



# Patients' Satisfaction with Male Nurses: Evidence from Ghana

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## Abstract

The patient is the main focus of service and the responsibility of the hospital. Hence, their satisfaction is one of the important indicators of quality health care. Enhancing quality in the health care system through continuous evaluation of patients' experience, ensures reforms in the system, based on the strengths and weaknesses of the sector. In an effort to contribute to the literature on improving nursing care and patient satisfaction, this study sought to evaluate patients' satisfaction and identify their priorities among the service quality dimensions from the nursing care received from male versus female nurses in Ghana's premier and largest tertiary teaching hospital, the Korle Bu Teaching Hospital (KBTH). The study adopted a quantitative research approach with a comparative study design. The study sites comprised of the accident and orthopaedic, chest, medical and surgical departments at KBTH. A total of 407 inpatients who had been on admission at these departments for at least 4 days and 4 nights were included in the study. The SERVQUAL model was adapted in measuring patient satisfaction. Average scores were used to determine the overall performance of male and female nurses from the responses of the patients. The independent sample t test was used to compare the mean values of the two groups to determine significant differences associated with the scores. Average scores were used to analyse the rating scale under the various dimensions of the SERVQUAL model. A higher order confirmatory factor analysis (CFA) was used to identify the specific dimensions of the SERVQUAL model that had significant loading on the model. All statistical results were significant at  $p \leq 0.05$ . Results showed that, patients were more satisfied with the health care they received from the male nurses than the female nurses. Overall aggregate score for male nurses was 860.00 with a mean (SD) of 4.20 ( $\pm 0.57$ ). Overall aggregate score for female nurses was 800.00 with a mean (SD) of 3.96 ( $\pm 0.64$ ). The independent sample t test showed a significant difference ( $P = 0.00$ ) in the mean values from the two groups. CFA of the model showed in order of priority that responsiveness, assurance, empathy, reliability and tangibility were significant contributors to patients' satisfaction. These findings provide valuable guidance to other hospitals on the African continent to improve their practices. Furthermore, by integrating the dimensions of service quality into their services, hospitals in Africa could benefit from improved quality of service, patient retention and loyalty, market share and profitability.

**Keywords:** Female Nurse, Male Nurse, Patient Satisfaction, Service Quality, Dimensions, Ghana, SERVQUAL model.

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## INTRODUCTION

Health, the state of being free of physical or psychological illness, malfunction or disease is universally necessary and creates the needed attention to provide best quality services in response to development in health care (Lim et al., 2018). Nurses provide the frontline service in the health care industry on a daily and regular basis. Worldwide, nurses account for nearly 50% of the global health workforce delivering care to health seekers (WHO, 2020). Nursing as a profession encompasses autonomous and collaborative care of health seekers of all ages, families, groups and communities. Nurses have four fundamental responsibilities. They are to restore health, prevent illness, alleviate suffering and to promote health (Driscoll et al., 2017). Thus, the care provided by nurses plays an important role in the satisfaction of patients (Motaghd et al., 2016).

Nursing was introduced as a subset of colonialism in the nineteenth century in Ghana. The people of Ghana, then Gold Coast, had trouble accepting the profession especially on the part of women owing to cultural theories. Hence, boys who were school leavers, otherwise termed “bush-boys”, were the ones who underwent training as nurses. They were trained to bathe and feed patients during the British colonial era. However, as the years went by, women became more welcoming to the profession and therefore got trained (Owusu, 1981). At present, the nursing profession is a largely female dominated occupation (Budu et al., 2019).

In Ghana, there are over 60 accredited nursing educational institutions offering certificate, diploma, undergraduate and postgraduate degrees. Collectively, these educational institutions churn out over 1000 graduate nurses yearly ([www.nab.gov.gh/public-nurses-training-colleges](http://www.nab.gov.gh/public-nurses-training-colleges)). Male student nurses continue to increase steadily in the annual graduation list of these institutions. According to Lievens et al., (2011), the ratio of male student nurses to female student nurses joining the nursing workforce in Ghana is 40% to 60% respectively. Quality can be viewed as the ability of a service or product to satisfy an expectation (Kotler et al., 2005). Service is any intangible activity that can be offered to a customer and/or consumer (Kotler et al., 2005). Generally, customer satisfaction is when the customers’ expectations are met through the products and/or services of an organization (Boasiako & Asante, 2019). Consequently, the provision of quality health care services across the globe vis-à-vis the importance of understanding patients’ satisfaction is widely acknowledged. Health care quality is also a service performance which results in patient satisfaction free from service deficiencies (Boasiako & Asante, 2019). As such, many health care facilities are shifting from the culture of the health care system formed by the preferences and decisions of the medical professionals to one that is shaped by the views and needs of its patients (Hendriks et al., 2002).

The service quality scale, SERVQUAL model, developed by Parasuraman et al., (1988) was adapted for this study. The SERVQUAL instrument remains efficient and has been widely applied in various industries such as the financial institutions, product producing and services rendering industries. It has also been used in studies in health care services including patient satisfaction (Bowers et al., 1994; Kokou, Van Tonder, & Roberts-Lombard, 2015; Motaghd et al., 2016; Peprah, 2014, Peprah & Atarah, 2014). The model consists of five service quality dimensions of tangibility, reliability, assurance, responsiveness and empathy.

The patient is the main focus of service and the responsibility of the hospital. Hence, their satisfaction is one of the important indicators of quality health care. Patients’ satisfaction is the patients’ feelings of either pleasure or disappointment based on the health care service received (Peprah & Atarah, 2014). It is also the extent to which a health care service performance matches the patients’ needs (Peprah, 2014). According to Shaikhi &

Javadi (2005), patient satisfaction is considered as an element of inspiring patients to keep patronizing a health care service overtime. It is an important criterion for providing health managers with important information in terms of meeting the needs, values and expectations of patients. Enhancing quality in the health care system through continuous evaluation of patients' experience, ensures reforms in the system, based on the strengths and weaknesses of the sector (Kokou et al., 2015).

Previous evidence from patient's satisfaction have shown that patient satisfaction influences the rate of patient compliance with advice of health care providers and the healing process of patients (Calnan, 1988; Roter et al., 1987); it also contributes to patient retention and loyalty (Peprah, 2014); promotes referrals to the health care facility irrespective of the cost incurred by patients (Boasiako & Asante, 2019; Iddrisu et al., 2015).

Few studies have reported patients' experiences with male nurses (Ahmad & Alasad, 2007; Budu et al., 2019; Downey, 2013; Weaver et al., 2013; Younas & Sundus, 2017). Findings show that while some patients appraised their satisfaction with care provided by male nurses, others also considered caring as a preserve of female nurses and thus the male nurses fell short of this virtue. Though males in recent times have considered nursing a preferred occupation for various reasons, mixed reactions continue to persist about patients' experiences on services provided by male nurses (Downey, 2013; Yi & Keogh, 2016; Younas & Sundus, 2017). The mixed reactions surrounding patients' preference for, and satisfaction with care provided by male nurses calls for continuing studies. Hence, to understand service quality and satisfaction in health care, it is necessary to investigate the dimensions of service quality considered to influence patient satisfaction. In an effort to contribute to the literature on improving nursing care and patient satisfaction, this study sought to evaluate patients' satisfaction and identify their priorities among the service quality dimensions from the nursing care received from male versus female nurses in Ghana's premier and largest tertiary teaching hospital, the Korle Bu Teaching Hospital (KBTH).

## **METHODS**

### **Research design**

This prospective study adopted a quantitative research approach with a comparative study design. Comparative studies demonstrate the ability to examine, compare and contrast subjects or opinions. These studies reach conclusions beyond single cases and explains the differences and similarities between the subjects of analysis against the background of the comparative variable (Maltby, Williams, McGarry & Day, 2010).

### **Study Sites**

The Accident and Orthopaedic, chest, medical and surgical departments at KBTH served as the study sites for the study. KBTH is the largest tertiary and major referral hospital in Accra, the capital city of Ghana. It has been in operation since October 9, 1923. It serves patients from the neighboring West Africa sub regions and all over Africa (<https://kbth.gov.gh>). These departments were chosen because they have appreciable number of male nurses providing nursing care to patients.

### **Study Sample**

Inpatients who had been on admission at these departments for at least 4 days and 4 nights were included in the study. This average measure was used because, based on the working

shift schedules of the nurses from these departments, patients would receive a minimum of 3 contact nursing care times from the first nurse who administered nursing care to the patient on the day of admission. As such, patients' evaluation of the nurses was premised on the gender of nurse who administered the first and subsequent nursing care to the patient upon admission in that department.

### **Sample Size**

The admission data from the four study sites for a period of 6 months spanning from January 2019 to July 2019, was used to estimate the sample size. The data returned a total of 6845 admissions. The Surgical department recording the highest number of 2858 with the medical department recording the second highest with 2758 admissions. The accident and orthopedics and chest department recorded 668 and 561 admissions respectively. Using the Yamane's formula for sample size determination (Yamane, 1967), the minimum sample size obtained was 378. A 7% allowance was adjusted to attain a final sample size of 407. Adopting proportional allocation to calculate the sample sizes for the four departments, 40 patients were sampled from Accident and Orthopaedics, 33 patients from the chest, 164 patients from the medical and 170 patients from the surgical departments.

### **Sampling Procedure**

Purposive sampling method was used to include patients in the study. Data of patients who had been admitted for various health conditions in the four departments for at least 4 days and 4 nights were sampled. Purposive sampling involves the intentional selection of study participants based on their ability to elucidate a specific theme, concept or phenomenon (Elfil & Negida, 2017; Robinson, 2014). This method was used based on the focus of inquiry; eligible patients' actual experience with the nurse.

### **Data Collection Instrument**

The first section of the questionnaire (section A) collected information on the demographic profiles of the patients and the second section of the questionnaire (section B) focused on the dimensions of service quality. The SERVQUAL model developed by Parasuraman et al., (1988) was adapted in measuring patient satisfaction in this study. The model consists of five service quality dimensions of tangibility, reliability, assurance, responsiveness and empathy. The operational definitions for the dimensions in the context of this study were:

- Tangibility referred to the appearance of the nurse, physical environment of the ward and state of equipment in the ward.
- Reliability referred to the accurate, dependable and consistent performance of the nurse in delivering health care to the patient.
- Responsiveness referred to the preparedness and enthusiasm of the nurse to deliver health care to the patient.
- Assurance referred to the nurse being knowledgeable and courteous and able to instill trust in the patient during health care delivery.
- Empathy referred to the effort of the nurse in understanding the patients' needs and providing individualized care for the patient.

Question items were set under each dimension to determine patient satisfaction from male and female nurses. Responses were measured on a five-point rating scale ranging from very

dissatisfied (1), dissatisfied (2), neutral (3), satisfied (4) to very satisfied (5). Our pretested instrument established a Cronbach's alpha value of 0.846.

### **Data Collection Procedure**

Data collection began in November 2019 and ended in June 2020. Collection began at the Accident and Orthopaedic Department, followed by the surgical department, continued to the medical department and ended at the chest department at KBTH. After identifying patients who fit the inclusion criteria, convenient times were chosen when they were free to participate in the study. Study details were explicitly explained to them in their language of understanding to enhance satisfactory compliance. Patients who agreed to participate in the study, signed or thumb printed the consent form before data collection ensued. Some of the questionnaires were self-administered while others were completed with the assistance of the researcher.

### **Ethical Considerations**

Approval to conduct this study was given by the research unit of the KBTH after the study protocol was reviewed. Approval and permission were also received from the Heads of Department before data collection. The methods for the study ensured that there was no harm in any way to the patients during data collection. An information sheet containing a summary of the research was given to every patient to read and understand prior to data collection. For those who could not read, it was explained to them in their preferred language of understanding. This was done to prevent issues of dishonesty. The consent form was signed or thumb printed by the patients before data collection. The study also ensured that privacy of patients was respected and no act compromised their privacy.

### **Data Analysis**

Descriptive and inferential statistics were employed in the analysis of the data. Descriptive details of the demographic profile of the patients were organized into frequencies and percentages using tables. Average scores (mean, mode, median and standard deviation) were used to determine the overall performance of male and female nurses from the responses of the patients. The independent sample t test was used to compare the mean values of the two groups to determine significant differences associated with the scores. Average scores (mean, mode, median and standard deviation) were used to analyse the rating scale under the various sub scales of the SERVQUAL model. Data was analyzed using SPSS version 25 (Chicago, Illinois, USA). A higher order confirmatory factor analysis (CFA) was used to identify the specific dimensions of the SERVQUAL model that had significant loading on the model. This was performed using IBM SPSS Amos version 23 (Chicago, Illinois, USA). All statistical results were significant at  $p \leq 0.05$ .

## **RESULTS**

### **Demographic Details of Patients**

A total of 407 patients from the accident and orthopaedics, 40/407 (9.8%), chest, 33/407 (8.1%), surgical, 170/407 (41.8%) and medical departments, 164/407 (40.3%) were involved in this study (see Table 1). They were made up of 235/407 (57.7%) males and 172/407 (42.3%) females. Of these, 205/407 (50.4%) patients were cared for by male nurses and

202/407 (49.6%) were cared for by female nurses. Their age ranged from 15 to 55 years old. Their educational level also ranged from patients who had no formal education to patients who had attained postgraduate education. Majority, 134/407 (32.9%) had attained up to Senior High School, followed by patients who had an undergraduate degree, 107/407 (10.1%) and those who attained up to Junior High School, 78/407 (19.2%). The least number, 23/407 (5.7%) was represented by patients who had no formal education (see Table 1). 170/407 (41.8%) were operating their own businesses, 77/407 (18.9%) were government sector employees, 68/407 (16.7%) were private sector employees, 56/407 (13.8%) were students and the rest, 36/407 (8.8%) were unemployed (see Table 1).

Table 1: Demographic details of patients

<b>Demographic details</b>	<i>f</i>	%
<b>Gender</b>		
Male	235	57.7
Female	172	42.3
Total	407	100
<b>Age (years)</b>		
15-25	97	23.8
26-35	158	38.9
36-45	92	22.6
46-55	60	14.8
Total	407	100
<b>Level of education</b>		
No formal education	23	5.7
Basic education	24	5.9
JHS	78	19.2
SHS	134	32.9
Undergraduate	107	26.3
Postgraduate	41	10.1
Total	407	100
<b>Occupation</b>		
Unemployed	36	8.8
Doing own business	170	41.8
Government employee	77	18.9
Private sector employee	68	16.7
Student	56	13.8
Total	407	100
<b>Department</b>		
Accident and orthopaedics	40	9.8
Chest	33	8.1
Medical	164	40.3
Surgical	170	41.8
Total	407	100

*f*-frequency

%-Percentage

JHS-Junior High School

SHS-Senior High School

## Service quality measurements among nurses Overall performance of male and female nurses

Summation of patients' responses to the constructs of the model was performed to obtain the aggregate scores for both groups. Overall, the results showed that, the patients were more satisfied with the health care they received from the male nurses than the female nurses (see Table 2). Overall aggregate score for male nurses was 860.00 with a mean (SD) of 4.20 ( $\pm 0.57$ ). Overall aggregate score for female nurses was 800.00 with a mean (SD) of 3.96 ( $\pm 0.64$ ). The independent sample t test showed a significant difference ( $P = 0.00$ ) in the mean values from the two groups (see Table 3 for further details).

Table 2: Overall performance of male and female nurses

Aggregate scores					
Male nurses	Mean	4.20	Female nurses	Mean	3.96
	Median	4.00		Median	4.00
	Mode	4.00		Mode	4.00
	SD	$\pm 0.57$		SD	$\pm 0.64$
	Aggregate score	860.00		Aggregate score	800.00

*SD-Standard deviation*

Table 3: Independent sample t test comparing aggregate mean scores

t-test for equality of means						
t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
4.499	380.981	.000	5.84919	1.30006	3.29301	8.40538

*t-test statistic*

*df-degrees of freedom*

## Performance ratings according to constructs – Tangibility

Results showed that the patients agreed that the male nurses were able to use the present environment of the patient to nurse the patients. Additionally, modal scores (5.00) showed that patients were very satisfied with the physical appearance and the body odour of the male nurses (see Table 4 for further details).

Table 4: Performance ratings according to constructs – Tangibility

Tangibility					
Nurse	Measure	The nurse used my present environment to nurse me	The nurse maintained a clean environment around me	The nurse was neat (well dressed) in appearance	The nurse did not have any unpleasant odor
Males	Mean	4.15	4.18	4.46	4.59
	Median	4.00	4.00	5.00	5.00
	Mode	4.00	4.00	5.00	5.00
	SD	0.74	0.69	0.64	0.65
Females	Mean	3.99	3.98	4.29	4.47

Median	4.00	4.00	4.00	5.00
Mode	4.00	4.00	4.00	5.00
SD	0.79	0.82	0.76	0.71

*SD-Standard deviation*

### Performance ratings according to constructs – Reliability

Results showed that patients were satisfied with the reliability dimension from the male nurses. Male nurses were found to give a listening ear to patients as compared to their female counterparts. It was also noticed that the male nurses inspired trust (professional, competent and confidence) in handling patients' challenges (see Table 5 for further details).

Table 5: Performance ratings according to constructs – Reliability

Nurse	Measure	Reliability				
		The nurse provided the care I needed on time	The nurse inspired trust (professional, competent and confidence) in handling my problem	The nurse was consistent in duty performance	The nurse told me exactly when care would be performed	The nurse gave me a listening ear
<b>Males</b>	Mean	4.16	4.22	4.17	4.06	4.34
	Median	4.00	4.00	4.00	4.00	4.00
	Mode	4.00	4.00	4.00	4.00	4.00
	SD	0.68	0.68	0.69	0.76	0.64
<b>Females</b>	Mean	3.86	4.02	3.95	3.85	4.03
	Median	4.00	4.00	4.00	4.00	4.00
	Mode	4.00	4.00	4.00	4.00	4.00
	SD	0.82	0.75	0.76	0.84	0.78

*SD-Standard deviation*

### Performance ratings according to constructs – Responsiveness

Responsiveness referred to the preparedness and enthusiasm of the nurse to deliver care. Modal scores (5.00) showed that the male nurses were more friendly. Largely, patients were satisfied with the responsive dimension of nursing care from the male nurses (see Table 6 for further details).

Table 6: Performance ratings according to constructs – Responsiveness

Nurse	Measure	Responsiveness				
		Generally, the nurse was willing to help me	When I had a problem, the nurse showed sincere interest in helping me	The nurse always responded immediately when I needed him/her	The nurse was friendly	The nurse didn't make me feel I was wasting his/her time
<b>Males</b>	Mean	4.10	4.15	4.01	4.33	4.20
	Median	4.00	4.00	4.00	4.00	4.00
	Mode	4.00	4.00	4.00	5.00	4.00
	SD	0.72	0.72	0.79	0.73	0.83
<b>Females</b>	Mean	3.96	3.97	3.83	4.11	3.90
	Median	4.00	4.00	4.00	4.00	4.00
	Mode	4.00	4.00	4.00	4.00	4.00
	SD	0.79	0.78	0.87	0.93	0.91

*SD-Standard deviation*



### Performance ratings according to constructs – Assurance

Concerning assurance, modal scores (5.00) showed that patients were very satisfied with the nursing care from male nurses because they felt safe interacting with the male nurses and male nurses were found to be able to maintain patient confidentiality (keeping secrets) (see Table 7 for further details).

Table 7: Performance ratings according to constructs – Assurance

		Assurance				
Nurse	Measure	The nurse was courteous (good manners) towards me	The nurse gave me adequate (sufficient/acceptable) information about my health condition when I asked him /her	The nurse was able to maintain patient confidentiality (keeping secrets)	I felt safe interacting with the nurse	The nurse was reassuring (restoring confidence, relieving anxiety and fear) towards me
<b>Males</b>	Mean	4.24	4.25	4.34	4.30	4.20
	Median	4.00	4.00	4.00	4.00	4.00
	Mode	4.00	4.00	5.00	5.00	4.00
	SD	0.67	0.74	0.73	0.74	0.78
<b>Females</b>	Mean	3.99	3.79	3.98	3.98	3.95
	Median	4.00	4.00	4.00	4.00	4.00
	Mode	4.00	4.00	4.00	4.00	4.00
	SD	0.87	0.87	0.83	0.86	0.87

*SD-Standard deviation*

### Performance ratings according to constructs – Empathy

Likewise, under the dimension of empathy, the male nurses performed better than the female nurses. In all, patients were satisfied with male nurses' ability to be sympathetic (friendly fellow feelings) towards them (see Table 8 for further details).

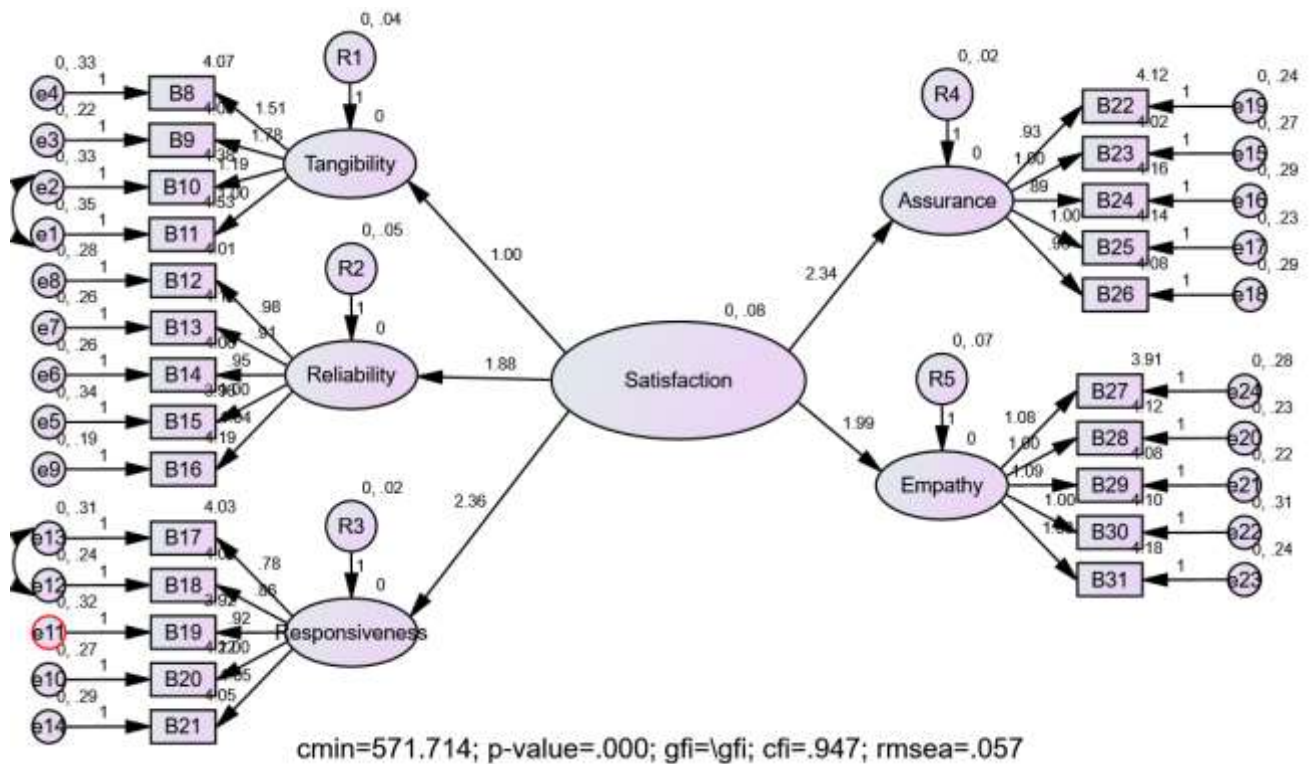
Table 8: Performance ratings according to constructs – Empathy

		Empathy				
Nurse	Measure	The nurse gave me personal attention	The nurse understood my specific needs	The nurse had my best interest at heart	The nurse gave me feedback about my progress	The nurse was sympathetic (friendly fellow feelings) towards me
<b>Males</b>	Mean	4.02	4.21	4.23	4.25	4.32
	Median	4.00	4.00	4.00	4.00	4.00
	Mode	4.00	4.00	4.00	4.00	4.00
	SD	0.80	0.76	0.74	0.75	0.69
<b>Females</b>	Mean	3.80	4.03	3.92	3.95	4.03
	Median	4.00	4.00	4.00	4.00	4.00
	Mode	4.00	4.00	4.00	4.00	4.00
	SD	0.87	0.79	0.85	0.87	0.89

*SD-Standard deviation*

## Confirmatory factor analysis (CFA)

A higher order confirmatory factor analysis was performed to determine the dimensions of the SERVQUAL model associated with patients' satisfaction from the nursing care received from male and female nurses. The fit indices for the proposed model ( $X^2 = 571.714$ ;  $df = 245$ ;  $p < 0.001$ ;  $X^2/df = 23.171$ ;  $RMSEA = 0.057$ ;  $CFI = 0.947$ ) showed that, the data was consistent with the proposed model. Figure 1 shows the pathway estimates for the hypothesized model. This shows the significance of all assumed paths.



$X^2$  – Chi square value,  $df$  – Degrees of freedom,  $RMSEA$  – Root mean square error of approximation,  $CFI$  – Comparative fit index,  $cmin$  – Related Chi square statistics.

**Figure 1: Pathway estimates for the hypothesized model**

Regarding tangibility, all items under consideration significantly loaded onto tangibility. These included the ability of the nurse to use the present environment of the patient to nurse them ( $\beta = 1.507$ ,  $p < 0.01$ ), maintaining a clean environment at the bedside of the patient ( $\beta = 1.777$ ,  $p < 0.001$ ) and being neat and well dressed in appearance ( $\beta = 1.190$ ,  $p < 0.001$ ). Absence of unpleasant odour was set to one (1) for the purpose of identification of the model. Additionally, tangibility as an indicator was set to one (1).

Concerning reliability, all items significantly loaded onto reliability. These included prompt provision of nursing care ( $\beta = 0.981$ ,  $p < 0.001$ ), the ability of the nurse to inspire trust in the provision of care ( $\beta = 0.908$ ,  $p < 0.001$ ), the ability of the nurse to communicate times of nursing care ( $\beta = 0.938$ ,  $p < 0.001$ ), the consistency of the nurse in duty performance ( $\beta = 0.950$ ,  $p < 0.001$ ) and the ability of the nurse to give a listening ear ( $\beta = 1.037$ ,  $p < 0.001$ ). Knowledge of care delivery time was set to one (1) for identification of model purposes. Reliability loaded significantly onto patients'

satisfaction ( $\beta = 1.879, p < 0.001$ ). This showed that reliability had a positive and significant link with patient satisfaction.

In connection with responsiveness, items under this category significantly loaded onto responsiveness. These included the general willingness of the nurse to help ( $\beta = 0.781, p < 0.001$ ) the sincere interest of the nurse in helping patients' when there was a problem ( $\beta = 0.864, p < 0.001$ ), immediate response of the nurse when needed ( $\beta = 0.924, p < 0.001$ ) and the patience of the nurse ( $\beta = 1.050, p < 0.001$ ). Friendliness of nurse was set to one (1). Responsiveness loaded significantly onto patient satisfaction ( $\beta = 2.363, p < 0.002$ ). This showed that responsiveness had a positive significant link with patient satisfaction.

Analysis of the model showed that all items significantly loaded onto assurance. These comprised courtesy of the nurse ( $\beta = 0.933, p < 0.001$ ), ability of the nurse to maintain patient confidentiality ( $\beta = 0.894, p < 0.001$ ), safety in interacting with the nurse ( $\beta = 1.001, p < 0.001$ ) and the reassuring attitude of the nurse ( $\beta = 0.963, p < 0.001$ ). Adequate information was set to one (1). Assurance loaded significantly onto patient satisfaction ( $\beta = 2.335, p < 0.001$ ). This showed that assurance had a positive significant link with patient satisfaction.

Regarding empathy, items under this category significantly loaded onto empathy. Estimates for this construct showed that the ability of the nurse to give personal attention ( $\beta = 1.084, p < 0.001$ ), the nurse having the best interest of the patient at heart ( $\beta = 1.089, p < 0.001$ ), the nurse giving feedback on patients' progress ( $\beta = 1.001, p < 0.001$ ) and the ability of the nurse to be sympathetic ( $\beta = 1.026, p < 0.001$ ) significantly loaded onto patient satisfaction. Understanding patients' specific needs was set to one (1). The latent construct, overall, loaded significantly loaded onto patient satisfaction ( $\beta = 1.989, p < 0.001$ ). Hence, there was a positive and significant link between empathy and patient satisfaction. In sum, in order of priority, the model showed that responsiveness, assurance, empathy, reliability and tangibility were significant contributors to patients' satisfaction.

## DISCUSSION

Governments and Health facilities managements, e.g. the KBTH in Ghana and in other developing countries in Africa should not only focus on expansions in infrastructure, employment of more health workers and improvement in equipment, technology and expertise use but more notably, the delivery best quality of service to patients. For KBTH to truly become competitive and remain viable over the long term as the hub of health tourism in Africa, patients' satisfaction across all its departments is crucial.

To the best of our knowledge, this is the first comparative study of patients' satisfaction from the nursing care received from male and female nurses from Ghana's largest hospital using a statistical model to determine the dimensions of the SERVQUAL model associated with patients' satisfaction in Ghana. Overall, our results showed that, patients were more satisfied with the health care they received from the male nurses as compared to the female nurses. Primarily, the significant findings of patients' satisfaction with male nursing care emphasizes the quality of care provided by the nurses. These results are consistent with Budu et al., (2019), Adeyemi-Adelanwa, Barton, Dawkins, & Lindo, (2015) and Ahmad & Alasad, (2007), who found patients preference for male nurses. This finding is stimulating and has positive implications on the general body of male nurses in the country; male student nurses undergoing training in various accredited nursing educational institutions as well as those serving in Ghana's health sector. Firstly, results of our study could infer the acceptance of male nurses into the profession by patients. Secondly, the encouraging acceptance of male

nurses in our study could conclude a professional conduct on the part of male nurses in the discharge of their work duties. Possibly, due to the feminine orientation attached to nursing creates an opportunity for male nurses to prove themselves as being worthy of their profession. Thus, their every deed during practice are key to their sustenance and continuance in the profession. Thirdly, perhaps having a larger proportion of male nurses across various health facilities might boost the attainment of the goals of Ghana's health sector. Recently in the UK, a highest number of students have been admitted to nursing courses across the country this year. New figures from the Universities and Colleges Admission Service (UCAS) revealed that 34,190 candidates had been accepted to study the nursing in various Universities and Colleges all across the UK with a record rise of 30% more male candidates (Ford, 2020).

However, negative influencing factors continue to perpetuate the myth that males are unsuitable to become nurses. Among such include impartial stereotyping of male nurses, where reference is made to the nurse as "she" in nursing textbooks, the expression of amazement with seeing male nurses in nursing uniforms, the subsequent omission of men from the history of nursing and the absence or lack of male nurse role models to motivate more males into the profession and the cultural orientation of society about the unsuitability of males to provide care (Adeyemi-Adelanwa et al., 2015; Grady, Stewardson & Hall, 2008; Hodes, 2005; Kouta & Kaite 2011; MacWilliams, Schmidt & Bleich 2013; Weaver et al., 2013). Additionally, male nurses are prevented from performing certain personal and intimate care procedures such as catheterization. Recent findings have reported that, these factors potentially impact the psychological orientation of male nurses who report high degrees of anxiety and tension on the job and are more likely to leave the profession early in comparison to their female counterparts (Budu et al., 2019).

Patients' preference for, and satisfaction with male nursing care were functions of responsiveness, assurance, empathy, reliability and tangibility. However, there were high levels of satisfaction in all five dimensions of the SERVQUAL model. This finding is consistent with findings of Chunlaka (2010) and Kokou et al., (2015) who also found high levels of satisfaction in all five dimensions of the SERVQUAL model. The provision of best services is an important aspect within the services sphere. Results of the study, have shown that patients value services in health care more for their compassionate quality than for their technical quality as submitted by Mekoth, (2012) and Yesilada & Direktor, (2010). Patients appreciated the preparedness and enthusiasm of the nurse to deliver health care. They treasured the fact that the nurse was knowledgeable and courteous and able to instill trust during health care delivery. Furthermore, they cherished the effort of the nurse in understanding their needs and providing individualized care and they relished the accurate, dependable and consistent performance of the nurse in delivering health care. These summed patients' need for interpersonal relationships with their nurses as posited by Mekoth et al., (2012). A similar study from the biggest military hospital in Libreville, Gabon, also showed mean results of 6.7 obtained for the empathy dimension 6.4 obtained for the assurance dimension, 6.2 obtained for responsiveness and 6.0 obtained for reliability dimensions with regards to services experienced by patients visiting the hospital (Kokou et al., 2015). This indicates that these service quality dimensions are critical determinants in patients' satisfaction of health care services.

On the whole, the findings of the current study have illustrated that patients were satisfied with all the different SERVQUAL dimensions relating to the service delivery of nurses. Clearly, patients do not only seek health care, but they take cognizance of the attitude exhibited by nurses as they seek health care.

## CONCLUSION

Generally, though some challenges remain in patients' opinion about nursing care delivered by male nurses, the results of this study strongly point to the fact that with time, patients' reception of male nurses will no longer be viewed with a gendered spectacle. These findings provide valuable guidance to other hospitals on the African continent to improve their practices. Furthermore, by integrating the dimensions of service quality into their services, hospitals in Africa could benefit from improved service quality, patient retention and loyalty, market share and profitability.

## Implications for Practice

Over the years, the KBTH has been very successful in the pursuit of its mission and vision of continuously refining the quality of health care and enhancing patient satisfaction in a cost-effective manner. The empirical results confirm that the KBTH is performing well. The overall mean scores indicated that the patients were satisfied with the nursing care received from male nurses as with regard to the variables of responsiveness, assurance, empathy, reliability and tangibility. Nurses in the other departments and hospitals should emulate the good work of the male nurses sampled from the departments used in this study.

## Recommendations

Professional socialization of male nurses must be enhanced by encouraging male nurse role models. More male student nurses should be encouraged, recruited and trained at the post-secondary and tertiary educational levels. There should be continuous research as per this current study and public awareness creation on the impact of male nurses in the health care delivery system to promote acceptance and strengthen gender diversity in the nursing profession.

The service quality dimensions investigated in this study can primarily be considered to improve the level of service quality provided by nurses in health care facilities. Managements of health care facilities wishing to improve the general level of patient satisfaction should take note of the results of this study and will need to further identify and investigate other dimensions of service quality that might have a greater association with general patient satisfaction at their health facilities.

Nurses should be continuously trained through educational programmes to raise their awareness of the importance of patient satisfaction and how to improve the overall quality of their service delivery to patients.

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