

Assessing Behaviors and Factors That Influence Patient Care by Nurses at the Buea Regional Hospital, Southwest Region, Cameroon

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Abstract

Background: Nurses' attitude continues to be a major health problem in developing countries, especially as nurses' behavior has a great influence on patient recovery. Patient safety is an important aspect of health care delivery, which is affected by several factors, and it is critical to health care assessment. Therefore, assessing behaviors and factors that influence patient care by nurses at the Buea Regional Hospital, Southwest Region, Cameroon is imperative. **Methods:** This study targeted adult patients who received healthcare at the Buea Regional Hospital from 3 January to 19 February 2024. The study was a descriptive and cross-sectional study that used a non-probability sampling method, recruiting patients based on their availability during data collection. Data was collected using a semi-structured questionnaire. The data collected was analyzed using SPSS 23.0, and the results were presented in tables and figures. **Results:** A total of 78 patients were recruited, whereby most participants attested that nurses at the Buea Regional Hospital were polite in the way they talk to patients 56/78 (71.8%) and nurses work considerably in teams 47/78 (60.3%). Also, most of the nurses made the patients feel safe 52/78 (66.7%), while at the hospital. Participants revealed that kind-heartedness 52/78 (66.7%) was a common behavior by nurses, and this made the patients feel free to express themselves 56/79 (71.8%). Participants revealed that nurses' behavior and attitude towards patients were influenced by working in very comfortable positions (59.0%), low wages (42.3%), stipends (51.2%), high workload (55; 70.5%) and a small number of staff per unit (51; 65.4%). **Conclusion:** Nurses'

behavior or attitude was generally good as revealed by the participants, although the attitude and behavior of nurses towards patients were influenced by certain factors such as low wages and few staff per unit. Workload management tools such as shift rotation plans, break policies, and task delegation strategies can be developed to ease the burden on nurses.

Keywords

Nurses, Behavior, Factors, Influence, Patient, Care

1. Background

Nursing care is derived from the philosophies of holism and humanism (Frisch & Rabinowitsch, 2019). Holism is one of the features that are well connected to holistic nursing care as it attests to the importance of the whole sum rather than the sum of its parts, which includes the whole being, body, and soul. McMillan et al. (2018) describe the vitality of a whole being or system as performing well if all parts of the system are not impaired or disturbed. In other words, one part is unable to function without the whole; therefore, providing the care needed by an individual is substantial. It is revealed that sick people die because of a nurse's incompetence and carelessness, whereby the aging group needs critical care. Furthermore, deaths among children under 5 years of age are linked to nurses' carelessness (Kirwan et al., 2013).

Nursing attitude continues to be a major health problem in developing countries, especially as nurses' behavior has a great influence on patient recovery. Nurses are the largest group of healthcare professionals who are the most interactive with patients (Wake, 2022). Patient safety is an important aspect of healthcare delivery and is critical to healthcare assessment (Yin et al., 2023). One of the primary burdens faced by nurses in Cameroon is the high patient load. The nurse-to-patient ratio is often inadequate, leading to overworked nurses who must manage multiple patients simultaneously. WHO recommended that the nurse-to-population ratio be 1:500, but in many parts of Cameroon, this ratio is far exceeded (WHO, 2023). Also, Nurses frequently have to work in environments with insufficient medical supplies, outdated equipment, and poor sanitary conditions due to a lack of essential resources (Moyimane et al., 2017).

Poor nursing care in many situations comes as a result of different challenges faced. In countries with low development skills, nurses face a greater challenge as a result of inadequate equipment, thereby exposing patients to more harm, and patients find it difficult to come to the hospital (Moyimane et al., 2017). Possible reasons for the poor behavior of nurses in patient care is due to high workload and stress, lack of resources and limited support from their colleagues, poor communication, lack of respect from the patient, organization culture, nurses having personal issues with patients, lack good education and training of the concept of patient care (Molina-Mula & Gallo-Estrada, 2020). Previous studies have shown

that healthcare by nurses has been faced with challenges such as caring problems, inadequate nurses' ability, poor management, and lack of adequate infrastructure, payment models, coordination and lack of job satisfaction in healthcare (van Weel et al., 2019).

Patients still suffer from a lack of adequate nursing care. Even with the part nurses play in healthcare delivery, there are still various challenges that affect their ability to provide optimal care. This is probably because of the high patient load, limited resources, inadequate training opportunities, and emotional and psychological stress. A considerable knowledge gap exists in the understanding of the specific challenges faced by nurses in Cameroon and their impact on patient care. Also, there is extensive information available on nursing care in other regions, but similar information is lacking in the Buea health area. Hence, there's a need to assess behaviors and factors that influence nurses' attitudes towards patient care in the Buea Regional Hospital.

2. Materials and Methods

2.1. Study Area

This study was carried out in the Buea Regional Hospital, which is located in the Southwest region of Cameroon. The hospital serves as a referral hospital for the region. Buea is the capital of the Southwest Region with an average population of 800,000 inhabitants as of 2023 (Helders & Stefan, 2008). It covers a total surface area of about 870 square kilometers (Figure 1), with an equatorial climate and temperature range of about 20°C - 28°C (Nzalie et al., 2023). Buea is characterized by a humid temperature with a favorable climatic condition, which is mostly cloudy during the day. Since it is a mountainous area, the temperature reduces and becomes cold at night and a gentle slope which facilitates movement. The hospital has several facilities meant for patient care. Patients from all economic backgrounds, whether rich or middle class, are hosted at the hospital. This is because it is very affordable and has doctors from Cameroon and internationally. It receives patients mainly from the English-speaking regions of Cameroon.

2.2. Study Design and Population

2.2.1. Study Population

The study included patients who received healthcare at the Buea Regional Hospital, Cameroon, from 3 January to 19 February 2024.

2.2.2. Sample Size

The sample size was determined using Fisher's formula (Fisher, 1925), and it was estimated to be 100 participants.

$$n = \frac{Z^2 P(1-P)}{d^2}$$

where,

$$Z = 1.96 \text{ at } 95\% \text{ confidence interval}$$

$P = 15\%$ (proportion of patients who complained that nurses had bad behavior towards them) (Mbanya et al., 2001)

$d = 5\% = 0.05$ (error margin)

$1 - P = 1 - 0.15 = 0.85$

$$n = \frac{1.96^2 \times 0.15}{0.0025} = 99.996 \approx 100 \text{ participants}$$

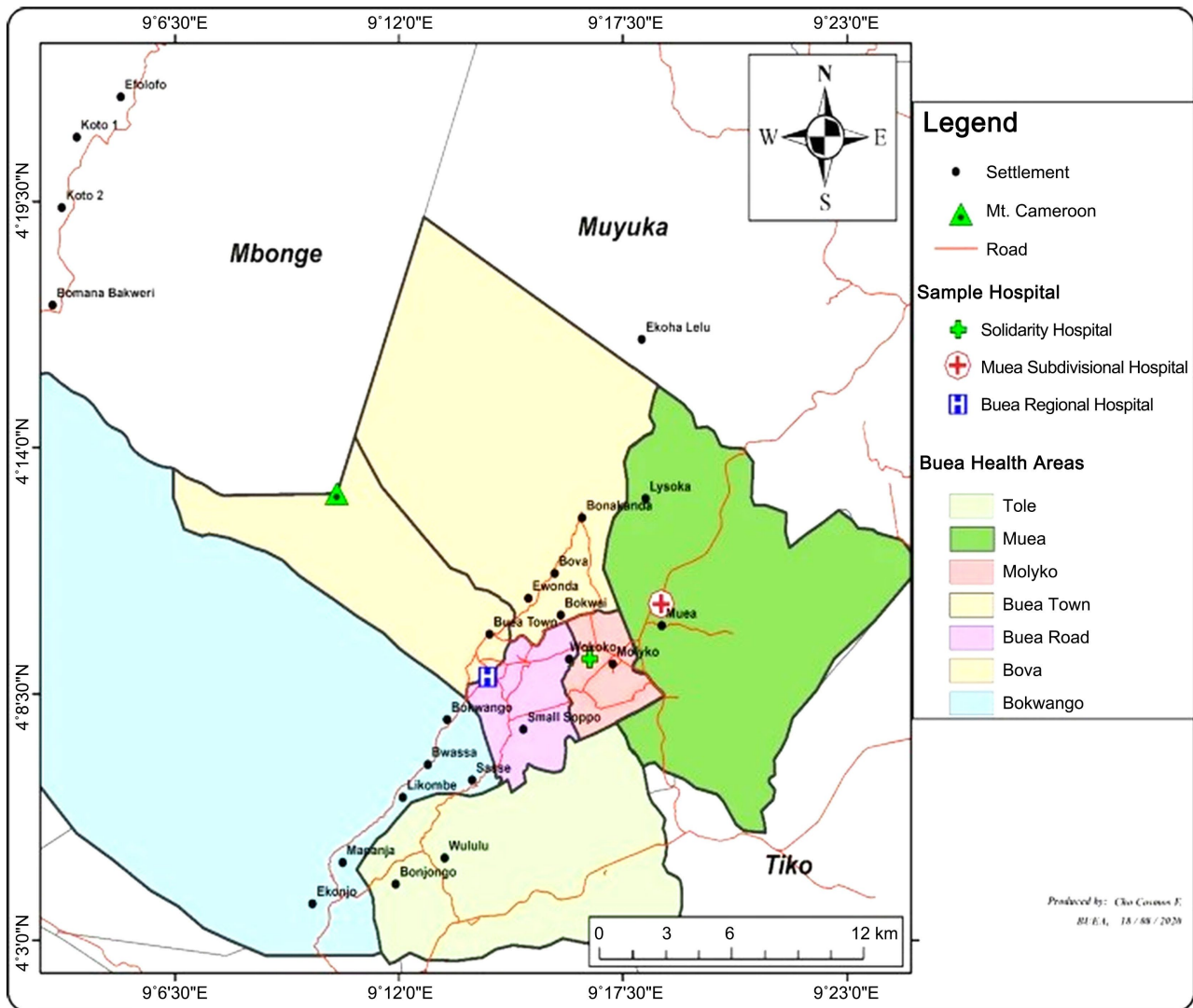


Figure 1. Map showing the location of Buea Regional Hospital (Nzalie et al., 2023).

2.2.3. Inclusion Criteria

Patients at the Buea Regional Hospital who signed an informed consent form.

2.2.4. Exclusion Criteria

Healthcare professionals at the Buea Regional Hospital were excluded.

2.3. Data Collection and Data Collection Tools

The data collection tool was a semi-structured questionnaire that was divided into

two parts. The first section contained demographic characteristics, while the second section included questions on nurses' attitudes and factors that influence patient care at the Regional Hospital Buea, Cameroon. Before the questionnaire used for this study was accepted to be used, it was pilot-tested on 14 patients in the same hospital and the Cronbach's alpha test was used to test for the consistency among items in the questionnaire (validity). These items were: politeness of nurses, teamwork among nurses in the hospital, patients feeling safe, kindheartedness of nurses, patients' ability to express themselves freely, nurses working in favorable conditions, nurses being well-paid and motivated, and the high workload with a limited number of nurses. Using these items, a Cronbach's alpha of 0.81 was obtained, which was good enough for the development of the semi-structured questionnaire and was used for the collection of data.

2.4. Ethical Considerations

Administrative authorization was obtained from Cornerstone University and Theological Seminary Limbe, Cameroon. Other authorizations were obtained from the Director of the Buea Regional Hospital and the heads of units where the data were collected. Before participating in the study, an informed consent form was signed and participation was non-mandatory. The participants were free to withdraw at any point if they felt uncomfortable. All information obtained from the participants was strictly confidential and used for the purpose of research. Since there was no invasive procedure like blood or tissue collection from participants, no ethical approval from the Institutional Review Board was obtained, but the administrative authorizations were respected by the principal investigator.

2.5. Data Analysis

Data was entered, cleaned and analyzed using SPSS version 23.0. Descriptive statistics were used to evaluate proportions, and the results were presented in figures and tables.

3. Results

3.1. Socio-Demographic Characteristics of the Study Population

A total of 78 participants completely answered and returned the questionnaires to the principal investigator. Therefore, data analysis was based on 78 participants out of 100 who completely answered the questionnaire that was served to them. From data analysis, the majority of the participants were between the age group of 20 - 29 years (61.5%), while the least were patients from 40 years and above (14.1%). Also, the majority were single (73.1%) while the rest were married (26.9%). More so, there were more Christians (83.3%) than Muslims (16.7%). Furthermore, most of the participants had primary education (56.5%) while a few had tertiary education (16.7%). Additionally, most of the participants were not employed by the government (62.8%), while 37.2% of the participants were employed by the

government (Table 1).

Table 1. Socio-demographic characteristics of the study population.

Factor	Category	Frequency (n)	Percentage (%)
Age group (years)	20 - 29	48	61.5
	30 - 39	19	24.4
	40 - 49	6	7.7
	50 and above	5	6.4
Marital status	Married	21	26.9
	Single	57	73.1
Religion	Christian	65	83.3
	Muslim	13	16.7
Educational level	Primary	44	56.4
	Secondary	21	26.9
	Tertiary	13	16.7
Occupation	Employed	29	37.2
	Self-employed	20	25.6
	Unemployed	29	37.2

3.2. Nurse's Attitude towards Patient Care

Generally, the attitude of nurses towards patient care was good in that most respondents revealed that nurses had a polite way of talking to patients, 56 (71.8%), compared to those who didn't have a polite way of talking, 21 (26.9%) (Figure 2). Also, patients revealed that most of the nurses, 47 (60.3%), worked in teams while just a few didn't love working as a team, 28 (35.9%), at the Buea Regional Hospital, Cameroon (Figure 3).

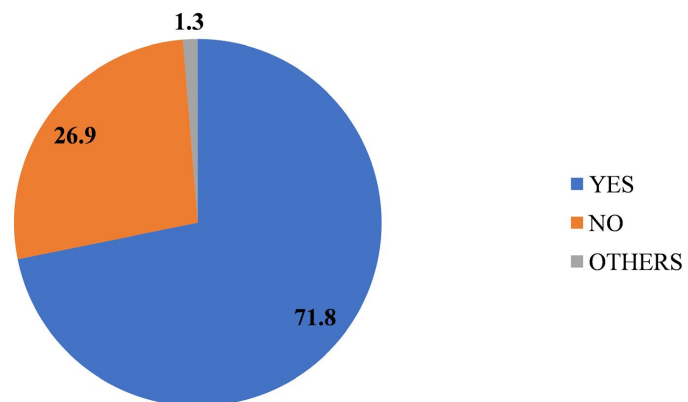


Figure 2. Polite way of talking to patients by nurses.

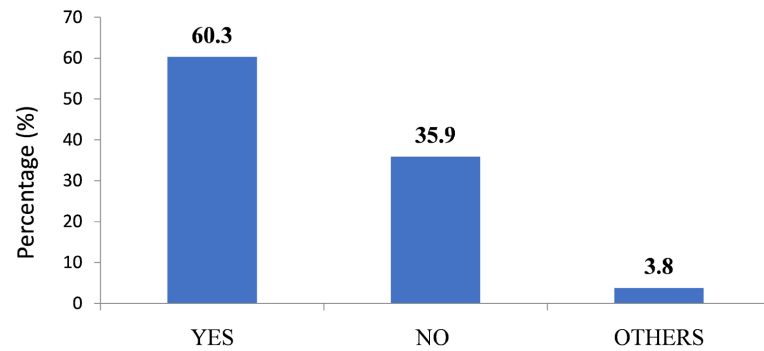


Figure 3. Teamwork by nurses in the Buea Regional Hospital.

Statistical analysis also revealed that most patients felt safe (66.7%) at the Buea Regional Hospital, while a few (32.1%) said patients didn't feel safe at the hospital. More so, most of the nurses at the Buea Regional Hospital were kind-hearted (66.7%), and the patients (71.8%) were free to express themselves while receiving healthcare at the Buea Regional Hospital (71.8%) (**Table 2**).

Table 2. Nurses' behavior or attitude towards patient care.

Question	Variable	Frequency (n)	Percentage (%)
Do patients feel safe while at the Regional Hospital?	Yes	52	66.7
	No	25	32.1
	Others	1	1.3
Are the nurses kind-hearted?	Yes	52	66.7
	No	24	30.8
	Others	2	2.6
Do patients express themselves freely in the hospital?	Yes	56	71.8
	No	16	20.5
	Others	6	7.7

3.3. Factors That Affect Nurses' Behavior or Attitude towards Patient Care at the Buea Regional Hospital

The study further assessed the factors that influenced nurses' attitudes towards patients at the Buea Regional Hospital. The participants revealed that most nurses (59.0%) worked in very comfortable positions, but complained that they were not well paid (42.3%). That notwithstanding, the patients revealed that nurses always attest that they receive motivation (51.2%) through stipends and other work benefits (**Table 3**). Notably, high workload (55; 70.5%) (**Figure 4**) and a small number of nurses per shift (51; 65.4%) (**Figure 5**) were factors that affected nurses' attitude towards patient care at the Buea Regional Hospital. The patients complained that the majority of the time, there were just a few nurses to attend to them.

Table 3. Factors that affect nurses’ behavior or attitude towards patient care at the Buea Regional Hospital.

Factor	Category	Frequency (n)	Percentage (%)
Nurses work in favorable conditions	Yes	46	59.0
	No	31	39.7
	Others	1	1.3
Nurses are well paid	Yes	33	42.3
	No	45	57.7
Receiving motivation through stipends and other benefits	Yes	40	51.3
	No	36	46.2
	Others	2	2.6

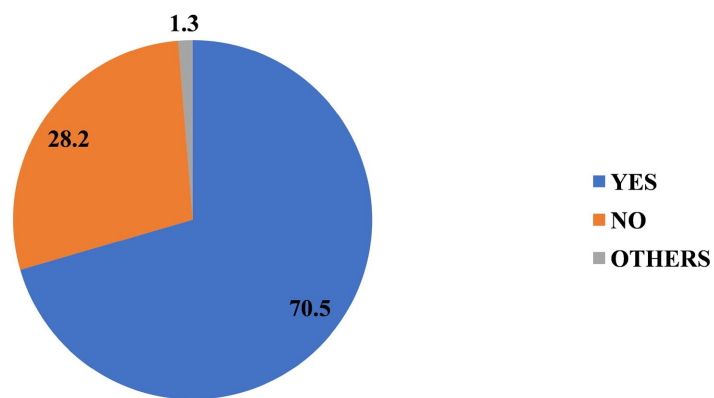


Figure 4. High workload affects nurses’ attitudes.

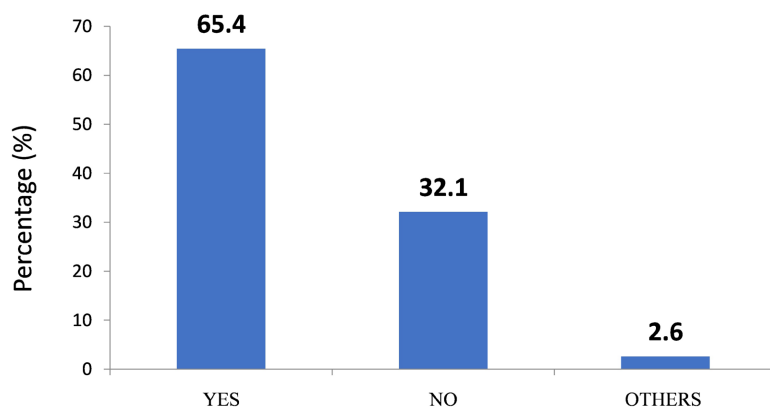


Figure 5. A small number of nurses per shift affects nurses’ attitudes towards patient care.

4. Discussion

This study was meant to determine nurses’ attitudes toward patient care at Buea Regional Hospital of the Southwest Region of Cameroon. Generally, the attitude of nurses toward patient care was good, as it was seen in the politeness of nurses

57 (71.8%) when talking to their patients. It has been previously reported that a good nurse-patient relationship enhances patient stay and recovery in any hospital in the world (Molina-Mula & Gallo-Estrada, 2020). Most patients will always feel welcomed, and recovery will always take a shorter time once they have a good relationship with the nurses. It can also help in drug compliance and receptiveness. The high level of patient satisfaction linked to polite care highlights the importance of soft skills training in nursing education and continuing professional development programs.

A majority of the study participants (60.3%) attested that nurses at the Buea Regional Hospital worked in teams. McEwan et al. (2017) in a systematic review and meta-analysis of controlled interventions based on the effectiveness of teamwork training on teamwork behaviors and team performance, revealed that effective teamwork and performance will improve behavior and effectiveness in service provision. Patients at the Buea Regional Hospital revealed that nurses work hand-in-hand with other healthcare providers to provide quality services. This finding was also in line with a study carried out by Zajac et al. (2021), who showed the importance of teamwork with other healthcare practitioners in service provision. Therefore, incorporating teamwork curricula in healthcare training institutions can reinforce the importance of professional attitude, teamwork, and communication in nursing practice.

A majority of the study population, 52 (66.7%), reported that they felt safe while being treated in the hospital, and the nurses were kindhearted, 52 (66.7%). This finding was in line with studies carried out by Dikmen et al. (2018) and Ayhan et al. (2015). In their findings, they revealed that nurses' care and treatment towards a patient is based on kindheartedness, regardless of the patient's sex or race. This was also the case at the Buea Regional Hospital. The sense of safety and kindheartedness reported by patients reinforces the role of emotional intelligence and empathy in nursing care.

When the participants were asked if patients were allowed to express themselves freely, a majority of the participants, 56 (71.8%), said patients were allowed to express themselves freely. This was contrary to the study carried out by Pereira et al. (2018), who showed that a majority of the participants were not allowed to express themselves freely. This could be related to the nurse's job description. Most patients have the habit of trying to tell the nurses what to do, whereas it is not their job to do so. This will likely cause the nurses to restrict the patients from freely expressing themselves during treatment. The freedom of expression among patients at the Regional Hospital Buea reflects positively on the institution's commitment to patient-centered care. These policies are implemented to promote participatory healthcare, where patients' voices are valued in decision-making. However, a need exists to clearly delineate patient-nurse boundaries, ensuring that patients feel heard without overstepping clinical roles.

This study was also meant to determine some factors that affect nurses' attitudes at the Buea Regional Hospital. From statistical analysis, 47 (70.5%) of the

study population responded that nurses had a high workload in the hospital. This was in line with a study carried out by [Adriani et al. \(2022\)](#), who revealed that 76% of the study population had high workload at the hospital. The reported staff shortages necessitate urgent policy interventions to recruit and retain more nurses. Additionally, 45 (57.7%) of the study population revealed that nurses always complain to the patients that they are not well paid at the hospital. These challenges are not unique to Buea; rather, they reflect broader systemic problems in healthcare across many African settings and may even migrate to other countries to seek for better wages ([Adam et al., 2025](#)). [Chang et al. \(2023\)](#) have also highlighted this concern, and this may affect nursing practice towards patient care and safety.

Interestingly, 46 (59.0%) of the study population reported that nurses work in favorable working conditions. This is contrary to a study carried out by [Dikmen et al. \(2018\)](#) and [Ayhan et al. \(2015\)](#), who found working environments to be generally poor in similar settings. A favorable working condition may improve healthcare and practice, which may improve recovery time and compliance with medical healthcare procedures by patients. More so, the number of nurses per shift was small to carry out the task and the majority, 60 (65.4%). This is in line with the study carried out by [McMillan et al. \(2018\)](#) in similar settings. Limited nurses per shift will definitely influence nurses' attitudes. The Buea Regional Hospital is known to host so many patients per day, and this could influence nurses' attitudes towards holistic patient care.

4.1. Conclusions

Nurses generally showed a positive attitude towards holistic patient care at the Buea Regional Hospital. However, it also exposes systemic challenges that could compromise service quality if left unaddressed. Implementing the policy recommendations and practical steps discussed here will not only strengthen nursing practice but also improve patient outcomes and overall healthcare delivery in the region.

4.2. Recommendations

- Hospital Management should improve supervision, mentorship, and performance evaluation frameworks.
- Workload Management Tools, such as shift rotation plans, break policies, and task delegation strategies, can be developed to ease the burden on nurses.
- Recognition and Reward Systems may be implemented to acknowledge exceptional nursing care, thereby boosting morale.
- Patient Feedback Mechanisms should be institutionalized to consistently assess patient satisfaction and identify areas of improvement.

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Author's Contributions

HFM conceived, designed, supervised the study and major contributions and performed statistical analysis and drafted the manuscript, and BAM participated in designing the project and carried out data collection in the field. WCA, HLP, VNN and LBA contributed to the revision of the manuscript. All authors read and approved the final manuscript.

Availability of Data and Materials

All datasets generated and analyzed during the study are presented in the paper.

Conflicts of Interest

The authors declare that they have no competing interests.

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