

Adequacy of Pre-Operative Teaching Provided For Surgical Patients in Selected Hospitals of Kano State: Patients' Perspectives

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Abstract: Background: The importance of preoperative teaching is consistently supported in nursing and medical literature however; few studies have been done to determine the adequacy of the information provided to surgical patients. In the short time available, nurses must be able to select and use variety of teaching materials/tools as well as precisely deliver adequate information to surgical patients; provide answers to their questions and gain compliance to ensure better postoperative outcomes. Therefore, **theaim of this study** was to determine the adequacy of preoperative teaching provided for surgical patients in selected hospitals of Kano state from patients' perspectives. **Sample**, stratified simple random sampling method was utilized to select the study's hospitals then a convenience sampling method was applied to various units of the hospitals to collect the data. The sample composed of 100 surgical patients from four different hospitals. **Results**, indicated that; despite the provision of preoperative teaching, it still remained inadequate (total score: 32.4000 ± 13.07708 [50-75%]) and various factors were responsible of its inadequacy. Also, certain differences exist in terms of the distribution of the participants' hospitals regarding level of adequacy of preoperative teaching. **Conclusion**, provision of preoperative teaching for surgical patients was inadequate and could be improved by overcoming certain factors. **Recommendation**, nurses need to be aware of their responsibilities, barriers and ways of overcoming them in the provision of adequate preoperative teaching for surgical patients.

Key words: Adequacy, Preoperative teaching, Patients' perspectives

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I. Introduction

Pre-operative teaching is an important aspect in improving health outcomes of patients undergoing surgeries. Preoperative teaching could be a multi-disciplinary approach that requires harmonization of knowledge or information between nurses, surgeons, anesthesiologists, dieticians, and physiotherapists to coordinate care for patients. The general components of the preoperative teaching include client education and preparation, reducing surgical stress response, maintaining postoperative physiological function, minimizing pain and discomfort and promotion of patients' autonomy(Gerlitz, 2010).

Patients who undergo surgical procedures as treatment options for their conditions experience a high level of stress and anxiety, which could have negative consequences on post-operative outcomes (Nahm, Stevens, Scott and Gorman, 2012).Preoperative teaching has been used to improve patients' experiences by providing health care relevant information, coping skills, and psychosocial support prior to surgery there by promoting positive postoperative outcomes in mixed groups of surgical patients. Also, it is being used in mitigating patients' post-operative complications and promoting postoperative outcomes for surgical patients across the healthcare settings (Guo, 2012).Furthermore, as preoperative teaching tends to reduce postoperative complications, it consequently decreases the costs of hospitalization which would increase savings(Jonathan, 2014).

Among various forms of preoperative teaching interventions designed for surgical patients by nurses, three most favorite teaching methods were oral explanation, pamphlets and oral explanation with pictures and to a lesser extent Internet and videotapes(Chi-Kong and Iris, 2012).The teaching involves nurses providing knowledge that includes expectations of the surgical procedure, medication and food restrictions before the surgical procedure, as well as providing instructions for aftercare post operatively (Grossweiler, 2012).

Despite the universally acknowledged importance of preoperative teaching, its implementation especially in developing countries and more specifically secondary health institutions is low. This is largely detailed to be associated with unawareness, inadequate knowledge among staff nurses on the concept of preoperative teaching,

nurses' shortage in the hospitals, lack of time, work overload, fear of passing wrong information to the patient, unwillingness by the surgeons and anesthetists to allow nurses to teach the patients and fear of information overload to the surgical patients (**Danjuma, Ibrahim, Sunday, Silas,**

Oluwafemi & Patience, 2015).

Significance of Study

The pre-operative teaching of patients who undergo surgery can have a significant influence on their post-operative care as it can be of vital importance in preventing certain post-operative complications and minimizing the costs of hospitalization. In the clinical setting, pre-operative teaching could be useful for nurses. Nurses especially those in surgical units are responsible for this teaching.

The researcher observed that, preoperative teaching for surgical patients is one of the bothering issues faced by surgical patients at the area of study as many of the patients undergo surgeries without getting basic information regarding their condition, surgery they will undergo, information related to anesthesia, what need to be done or avoid as well as possible surgical consequences that will follow thereafter. This study could also be useful in establishing a basis for continuous nursing research regarding pre-operative teaching of patients who undergo surgery and its implications in nursing care.

II. Methodology

Aim of the study

The aim of the study was to:

Determine the adequacy of preoperative teaching of surgical patients in selected hospital of Kano State from patients' perspectives.

Study Design

Descriptive, cross-sectional quantitative study design was used to conduct this study.

Setting

This study was conducted at surgical units of 4 different general hospitals (Rano General Hospital, Kura General Hospital, Dawakin Kudu General Hospital and Tiga General Hospital) in Rano Zone II of Kano state Nigeria.

Subjects

Stratified random sampling method was firstly applied in collecting the data from the surgical units of the four hospitals. Then, convenient sample of 100 surgical patients from surgical units of Rano zone II hospitals were enrolled in the study. It comprises of adult surgical patients aged 18-60 years of both sexes who were to undergo surgical procedures.

Tools for Data Collection

A single tool was designed to retrieve information regarding the adequacy of preoperative teaching of surgical patients from the patients' perspectives. It is a self-administered questionnaire developed by (**Tse, K., 2006**) and consisted five (5) sections:

Section I: Consisted of socio-demographic information such as age, sex, occupation, educational qualification, diagnosis, hospital admitted and unit of admission, day(s) on admission.

Section II: It comprised of preoperative teaching received (26 items) each statement followed with three responses; 'None of what I was informed'=0, 'Some of what I was informed'=1 and 'All of what I was informed'=2. Participants responded by selecting one response in each statement. The total score for the preoperative teaching section was ranged from 0-52. The adequacy of the preoperative teaching was evaluated as follows; -Poor= (Less than 50%), Fair= (50-75%) and Good= (more than 75%).

Section III: Composed of ways/nature participants received preoperative teaching (12 items) with 'Yes=1' or 'No=0' responses.

Section IV: Contained information regarding preferred method of receiving preoperative teaching with (5 items) and three ranged responses 'least preferred=1-2', 'neutral=3-4' and 'most preferred=5'.

Section V: Included factors that affect the adequacy of preoperative teaching as perceived by the respondents (10 items) with three points Likert's type scale responses ranging from 'disagreed=0', 'neutral=1' and 'agreed=2'.

Pilot Study

A pilot study was conducted on 10 surgical patients randomly selected from the study areas and were excluded from the main study sample. The pilot study aimed at evaluating the simplicity, reliability, applicability and clarity of the research tool and necessary modification were done.

Methods

- A review of local, national and international related references was carried out to get acquainted with the various aspects of the research problem and the study tool.

- Data were collected through a self administered questionnaire which took each respondent 10-15 minutes to complete.
- The study questionnaires were distributed over the period of 3 months (September to November, 2017).

Statistical Analysis

Data were sorted, coded, organized and then transferred into specially designed formats. Data were analyzed using SPSS (stands for Statistical Package for Social Sciences) version 16. Descriptive statistics, including measures of central tendency and means were calculated for total score of adequacy of preoperative teaching. The surgical patients were grouped according to their hospitals and level of adequacy of preoperative teaching to detect any difference.

III. Results

Table 1 shows the distribution of respondents according to their socio-demographic characteristics. As shown, the sample consisted of 100 surgical patients; most of the respondents were between the age of 21-30 years (33%) and the least were aged 51-60 years (9.0%). No significant differences with regard to gender as (46% and 54%) were males and females respectively. More than one quarter of the respondents (34.0%) were diagnosed other surgical condition, (26.0%) were diagnosed with appendicitis while only (6.0%) diagnosed with BPH. Most of the respondents were married (61%) and (39.0%) were single. More so, 35.0% of the respondents had secondary school as their level of education while (19.0%) had primary school as level of education. With regard to occupation, (36.0%) of the respondents reported to be housewives and (33.0%) were farmers while only (13%) were traders. Also, (40.0%) of the respondents were from Rano General Hospital and only (15.0%) were from Tiga general hospital. More than half of the respondents (54.0%) were in female surgical ward while only (46.0%) were in male surgical ward. Regarding days on admission, the respondents had 2 days as median.

Table 1: Socio-demographic characteristics of the respondents (n=100).

Socio-demographic Data	(n=100)	
Age of the respondents	No	(%)
• 18-20 years	21	21.0
• 21-30 years	33	33.0
• 31-40 years	24	24.0
• 41-50 years	13	13.0
• 51-60 years	9	9.0
Gender		
• Male	46	46.0
• Female	54	54.0
Diagnosis		
• Appendicitis	26	26.0
• Hernia	14	14.0
• Typhoid perforation	10	10.0
• Benign Prostatic Hypertrophy (BPH)	6	6.0
• Bowel Obstruction	10	10.0
• Others	34	34.0
Marital Status		
• Single	39	39.0
• Married	61	61.0
Education Level		
• Illiterate	22	22.0
• Primary School	19	19.0
• Secondary School	35	35.0
• Higher Education	24	24.0
Occupation		
• Farming	33	33.0
• House wife	36	36.0
• Civil servant	18	18.0
• Trading	13	13.0
Hospitals		
• Rano General Hospital	40	40.0
• Kura General Hospital	25	25.0
• Dawakin kudu General Hospital	20	20.0
• Tiga General Hospital	15	15.0
Ward/Unit		
• Male Surgical	46	46.0
• Female Surgical	54	54.0

Adequacy Of Pre-Operative Teaching Provided For Surgical Patients In Selected Hospitals

Days on Admission		
• ≤ 24 Hours	26	26.0
• 2 Days	37	37.0
• 3 Days	8	8.0
• ≥ 4 Days	29	29.0
Median=2days		

Table 2 represents descriptive data of preoperative teaching received by the study participants. It revealed that, the information the respondents received most during preoperative teaching includes ‘details about the cost of the surgery’ (62.0%), ‘emptying of the bladder before going to theater’ and ‘preoperative preparations’ (56.0%) each, ‘details about when preoperative fasting will commence’ (54.0%), ‘shaving and its importance’ and ‘details about preoperative medication’ (53.0%) each.

While information like, ‘details about the operation’ (57.0%), ‘details about diagnosis’ (54.0%), ‘postoperative nutritional requirements’ (49.0%) and ‘details about time to commence oral food intake’ (48.0%) were only taught to some extent (“some of what the respondents were informed”). On the other hand, (30.0%) of the respondents reported that they were not informed at all about ‘estimated days to stay in the hospital after the operation’, ‘ways to minimize postoperative complications’ (29.0%) ‘Details about laboratory and radiological investigation’ (28.0%), ‘Details about possible postoperative complications and postoperative expectations’ (25.0%).

Generally, the total mean score of preoperative teaching received by the study participants is **32.40 ± 13.08**, with range of 49 (Min=3, Max=52). So, the level of adequacy of preoperative teaching received for current study is evaluated to be ‘Fair’ (50-75%) of the total score.

Table 2: Preoperative teaching received by the respondents (n=100).

Preoperative Teaching Received from Nurses (n=100 in each case)	'None of what I was informed n (%)	Some of what I was informed n (%)	'All of what I was informed n (%)
Details about the diagnosis	11(11.0)	54(54.0)	35(35.0)
Details about the operation	6(6.0)	57(57.0)	37(37.0)
Pre-operative preparations	16(16.0)	28(28.0)	56(56.0)
Operating theater environment	19(19.0)	42(42.0)	39(39.0)
Post-operative expectations	25(25.0)	34(34.0)	41(41.0)
Details about anesthesia	21(21.0)	38(38.0)	41(41.0)
Details about possible complications	25(25.0)	38(38.0)	37(37.0)
Ways to minimize post-operative complications	29(29.0)	36(36.0)	35(35.0)
Details about post-operative nutritional requirement	15(15.0)	49(49.0)	36(36.0)
Details about laboratory and radiological investigations	28(28.0)	33(33.0)	39(39.0)
Details about drugs to be avoided such as steroids and alcohol	17(17.0)	34(34.0)	49(49.0)
Duration of the operation	15(15.0)	38(38.0)	47(47.0)
Risks involved in the operation	19(19.0)	32(32.0)	49(49.0)
Scheduled time of the operation	17(17.0)	31(31.0)	52(52.0)
Details about costs of the operation	7(7.0)	31(31.0)	62(62.0)
When preoperative fasting will commence	9(9.0)	37(37.0)	54(54.0)
Details about shaving and its importance	22(22.0)	25(25.0)	53(53.0)
Emptying of bladder before going to theater	16(16.0)	28(28.0)	56(56.0)
Details about preoperative medication	13(13.0)	34(34.0)	53(53.0)
Details about catheterization	22(22.0)	35(35.0)	43(43.0)
Details about drainages (if applicable)	32(32.0)	29(29.0)	39(39.0)
Time to commence oral food intake	14(14.0)	48(48.0)	38(38.0)
When to move out of bed	21(21.0)	41(41.0)	38(38.0)
When stitches can be removed (estimated days)	27(27.0)	37(37.0)	36(36.0)
Estimated days to stay in the hospital after operation	30(30.0)	40(40.0)	30(30.0)
Details on how post-operative pain can be managed	23(23.0)	33(33.0)	44(44.0)
Total Score: Mean ± SD 32.4000 ± 13.07708			
Range: 49 (Min=3, Max=52)			

Figure 1 represented the preferred way(s) of receiving information during preoperative teaching as reported by the respondents. It illustrated that, majority of the respondents (80.0%) preferred verbal explanation with picture as method which preoperative teaching was more effective. Also, (53.0%) of the respondents reported verbal explanation as more preferred. Additionally, (51.0%) of the respondents remained

neutral regarding the use of video during preoperative teaching. While (34.0%) and (32.0%) of the respondents reported the use of pamphlets and Internet during preoperative teaching as least preferred methods of receiving preoperative teaching respectively.

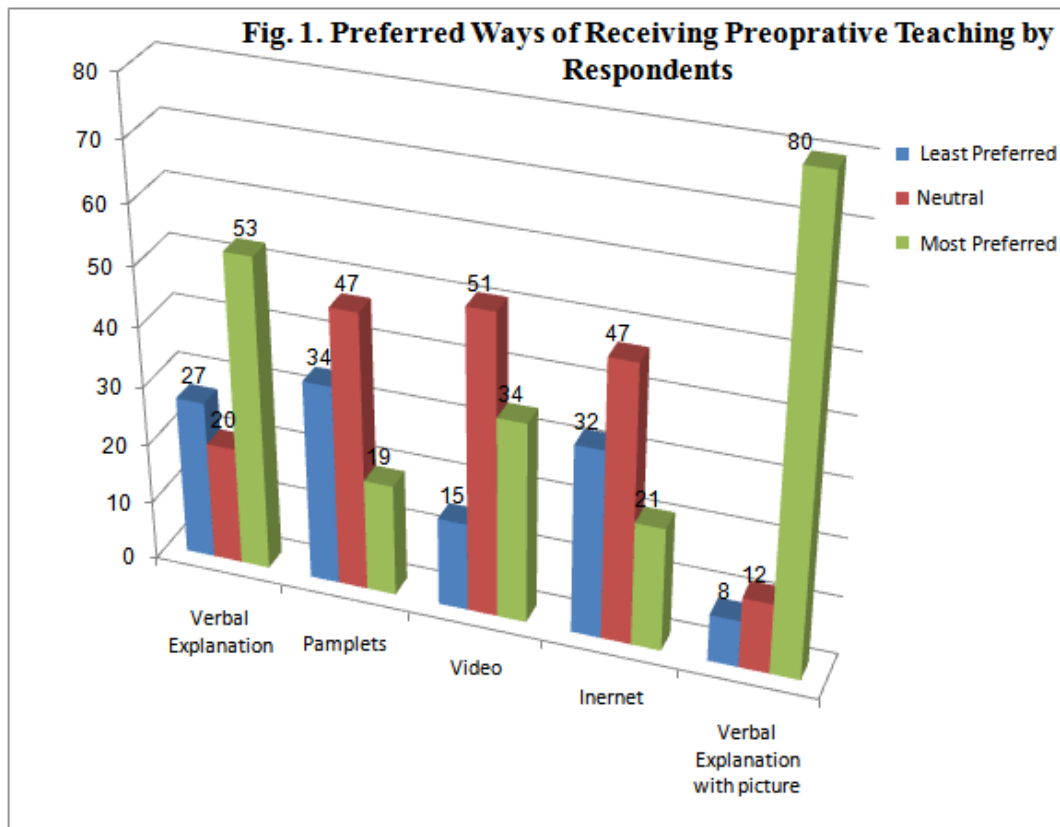


Table 3: represented the factors that affect adequacy of preoperative teaching as reported by the study participants. It revealed that most of the respondents (81.0%) reported that, factors such as ‘Nurses’ language’, ‘the type of responses nurses give to questions asked’ affect the adequacy of preoperative teaching. Also, more than half of the respondents (73.0%) reported ‘anxiety due diagnosis/fear of surgery’, ‘Anxiety due to unfamiliar environment’, (69.0%), ‘Availability of time’ and ‘Frequency of hospital admission’ (66.0%) as well as ‘Feeling shy to ask nurses certain questions’ (62.0%) were among the highly rated factors that affect the adequacy of preoperative teaching.

On the other hand, ‘The Limited nurses’ knowledge’ (45%) and ‘Nurses’ body language’ (48%) were rated least factors that adequacy of preoperative teaching for surgical patients.

Table 3: Factors that Affect Adequacy of Preoperative Teaching as reported by the study participants (n=100).

Factors that Affect Adequacy of Preoperative Teaching	Disagreed n (%)	Neutral n (%)	Agreed n (%)
Nurses’ Language	12 (12.0)	7 (7.0)	81 (81.0)
Availability of time	4 (4.0)	30 (30.0)	66 (66.0)
The body language of nurses	16 (16.0)	36 (36.0)	48 (48.0)
The type of responses nurses give to questions asked	5 (5.0)	14 (14.0)	81 (81.0)
Frequency of hospital admissions	16 (16.0)	18 (18.0)	66 (66.0)
Feeling shy to ask nurses certain questions	20 (20.0)	18 (18.0)	62 (62.0)
Anxiety due to unfamiliar environment	16 (16.0)	15 (15.0)	69 (69.0)
Anxiety due to diagnosis/fear of the surgery	10 (10.0)	17 (17.0)	73 (73.0)
Limited Nurses’ knowledge	41 (41.0)	14 (14.0)	45 (45.0)
Making preoperative teaching of surgical patients necessary by hospital management	21 (21.0)	15 (15.0)	64 (64.0)

Table 4: Depicted the distributions of the respondents' hospitals regarding adequacy of preoperative teaching. It shown that, majority of the respondents from TGH (73.3%) reported poor adequacy of preoperative teaching, more than half of the respondents from KGH (56.0%) reported that, the adequacy of preoperative teaching received was good. While, less than half (45.0%) of the respondents from RGH reported fair adequacy level of preoperative teaching. Generally, less than half of the total respondents from all four hospitals (37.0%, 28.0% and 35.0%) reported to have received poor, fair and good level of adequacy of preoperative teaching respectively.

Table 4: Distribution of the respondents' hospitals regarding adequacy of preoperative teaching (n=100).

Hospitals of the respondents	Adequacy of Preoperative Teaching		
	Poor n (%)	Fair n (%)	Good n (%)
Rano General Hospital (N=40)	11 (27.5)	18 (45.0)	11 (27.5)
Kura General Hospital (N=25)	10 (40.0)	1 (4.0)	14 (56.0)
Dawakin kudu General Hospital (N=20)	5 (25.0)	6 (30.0)	9 (45.0)
Tiga General Hospital (N=15)	11 (73.3)	3 (20.0)	1 (6.7)
Total N=100	37(37.0)	28 (28.0)	35 (35.0)

IV. Discussion

Preoperative teaching has been used to improve patients' experiences by providing health related information, coping skills, and psychosocial support before surgery (Guo, 2012). Adequate preoperative patients' teaching significantly reduces postoperative anxiety, pain, and length of hospital stay. In contrast, inadequate teaching related to possible pre-operative and post-operative expectations increases patients' level of the anxiety which causes post-operative emotional problems and more intense sense of pain and leading to increased hospital stay as well as cost of hospitalization (Yeola and Jaipuriya, 2016). Therefore, this study was aimed to determine the adequacy of preoperative teaching provided for surgical patients in selected hospital of Kano state from the patients' perspectives.

The results of the present study revealed that more than two third of the respondents fell between the ages of 21 to 40 years. This is similar with findings in the study 'Perceptions of surgical patient during preoperative period concerning nursing care' by (Rosana, et al., 2013) in which the respondents were predominantly aged between 30-49 years. In contrast, a study on 'Patient Education Before Hip or Knee Arthroplasty Lowers Length of Stay' by (Richard, et al., 2010) revealed more than half of the respondents were 60 years and above.

With regard to the gender of the respondent, there were slightly more female than male. This was in harmony with the study on 'Effects of a web-based preoperative education program for patients undergoing ambulatory surgery: a preliminary study' by (Eun-Shim, Lena, Pamela & Kristy, 2012) in which female formed two third of the respondents. This contradicts a research by (Kelly, Maria & Wei, 2013) in which more than half of the respondents were male.

Concerning the diagnosis of the respondents, majority were diagnosed with minor surgical cases which formed two third of the diagnosis (with appendicitis and hernia been highest when combined). This could be related to the level of care provided by the hospitals in the area of study. This was in line with the study 'Where there is no specialist: surgical care in secondary health facility in developing country' conducted at a secondary health institution by (Olaogun, Popoola, Olatunya & Oluwadiya, 2014), which revealed more than three quarter of the respondents had diagnosis of minor surgical cases.

In respect of marital status, more than half of the respondents were married. This corresponds with the study on 'an assessment of the preoperative information given to patients in the province of Karaman' by (Şahi, Ayhan, Öcal and Çayır, 2015) which revealed that more than half of the respondents were married. It is in contrast with the findings of the study on 'perceptions of surgical patients during preoperative period concerning nursing care' by (Rosana, et al., 2013) in which there is equal distribution between single and married.

In relation to educational qualification, more than three fifth of the respondents have secondary school and below as level of education (Illiterates formed more than one fifth and secondary and primary more than two fifth). This coincide with the study by (Fernanda, Leopoldo, Sckarlet, Adriano and Yara, 2011), in which three fifth of the respondents obtained either elementary level of education or were illiterates.

Also, regarding the occupation of the respondents, three quarter were farmers and housewives (males and females respectively) in contrast with study on 'patients' perceptions regarding nursing care in the general surgical wards at Kenyatta national hospital' by (Shawa, 2012) where three quarter of the sample was formed by business and professionals. This could be related to the setting in which the current study was conducted which is rural.

With regard to the hospitals of the respondents, two fifth were from Rano general hospital. This could be due to the fact that it is the zonal hospital and more central than the rest of the three hospitals. While regarding the units of the respondents, current study revealed that more than half of the respondents were from

female surgical unit. Concerning the days on admission, the mean of hospital stay of the respondents was 2.400 ± 1.1634 days. This is in contrast with the study by (Blay & Donoghue, 2005), whose mean hospital stay of the respondents in their study was 24.4 ± 29.6 days.

A study carried out by (Mitchell, 2016) revealed that, the information delivered to the respondents include:- 'details about the operation' details about preoperative preparations' details about anesthesia' overview of the theater environment'. In addition, study by (Şahi, Ayhan, Öcal and Çayır, 2015) illustrated that more than three quarter of the respondents in their study received preoperative information such as 'details about preoperative fasting', details about preoperative medication', 'bowel preparation'.

These are in line with the findings of the current study which revealed that more than two third of the respondents were informed about 'details about when preoperative fasting will commence', 'details about diagnosis' details about post-operative nutritional requirement' details about when to commence oral food intake' in addition to what was highlighted in the studies above.

In contrast, study by (Chi-Kong and Iris, 2012) titled 'Preoperative patient teaching: the practice and perceptions among surgical ward nurses' and that by (Mitchell, 2016), titled 'Day surgery nurses' selection of patient preoperative information' in both of which respondents included 'details about post-operative expectations' as among the information that the respondents were informed.

More so, in the current study; information such as 'estimated days of stay after the operation', 'way to minimize post-operative complications', 'details about post-operative complications' were among the information which three quarter of the respondents were not informed in addition to the 'details about post-operative expectations'.

Regarding preferred methods of receiving preoperative teaching, more than three quarter of the respondents preferred 'verbal explanation with pictures'; more than half indicated 'verbal explanation' only. Only one third of the respondents indicated video and internet as preferred methods of receiving preoperative teaching. These findings were similar with that of the study by (Chi-Kong and Iris, 2012) in which (91.9%) of the respondents reported oral explanation as the most preferred method of receiving preoperative teaching, followed by the use of pamphlets (76.7%) and verbal explanation with pictures (76.7%). The least preferred methods reported in their study were Internet (10.5%) and the use of videos (4.7%).

In respect of the factors that affect the adequacy of preoperative teaching, a study on 'Patient perception about preoperative information to allay anxiety towards majorsurgery' by (Kelly, Maria & Wei, 2013) reported 'work overload' as the most reported factor that affect preoperative teaching. While (Lee & Lee, 2012) in their study it was reported by more than half of the respondents that factors such as 'communication difficulties and limited teaching resources', 'nurses expectations and role ambiguity', 'time constraint and nursing workload' were among the factors that affect the adequacy of preoperative teaching provided for surgical patients.

Yael, Ilana & Janna (2017), in their study titled 'Barriers to patient education and their relationship tonurses' perceptions of patient education climate' it was found that 'perceived priority of preoperative patients teaching', 'assigning nurses to have central role in providing preoperative teaching' and 'nurses' workload' were identified as factors that affect the adequacy of preoperative teaching.

Findings from current study revealed that, majority of the respondents indicated that 'Nurses' language', 'the type of responses nurses give to questions asked' 'availability of time' 'Frequency of hospital admission' as well as 'Feeling shy to ask nurses certain questions' were the highest ranked factors that affect the adequacy of preoperative teaching. While 'The Limited nurses' knowledge' and 'Nurses' body language' ranked least factor.

The current study revealed that, certain difference exist in terms of the distributions of hospitals of the study participants regarding adequacy level of preoperative teaching.

These findings were in line with the studies on 'Patients and Nurses' Perceptions of the Cardiac Patient's Learning Needs' by (Jana, 2004) and that on 'Effect of Pre-Operative Counseling on Post-Operative Outcome in Hernia Surgery Patients' by (Yeola & Jaipuriya, 2013) in which it was reported that significant variations existed when comparison between socio-demographic variables with preoperative teaching outcomes was made. In contrast with the study on 'The Effect of Preoperative Exercises, Education and Pain Control for Patients Undergoing Total Hip Arthroplasty' by (Shawnae & Evan, 2014) which reported no significant variations existed when some of the socio-demographic data were compared with preoperative teaching outcomes between two distinct groups.

V. Conclusion

The provision of adequate preoperative teaching is vital to the quality of preoperative nursing care. Although this study was limited by the small sample size, the findings showed that there are still gaps in the aspect of delivering sufficient preoperative information. Therefore, this study concludes that, the preoperative teaching provided for surgical patients in the area of study is inadequate.

Study Limitations

Small sample size and data were collected only from patients of only four hospitals and covering short period (months) are the major limitations of this study because it hinders the generalizability of the findings.

Relevance to Practice

An appraisal of preoperative teaching readiness by nurses for surgical patients is essential for its successful implementation. Success in the provision of adequate preoperative teaching can be achieved by understanding the needs and readiness of surgical patients as far as their condition as well as determining the factors that can hinder the delivery of adequate information to the patients and in the same vein finding ways of improving such factors. This study aimed to assist in determining the areas in which provision of preoperative is still lagging and ways to improve it.

Recommendations

- There is a need for an advocacy on the practice and implementation of preoperative patients' teaching by nurses at all the healthcare institutions.
- There is need for sensitization and reorientation of nurses on the importance of adequate preoperative patients' teaching.
- There is also need to organize special training and retraining of perioperative nurses in order to get familiar with the new trends in perioperative nursing practice; especially in the area of use of modern teaching tools.
- Nurses need to be aware of their responsibilities, barriers and ways of overcoming them in the provision of adequate preoperative teaching for surgical patients.
- Further studies are needed to be carried out using larger and more diverse samples to ensure generalization and to evaluate the clinical importance of preoperative teaching in relation to patients' postoperative outcomes.

Ethical Considerations

An official letter was issued from Faculty of Nursing Mansoura University to the Executive secretary Hospitals Management Board Kano state Nigeria. An official permission was granted to use the selected hospitals for the research by the Ethical and Research Committee of the state. An oral informed consent was obtained from each of the participants after explaining the purposes, aims and importance of the research. They were informed that participation in the study is voluntary and the information will only be used for the research purpose.

Conflicts of Interest

The authors declared no conflict of interest.

References

- [1]. Blay & Donoghue, (2005). The effect of pre-admission education on domiciliary recovery following laparoscopic cholecystectomy: Australian Journal of Nursing, 2005 Jun-Aug; 22(4):14-9.
- [2]. Chi-Kong L. and Iris L., (2012). Preoperative patient teaching: the practice and perceptions among surgical ward nurses: Journal of Clinical Nursing, 22, 2551–2561.
- [3]. Danjuma A., Ibrahim T. A., Sunday O. O., Silas K., Oluwafemi M. O., and Patience E. E., (2015). Knowledge, attitude and practice of preoperative visit: A survey of Nigerian perioperative nurses: American Journal of Health Research; 3(1-1): 54-60. doi: 10.11648/j.ajhr.s.2015030101.18 ISSN: 2330-8796
- [4]. Eun-Shim N., Lena S., Pamela S. and Kristy G., (2012). Effects of a web-based preoperative education program for patients undergoing ambulatory surgery: a preliminary study: Journal of Hospital Administration, Vol. 1, No.1, P. 21-27. DOI: 10.5430/jha.v1n1p21
- [5]. Fernanda L., Leopoldo M., Scharlet E. B., Adriano D., Yara M. M. C., (2011). Patient perceptions about anesthesia and anesthesiologists before and after surgical procedures: Sao Paulo Med J. 2011; 129(4):224-9
- [6]. Gerlitz R., (2017). Barriers and Facilitators of Preoperative Education within Enhanced Recovery after Surgery (ERAS) Programs: University of Lethbridge master project work.
- [7]. Grossweiler, H., (2012). "Preoperative Education: How Effective Teaching Impacts Knowledge with the Surgical Patient" Nursing Theses and Capstone Projects, Paper 119. Retrieved from: https://digitalcommons.gardner-webb.edu/cgi/viewcontent.cgi?article=1119&context=nursing_etdon 23
- [8]. Guo, P. (2012). A preoperative education intervention to reduce anxiety and improve recovery among Chinese cardiac patients: a randomized controlled trial. PhD thesis, University of Nottingham. ISRCTN87451169.
- [9]. Jana M. B., (2004). Patients and Nurses' Perceptions of the Cardiac Patient's Learning Needs: Electronic Theses, Treatises and Dissertations; Florida State University Libraries.
- [10]. Jonathan E. R., (2014). Preoperative Education Needs in Ear, Nose, & Throat Clinic: A Patient Perspective; Walden University Scholar Works.
- [11]. Kelly E. T., Maria S. S. and Wei F. S., (2013). Patient perception about preoperative information to allay anxiety towards major surgery: IeJSME 2013 7(1): 29-32
- [12]. Lee C.K. and Lee I. F., (2013). Preoperative patient teaching: the practice and perceptions among surgical ward nurses. Journal of Clinical Nursing. 2013 Sep; 22(17-18):2551-61. doi: 10.1111/j.1365-2702.2012.04345.x.

- [13]. Mitchell M., (2016). Day surgery nurses' selection of patient preoperative information: *Journal of Clinical Nursing*, 26, 225–237, doi: 10.1111/jocn.13375
- [14]. Nahm E.S., Stevens L., Scott P. and Gorman K., (2012). Effects of a web-based preoperative education program for patients undergoing ambulatory surgery: a preliminary study; *Journal of Hospital Administration International Peer-Reviewed and Open Access Journal for Healthcare Management Specialists*, Sciedu Press, September 2012, Vol. 1, No. 1
- [15]. Olaogun J. G., Popoola S. O., Olatunya O. S., & Oluwadiya K. S., (2014). Where there is no specialist: surgical care in a secondary health facility in a developing country: *The Egyptian Journal of Surgery*, 2014, 33:223–227
- [16]. Richard S. Y., Kate W. N., Jeffrey A. G., Abraham D. K., Maiken R. J., and William M., (2010). Patient Education before Hip or Knee Arthroplasty Lowers Length of Stay: *The Journal of Arthroplasty* Vol. 25 No. 4 2010.
- [17]. Rosana A. A., Mariluci N., Angela A. S., Olvani M., Tânia M. A., Kiciosan S. and Bernadi G., (2013). Perceptions of Surgical Patient during Preoperative Period Concerning Nursing Care: *Journal of Nursing*, Recife, 7(4):P. 1136-1144 DOI: 10.5205/reuol.3188-26334-1-LE.0704201309
- [18]. Şahin, A., Ayhan, F., Öcal, HS., Çayır, A. (2015). An assessment of the preoperative information given to patients in the province of Karaman: *International Journal of Human Sciences*, 12(2), 1111-1119. doi:10.14687/ijhs.v12i2.3348
- [19]. Shawa E., (2012). Patients' Perceptions Regarding Nursing Care in the General Surgical Wards at Kenyatta National Hospital: Virginia Henderson Global Nursing e-Repository. Retrieved from <http://hdl.handle.net/10755/621210> on 30 December, 2017.
- [20]. Tse, K., (2006). Hong Kong nurses' perception and values on preoperative teaching for ambulatory surgical patients. (Thesis). University of Hong Kong, Pokfulam, Hong Kong SAR. Retrieved from: http://dx.doi.org/10.5353/th_b4501191, on 20th February, 2017.
- [21]. Yae L., Ilana P. and Janna S., (2017). Barriers to patient education and their relationship to nurses' perceptions of patient education climate: *Journal of Clinical Nursing Studies* 2017, Vol. 5, No. 4, P. 65-72
- [22]. Yeola M. and Jaipuria P., (2013). Effect of Pre-Operative Counseling on Post-Operative Outcome in Hernia Surgery Patients: *International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064*.

Musa S. T. (1). "Adequacy of Pre-Operative Teaching Provided For Surgical Patients in Selected Hospitals of Kano State: Patients' Perspectives". *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, vol. 7, no.4, 2018, pp. 01-09.