patients' belief about cancer and its treatment, patient's poor economic status that affected the affordability of treatment and chemotherapy related side-effects.

Factors arising from cancer treatment and the hospital facility were elicited by 14 questions about cost of treatment to the patients, availability of drugs, pain management, adverse/side effects of chemotherapy; functioning equipment, adequacy of system resource supply, cost of hospital bills, and staff remuneration among others.

Section B-D were constructed on a 5-pointLikert.-type scale and weighted as follows: Strongly Agreed (SA) – (5points), Agreed (A) – (4points), Strongly Disagreed (SD) – (3points), Disagree (D) – (2points) and Undecided (UD) - (1point). Test -re-test method was used to establish the reliability of the instrument and data analyzed using Pearson's Product Moment Co-relation Co-efficient technique which yielded a coefficient of 0.82.

Ethics

The Health Research Ethics Committee of the study center approved the study (NHREC/05/01/2008B-FWA00002458-1RB00002323) while the administrative permit was duly obtained from appropriate Nurse managers. Informed consent was obtained from the nurses after a detailed explanation of the study. Confidentiality and anonymityof information were ensured.

Method of data collection

The questionnaires were administered to the nurses in their respective wards during morning and afternoon shifts when a greater number of them would be on duty and collected on the spot after they were completed. All nurses who were off duty; on any sort of leave; and those unwilling to participate were excluded.

Data Analysis

Data analysis was done with the Statistical Package for the Social Sciences version (IBM SPSS) version 23 using descriptive statistics of proportions, percentages, means, and standard deviations. Any item with a mean score of up to or more than 3 was accepted as a significant self-reported challenge to the nurses.

Results

Demographic characteristics of respondents (Table 1)

Male respondents were 11.3% while 88.7% were females; the modal age group was 36-40 years (33.1%). Up to 78 (58.6%) had at least a bachelor's degree in nursing and a good number (61.6%) were Principal Nursing Officers and above while126 (94.7%) had worked in different wards where cancer patients were hospitalized for at least 5 years. More than half of the respondents (57.9%) had never attended any oncology or cancer-related training/workshop while only (42.1%) had ever attended .

Professional/ individual patient challenges affecting cancer care (Table 2)

Low level of knowledge of cancer management protocols (3.01 ±0.76), reduced team spirit among nurses and other health personnel (3.76 ± 0.76), lack of continuing education on current trends in the management of cancer (4.03±0.45), and shortage of nurses(inadequate number of skilled nurses in each ward) (4.73±0.58) were factors

Table 1. Demographic Characteristics of Respondents

Variable	Frequency	Percentage (%)
Age		
<30 years	23	17.3
31 - 35 years	18	13.5
36 -.40 years	37	27.8
41- 45 years	11	8.3
≥46 years	44	33.1
Marital status		
Single	20	15.0
Married	110	82.7
Separated	3	2.3
Gender		
Female	120	90.2
Male	13	9.7
Highest Educational qualification		
Registered Nurse	2	1.5
Registered Nurse Midwife	29	21.8
Post Basic Diploma in Nursing	24	18.0
BNSC	56	42.1
MSC	20	15.0
PhD	2	1.5
Professional designation		
Chief Nursing Officer	23	17.3
Assistant CNO	18	13.5
Principal Nursing Officer	41	30.8
Senior Nursing Sister	16	12.0
Senior Nursing Officer	21	15.8
Nursing Officer	14	10.5
Years of experience in caring for cancer patients		
< 5	81	60.9
6 – 10	45	33.8
≥11	7	5.3
Ward/ area of posting		
ENT ward	12	9.0
Male Surgical Ward	17	12.8
Male medical Ward	9	6.8
Female Surgical Ward	6	4.5
Oncology ward	12	9.0
Orthopedic	14	10.5
Female medical Ward	7	5.3
Neuro-surgical ward	10	7.5
Medical- extension Ward	17	12.8
Paediatric oncology	14	10.5
Urology ward	15	11.3
Attended any oncology/cancer training?		
Yes	56	42.1
No	77	57.9

reported to have affected care delivery. Lack of oncology-trained nursing experts for job mentoring (4.24±0.77) and nurses' lack of interest in cancer care (3.17±084) was reported as challenging.

Challenges emanating from individual cancer patients included patients' conflicting cultural backgrounds and beliefs that cancer is caused by curses/attack from evil spirits (4.34±0.85): patient's poor economic status that affected the affordability of treatment (4.72±0.54): managing patients facing chemotherapy related side-effects (3.06±2.12); as well as dealing with frustrations expressed by patients due to long term treatment (3.42±2.48) and patients' non adherence to the treatment regimen (4.45±0.70) posed challenges to cancer nursing care (Table 2).

Treatment regimen-related/ Institutional challenges (Table 3)

Table 3 showed that high cost of treatment borne by patients (4.41±0.68), non-availability of drugs (4.09±0.87), inadequate pain management (3.84±0.88), adverse/side effects of treatment (4.33±0.73), and difficulty with meeting up with requirements before treatment (adequate blood level before chemotherapy (3.80±0.82) were the regimen-related challenges that nurses need to handle while caring for cancer patients.

Restrictive policies that limit nurses' independent actions such as restriction of IV injections as a 'doctors only' procedure even in emergencies (3.68±081), policy bottlenecks that delay subsidizing cost of cancer treatment (4.09±0.84), and lack of adequate and fully functioning equipment (4.24 ± 0.55) were reported. Inadequate system resource supply (4.36±0.48), high cost of hospital bills (4.72±0.48) and need to motivate staff through adequate remuneration (4.53±0.85) were also reported as challenging (Table 3).

Discussion

Nurses reported inadequate continuing education on current trends in the management of cancer patients, shortage of nurses(inadequate number of nurses per each ward), and lack of oncology trained nursing experts for job mentoring as major challenges. The majorities of the nurses in this study worked in non-oncology wards and were registered nurses without any specialized oncology nursing training. Lack of continuing education can account for the low level of knowledge of cancer care especially in assessing and providing psychological care. Similar findings were reported in several studies where insufficient clinical exposure, lack of training in oncology nursing, and limited understanding about cancer treatment, medication, and side effects influenced nurses' ability to provide adequate care (Chou et al., 2016; Kamisli et al., 2017; Maree et al., 2017).

Similarly, nurses in Zheng et al., (2015) reported self-limitation, lack of knowledge, and inexperience in providing psychological care for cancer patients as challenging while inadequate education on pain management was reported as challenging by nurses in Golberg and Morrison (2016) and Peterson et al., (2015). The finding is also similar to findings of other studies (Banerjee et al., 2016; Chou et al., 2016; Kamish et al., 2017) where cancer patients expressed unmet psychological needs due to nurses' poor communication skills and inability to give support and information about

Table 2. Professional and Individual Patient Challenges that Affected Nursing Management of Cancer Patient

Variables	SA	A	D	SD	UD	Mean/ standard deviation
Professional Challenges						
The level of knowledge of cancer management among nurses is low	4 (3.0)	27 (20.3)	70 (52.6)	31 (23.3)	1 (0.8)	*3.01±0.76
Reduced team spirit among nurses and other health personnel	8 (6)	101 (75.9)	13 (9.3)	7 (5.3)	4 (3)	*3.76 ± 0.76
Lack of continuing education on modification in management of cancer patient cancer	14 (10.5)	112 (84.2)	5 (2.8)	2 (1.5)	0	*4.03±0.45
Shortage of nurses in the ward	13 (9.8)	79 (59.4)	20 (15)	19 (14.3)	2 (1.5)	*4.73±0.58
Lack of oncology trained nurses, mentioning in the field	51 (38.3)	70 (52.6)	7 (5.3)	3 (2.3)	2 (1.5)	*4.73±0.77
Lack of interest towards cancer care	13 (98)	20 (15)	79 (59.4)	19 (14.3)	2 (1.5)	*3.17±084
Individual patient challenges						
Cultural background and beliefs that cancer is caused by curses/attack from evil spirits	67 (50.4)	56 (42.1)	0	9 (6.8)	1 (0.8)	*4.34±0.85
Religious belief that cancer is not treated with orthodox treatment	21 (15.8)	100 (75.2)	10 (7.5)	1 (0.8)	1 (0.8)	*4.04 ±0.57
Economic status that affected affordability of treatment	100 (75.2)	31 (23.3)	0	2 (1.5)	0	*4.72±0.54
Stress and distress caused by adverse/side effects of drugs	17 (12.3)	83 (62.4)	9 (6.8)	11 (8.3)	13 (19.8)	*3.06±2.12
Patient's frustration due to long term treatment	32 (24.1)	60 (45.1)	4 (3)	7 (5.3)	30 (22.6)	*3.42±2.48
Patients perception of disease as punishment for sins	10 (7.5)	24 (18)	58 (43.6)	6 (4.5)	34 (25.3)	*3.77±1.23
Patients perception of nursing skills as incompetent	1 (0.8)	22 (16.5)	90 (67.7)	17 (12.8)	3 (2.3)	*3.00±0.64
Unmet psychological needs	9 (6.8)	93 (69.9)	23 (17.3)	3 (2.3)	5 (3.8)	*3.73±0.77
Non adherence to treatment regimen	73 (54.9)	52 (39.1)	4 (3)	4 (3)	0	*4.45±0.70
Inadequate information and health education on the disease treatment options	46 (34.6)	73 (54.9)	11 (8.3)	2 (1.5)	1 (0.8)	*4.21±0.71

Decision mean = ≥3, *signifies mean score ≥3 accepted as challenging factor in cancer care; SA, Strongly agree; A, Agree; D, Disagree; SD, Strongly disagree; UD, Undecided

cancer treatment and side effects.

De Calvo, Esperanza, and Sepulveda- Carrillo (2017) also reported that 52% of their respondents reported unmet psychological needs ranging from being depressed to feeling sad and anxious about the outcome of the disease. To bridge these gaps, specialist oncology training and workshops for nurses to improve knowledge and enhance on-job mentoring are imperative (Burhenn et al., 2016)

Shortage of nurses(inadequate number of nurses in the ward) as reported in this study would affect the quality and /or quantity of nursing care and also reduce nurses' motivation to provide quality care. The inadequate nurse-patient ratio increases the workload for nurses possibly leading to stress and burnout, task conflict, depression,

Table 3. Regimen/Institutional Challenges that Affected Nursing Management of Cancer Patients

Variables	SA	A	D	SD	UD	Mean/ standard deviation
Treatment Regimen challenges						
High cost of treatment services that made patient unable to afford services	69 (51.9)	51 (38.3)	12 (9.0)	1 (0.8)	0	*4.41±0.68
Frequent changing rate of treatment pattern by physicians	30 (22.6)	66 (49.6)	30 (22.6)	3 (2.3)	4 (2.3)	*3.86 ±0.89
Non availability of drugs	42 (31.6)	73 (54.9)	9 (6.8)	6 (4.5)	3 (2.3)	*4.09±0.87
Ineffectiveness of most available drugs for pain and symptoms management	31 (23.3)	63 (47.4)	27 (20.3)	12 (9.0)	0	*3.84±0.88
Multidisciplinary demand of treatment protocols with few nurses to deliver services.	67 (50.4)	48 (36.8)	12 (9.0)	5 (3.8)	1 (0.8)	*4.31±0.84
Lack of political will to subsidize cost of treatment	49 (36.8)	49 (36.8)	29 (21.8)	6 (4.5)	0	*4.06±0.7
Adverse/side effects of treatment	61 (45.6)	61 (45.9)	6 (4.5)	5 (3.8)	0	*4.33±0.73
Requirement that must be met before treatment e.g. adequate HB makes it difficult for patients to attain.	23 (17.3)	72 (54.1)	27 (20.3)	11 (8.3)	0	*3.80±0.82
Organizational challenges						
Restrictive policy that limits nursing care e.g. selection of IV injections as doctors procedure even in emergency setting	8 (13.5)	64 (48.1)	44 (33.1)	5 (3.8)	2 (1.5)	*3.68±081
Lack of adequate and effective functioning equipment	37 (27.8)	93 (69.9)	2 (1.5)	0	1 (0.8)	*4.24 ± 0.55
Inadequate system resource supply	49 (36.8)	84 (63.2)	0	0	0	*4.36±0.48
High cost of hospital bill	98 (73.3)	33 (24.8)	2 (1.5)	0	0	*4.72±0.48
Inadequate staff remuneration	93 (69.9)	26 (19.5)	8 (6)	4 (3)	2 (1.5)	*4.53±0.85
Policy bottleneck that delays subsidizing cost of treatment for cancer patients	38 (28.6)	81 (60.9)	6 (4.5)	4 (3)	4 (3)	*4.09±0.84

Decision mean = ≥3, *signifies mean score ≥3 accepted as challenging factor in cancer care; SA, Strongly agree; A, Agree; D, Disagree; SD, Strongly disagree; UD, Undecided

irritability, and poor quality of care. The findings agreed with other studies in Jordan, Iran, and elsewhere (Al zoubi et al., 2019; Chuah et al., 2017; Dehghan-Nayeri et al., 2018) that reported challenges from the shortage of nurses and low nurse-to-patient ratio. Challinor et al.,(2020) opined that cancer control in all countries, particularly in resource-constrained countries with a few oncology nursing staff should be addressed by ensuring retention of experienced oncology nurses and prevention of continuing out-migration of nurses to resource-rich countries.

Individual patient challenges reported by nurses in this study were those associated with managing patients whose cultural backgrounds and beliefs contradicted generally accepted beliefs and practices of nursing care. For example, some patients believed that cancer was caused by curses/attacks from evil spirits. The challenge here could result from the nurses' limited knowledge of cultural considerations while rendering care. In India respondents in Chou et al., (2016) reported that their cancer patients held mystical and cultural beliefs about the cause of cancer while Walubita et al., (2018) reported their respondents' belief that cancer is a product of witchcraft thereby holding to the role of faith healing. There is a need to provide information on the disease process and treatment to patients and relatives to gain their co-operation and disabuse superstitions that conflict with care. Furthermore, there is also the need for nurses to show cultural competence and unbiased acceptance of their patients.

Findings from this study also showed that the high cost of treatment to the patient, exorbitant hospital bills, and patients' poor economic status which affected the affordability of treatment posed major challenges to care delivery. This is a very common factor in low-middle income countries like Nigeria. Most of the cancer patients especially those from rural areas report to the hospital at the terminal stage due to lack of transport funds and poverty. Nigeria has been going through an adverse economy due to corruption, terrorism, and inadequate health sector funding among other things. The result of various combinations of these factors leaves the vulnerable population in abject poverty and the added responsibility to finance their health care needs (out-of-pocket) is quite daunting for many. Given the economic situation in the country, several peoples' ability to bear their health care costs, (which could be quite huge) is greatly reduced, as seen commonly among patients undergoing cancer treatment.

Altice et al., (2017) found that some respondents (cancer survivors) reported health-related spending as being >20% of total household income while 7% reported being bankrupt. In a review by Gilligan et al., (2018), it was reported that 42% of the estimated 9.5 million people diagnosed from 2000-2012 in America depleted all of their assets within 2 years of diagnosis, 62% of the patients reported being in debt because of their cancer care. Financial hardship leads to discontinuation of treatment and attrition of patients during follow- up. Lack of funds among patients in poor resource countries like Nigeria can prevent cancer patients from feeding adequately; taking necessary self-care to build up their blood levels and general well-being before chemotherapy.

Seeing their patients in very poor states where patients but could not even be fit to undergo chemotherapy due to inadequate blood levels, could become such a challenge to nurses as reported in this study. One of the priority goals of the World Health Organization is to promote universal health coverage worldwide to ensure that all people obtain the health services they need without suffering undue financial hardship (Cazap et al., 2016). However, access to, and affordability of are is suboptimal in low-income countries and nurses face diverse challenges and dilemmas intrying to identify/manage patients' financial needs (Wiley, 2016).

Managing patients that are frustrated due to long-term treatment of cancer, those facing chemotherapy-related side-effects, and non-adherence to treatment regimen were also reported in this study. Cancer is a chronic illness requiring long-term treatment and patients tend to get exhausted and frustrated leading to non-adherence to the regimen. When patients fail to adhere to prescribed therapies it leads to poorer health outcomes and increased healthcare costs (Opara et al., 2018). Nurses should be able to assess for risk factors for non-adherence in patients with chronic illnesses such as cancer (Opara et al., 2018).

Rendering care in an organization with a restrictive policy that limits nursing care (e.g. ascribing the administration of IV injections as doctors procedure even in emergencies), policy bottlenecks that delay subsidizing the cost of cancer treatment, and inadequate system resource and supply can be challenging. This group of factors tends to restrict the nurses' prompt response to cancer patients' needs and can result in emotional distress for nurses when they watch cancer patients go through discomfort and pain. Uysal, (2018) reported similar institutional challenges in pain management services due to restrictions in the prescription of opioids; Toba et al., (2019) also stated that 56.4% of participants in their study in Palestine reported that contactingthe physician for the prescription of opioids was a major source of delay in rendering nursing care. Lack of administrative support that fosters large caseloads and policies that contribute to delays in cancer treatment should be revisited if the quality of life of cancer patients will be improved (Stewart et al., 2018).

In this study, lack of adequate and functional equipment, as well as a shortage of materials for nurses to work, was also identified as challenges. This can constitute a serious constraint as patients miss nursing care with such shortages. This lack can be attributed to poor funding of the health system in the nation and lack of political will to equip health facilities. This finding is similar to findings in another study in Nigeria, (Nwozichi et al., 2017) and Zambia (Maree et al., 2017). Outdated equipment fails to provide desired services leading to missed nursing care for hospitalized patients with cancer (Dehghan-Nayeri et al., 2018). Lack of a conducive working environment for nurses and lack of staff motivation through inadequate remuneration can make the care for cancer patients a struggle.

Other studies also reported challenges with nurses' poor working environment (Alzoubi et al., 2019; Dehghan-Nayeri et al., 2018; Maree et al., 2017). Cancer nursing care in Nigeria was rated as very challenging. Reflecting on the burden of cancer in Africa and Nigeria there is an urgent need for oncology nursing training and removal of professional and institutional barriers.

Implications for Practice

The quality of nursing care of cancer patients can be affected negatively by a shortage of staff, lack of specialized oncology nursing education, and financial burden of treatment on patients. Findings from this study highlighted the need for more active institutional and governmental involvement in policies that enhance quality cancer care. The cost of cancer treatment borne by the patients should be subsidized and work materials provided. The nurse-patient ratio should be achieved by employing adequate and educated oncology nursing experts in cancer care. This study can stimulate further enquiries about challenges in cancer care in community-based health facilities as well as the effect of such challenges on the well-being of the nurses.

In conclusion, Nurses caring for cancer patients encountered challenges from the individual patients, institutional bottlenecks, shortage of oncology trained nurses, and lack of continuing education for nurses. To ensure that cancer patients receive quality care, challenges that negate effective provision of psychological and emotional support should be urgently addressed. Education and training should be provided for all health professionals involved in caring for cancer patients of different cultural backgrounds to enhance the quality of life of these patients.

Author Contribution Statement

Study conception and design: done by HO, JI, AA, Data collection: HO, JI Data analysis and interpretation: HO, JI, PI, JAI, AA Drafting of the article: HO, PI, NO Critical revision of the article: PI, AA, HO, JAI, NO Approval of the article: All Authors

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The work was part of an approved student thesis at University of Nigeria, Enugu campus.

How the ethical issue was handled (name the ethical committee that approved the research)

The Health Research Ethics Committee of the study center approved the study (NHREC/05/01/2008B-FWA00002458-1RB00002323) while the administrative permit was duly obtained from appropriate Nurse managers. Informed consent was obtained from the nurses after a detailed explanation of the study. Confidentiality and anonymity of information were ensured.

Availability of data

All the data related to this study were contained in this article and further clarification can be obtained by request from the corresponding author

Any conflict of interest

Authors have declared that no competing interests exist.

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