

Knowledge, attitude and practice of preoperative visit: A survey of Nigerian perioperative nurses

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Abstract: *Background:* The notion of preoperative visiting has been in existence since the 1960s and its value and worth in relation to healthcare delivery has been debated consistently since the term *preoperative-visit* is often confusing. However, little is known about knowledge, attitude and practice of preoperative visits among perioperative nurses in Nigeria. *Objectives:* The study sought to determine knowledge, attitude and practice of Nigerian perioperative nurses towards the practice of preoperative visits and to identify barriers militating against the practice. *Design:* This is a countrywide cross-sectional descriptive survey. *Results:* One hundred and forty six Nigerian perioperative nurses among the conference attendees gave consent to participate in this study. Half of the participants- 70(50%) of the participants worked with tertiary health facilities and 71(52.2%) were from the conference host region (Southwest, Nigeria). The majority (97.3%) of the participants possess good knowledge of preoperative visit. Equally, 139 (96%) of them acknowledged that the practice of preoperative visit is very important to perioperative nursing care as well as to the teeming patients. About two-third (63%) of the participants reported that they practice preoperative patient visit while 53 (37%) did not. Ninety two (72%) of the participants stated that they often document their opinions during preoperative visits to patients. Major factors militating against the practice of preoperative visit include timing of the visits (89%) and work overload (66%). It is equally important to note that 27 (18%) of the participants identified shortage of perioperative nurses as a barrier to preoperative visit. Years of experience, workplace, age and professional rank were associated with the practice of preoperative visit. *Conclusion:* Most perioperative nurses in Nigeria have formally acquired knowledge of preoperative visit. However, there is a notable gap between their knowledge and attitude towards it. Therefore, they require periodic reminder through continuing professional development programs on their responsibilities towards the recipients/beneficiaries of the perioperative nursing care.

Keywords: Preoperative Visit, Perioperative Nurses, Perioperative Nurse Patient Review, Operating Room Nurses, Knowledge, Practice, Nigeria

1. Introduction

Preoperative visit, preoperative nurse visit, perioperative nurse patient assessment and perioperative nurse patient review are used interchangeably. The evolution of theatre

nursing (perioperative nursing) is practically the same with the growth of surgery, not only because they developed together but because they complement each other. Perioperative nurses were formally referred to as "operating room nurses" a term that historically referred to

patient care provided in the intraoperative period and practice within the operating room itself. However, as the responsibilities of the operating room nurses expended to care in the preoperative and postoperative periods, the term "perioperative" was recognized as more appropriate [1-2]. A perioperative nurse is a nurse who specializes in perioperative practice and who provides nursing care to the surgical patients throughout the continuum of care [3]. Perioperative nurses provide patients care within the framework of the nursing process; they use the tools of patient assessment, care planning, intervention, and evaluation of patient outcomes to meet the needs of the patients who will undergo surgery or other invasive procedures [2]. They also attend to the healthcare of patients in the operating room, oversee the work organization within the operating theatre, and mediate between various hospital departments, the surgeons, and the management of the hospital [4]. Preoperative nurse patient review is one of the roles of a perioperative nurse meeting the patient one on one to interact, assess, educate and form a rapport with the patient prior to surgery [5]. Idusogie [6] states that preoperative visit is a mandatory visit during the surgical care of the client.

The notion of preoperative visit has been in existence since the 1960s and its value and worth in relation to care delivery has been debated consistently since the term preoperative visit is often confusing [7-11]. Equally, Alfredsdottir & Bjornsdottir [12] affirmed that the complex role of the care provided by the perioperative nurse practitioner can easily be misunderstood. Cox [13] and Donworth [14] establish that perioperative care of patients consists of three main parts; a preoperative visit related to a nursing assessment of the patient, care of the patient during surgery and post-operative nursing care and evaluation of the patient. The benefits of preoperative visit to patients and theatre nurses undertaking pre-operative visits as a way of providing pre-operative information and teaching patients have been researched and documented [15-17]. Studies have shown that visiting patients in the preoperative period helps in post-operative recovery of patients and allow the patient the opportunity to express concerns and fears about the impending procedure [18-21]. Other benefits include; to collect data, to lessen the anxieties that the patient has towards his operation, to improve patient care by knowing the patient and his problems before operation, to help the patient to understand the procedures and the equipment needed for his care, to involve perioperative nurse more with total patient care and to encourage her to keep up-to-date with new procedures and ideals and to re-enforce information that the patient has already been given by ward nurses and surgeons [22-23 and 6]. In the same vein, the value of giving pre-operative information to patients has been widely debated in the literatures, with many authors claiming that psychological preparation for an operation help in reducing hospital induced anxiety. Equally, Sadati et al [24] states that in some hospitals preoperative visit is advocated, particularly for those patients admitted a day before the surgery. However, preoperative visit has met with resistance from staff due to

limited staffing, timing of the visits and availability of the patient themselves [25-28 and 6].

Despite the universally acknowledged importance of preoperative nurse patient visit to the provision of perioperative nursing care to surgical patients, its implementation especially in developing countries is low. This is largely detailed to be associated with unawareness/inadequate knowledge among perioperative nurses on the concept of preoperative visit to patients, shortage of perioperative nurses in many hospitals, lack of time, fear of passing wrong information to the patient, unwillingness by the surgeons and anaesthetists to allow the perioperative nurses to visit patients and fear of information overload to the patient [5, 29].

1.1. Aims of the Study

To determine knowledge, attitude and practice of Nigerian perioperative nurses towards the practice of preoperative patient visit and to identify barriers militating against the practice.

2. Methods

2.1. Background to the Study Area

The study was carried out at the 14th Annual Scientific/5th Delegates' Conference of National Association of Perioperative Nurses of Nigeria (NAPON) held at Yessy Events Centre, along Gbongan-Ibadan Road, Owode, Osogbo, Osun State between Monday 13th and Friday 17th October 2014. NAPON is a registered association for all registered perioperative nurses in Nigeria under the umbrella of National Association of Nigerian Nurses and Midwives (NANNM). NAPON annual scientific/seminar conference was first inaugurated in the year 2000. The conference has been an annual event tailored to congregate all perioperative nurses all over the federation to brainstorm on ways of improving the standards of perioperative nursing practice all over Nigeria and to increase patients' satisfaction through quality surgical nursing care [30]. Perioperative nursing education program is a Post Basic Nursing program designed to equip the basic general nurses with the complexity of knowledge, skills and attitude required to effectively care for recipients of perioperative nursing services. The program is built upon the foundation of sciences and humanities [12]. To coordinate effective and efficient clinical practices that is considered paramount to obtain the best outcome of perioperative patient care [31].

2.2. Study Design

This is a nationwide cross-sectional descriptive survey of perioperative nurses in Nigeria.

2.3. Study Population

All Nigerian perioperative nurses who attended the conference were eligible.

2.4. Sampling Techniques

A convenience sample, randomly selected from the conference attendees was recruited for the study. A total of 146 gave their consent for participation.

2.5. Data Collection Tools

Eighteen item semi-structured questionnaire on KAP of preoperative nurses visits was administered to all perioperative nurses who gave consent to participate.

2.6. Inclusion and Exclusion Criteria

Participation in this study was restricted to perioperative nurses working in both government and non-government health facilities in Nigeria. Other categories of nurses who attended the conference were excluded from the study.

2.7. Data analysis and management

Data analysis was done using SPSS 16.0 for windows to analyze the data. Descriptive analysis was computed on dependent and independent variables using Mean and Standard Deviation while test for significance was determined using Chi-square (χ^2) and p-value set at $P=0.05$.

2.8. Ethics

Approval was obtained from the National President of National Association of Perioperative Nurses of Nigeria

(NAPON) and the local organizers of the conference. Individual participant's informed consent was obtained before administration of the questionnaire.

3. Results

3.1. Socio-Demographic Characteristics

Seventy nine (54.1%) of the participants were females and the majority (65.8%) were fifty years old or below, with a mean age of 45 ± 8 years. All participants have dual nursing professional qualifications or more. Participants work experience showed that 39 (26.9%) of them had spent between 6-10 years in practice as registered perioperative nurses. One hundred and eight (80.6%) of the participants were principal nursing officers and above. Half (50%) of the participants worked with tertiary health facilities and more than half (52.2%) were from the South-west zone where the conference was held.

3.2. Participants' KAP of Preoperative Visit

As shown on Table 1, 142 (97.3%) of the participants acquired their knowledge of preoperative visit right from school and 139 (96%) of the participants acknowledged that the practice of preoperative visit is very important to the practice of a perioperative nurse and his patient (s). However, 53 (36%) admitted that they do not conduct preoperative visit at their place of work.

Table 1. Participants' awareness, attitude and practice preoperative visit

	N	Yes (%)	No (%)	Unsure (%)
Were you taught on the preoperative patient visit in your training school	146	142(97.3)	2(1.4)	2(1.4)
How important is the practice of preoperative visits to the perioperative nurses and the patient	146	139(95.2)	6(4.1)	1(.7)
Did you carry out preoperative patient visit during your clinical/practical posting as perioperative nurse student	145	122(84)	22(15)	1(.7)
Do you carry out preoperative patient visit at your present place of work	145	92(63)	53(37)	0(0)
Do you document your opinion during preoperative visits	127	92(72.4)	32(25.2)	3(2.4)

3.3. Knowledge on Benefits of Preoperative Visit

Table 2 below demonstrates participants' basic knowledge of the intrinsic benefits of preoperative visit. One hundred and forty one (96.6%) of the participants indicated that preoperative visit will lessen patients' anxieties regarding the

operation, 94 (64.4%) advanced improved patient's care as a result of fore knowledge of his predicaments and 1 (0.7%) acknowledged that it will reduce ethico-legal issues surrounding surgeries.

Table 2. Participants' knowledge on the benefits of preoperative visit

Benefits	Frequency	%
To lessen the anxieties that the patient has towards his operation	141	96.6
Aid recovery of post-operative patients	94	64.4
It allow patients the opportunity to express concerns and fears about the impending surgery	137	93.8
Allows perioperative nurses to learn about their patients	137	93.8
Establish good rapport	136	93.2
Develop a plan of care before the patient arrives in the department	134	91.8
To collect data	133	91.1
To improve patient care by knowing the patient and his problems before operation	94	64.4

Benefits	Frequency	%
To enable the perioperative nurse to anticipate equipment that may be needed for patients care	130	89.0
To help the patient to understand the procedures and the equipment that will be used in his care	130	89.0
To involve perioperative nurse more with total patient care and to encourage her to keep up to date with new procedures and ideals	129	88.4
To re-enforce information that the patient has already been given by ward nurses and surgeons	127	87.0
It reduces the rate of surgery cancellations	11	7.5
To ascertain the level of patient preparedness to surgery	11	7.5
It reduces the rate of ethics and legal issues associated with surgeries	1	0.7
To encourage the use of surgical checklist	1	0.7

3.4. Barriers to Preoperative Visit

Lack of time or wrong timing was identified by 130(89%) among the participants (see Table 3), 97 (66.4%) spotted work overload and 2 (1.4) stated that language barrier contribute to impediments of preoperative visit.

Table 3. Barriers to practice of preoperative visit

Barriers	N	%
Timing of the visits/ lack of time	130	89.0
Unawareness/ inadequate knowledge among perioperative nurses on the concept of preoperative visit to patients	38	26.0
Fear of passing wrong information to the patient	26	17.8
Reluctance by the surgeons and anaesthetists to allow the perioperative nurses to conduct standalone visit to surgical patients	24	16.4
Fear of information overload to the patients	22	15.1
Work overload	97	66.4
shortage of perioperative nurses manpower	27	18.5
Hospital policy	15	10.3
Language barrier	2	1.4

3.5. Ways to Improve on Preoperative Visit

Figure 1 shows that 121 (83%) of the participants suggested adherence to standards as a major measure to improve preoperative visit.

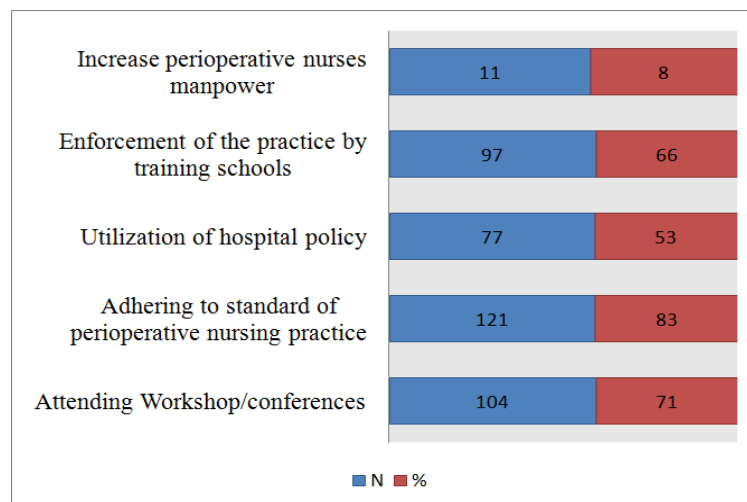


Fig. 1. Ways to improve preoperative visit practice

3.6. Associations with KAP of Preoperative Visits

Table 4 presents some significant factors associated with KAP of preoperative visit. Age and workplace were associated with practicing preoperative visit at training level. Other factors include rank and year of experience.

Table 4. Factors associated with KAP of preoperative visit

VARIABLES	A*		Y*		R*		WP*	
	χ^2	p-value	χ^2	p-value	χ^2	p-value	χ^2	p-value
Were you taught preoperative visit in your training school	2.648	.989	41.698	.000	9.548	.976	28.963	.011
ways to improve preoperative visit practice	81.656	.280	1.1088	.513	1.524	.431	1.214	.131
Did you carry out preoperative patient visit during your clinical/practical posting as perioperative nurse student	28.007	.022	15.805	.895	45.765	.033	62.832	.000
Do you carry out preoperative patient visit at your present place of work	19.808	.031	17.351	.363	10.698	.954	17.728	.219
Documentation of opinions during preoperative visit	17.596	.285	21.898	.585	18.908	.942	10.428	.973
Important of preoperative visit practice to nurses and the patients	14.114	.168	11.029	.808	17.389	.628	19.652	.142
How often do you carry out preoperative visit to patients	16.519	.348	23.428	.495	21.803	.861	24.855	.253

4. Discussion

The demographic pattern of participants in this study shows that gender divide among the participants was somewhat pronounced as more than half (54.1%) of the participants were female. This is in agreement with a study by Bamishaye & Hinmikyane [32] which reported that 70% of the operating room nurses were females. Contrary to our study Adeleke et al [33] reported that most participants in their study were male who possessed good behavior towards investigative healthcare. The preoperative assessment of patients enables the perioperative nurses to make need assessment and develop early stages of plan of care specific for the index patient. Conventionally, preoperative visit aims at reducing preoperative anxieties, aids recovery, to interact, assess, educate and form a rapport with the patient prior to surgery. It also allows the patient the opportunity to express concerns and fears about the impending procedure [16-18,5] The findings in our study concurs with these assertions as the majority (96%) of participants established that the practice of preoperative visits is very important to perioperative nursing and the patients. In a related development, 97% of the participants admitted that the practice of preoperative visit lessens the anxieties that patient has towards operations and 94% indicated that the practice allows patients the opportunity to express concerns and fears about the impending surgery. The same percentage agreed that it allows the perioperative nurses to learn about booked patients for surgeries in advance.

This study also found that Nigerian perioperative nurses (97.3%) acquired knowledge of preoperative patient visits right from their respective training schools and are positively inclined to its importance to their practice and the patients. These finding agrees with a study on medical confidentiality [33] that most healthcare professionals affirmed to have good knowledge of confidentiality of patient's health records right from their respective training schools and are positively disposed to its relevance and importance to sound healthcare delivery. In a related development, years of experience ($p=.000$) and workplace ($p=.011$) had association with participants' knowledge of preoperative visits. Likewise, workplace ($p=.000$) was found to have association with conduct of preoperative patient visit during clinical/practical posting of students perioperative nurses. However, it is equally demonstrated in our study that there is no association

between stated actors and attitude of the participants towards preoperative visit. In spite of the documented facts [16-19] about the positive benefits of preoperative visit to patients, Williams [11] reported that the practice is still low in many units. Our findings are not in tandem with this report. For instance, 63% of the participants in our study established that they do conduct preoperative patients visit in their various places of work. Likewise, our study established that age ($p=.022$), workplace ($p=.000$) and professional rank ($p=0.033$) were found to be associated with practice of preoperative patient visit. These findings go with a study [34] where workplace was a factor associated with perceptions of participants on health information technology. It is remarkable to state that 38% of the participants in this study do not occasionally conduct preoperative patient visits in their respective places of work especially at tertiary health facilities which are presumed centres for research and training of most healthcare professionals in the country.

Reported barriers to perioperative visit practice shows that 89% of the participants identified wrong timing of the preoperative visit or lack of time by the perioperative nurses to conduct the preoperative visit as a major contender to the practice. Another obvious barrier was work overload (66%). Our discovery is relatively in agreement with a study [29] that the apparent difficulties with preoperative visit and subsequent assessment of patients were premised on time and timing. On the contrary, other studies [35 and 11] documented an incident where an anaesthetist positively discouraged and prevented preoperative nurses from practicing preoperative nurse patient visit for fear of information overload and saying the wrong thing to the patients.

4.1. Study Limitations

Most Nigerian perioperative nurses could not attend the conference due to the security challenges (*Boko Haram* Terrorism) in the country coupled with the outbreak of Ebola Virus Disease (EDV) as at the time of the study. As such, the findings in this study could not be generalized because 50% of the participants came from the conference host region of the country (South-western Nigeria). This might mean that their practice lacks divergence and varieties.

5. Conclusion

Most of the perioperative nurses in Nigeria have formally

acquired knowledge of preoperative visit. There is a notable gap between their knowledge and attitude toward preoperative visit. However, they require continuous reorientation through continuing professional education especially with regards to their obligations towards recipients/beneficiaries of perioperative nursing services.

Recommendations

- There is a need for nationwide advocacy on the practice and implementation of preoperative patients visit at all the healthcare institutions.
- There is also a need to establish more perioperative nursing training schools in Nigeria to preclude manpower shortage in perioperative nursing practice in the country.
- In general, there is a need to organize Mandatory Continuous Professional Education Programs (MCPDP), training and retraining of perioperative nurses in Nigeria to get abreast with the new trends in perioperative nursing practice.

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Competing Interest

The authors declare that no competing interests exist.

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