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The Quality of Healthcare Rendered in the Regional Hospital Bamenda, North West Cameroon and Assessing the Patients Experiences

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Abstract

The WHO Framework for Health Systems Performance Assessment recommends that decision makers at all levels need to quantify the variation in health system performance, identify factors that influence it and ultimately articulate policies that will archive better results in a variety of settings. The performance of sub-components of systems such as regions within countries or public health services also needs to be assessed. Health outcomes are a reflection of clinical quality/appropriateness of care and are co-produced by care providers and users. Their roles and responsibility differ but intertwine for the achievement of quality. While the provider is guided by professional and ethical policies, the user has needs and expectations to be met. Therefore, measuring users' experiences as recipients of health services plays a significant role in assessing the delivery of quality healthcare.

This study aimed at using patients' experiences as a measure in assessing the quality of care rendered in the Regional Hospital Bamenda. A cross-sectional survey was employed where patients who received care in the RHB were sampled to give a snapshot of the general opinion of patients who frequent the hospital. The PAHC instrument for in and out patients was used to collect data for analysis in SPSS version 20. Regression analysis, a 0.05 significance level was used to calculate the correlation between the overall ratings of the hospital performance and the dimensions of care.

Majority of patients, 52% to 91.7%, had their various needs attained with the care they received though two of the expected care needs were unmet to a greater population. Most of patients revealed that they experienced a moderate (44%) and high (24%) global level of satisfaction with the quality of care rendered to them. The dimensions of care which had statistically significant associations with the overall hospital rating of quality of care received were identified as factors which positively influenced these patients' experiences of care in the hospital. There is need for improvement in quality care provision to achieve better health outcomes.

Keywords: Health care delivery; Quality; Patients; Hospital days; Patient's experiences; Health care services; Doctors; Nurses; Bamenda Regional Hospital

Introduction

Statement of research problem

Quality of healthcare is the extent to which health care services provided to individuals and patient populations improve desired health outcomes. In order to achieve this, health care must be safe, effective, timely, efficient, equitable, and people-centred. WHO highlights that getting the patients perspective on quality is among the six policy recommendations to improve quality of care and amplify policy impact [1,2].

Patient experience is the sum of all interactions shaped by an organization's culture that influences the patient's perception across the continuum of care. It encompasses the range of interactions that patients have with the health care system, including their care from health plans, and from doctors, nurses and staff in hospitals, physicians' practices and other health care facilities [3].

The Institute of Medicine, USA [4] reports that as medical science and technology has advanced at a rapid speed, the health care delivery system has floundered in its ability to provide consistently high quality care to all. In view of improving this quality, the WHO Framework for Health Systems Performance Assessment recommends that decision makers at all levels need to quantify the variation in health system performance, identify factors that influence it and ultimately articulate policies that will archive better results in a variety of settings. The performance of subcomponents of systems such as regions within countries or public health services also needs to be assessed. In every health system, organizations must perform four basic functions; financing, provision, stewardship and resource development. Stewardship consists in performance assessment and consumer satisfaction among others. The aspects of Health system performance involves; population health, health

outcomes, clinical quality and appropriateness of care, responsiveness, equity and productivity [2,5].

Health outcomes are a reflection of clinical quality/ appropriateness of care and are co-produced by care providers and users. Their roles and responsibility differ but intertwine for the achievement of quality. While the provider is guided by professional and ethical policies, the user has needs and expectations to be met. Therefore, measuring users' experiences as recipients of health services plays a significant role in assessing the delivery of quality healthcare. Patients have important experiences with care provision, unknown to care providers and expressing these expectations can be very valuable and educational for care providers [6]. Patients also often have other expectations, wishes and priorities and it is - for effective care-crucial to know.

In some developed countries, assessment of healthcare quality using the patients' experience has been done, and found moderately high levels of satisfaction with care ranging from, 63.5% to 70.2% across different hospitals. In low income countries, existing literature on this is limited. There are no documented studies in Cameroon [7].

This study revealed the experiences of patients on the quality of health care received identify influential factors, promote decision making in care provision and increase retention in care. It also served as a ne for future evaluation of service performance and in monitoring effectiveness of interventions.

Study objectives

General objective: To assess patients' experiences as a measure in assessing the quality of care rendered in the Regional Hospital Bamenda.

Specific objectives:

- To assess the extent to which patients' needs are met with the care they receive.
- To assess the patients' satisfaction relative to the service delivery rendered them by care providers.
- To identify factors that influence delivery of quality care to meet patients' expectations and desired outcomes.
- To propose strategies aimed at quality improvement through customer satisfaction.

Research question

What is the quality of healthcare rendered to patients admitted in the RHB as per patients' judgments?

Hypothesis

The patients' experiences with the quality of healthcare delivered in the RHB would be satisfactory.

Research Methodology

Description of study setting

The study was carried out in the Regional Hospital Bamenda, located in the Azire Health Area, Bamenda Health District in the North West Region of Cameroon. It has had the status of a 3rd level Reference Health Institution for the region since 2009 to serve an estimated 2, 212, 631 inhabitants [8]. Following the Cameroon system health policy, about 20% of all the region's health problems are referred to the Regional Hospital resulting in a target population of 442, 526 inhabitants.

In 2017, 14,214 admissions were recorded out of 71,293 consultations. The hospital has 400 beds and staff strength of 457 workers offering both general and specialized care on outpatient and inpatient basis [9]. It had undergone quality assessment from a South to South project with a Tanzanian hospital from 2011 to 2015. This assessment was done using general indicators which focused on the global quality of care in the hospital. Although patient satisfaction was an aspect, the patients' experience was not the center of the assessment.

The study population comprised of in-and-out patients who received care within the recent past in the hospital.

Eligibility criteria

Inclusion criteria: Out-patients who received care within the recent past in the hospital, and patients who have just been discharged following at least 24 hours of hospitalization.

Exclusion criteria: Patients who had been hospitalized less than 24 hours and those who had gone home were excluded.

Study design

A cross-sectional design was employed where-in; patients who received care in the Regional Hospital Bamenda were randomly sampled to give a snapshot of the general experiences of the entire patient population who received care in the hospital; on the care rendered by care providers and their findings analyzed as per the study objectives.

Sample size determination

Using a 95% confidence level and $p < 0.05$, the Yamane simplified formula was used to determine the sample size.

$$n = \frac{N}{1 + N(e)^2}$$

Where n =The sample size, N =population size which is 14,214 and e =The level of precision.

$n = 14214 / (1 + 14214 (0.05)^2)$, giving a sample size of 389 participants.

Sampling technique

A simple random sampling technique was used to obtain a sample from the patients who seek health care at the Regional Hospital Bamenda. Every patient (from lying-in wards and outpatient departments) who have been consulted or discharged from the hospital during the data collection period and who gave consent was recruited in the study.

Data collection tool and data collection method

The PAHC instrument was employed. Its reliability and validity had been tested in Ethiopia, a low income country like Cameroon, and found to be appropriate and feasible to administer.

Separate questionnaires were used for outpatients care (O-PAHC, consisting in 24 questions) and inpatients care (I-PAHC, consisting in 22 questions) covering nurse communication, doctor communication, physical environment, pain management and medication and symptom communication. Items are scored using a 4-point Likert scale, ranging from 1 (Never) to 4 (Always) in the I-PAHC survey and 1 (Strongly disagree) to 4 (Strongly Agree) in the O-PAHC survey. Additionally, in both questionnaires, patients provided an overall evaluation of care (scored 0-10) and were asked if they would recommend the facility to friends and family (on a 4 point scale from Definitely NO to Definitely YES). Based on the global ratings grouped by the Centres for Medicare and Medicaid Services (CMS) into one of three categories, 0-6 (Minimum global satisfaction), 7-8 (moderate global satisfaction), 9-10 (high global satisfaction), the overall hospital rating of the hospital will be categorized as: 0-6 (Minimum global satisfaction), 7-8 (moderate global satisfaction) and 9-10 (High global satisfaction).

Trained assistants who do not work in the facility (to control bias) and who show mastery of the questionnaires and participants' confidentiality went round with the researcher and administered the questionnaire face-to-face on a daily basis to willing participants. This was preceded by pretesting to roll out flaws in questions and lapses in responses as well as the duration of time spent in completing the tool. Nevertheless participation in the study was of free will and when a participant wished to withdraw, they were not forced. In this case the incomplete questionnaire was discarded.

Data management

Responses from questionnaires were analyzed in Statistical Packaging for Social Sciences version 20 (Software SPSS INC, Chicago, IL, USA) and Microsoft Excel 2013. Regression analysis, a 0.05 significance level, was used to determine the correlation between the dimensions of care and the overall ratings of the hospital performance.

Strengths and Limitations

Though the study involves the patient in quality healthcare assessment, promotes patient centered care and recommends strategies for quality improvement, limitations include recall bias for patients who have stayed too long in the hospital and can't clearly remember their whole experience. In addition, since sickness is most often associated with pain some of the responses may be irrational. However, randomization minimized the effect of these limitations on the study outcome. Regarding the outcome, it is expected that patients will rate the quality of care they receive using their experiences in the hospital.

Results

Socio-demographic data

A total of 382 out of 389 patients participated in the study resulting in a 98.2% response rate. They comprised in 175 (45.8%) outpatients and 207 (54.2%) inpatients.

Age distribution of respondents: The mean age of respondents was 35.75 (Figure 1) ranging across 7 to 84 years.

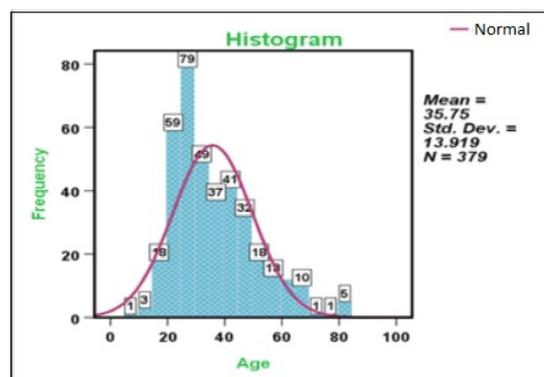


Figure 1 Age distribution of respondents.

They consisted of 3% children (7 to 17 years) and adults 96.4% (18 years and above). Male respondents were mostly within the age group 31-45 years whereas females were mostly aged between 18-30 years. In total, majority (43%) of respondents were within the age group 18-30 years and only a few (2%) of them were aged 76+ years (Figure 2).

Gender distribution of respondents: Both genders were represented with 58% females and 42% males as shown in Figure 3.

Marital status of respondents: A greater proportion of respondents (54%) were married, (30%) of who were females and 45% were singles relative to 1% divorcees and 4% widows/widowers as illustrated in Figure 4.

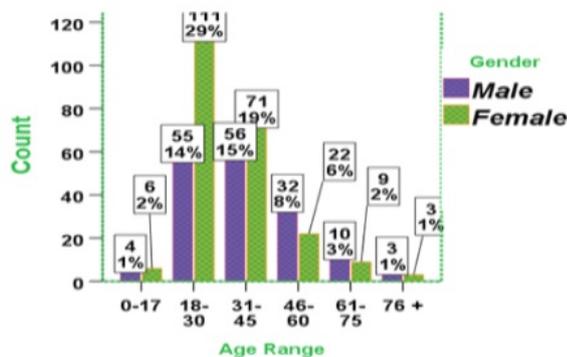


Figure 2 Age distribution across gender.

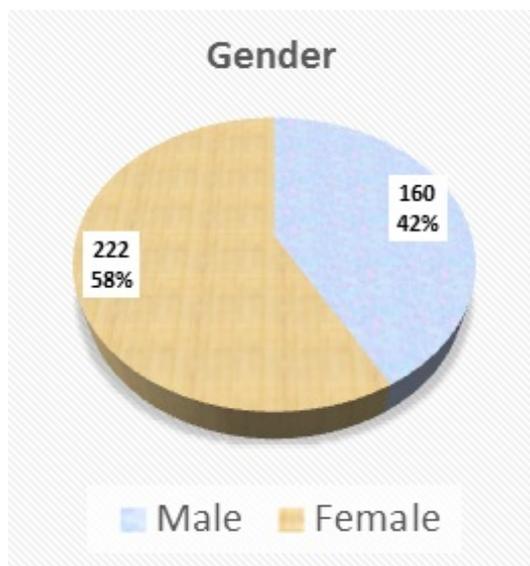


Figure 3 Proportion of respondents relative to gender.

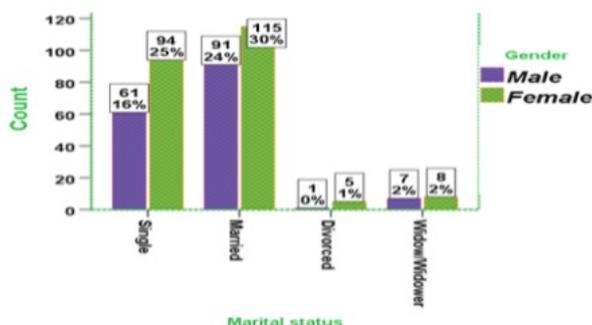


Figure 4 Distribution of respondent's marital status across gender.

- Businessmen comprised of traders, butchers, hair dressers seamstresses, businessmen and business women.
- Salary earners comprised of bankers, accountants, secretaries, military and nurses.
- Students comprised of applicants, students, pupils and cleaners.
- Others were religious workers, retired and security officers.
- Housewives were housewives and farmers.

As displayed in Figure 5, 27.2% of respondents were businessmen, 26.7% were students while 3.4% of them were found in the occupation group 'others'.

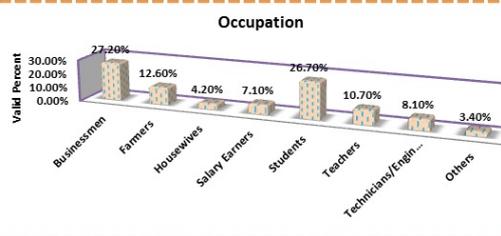


Figure 5 Distribution of respondents across occupation groups.

Educational qualification of respondents: With regards to level of education, 41% respondents had completed secondary and 38% had had tertiary education. 16% of them had undergone primary education meanwhile very few (5%) had no educational experience (Figure 6).

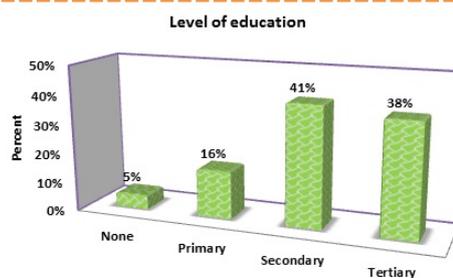


Figure 6 Distribution of respondents relative to level of education.

Language distribution of respondents: As seen in Figure 7, an overwhelming 90% of respondents revealed that English was their first language unlike French which recorded 9%.

Univariate analysis of all dimensions of care to determine the extent to which patients need were met

Nurse's behavior: Respondents expressed that nurses (45%) usually treated them with respect and courtesy more than they always do (39%); nurses always listened to them carefully (45%) more than they usually do (42%), nurses usually explained things to them in a way they could understand (43%)

Occupational distribution of respondents: Respondents' occupations were categorized under six groups as follows:

- Technician/Engineers comprised in technicians, engineers, environmentalists, welders, weatherperson, plumbers.

more than they always do (39%). This is contrary to very low responses of nurses never treating them with courtesy and respect, listening to them carefully and explaining things to their understanding ranging from 3% to 13% as illustrated in **Figure 8**.

sometimes kept clean respectively (**Figure 9**). An average response of 56% was indicated that baths were usually kept clean and 4% who never met clean baths.

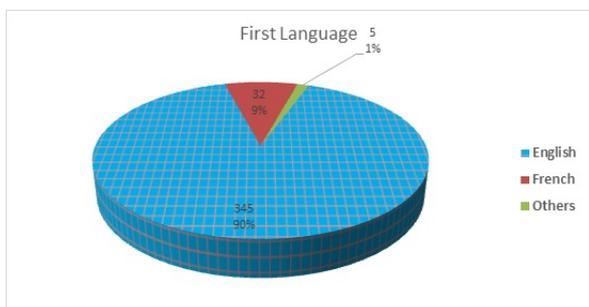


Figure 7 Distribution of respondents according to first language.

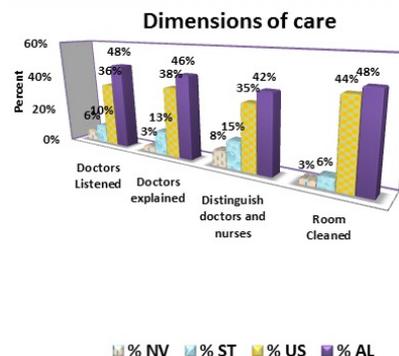


Figure 9 Distribution of responses relative to doctor's behavior.

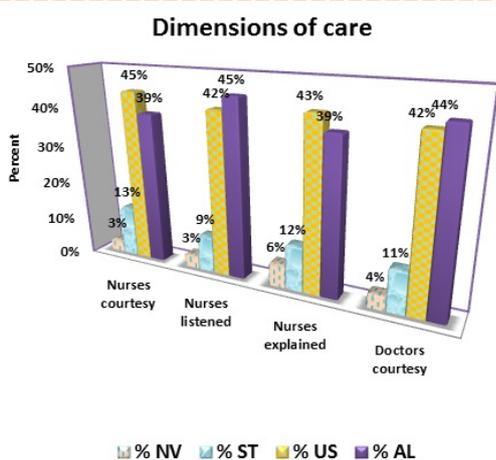


Figure 8 Distribution of responses relative to Nurses' behavior.

Doctor's behavior: Similarly 44% of respondents expressed that doctors always treated them with courtesy and respect while 42% said they usually do not (**Figure 8**). Forty eight percent of them expressed that doctors always listened carefully to them than usually (36%), doctors always explained things to them in a way that they could understand (46%) than usually (38%). Likewise, fewer respondents 3% to 15% revealed that doctors never or sometimes treated them with courtesy and respect, listened to them carefully and explained things to them in a way they could understand.

With respect to time spent with the doctor, exactly half (50%) of respondents expressed that they usually had enough time to discuss their medical problems with the doctor even though 8% of them never had such time (**Figure 10**).

Remarkably, 8% of respondents never distinguished nurses from doctors while 15% sometimes did, 35% usually did and a greater 42% always knew the difference (**Figure 9**).

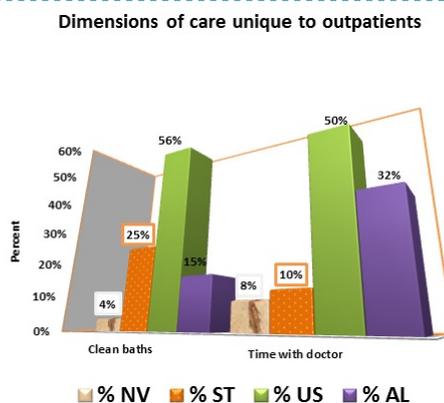


Figure 10 Distribution of responses on physical environment/time spent with doctor.

Physical environment/Time spent with doctor: Forty eight percent of respondents reported that their rooms were always kept clean and 44% replied it was usually clean unlike the 3% and 6% who were clear that their rooms were never or

As illustrated in **Figure 11**, about half (52%) of in-patients always experienced a quiet environment at night dissimilar to those who never had a quiet night (7%).

Similarly, 49% of these patients had their personal privacy respected whereas 14% reported their being respected sometimes. 12% of them suffered complete absence of personal privacy (**Figure 12**).

Pain management: Out of the percentage of patients who responded 'Yes' to have experienced pain, 52% of them reported that the staff always did everything they could to control it with a similar 52% who had their pain well controlled. Similarly, those who remarked that staff usually (21%), sometimes (14%) and never (13%) did everything to

control pain have an almost equivalent outcome on pain control as shown in **Figure 11**.

Generally Pearson's correlation analysis on pain management revealed that there was no significant correlation between the patient's overall rating of their health and pain management [Pain was well controlled ($r=0.118$, $p=0.091$), Staff did everything to control pain ($r=0.127$, $p=0.068$)].

There was a strong negative significant correlation between experiencing pain and having the staff do everything they could to help with pain ($r=-0.596$, $p<0.01$).

A significant regression equation was found thus: ($F(2,204)=17.096$, $p<0.001$) with $R^2=0.114$ for Staff communication of reason for prescribing new drugs to a patient and the Doctors showing courtesy/respect being significant predictors to better pain management as judged by the patients.

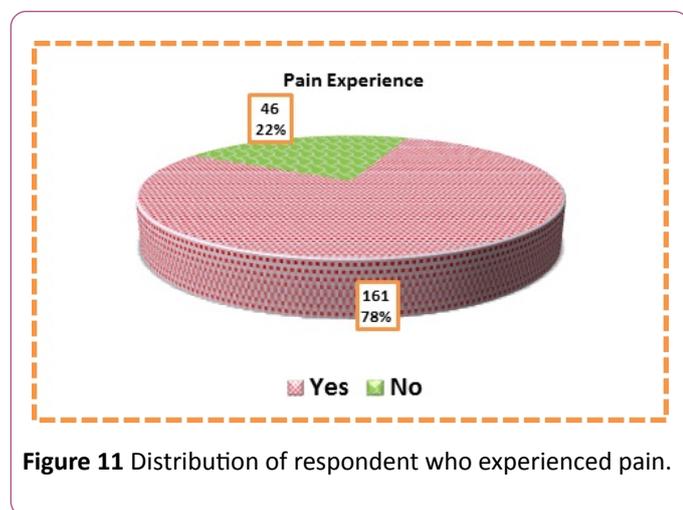


Figure 11 Distribution of respondent who experienced pain.

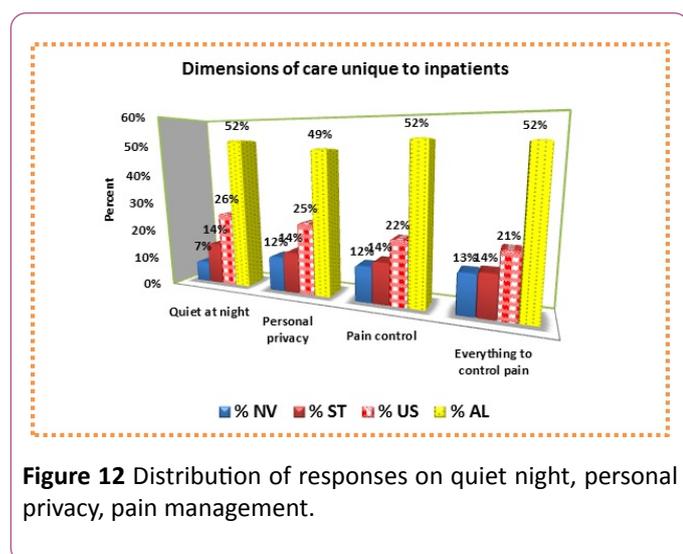


Figure 12 Distribution of responses on quiet night, personal privacy, pain management.

Medication communication/cost of care: Most patients (65%) unlike 35% had new medications prescribed to them during their hospital visit of which only 48% were told the reason for the new prescription and medication side effects only communicated to 34%. Although great proportions (69%) of these patients were educated on signs and symptoms to

look out for after leaving the hospital, 31% of them left uninformed. Seventy two percent patients responded that they paid their hospital bills and found it inexpensive (58%). A majority (74%) of patients reported being able to easily find their way around the hospital and it was the first time for 56% of respondents to visit the hospital (**Figure 13**).

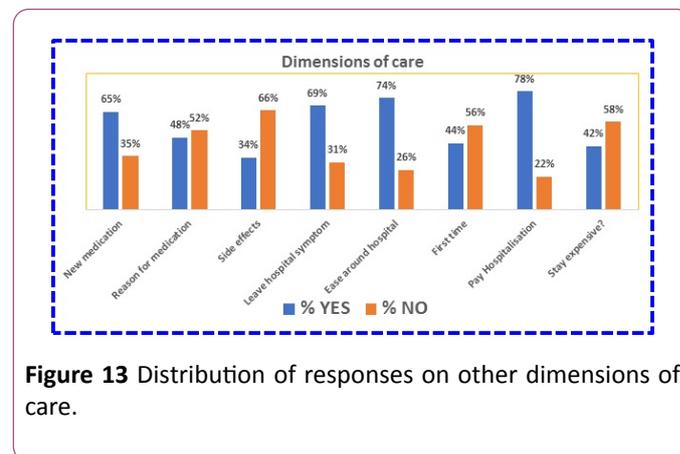


Figure 13 Distribution of responses on other dimensions of care.

Availability of drugs: Sixty nine percent of respondents had their drugs available in the hospital pharmacy whereas 31% of them could not find their drugs there (**Figure 14**).

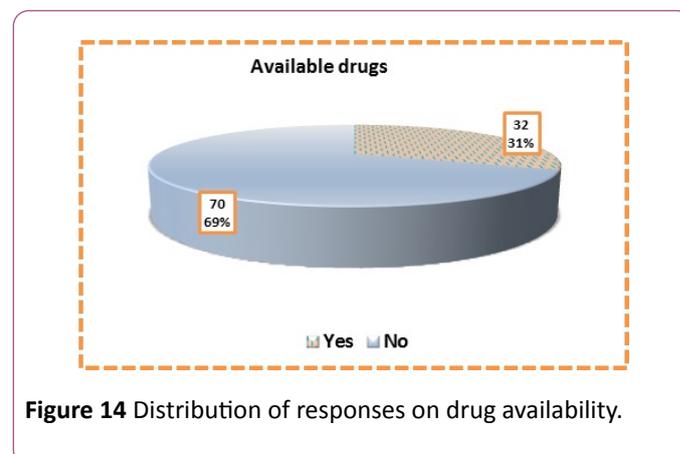


Figure 14 Distribution of responses on drug availability.

Recommending hospital to others: As seen in **Figure 15** respondents (59.2%) expressed that they will probably and definitely (30.4%) recommend the hospital to others meanwhile 6.5% of them might not and 3.9% were sure not too.

Rate overall health: A greater percentage of patients (66%) reported an overall good health, 14% reported excellent health, 17% and 3% rated their health fair and poor respectively (**Figure 16**).

Analysis of overall hospital rating to determine the patients' level of satisfaction with the care received

Generally, on a scale of 0–10, 32% respondents rated the hospital between 0–6 resulting in minimum global satisfaction, 44% rated it between 7–8 resulting in moderate global

satisfaction and 24% rated it between 9–10 resulting in high global satisfaction (Figure 17).

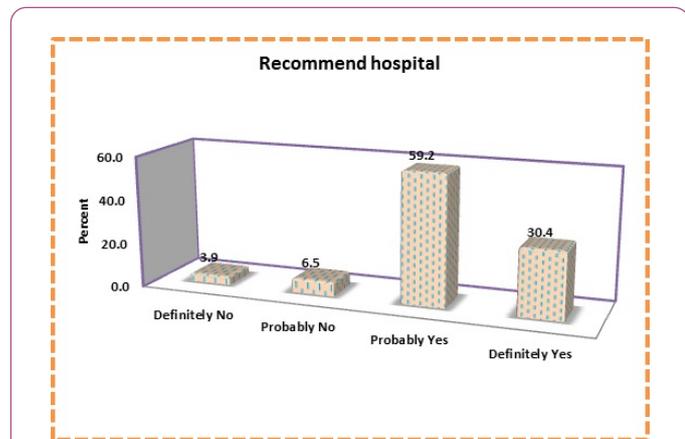


Figure 15 Distribution of respondent’s recommendation of hospital to others.

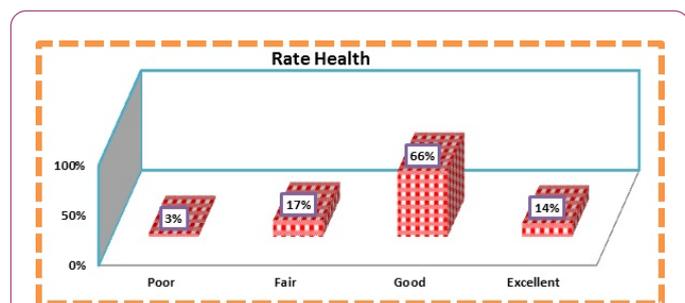


Figure 16 Distribution of respondents overall health.



Figure 17 Distribution of respondents’ satisfaction with the overall rating of the hospital quality of care.

Identification of factors influencing care

Persons’ Chi square test was performed to determine the significance of association between each dimension of care and the overall hospital rating and using Cramer’s V to determine the strength of the association between the two variables.

Respondent’s age, gender, marital status, occupation, level of education and first language had no significant relationship with the overall hospital rating.

Nurses’ courtesy

A significantly strong association was found, $\chi^2(3)=51.59$, $p<0.01$. Satisfied respondents were mostly those who usually (37%) or always (36%) experienced nurses’ courtesy and respect while others were dissatisfied despite haven usually (8%) and always (3%) had courtesy/respect from nurses as shown in Figure 18.

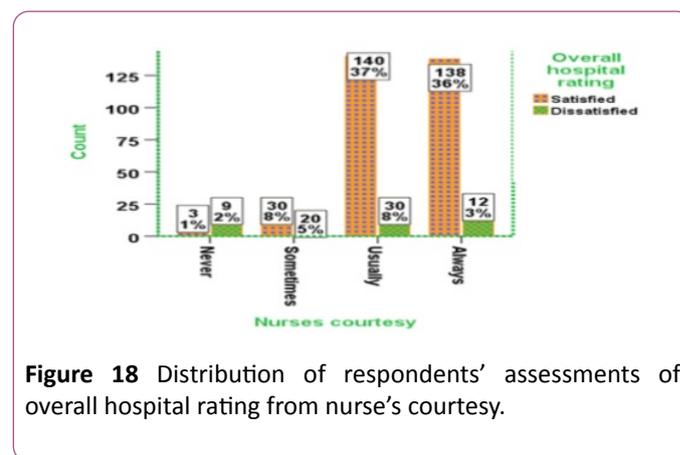


Figure 18 Distribution of respondents’ assessments of overall hospital rating from nurse’s courtesy.

Patients listened to by nurses

A significantly moderate association was found, $\chi^2(3)=25.76$, $p<0.01$. Respondents whom nurses usually listened to (32%) and always listened to (41%) carefully expressed satisfaction. Nevertheless 10% and 4% of them were dissatisfied respectively (Figure 19).

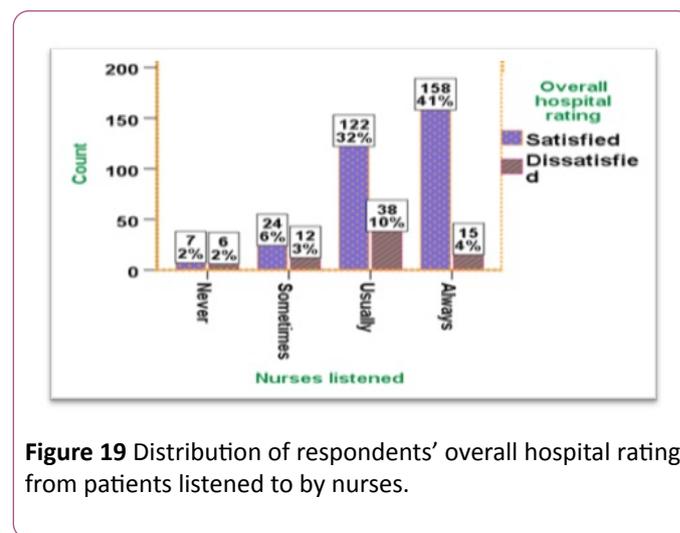


Figure 19 Distribution of respondents’ overall hospital rating from patients listened to by nurses.

Doctor’s courtesy

Significant strong association were found, $\chi^2(3)=46.77$, $p<0.01$. The majority of satisfied respondents were those who usually (34%) and always (40%) experienced doctor’s courtesy. Yet 8% of those who usually experienced this were dissatisfied (Figure 20).

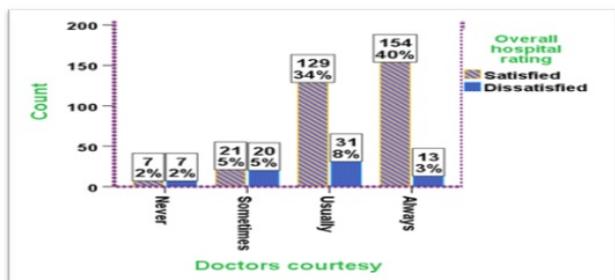


Figure 20 Distribution of respondents overall hospital rating from Doctors courtesy to patients.

clean (42%). However some were dissatisfied even when their rooms were usually kept clean (9%) or always kept clean (5%) (Figure 24).

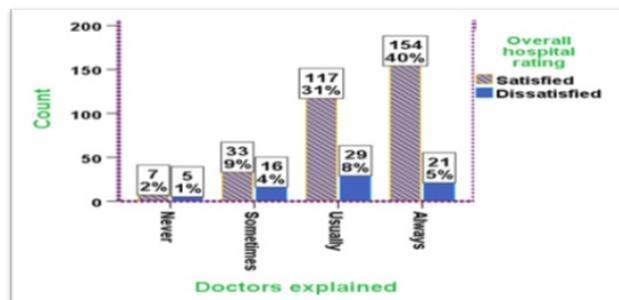


Figure 22 Distribution of respondents overall hospital rating from the explanations from doctors.

Patients listened to by doctors

There was a significantly moderate association, $\chi^2(3)=16.32$, $p<0.01$. A majority of satisfied patients were those whose doctors usually listened to (28%) or always listened to them carefully (42%). Minimal proportions of satisfaction were expressed by those whose doctors sometimes carefully listened to them (7%). Remarkably, 4% of those who never experienced this still reported satisfaction (Figure 21).

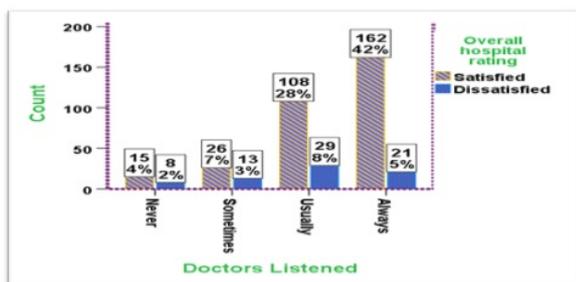


Figure 21 Distribution of respondents overall hospital rating from patients listened to by doctors.

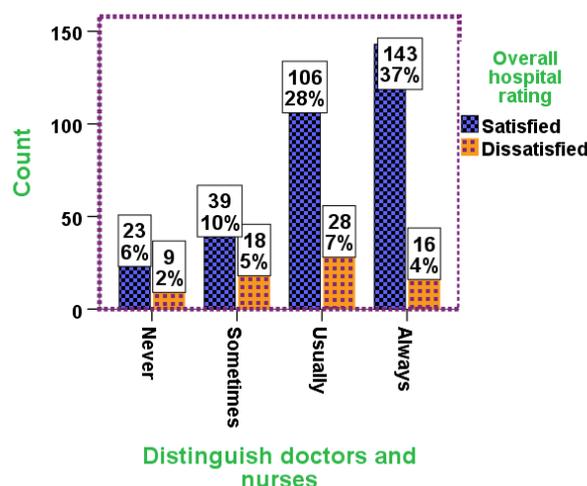


Figure 23 Distribution of respondents' overall hospital ratings from distinguishing staff.

Satisfactory explanation by doctors

A significant moderate association was found, $\chi^2(3)=15.81$, $p<0.01$. The most satisfied respondents (40%) were those whose doctors always explained things to them in a way they could understand (Figure 22).

Ability to distinguish doctors from nurses

A significant moderate association was found, $\chi^2(3)=16.54$, $p<0.01$, 28% and 37% of patients who usually and always distinguished between nurses and doctors respectively. The most dissatisfied patients in relation to this were those who sometimes (10%) distinguish the two (Figure 23).

Room clean and satisfactory

A significant moderate association was found, $\chi^2(3)=20.39$, $p<0.01$. Respondents expressed high levels of satisfaction when their rooms were usually kept clean (35%) or always kept

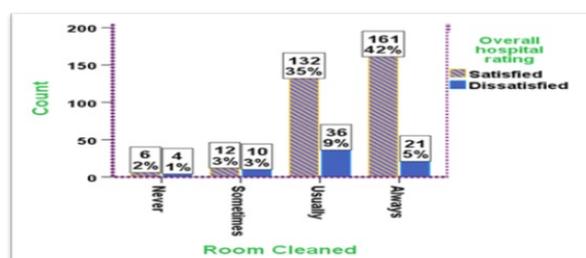


Figure 24 Distribution of respondents overall hospital rating clean rooms.

Recommend hospital

A strong association was found $\chi^2(3)=55.49$, $p<0.01$. Respondents who would probably (49%) or definitely (28%) recommend the hospital to friends and family were satisfied

though 10% of those who would probably did so were dissatisfied (Figure 25).

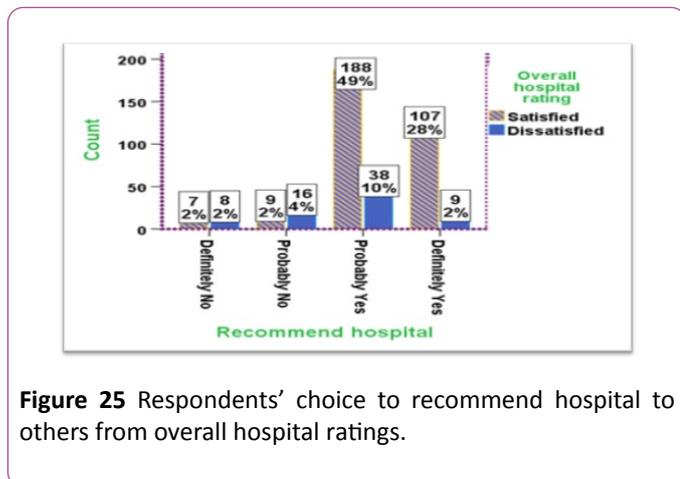


Figure 25 Respondents' choice to recommend hospital to others from overall hospital ratings.

Payment of hospital bills

There was a moderate association found, $\chi^2 (3)=11.37$, $p<0.01$. A huge proportion (66.5%) of respondents who paid their hospital bills expressed satisfaction though 11.8% of them were dissatisfied. Interestingly, 6.8% of those who did not pay hospital bills were dissatisfied (Figure 26).

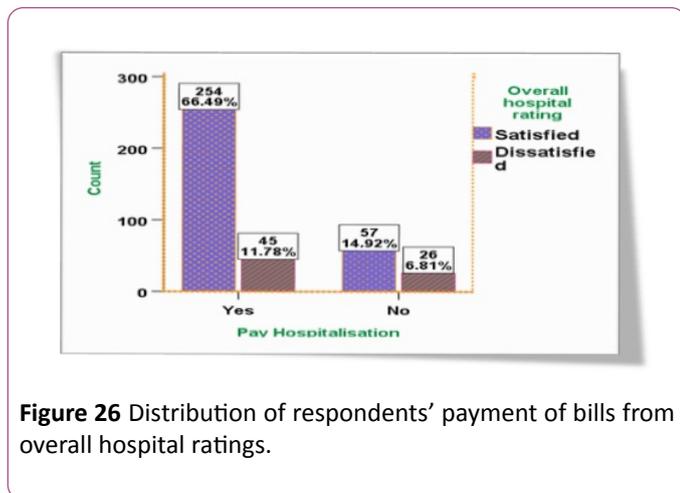


Figure 26 Distribution of respondents' payment of bills from overall hospital ratings.

Rating overall health

A strong association was found, $\chi^2 (3)=42.12$, $p<0.01$. Fifty seven percent of respondents who rated their health as good were satisfied while 9% of them were not. Out of the 14% who rated their health as excellent, 1% declared dissatisfaction (Figure 27).

Experienced a quiet night

A moderate association was found, $\chi^2 (3)=13.59$, $p<0.05$. Descending levels of satisfaction were registered by those who always had a quiet night (48%), usually (22%), sometimes (10%) and never (6%) found the hospital quiet at night. Meanwhile levels of dissatisfaction were generally minimal ranging from 1% to 5% (Figure 28).

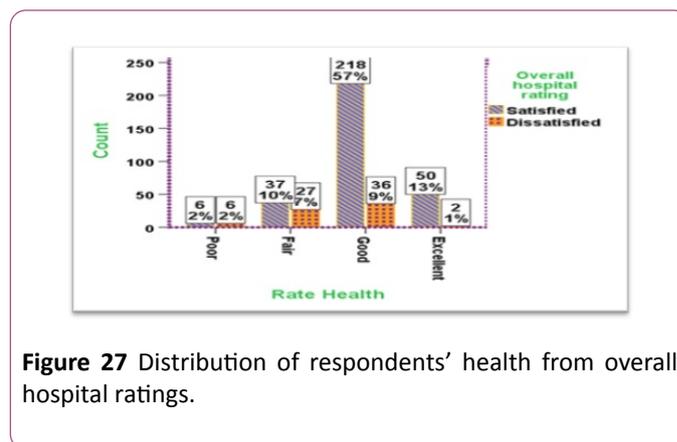


Figure 27 Distribution of respondents' health from overall hospital ratings.

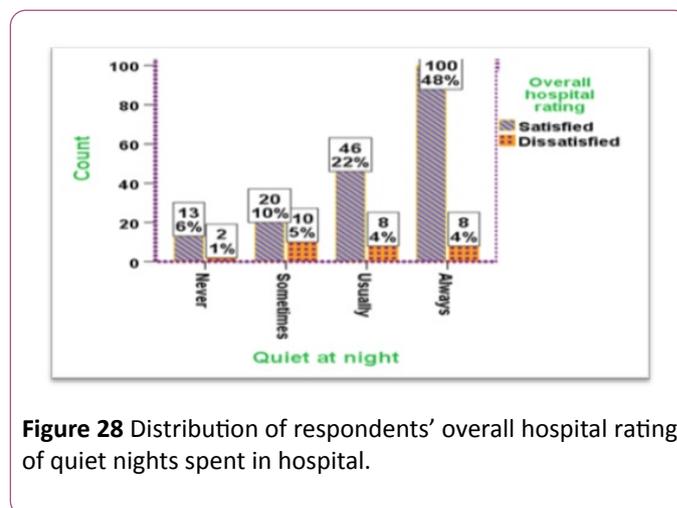


Figure 28 Distribution of respondents' overall hospital rating of quiet nights spent in hospital.

Personal privacy

A moderate association was found, $\chi^2 (3)=16.15$, $p<0.05$. Great proportions of respondents whose personal privacy was usually (20%) and always (46%) expressed satisfaction. The highest level of dissatisfaction was from 5% of those whose personal privacy was not respected (Figure 29).

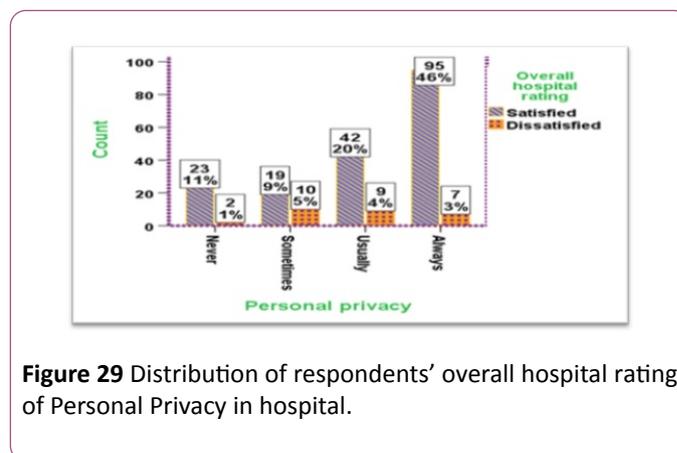


Figure 29 Distribution of respondents' overall hospital rating of Personal Privacy in hospital.

Pain control

A moderate association was found, $\chi^2 (3)=10.32$, $p<0.05$. Respondents who had their pain usually (18%) and always (49%) controlled were satisfied. Interestingly, while 3% of

patients whose pain was always controlled expressed dissatisfaction, 9% of those who never experienced pain control expressed satisfaction (Figure 30).

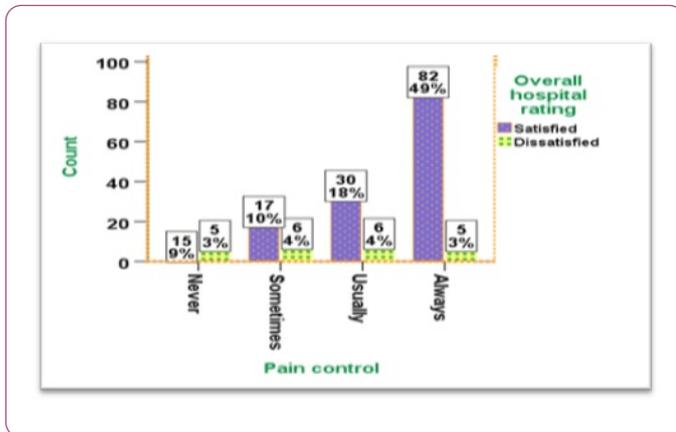


Figure 30 Distribution of respondents overall hospital rating in pain control.

Aspects to control pain

A moderate association was found, $\chi^2(3)=13.99$, $p<0.05$. An exact 50% of satisfied respondents were those who indicated that the staff always did everything they could to control their

pain. Lower levels of satisfaction were recorded by those who remarked that staff usually (16%), sometimes (10%) and never (11%) did everything to control their pain (Figure 31).

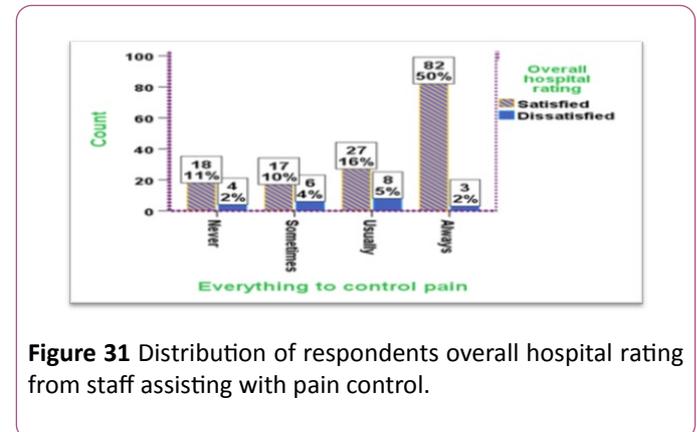


Figure 31 Distribution of respondents overall hospital rating from staff assisting with pain control.

Table 1 illustrates a summary of the results of the Chi square test with the Cramer's value showing the strength of the association between each of the dimensions of care and the overall hospital rating. It was observed that recommending the hospital to family and friends, doctor's courtesy, nurse's courtesy and rating overall health were the strongest predicting factors to the overall hospital rating.

Table 1 Summary of Chi square test results for dimensions of care with association with overall hospital rating.

Variable 1	Variable 2	Degrees of freedom (df)	Chi Square (χ^2) value	p-value	Cramer's V
Recommend hospital to family and friends	Overall hospital rating	3	55.499	<0.01	0.381
Nurses courtesy/respect	√	3	51.598**	<0.01	0.368
Doctors courtesy/respect	√	3	46.775**	<0.01	0.350
Rate overall health	√	3	42.120**	<0.01	0.332
Nurses explained	√	3	32.642**	<0.01	0.292
Everything to control pain	√	3	13.993**	<0.01	0.291
Personal privacy	√	3	16.154**	<0.01	0.279
Nurses listened	√	3	25.763**	<0.01	0.260
Quiet night	√	3	13.596**	<0.01	0.256
Pain control	√	3	10.324*	<0.05	0.249
Room cleaned	√	3	18.128**	<0.01	0.231
Distinguish doctors and nurses	√	3	16.389**	<0.01	0.207
Doctors listened	√	3	16.311**	<0.01	0.207
Doctors explained	√	3	15.806**	<0.01	0.203
Pay hospital bills	√	1	11.372**	<0.01	0.173

**For p-values lower than 0.01
*For p-values lower than 0.05 but greater than 0.01

Table 2 illustrates the dimensions of care which were found without association with the overall hospital rating.

Table 2 Summary of Chi square test results for dimensions of care with no association with overall hospital rating.

Variable 1	Variable 2	Degrees of freedom (df)	Chi Square (χ^2) value	P-value	Cramer's V
Experience pain	Overall hospital rating	1	0.012	>0.05	.008
Status	√	1	7.645	>0.05	0.141
Stay expensive	√	1	.923	>0.05	0.051
First time	√	1	.348	>0.05	0.030
Ease around	√	1	1.744	>0.05	0.068
Available drugs	√	1	.006	>0.05	0.008
Side effects	√	1	1.237	>0.05	0.063
Reason for medication	√	1	1.625	>0.05	0.072
New medication	√	1	.640	>0.05	0.041
Leave hospital symptom explained	√	1	3.821	>0.05	0.100
Time with doctor	√	1	6.658	>0.05	0.195

Discussion

In this study the patients' status was found to have no significant influence with the overall hospital rating implying that the quality of healthcare delivered to both in and out patients was proportionate. Therefore where applicable, respondents' responses were merged into four categories: Never, Sometimes, Usually and Always to ease data interpretation. Meanwhile, respondents whose first language was not English exhibited enough knowledge to understanding and responding to the questions adequately.

A response rate of 98.2% signifies that the patients demonstrated willingness and interest to air their views with the appraisal of the quality of healthcare they received. It also means that a representative population participated in the study cutting across different gender, age groups, educational levels and occupations.

Extent to which patients' needs were met from care received

In relation with the above results, there is a general shift, far above average, in the expressions of patients pertaining to their experiences with the various dimensions of care received in the hospital and the extent to which the care met their needs. This is evidenced by the majority of responses being positively inclined to 'Usually' and 'Always'. For all aspects of nurses' behavior, 84% of patients felt nurses treated them with respect and courtesy, 87% of them were listened to carefully and 82% received explanations from nurses in a way they could understand. With regards to doctors' behavior, similar proportions were revealed for doctors who showed respect and courtesy (86%), doctors who listened carefully to patients registered 84% and 84% of patients also spelled out that they received explanations from doctors in a way they could understand. This means that these patients expected respect

and courtesy during their visit and this need was met above for the greater population. These results are higher than those of who found that 68.9% of patients in Bangladesh experienced respect and politeness from care providers [10].

The physical environment of the hospital was generally reported to be clean especially rooms (88%) and baths (71%). A quiet night was also ensured to 78% with personal privacy maintained to 74% of patients. This findings contrast with [10], who found that personal privacy was maintained to less than half (45.1%) of patients and [7], who found average values of 54% for patients having a quiet night [11] remarks that perceptions of neatness of wards and buildings, the décor and the appearance of the nursing staff will influence whether a patient will return to a hospital or not.

Eighty two percent of patients spent enough time with the doctor unlike the 91.7% of patients who reported spending much time with their doctor [10]. It is possible that this had a lot to do with the doctors' behavior which engulfs respect/courtesy, listening and explaining. It could also be that the patients low expectations that were easily met.

The 77% of patients who could distinguish between doctors and nurses signifies that they were aware of the various professional cadres so that their expectations were not misplaced or misread.

New medications were prescribed to 65% of patients. Prescribed drugs were available to 69% of patients in the hospital pharmacy. This is likely in line with the national list for essential drugs made available in public hospitals in Cameroon. Therefore where prescriptions require a drug that is out of this list, patients are expected to purchase them out of the hospital. Most patients (69%) had an explanation of symptoms to look out for after leaving the hospital. This shows that they were educated upon discharge from the hospital.

Out of 78% patients who experienced pain, it was reported that 52% of them had their pain controlled pointing out that

the staff did everything they could to ensure so. This findings are lower than those of Gupta et al. [12], who found that on the average, approximately 71% of patients in critical access hospitals had their pain always well controlled compared to about 67% of patients in acute care hospitals. For those who reported not having their pain controlled, it could be attributed to the fact that they could have lacked the prescribed drugs for financial reasons or due to unavailability in the hospital pharmacy. Also they could have been suffering from chronic pain which might require longer periods to be abated. Inadequate pain management can also result in poor patient outcomes leading to increased healthcare costs.

Most patients (80%) rated their overall health within 'good' and 'excellent' implying that the care they received had a positive impact on their overall wellbeing. Accordingly Goldstein et al. [13] recorded lower proportions of 40% patients rating their overall health as 'good' and 'excellent'.

Most of the patients (56%) had visited the hospital at least once before which can explain the reason why a majority of them (74%) found it easy finding their way around the hospital. In addition, the presence of a hospital map, direction signs, and visible names of offices and units also eases movement around. Despite this, some patients (26%) could not find their way around probably due to inability to read signs or because they were visiting the hospital for the first time.

Remarkably, a greater proportion (58%) of those who reported paying their hospital bills pointed out that they were inexpensive. This could be because the study setting was a public health facility and users were aware that they have to pay bills for services rendered to them. Besides there are clear verbal explanations upon admission and written public notices in the hospital educating patients on the cost of various services. As such they are not taken by surprise during payments. On the other hand those who reported not paying bills could have been registered under an insurance scheme or are paupers registered under the social service.

On the other hand, some dimensions of care registered greater response values negatively inclined to 'Never' and 'Sometimes'. Though new medications were prescribed to a majority of patients, a greater proportion (52%) of them did not receive any explanations regarding the new prescriptions neither did they (66%) receive education on the side effects of the drugs they were placed on. These are aspects of care which patients expected to be exploited implying that a majority of patients registered these aspects of care lacking during their care process.

In summary, majority of patients had their various needs attained with the care they received though two of the expected care needs were unmet to a greater population.

Assessment of level of satisfaction of care received

Majority of patients (44%) rated the overall hospital within the range 7–8 representative of a moderate global satisfaction

with the quality of healthcare received while 32% rated it between 0–6 being minimum global satisfaction and 24% rated it between 9–10; being high global satisfaction. This indicates that though a larger number of patients were moderately satisfied with the quality of care they had during their contact with the hospital, some experienced care of high quality while a few experienced a minimum. Therefore their experiences were more geared towards moderate and high satisfaction with quality of care.

This is probably because a majority of them showed that their needs were almost completely met. When patient's needs and expectations are more than averagely met, the resulting effect is greater satisfaction. Since families and friends are closer and believe in each other, a satisfied patient would be fast in encouraging other sick family members and friends to visit the same hospital and probably see the same doctor or nurse if possible [11]. Patients also prefer to stick to the same hospital and same doctor because they have an already established relationship and the level of trust is higher. The findings of this study contrast with [7], who found that in some states, 71.9% of patients gave their care a high global rating while in others 49.9% did so.

Factors influencing care delivery to meet patients' needs

The age, gender, marital status, occupation, level of education, first language of patient had no relationship with their overall rating of the quality of health care rendered them.

The results show that fifteen out of the twenty six dimensions of care were statistically proven to be significant predicting factors to the overall hospital rating of quality care. The strengths of this association varied with the strongest ranging from choosing to recommend the hospital to family and friends to nurse's courtesy/respect, doctor's courtesy/respect and overall rating of their health. When patients experience staff as cheerful, kind, caring and courteous as well as highly skilled and prompt in service, then they are more likely to return to the same hospital should the need arise [11].

Moderate associations were recorded for nurses explained in a way that could be understood, pain controlled, staff doing everything to control pain, ensuring personal privacy, nurses listening carefully, having a quiet night, room kept clean, distinguishing doctors and nurses, doctors listened carefully, doctors explained in a way that could be understood and paying hospital bills.

The presence of this association implies that the overall rating of the hospital was reflective of the quality of health care receive by these patients. It also means the tool was suitable for measuring patients' experiences with the quality of care they received in this setting corresponding with [14]. These findings falls in line with [7], who realized highest hospital ratings strongly correlated with the willingness to recommend the hospital to others and with [10], who established that the most powerful predictive factors of overall rating of hospital care services was provider's behavior

towards the patient (particularly politeness and respect), respect of privacy, quiet environment at night.

Even though there was absence of a correlation between Pain control and the Rating of the patients' health, Pain control significantly determined their Overall rating of the hospital probably due to the fact that those who experienced pain and had it well controlled expressed that staff did everything they could to control it. It could also be because those patients who have experienced chronic pain and have been accustomed to it did not reflect it on the overall rating of their health and the overall rating of the hospital quality of care.

This study agrees with [12], on better pain relief when patients had good communication with their doctors ($r=0.84$). This is shown in the aspects of 'Doctor's showing courtesy/respect' and the 'Staff communicating the reasons for new medications' as significant predictors of pain control. It is therefore probable that patients who experienced pain but said that the staff did not do everything to control it reported a significant poor pain control related to the fact that overall inadequate pain control leads to poor patient outcomes and higher health care cost. On the other hand, a remarkable proportion of these patients who reported the staff not doing everything to control it expressed satisfaction with the care received possibly because they have had chronic pain and have been accustomed to their pain.

With regards to those who experienced pain and expressed that the staff did not do everything they could to help with it points out that when some patients are faced with pain, the staff do not ensure that they practice all they could to relieve it. This could be linked to the absence of pain control protocols, possible lack of empathy or poor communication which are all aspects of pain management.

In summary the dimensions of care discussed above which had statistically significant associations with the overall hospital rating of quality of care received were identified as factors which positively influenced these patients' experiences of care in the hospital. On the other hand, the dimensions of care listed in **Table 2** which did not have any significant relationship with the patients overall hospital rating of quality care could have been viewed as important but did not directly influence their judgment on the quality of care rendered to them.

Conclusion

A majority of patients expressed their experiences with the quality of care rendered to them, met their needs and expectations to a greater positive extent. Nevertheless, the expectation of being informed on the reason for prescribing new drugs and the explanation of side effects of drugs were unmet for a majority of them. A majority of patients revealed that they derived moderate and high degree of satisfaction with the quality of care rendered to them.

The overall rating of the hospital's quality of care from these patients experience was strongly predicted by the their choice

to recommend the hospital to family and friends, nurses' courtesy and respect, doctors' courtesy and respect, and the overall rating of their health. Moderate predicting factors were nurses' explaining things in a way that could be understood; staff doing everything to control pain, maintenance of personal privacy, nurses listening carefully; having a quiet night, having their pain controlled, rooms kept clean, distinguishing doctors and nurses, doctor listening carefully, doctors explained, and could pay their hospital bills. Therefore from the above results, the patients' experience of the quality of care rendered to them in the Regional Hospital Bamenda is satisfactory implying that there is need for maintenance and improvement in the provision of quality care to achieve better outcomes.

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