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Patient satisfaction with perioperative nursing care in a tertiary hospital in Ghana

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Abstract

Purpose – Promoting patient satisfaction is crucial for healthcare quality improvement. However, literature on patient satisfaction with nursing care in Ghana is limited. The aim of this study was to assess patient satisfaction with perioperative nursing care in Korle-Bu Teaching Hospital, the largest tertiary hospital in Ghana.

Design/methodology/approach – The study was a cross-sectional study. A sample of one hundred ($n = 100$) in-patients in the surgical department were interviewed. Statistical Package for Social Science (SPSS), version 22, was used to analyze the data. The results were presented using univariate, bivariate and multivariate analyses.

Findings – It was found that majority of the respondents were males (53%), employed (56%) and insured (85%). It was also found that eight in ten respondents were satisfied with the perioperative nursing care. Overall patient satisfaction with perioperative nursing care was significantly associated with information provision ($p < 0.001$), nurse–patient relationship ($p < 0.001$), fear and concern ($p < 0.05$) and discomfort and need ($p < 0.05$). At the multivariate level, overall patient satisfaction was significantly influenced by nurse–patient relationship ($\beta = 0.430$, $p = 0.002$).

Originality/value – There is limited literature on nursing care in surgical departments and rarely are patients' views considered in assessing quality of perioperative care, especially in Low- and Middle- Income Countries (LMICs). This study is a modest contribution to the literature on patient satisfaction with perioperative nursing care in Ghana.

Keywords Perioperative nursing care in Ghana, Patient satisfaction in surgical departments, Korle-Bu Teaching Hospital

Paper type Research paper

Introduction

Patient satisfaction is an important concept in healthcare delivery. It is a key determinant of health service quality (Azadeh *et al.*, 2018; Qu *et al.*, 2011, Van Den Assem and Dulewicz, 2015; Nadkarni *et al.*, 2014) and also promotes patient loyalty (Rozenblum *et al.*, 2013). In this regard, healthcare practitioners are investing more resources to improve patient satisfaction with care (Rozenblum *et al.*, 2011). Patient satisfaction can be defined as the judgment of patients about their needs and expectations met by the care provided or an evaluation based on the fulfillment of expectations of the user (Baker and Streatfield, 1995; Al-Eisa *et al.*, 2005).

There is evidence to show that satisfied patients are more likely to comply with medical regimen, make efficient use of medical services and recover faster from illnesses than

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dissatisfied patients (Alazri and Neal, 2003). Assessing patients' views can help healthcare providers to identify their shortcomings. It can also help healthcare management to identify weaknesses in the healthcare system (Farooqi, 2005; Al-Qatari and Haran, 2008). Moreover, seeking patients' views about their health care has human right implications and central to patient-centered care (Al-Eisa *et al.*, 2005).

The perioperative period is a critical moment and many patients consider the day of surgery as the last day of their lives (Wetsch *et al.*, 2009). The theatre serves as the "shop window" to any healthcare service provided to patients (El-Nasser and Mohamed, 2013). Perioperative care is the provision of what is necessary for the health, wellbeing and protection of patients before, during and after surgery (Spry, 2009). According to Woldeyohanes *et al.* (2015), perioperative care includes preoperative care, intraoperative care and postoperative care.

Perioperative nurses play crucial roles before, during and after surgery. For instance, they educate patients about their surgery and medication and food restrictions before surgery. Perioperative nurses also help in allaying patients' fears and anxieties before surgery, assist during surgery and nurse patients after surgery (Woldeyohanes *et al.*, 2015). These practices help in patient recovery and adherence to medication. In this regard, promoting patient satisfaction with perioperative nursing care is crucial for healthcare quality improvement.

In Ghana, anecdotal evidence suggests that surgical complications or errors are quite common. For example, the Obenfo Hospital's case, where a woman died as a result of alleged surgical complications, is one of the numerous surgical complication-related cases that have received much attention of the media and public (Adamu, 2018). These pose threats to quality of care and patients' confidence and trust in surgical care. In addition, prior studies in Ghana found patient dissatisfaction with nursing care in healthcare facilities. For example, Dzomeku *et al.* (2013) found that 62% of male in-patients and 70% of female in-patients were dissatisfied with nursing care. Nurses' interpersonal relationships with patients were found to be poor. Moreover, over 80% of their respondents were dissatisfied with the amount, explanation and type of information the nurses gave about their conditions.

However, there is limited literature on perioperative nursing care in Ghana, and rarely are patients' views considered in assessing quality of care in surgical departments. Prior studies focused on determinants of patient satisfaction and patient satisfaction with quality of care in general wards (Atinga, 2012; Ahenkan and Aduo-Adjei, 2017), with little focus on surgical departments. Therefore, this study sought to assess patient satisfaction with perioperative nursing care in the Korle-Bu Teaching Hospital and associated factors. Studies of this nature have implications for healthcare quality improvement, especially in surgical departments. For instance, if stakeholders have a clear understanding of gaps in patient satisfaction, policy or management actions can be taken to address such gaps.

Literature review

Available literature suggests that patient satisfaction with care is influenced by multiple factors. Prior studies found nurses' attitudes, capacity to deliver prompt services, up-to-date equipment, 24 h service, healthcare education, cost of care, waiting time, effective communication, information sharing with patients, accuracy of diagnosis and well-dressed staff as factors influencing patient satisfaction (Baydas, 2014; Messina *et al.*, 2015; Njong and Tchouapi, 2014; Peprah and Atarah, 2014). It has also been suggested that patient satisfaction can be achieved by managing the time interval between arrival and treatment, as well as, time interval between visits of doctors and paramedical staff (Hajinia Leilabadi and Noorossana, 2014).

Perioperative care is a specialized form of care and has unique determinants. In many countries, patient satisfaction with perioperative care has been found to be low. For

example, a study in the Gulf region by Aseel *et al.* (2009) found that 62% of their respondents were dissatisfied with the healthcare services they received. Similar results were found by a similar study in Qatar (Baroudi *et al.*, 2012). On the contrary, a study in Ethiopia found that patient satisfaction with perioperative care was high (more than 80%), despite some level of dissatisfaction with pain control during invasive procedures, disturbing preoperative noise and postoperative pain (Hamilton *et al.*, 2013). A study found that patient satisfaction with perioperative care was influenced by five factors. These include information provision, discomfort and needs, staff–patient relationship, fear and concern and service (El-Nasser and Mohamed, 2013). Cheng *et al.* (2003) also found that patient satisfaction with perioperative care was associated with factors ranging from admission to discharge services, as well as, from medical care to interpersonal communication. Other associates include responsiveness, communication, attitude, clinical skill, comforting skill, amenities and food services. It has also been found that the interpersonal and technical skills of healthcare providers are the two unique dimensions salient in patient assessment of surgical care (Heidegger *et al.*, 2004). El-Nasser and Mohamed (2013) observed that patient satisfaction with perioperative care was influenced by waiting time, preoperative surgical information and guidance, fear from undesirable outcomes and staff–patient relationships. Hepner *et al.* (2004) also revealed that the duration of stay in the preoperative holding area significantly correlated with patient satisfaction. Alzolibani (2011) argued that to improve patient satisfaction with perioperative care, certain areas such as reducing waiting period for appointments, providing more information about the disease and ensuring that patients can ask questions, needed to be improved. It has also been argued that adequate provision of information and effective communication are the most important factors to ensure patient satisfaction throughout the entire perioperative period (Heidegger *et al.*, 2002, 2006).

In addition, Rozenblum *et al.* (2013) found that the discrepancy between patient and practitioner beliefs about care is an important determinant of trust and patient satisfaction (Van Den Assem and Dulewicz, 2015). It is posited that involving patients in the decision-making process results in higher satisfaction with care (Heidegger *et al.*, 2004; Auquier *et al.*, 2005). Some studies have also argued that quality of perioperative care does not only compose of good information and communication skills but how the health professional acts or behaves toward the patients. Some researchers have emphasized that patient satisfaction is largely based on good information provision and staff–patient relationship (Cheng *et al.*, 2003; Farooqi, 2005; Hepner *et al.*, 2004). Minor perioperative complaints such as nausea, sore throat or hoarseness can also influence patient dissatisfaction with care (Myles *et al.*, 2000).

Methods

This study was conducted in the surgical department of Korle-Bu Teaching Hospital in Accra, Ghana. The Korle-Bu Teaching Hospital is the largest healthcare facility in Ghana. It is affiliated to the University of Ghana Medical School and has three centers of excellence, including the National Cardiothoracic, National Plastic and Reconstructive Surgery and Radiotherapy Centers. It is currently the third largest hospital in Africa and the leading national referral center in Ghana. The hospital has about 2,000 beds and 17 clinical and diagnostic departments. It has an average daily attendance of 1,500 patients and about 250 patient admissions. Clinical and diagnostic departments of the hospital include Medicine, Child Health, Obstetrics and Gynecology, Pathology, Laboratories, Radiology, Anesthesia, Surgical, Polyclinic, Accident Center and the Surgical/Medical Emergency (Korle-Bu-Teaching-Hospital, 2018).

This study was a cross-sectional survey of in-patients in the surgical department. The surgical department, the largest department of the hospital, has a bed capacity of 612

(Korle-Bu-Teaching-Hospital, 2018). The calculated sample size was 119. Ten percent of the calculated sample size ($n = 12$) was added to cater for non-respondents, summing up to 131 in-patients. The small nature of the sample size is partly due to lack of reliable patient records. In this regard, the total bed capacity of the surgical department (612) was used in estimating the sample size. The sample size was calculated using OpenEpi Info software (Open Source Epidemiologic Statistics for Public Health) version 3.01. The sample size was calculated based on the design effect, population size, estimated proportion and desired absolute precision (Kaiser *et al.*, 2006). Formula for calculating sample size

$$n = \text{deff} \times \frac{Npq}{\frac{d^2}{1.96^2}(N-1) + pq}$$

Simple random sampling technique was used to recruit respondents (Teddlie and YU, 2007). In-patients in the surgical department who showed interest of participation were asked to draw from a box containing folded pieces of paper with "yes" and "no" responses. The picking of a "yes" or a "no" was only based on chance. Therefore, the researchers had no influence in selection process. Paper questionnaire was administered by the first author between 5th and 30th May 2018. Data collection was done in the surgical department of Korle-Bu Teaching Hospital. After seeking approval from the management of the hospital, a data collection plan was submitted. Prior to administering a questionnaire, respondents were taken through the purpose of the study and consenting process. If a respondent consented, a copy of the questionnaire was given to him or her, provided he/she could read and understand the items on the questionnaire. Respondents who could not read were taken through the questionnaire by the first author. On average, 15 min were spent to complete a questionnaire. In all, one hundred (100) questionnaires were administered, representing 76% response rate.

The questionnaire was categorized into three main sections. The first section comprises socio-demographic characteristics of respondents such as age, sex, educational status among others. The Leiden Preoperative Care Satisfaction questionnaire (LPPSq), modified by Caljouw *et al.* (2008) was adopted to assess patient satisfaction with perioperative nursing care. For the purpose of this study, 30 items of Caljouw *et al.* (2008) questionnaire were used. These items were clustered into to five dimensions. The first dimension was information provision, which assessed the explanation and amount of information provided to patients regarding their surgery and duration in the operating theatre. The second dimension was discomfort and needs. This dimension assessed the adverse outcomes of the anesthesia which can influence patient satisfaction. The third dimension was nurse–patient relationship, which assessed the relationship between patients and hospital staff, the amount of care shown to patients and the magnitude of patients' expectations of the attitudes and behaviors of the staff. The fourth dimension was fear and concern. This dimension assessed the degree of fear and concern among patients with respect to some situations such as awaking during the operation, seeing the operating room and pain due to anesthesia. The fifth dimension was service. It assessed patients' perceptions of waiting time before surgery, operation time and scheduled operation date (El-Nasser and Mohamed, 2013).

Statistical Package for Social Science (SPSS) software, version 22.0, was used to analyze the data. Results were presented in three stages, including univariate, bivariate and multivariate analyses. Univariate analysis comprises frequencies, percentages, means and SD. The next stage was bivariate analysis, where Person's Correlation Coefficient was computed to determine the association between the dependent and independent variables. The final stage was multivariate analysis, where multiple linear regression analysis was computed to determine the predictors of overall patient satisfaction with perioperative nursing care. Results were reported at 95% confidence level.

Results

Socio-demographic characteristics of respondents

It was found that majority (53%) of the respondents were males, believers of Christianity (76%) and were between ages 18 and 30 (56%). Many of the respondents were not married, had tertiary education (60.6%) and employed (56.1%). Furthermore, majority of the respondents resided in urban areas (70%), were insured (85%) and had no prior operation experience (59%). About five in ten respondents were admitted in the general ward and approximately five in ten respondents had stayed in the surgical ward for 4–6 days.

Univariate analysis: descriptive statistics for dimensions of patient satisfaction

Generally, majority of the respondents were satisfied with the information provided by the perioperative nurses. For instance, close to 76% of the respondents indicated that they were satisfied with the explanation about their operation, while exactly 59% of the respondents were satisfied the amount of information they received from the nurses concerning their operation. Regarding the amount of information about their stay in the theatre, majority (59%) of the respondents did indicate that they were satisfied, while 60% of the respondents were satisfied with the explanation about their stay in the surgical ward.

Generally, the relationship between the nurses and patients was found to be satisfactory. For example, about eight in ten respondents were satisfied with how the nurses respected their privacy. Close to 79% of the respondents stated that they had high confidence in the nurses. Furthermore, the respondents were satisfied with the attitudes and respectfulness of the nurses. Moreover, the respondents were satisfied with how the nurses addressed their questions, understood their situation, demonstrated politeness and professionalism. Other items such as kindness and knowledge of nurses also recorded favorable responses.

However, it was found that majority of the respondents experienced discomfort regarding postoperative pain, vomiting and hunger. Furthermore, waiting time between arrival at the theatre and the actual operation was perceived to be long. Details are provided in Table 1. From Figure 1, overall patient satisfaction with perioperative nursing care was found to be high. Overall, more than 80% of the respondents were satisfied with the perioperative nursing care.

Bivariate analysis: person's correlation of patient satisfaction and socio-demographic variables

A significant positive relationship was found between overall patient satisfaction and information provision ($p < 0.001$), nurse–patient relationship ($p < 0.001$), fear and concern ($p < 0.05$) and discomfort and need ($p < 0.05$). However, services had no significant relationship with overall patient satisfaction. Moreover, all the socio-demographic characteristics had no significant relationship with overall patient satisfaction, except employment and education statuses, which had a negative significant relationship with overall patient satisfaction. See Table 2.

Multivariate analysis: multiple linear regression for predictors of overall patient satisfaction

At the multivariate level where confounding variables were controlled, it was found that of the five independent variables (i.e. information provision, nurse–patient relationship, fear and concern, discomfort and needs and services) of overall patient satisfaction with perioperative nursing care, only nurse–patient relationship emerged as a significant predictor of overall patient satisfaction. This means that holding other factors constant, a unit increase in positive nurse–patient relationship will lead to 43% increment in overall patient satisfaction with perioperative nursing care. Details are provided in Table 3.

Characteristic	*n*	Mean	SD	1(%)	2(%)	3(5%)	4(%)	5(%)
Information provision								
The explanation about the operation	98	3.97	0.855	1	4.1	19.4	48	27.6
The amount of information the operation	99	3.71	0.895	2	4	34.3	40.4	19.2
The amount of information about your stay in the theatre	99	3.81	1.007	2	5.1	34.3	27.3	31.3
The explanation about your stay in the theatre	99	3.79	0.929	1	5.1	34.3	33.3	26.3
Nurses–patient relationship								
How the nurses took into account your privacy	99	4.16	0.877	1	5.1	10.1	44.4	39.4
Your confidence in the nurses	99	4.04	0.820	0	5.1	16.2	48.5	30.3
Attitude of nurses	99	4.13	0.751	0	5.1	16.2	48.5	30.3
Respectfulness of nurses	99	4.10	0.776	0	3	16.2	48.5	33.3
How nurses understood your situation	99	3.91	0.870	1	3	27.3	41.4	27.3
Politeness of nurses	99	4.13	0.944	2	4	14.1	38.4	41.4
Professionalism of nurses	99	3.99	0.964	3	2	22.2	38.4	34.3
How nurses paid attention to your questions	99	4.10	0.827	1	3	14.1	48.5	33.3
How nurses paid attention to your complaints like pain	99	3.96	0.925	2	5.1	17.2	46.5	29.3
How your preferences were considered	99	3.83	0.980	2	4	33.3	30.3	30.3
Knowledge level of nurses	99	3.82	0.941	2	2	36.4	31.3	28.3
How nurses paid attention to you as an individual	99	3.88	0.993	2	4	31.3	29.3	33.3
Kindness of the nurses	99	4.06	0.988	3	3	18.2	36.4	39.4
Fear and concern about . . .								
Awaking during the operation	99	2.74	1.523	33.3	14.1	15.2	20.2	17.2
Seeing the operating room?	99	2.72	1.471	30.3	21.2	8.1	27.3	13.1
Pain due to the surgery?	99	2.97	1.388	22.2	16.2	18.2	29.3	14.1
Pain due to the anesthetic?	99	2.80	1.471	29.3	16.2	15.2	24.2	15.2
Discomfort and needs about . . .								
Postoperative pain	98	3.22	1.503	22.4	11.2	12.2	29.6	24.5
Sore throat	97	2.26	1.536	52.6	10.3	9.3	14.4	13.4
Back pain	97	2.51	1.408	35.1	19.6	15.5	19.6	10.3
Vomiting	97	2.61	1.381	32	15.5	22.7	19.6	10.3
Cold	97	2.41	1.367	38.1	16.5	19.6	17.5	8.2
Hunger	97	2.85	1.402	23.7	21.6	14.4	26.8	13.4
Services								
How did you experience the waiting time between your arrival at the operating theatre center and the operation?	98	2.53	1.186	24.5	26.5	24.5	20.4	4.1
How did you experience the waiting time between your time spent in the recovery room and your leaving of the operating theatre center?	97	2.63	1.074	17.5	27.8	30.9	21.6	2.1

Note(s): For Information provision and Nurse- patient relationship, 1 = completely dissatisfied, 2 = dissatisfied, 3 = do not know, 4 = satisfied, 5 = completely satisfied
For Fear and concern, Discomfort and need, 1 = not at all, 2 = A little bit, 3 = Moderately, 4 = Quite a bit, 5 = Extremely
For Services, 1 = Too long, 2 = Long, 3 = just right, 4 = short, 5 = too short

Table 1.
Descriptive statistics of dimensions of patient satisfaction

Discussion

Generally, patient satisfaction with perioperative nursing care in the Korle-Bu Teaching Hospital was found to be satisfactory. Perioperative nurses were perceived to be respectful, empathetic and demonstrated professionalism by involving patients in decision making about their care. In addition, nurse–patient relationship emerged as a sole predictor of overall patient satisfaction with perioperative nursing care. This finding is consistent with existing literature. For instance, Hamilton *et al.* (2013) found that over 80% of patients in their study were satisfied with nursing care in hospitals. Al-Omar (2000) also found that patient satisfaction was influenced by the quality of nursing care and staff kindness. Moreover, existing studies can confirm that friendliness and courtesy of staff are associated with patient satisfaction (Gray and Boshoff, 2004; Pakdil and Harwood, 2005).

However, other existing studies contradict with this finding. A study done in the Gulf region by Al Emadi *et al.* (2009) showed that 62% of their respondents were dissatisfied with healthcare services (Baroudi *et al.*, 2012). The differences in findings can be attributed to the characteristics of the health facilities involved. Korle-Bu Teaching Hospital is a tertiary hospital and has enough professional nurses. Furthermore, as a tertiary hospital, standards of nursing and supervision are expected to be high. These findings have implications for healthcare quality improvement. In the quest to improve patient satisfaction with care in Ghanaian healthcare facilities, management will have to pay more focus on improving the relationship between nurses and patients. Nurses represent a larger proportion of the health workforce and are also involved in direct patient care. Therefore, promoting positive nurse–patient relationship is crucial for healthcare quality improvement, especially in LMICs such as Ghana.

Overall patient satisfaction had a significant relationship with the amount of information and explanation to the information provided by the perioperative nurses. Studies have found that detailed and easily understandable information plays a crucial role in patient satisfaction with perioperative care. For example, prior studies found a strong correlation between the quality of pre-anesthesia visit, including the information obtained on possible complications and alternative methods of anesthesia, and patient satisfaction with care (Lemos *et al.*, 2009; Gaszynski *et al.*, 2007). Heidegger *et al.* (2002) also argued that providing adequate information to patients prior to surgery and effective communication are the most important determinants of patient satisfaction with perioperative care (Auquier *et al.*, 2005).

Another dimension that had a positive relationship with patient satisfaction was fear and concern. This suggest that patient satisfaction was found to be high in this study, partly because the patients experienced little fear about their surgery. This finding suggests that majority of the patients were not afraid of the surgery because the nurses provided them with enough information or education that allayed their fears. These findings imply that to improve patient satisfaction with nursing care in Ghana, there is the need to focus on improving the communication skills of nurses. Since, nurses spend more time with patients,

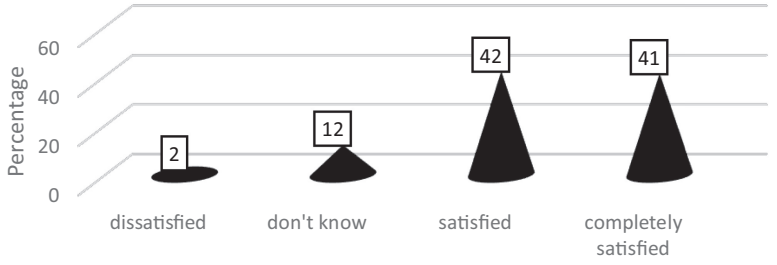

Figure 1. Overall patient satisfaction with perioperative nursing care

Table 2.
Correlation matrix for overall satisfaction, socio-demographic characteristics and dimensions of patient satisfaction

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Overall satisfaction	1																
2	Information provision	0.384*	1															
3	Nurse–patient relationship	0.464*	0.666*	1														
4	Fear and concern	0.196*	0.196*	0.160	1													
5	Discomfort and needs	0.183*	0.131	−0.08	0.464*	1												
6	Services	0.090	0.046	0.202*	−0.025	−0.091	1											
7	Gender	−0.099	0.071	0.154	−0.19*	−0.28*	0.058	1										
8	Religion	−0.088	0.127	0.122	0.056	0.154	−0.054	−0.060	1									
9	Marital status	−0.090	−0.114	−0.07	−0.23*	−0.30*	0.157	0.189*	−0.17*	1								
10	Age	−0.098	0.009	0.017	0.094	0.123	−0.21*	−0.030	0.072	0.159	1							
11	Education	−0.18*	−0.33*	−0.19*	0.042	−0.014	0.112	−0.17*	−0.08	0.031	0.038	1						
12	Employment	−0.28*	−0.18*	−0.18*	−0.158	−0.081	0.279*	0.139	−0.08	0.280*	0.230*	0.428*	1					
13	Residential	0.067	0.100	0.046	−0.101	0.165	0.223*	0.083	0.092	0.248*	−0.092	−0.21*	−0.01	1				
14	Experience	−0.098	−0.068	0.044	−0.159	−0.110	0.218*	−0.017	−0.03	0.041	−0.42*	−0.057	−0.04	0.095	1			
15	Ward type	0.119	−0.074	−0.13	0.185*	0.239*	−0.21*	−0.109	−0.13	−0.24*	0.019	0.269**	−0.01	−0.23*	−0.06	1		
16	Duration	0.040	−0.25*	−0.17	0.093	0.204*	−0.27*	−0.35*	−0.01	−0.144	0.297*	0.124	0.079	−0.22*	−0.11	0.185*	1	
17	Insurance	0.015	0.031	−0.01	−0.154	−0.089	−0.069	−0.003	0.026	0.000	−0.018	−0.150	0.018	−0.03	0.157	0.042	0.042	1

Note(s): *significant at 0.05 confidence level

Predictors	*B*	SE	Beta	*t*-value	*p*-value
Sex of respondent	−0.098	0.151	−0.067	−0.646	0.521
Age of respondent	−0.079	0.077	−0.111	−1.027	0.308
Educational status	−0.034	0.104	−0.038	−0.323	0.747
Employment status	−0.266	0.149	−0.202	−1.788	0.078
Previous operation	−0.188	0.160	−0.126	−1.180	0.242
Ward type	0.090	0.090	0.101	1.007	0.317
Duration of stay	0.032	0.043	0.079	0.742	0.461
Insurance status	0.125	0.205	0.059	0.610	0.544
Information provision	0.042	0.032	0.179	1.341	0.185
Nurse–patient relationship	0.039	0.012	0.430	3.310	0.002
Fear and concern	0.015	0.016	0.105	0.898	0.372
Discomfort and needs	0.001	0.012	0.015	0.126	0.900
Services	0.029	0.043	0.073	0.671	0.505

Note(s): $R^2 = 0.473$, adjusted $R^2 = 0.371$, F value $= 4.631$, $p > 0.001$

Table 3. Multiple linear regression analysis of predictors of patient satisfaction with perioperative nursing care

they are in the right position to promote patient education. Patients who have adequate and reliable information about their conditions are more likely to recover faster than patients without reliable information. In addition, patients who are informed are more likely to engage in effective self-care, which is crucial for preventing postoperative nosocomial infections. Hence, promoting communication skills of nurses through training is crucial for quality-of-care improvement.

Furthermore, patient satisfaction had a positive relationship with discomfort and need. This implies that the patients were satisfied, because they experienced minimal discomfort and infection such as sore throat, cold and back pain. Patients who undergo surgery are more susceptible to nosocomial infections. Therefore, the perioperative nurses deserve commendation for providing safe and quality nursing care. Promoting good nursing practices such as adherence to infection prevention and control protocols are critical for preventing hospital acquired infections.

Despite the fact that overall patient satisfaction with perioperative care was generally satisfactory, patient satisfaction with pain management was found to be suboptimal. This finding has been confirmed by a previous study (Belihun *et al.*, 2015). Some of the patients expressed concerns about postoperative pain. This implies that the patients did not receive quality pain management. Going forward, ensuring good pain management should be of importance to the management of Korle-Bu Teaching Hospital. Perioperative nurses should be given more training on pain management to help them refresh or improve their pain management skills.

Additionally, patient satisfaction with waiting time was found to be low. Long waiting time is a persistent problem in Ghanaian health facilities. For example, Abuosi and Braimah (2019), using national survey data found that long waiting time is an intractable problem at various service delivery units of health facilities and constitutes a major source of patient dissatisfaction with care (El-Nasser and Mohamed, 2013). In addition, long waiting time has been found to be a significant predictor of patient dissatisfaction with care (Aqel and Al-Tarawneh, 2013; Tahir *et al.*, 2012; Njong and Tchouapi, 2014). This implies that to improve patient satisfaction with perioperative care in the Korle-Bu Teaching Hospital, management will have to innovate strategies to address the problem of long waiting time.

Practical implications

The practical implications of these findings for health policy and practice cannot be underestimated. For instance, the findings show that positive attitudes of nurses influence

patient satisfaction. With this evidence-based understanding, healthcare managers and practitioners in their quest to improve patient satisfaction with care can focus on promoting positive attitudes among nurses. In addition, it has been established in this study that the patients were dissatisfied with pain management and waiting time. These findings highlight some of the weaknesses in Ghana's healthcare system. Policymakers and health practitioners can leverage on this empirical evidence to innovate and implement health policies and strategies to help address the shortfalls in the healthcare system. Last but not least, this study makes a modest contribution to literature on the subject matter and can also be a valuable reference material for future studies.

Conclusion

In conclusion, improving patient satisfaction with care is essential for healthcare quality improvement. Patients in this study were satisfied with perioperative nursing care in Korle-Bu Teaching Hospital. Out of the five dimensions, nurse–patient relationship emerged as the only significant predictor of overall patient satisfaction with perioperative nursing care. However, the patients were dissatisfied with waiting time and pain management. Despite the fact that this study provides empirical evidence for patient satisfaction improvement, the study is not devoid of limitations. Generalization of the findings should be done with caution, due to the small nature of the sample size. Also, Korle-Bu Teaching Hospital is a tertiary healthcare facility whose characteristics differ significantly from other health facilities such as regional and district hospitals. In addition, the study was conducted in an urban setting where majority of nurses are concentrated. Therefore, the findings might not be the same as the rural settings where nurses are inadequate. In this regard, future studies should consider comparing urban and rural health facilities. Notwithstanding, this study sends a strong message to health practitioners and policymakers, especially in Ghana.

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