

Patients' perceptions and satisfaction with the quality of health care services provided at Mbeya Zonal Referral Hospital, Tanzania

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Abstract

Background: Patient satisfaction is critical to the healthcare industry, especially in today's competitive environment. The concept of patient satisfaction continues to evolve, and hospitals are employing various strategies to enhance patient care and operational efficiency. Understanding patients' views on the services they receive helps identify key areas that may need improvement. This study aimed to assess patients' perceptions and satisfaction regarding the quality of healthcare services provided at Mbeya Zonal Referral Hospital.

Methods: A cross-sectional study was conducted from May to June 2024 at the patients' waiting areas for out-patients and wards for in-patients of different Mbeya Zonal Regional Hospital departments, involving adult patients awaiting imaging procedures. Structured questionnaires with informed consent were used to collect data. The questionnaire collected demographic data, perceptions, and satisfaction with the services provided. Descriptive statistics were used to analyse data. The association between levels of perceptions and satisfaction with participants' demographic factors were calculated.

Results: Of the 245 respondents, 169 (69.26%) had a positive perception of the quality of healthcare services, and 161 (66.53%) were satisfied with the services provided. Being married was significantly associated with a lower likelihood (AOR=0.260, 95% CI [0.096-0.424], p=0.025) of having a positive perception of healthcare services compared to being single. Similarly, private sector employees (AOR=0.262, 95% CI [0.121-0.403], p=0.013) and unemployed individuals (AOR=0.390, 95% CI [0.224-0.556], p=0.027) were less likely to have a favourable perception compared to the self-employed.

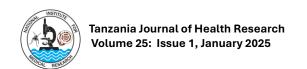
Conclusion: Approximately two-thirds of the participants had a positive perception and were satisfied with the healthcare services at Mbeya Zonal Referral Hospital. Marital and employment status significantly influenced patients' perceptions and satisfaction levels. To enhance patient perception and satisfaction, healthcare workers should address patient needs and improve care. Key areas for improvement include communication skills (compassion, politeness, and active listening), availability of essential drugs, and clinicians' prescription practices.

Keywords: Patients' perceptions, patients' satisfaction, health care, Mbeya Zonal Referral Hospital

Introduction

Patient satisfaction is crucial to the healthcare industry, particularly in today's competitive environment. The concept of patient satisfaction is evolving, with hospitals employing various strategies to enhance patient care institution efficiency. Understanding patients' perceptions of the services they receive can help pinpoint areas that need improvement (Patrick Olanrewaju et al., 2020). Improving patient satisfaction and healthcare service quality often requires a multidisciplinary approach, combining patient feedback with expert input. Exploring patient satisfaction can serve as a vital tool for enhancing service quality. Patients' satisfaction with

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healthcare is also linked to their continued use of services, adherence to medical advice, and overall improvement in the coverage and effectiveness of care (Virk et al., 2013). Research has also shown that certain socio-demographic factors, such as age, residence, and the number of outpatient departments visited, can significantly influence patient satisfaction (Jain et al., 2016). Satisfaction levels with healthcare services provided in different departments vary based on these characteristics.

In healthcare, patient satisfaction is defined as a combination of experiences, expectations, and perceived needs. It is the subjective assessment of a patient's cognitive and emotional responses based on the gap between their expectations of ideal care and their experience of the provided care. There is a strong link between how patients perceive the quality of healthcare services and their overall satisfaction. Healthcare providers can only fully meet patient expectations if they understand what patients mean by "quality," and this understanding is essential for a hospital's success. Therefore, identifying the dimensions of quality that impact patient satisfaction is crucial (Wang et al., 2020). A study conducted in 2018 at a tertiary hospital in Southwest Nigeria found that only 23.10% of respondents were satisfied with the quality of healthcare, while 29.60% were dissatisfied, and 47.30% were uncertain. This highlights the potential gap between patient's and healthcare professional's perceptions of quality care, making it necessary to understand the concept of quality from the patient's perspective to deliver the desired level of care (Obi et al., 2018).

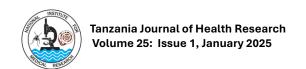
In Tanzania, satisfaction levels varied across different hospitals. At Muhimbili National Hospital, satisfaction was high (90-95%) (Muhondwa et al., 2008), while it was moderate at Kilosa District Hospital in Morogoro (70%) (Juma & Manongi, 2009). However, at Mwananyamala Referral Hospital, satisfaction levels were below 50% (GA et al., 2017). When patients' expectations of healthcare quality are not met, they may seek treatment outside formal healthcare systems, leading to poor health-seeking behaviours, reduced adherence to treatments, and ultimately increased morbidity and mortality (Arshad et al., 2012). A 2020 study in public hospitals in Tanzania confirmed that healthcare service quality has a positive and significant impact on patient satisfaction (Wang et al., 2020). The quality-of-service delivery plays a key role in patient satisfaction and recovery. If services are of poor quality, patients are more likely to be dissatisfied, which can prolong recovery time. The study also found a strong link between patients' service expectations and their satisfaction. When patients expect good service, it positively influences their satisfaction with the care they receive (GA et al., 2017).

In Tanzania, the healthcare system comprises both public and private sectors, with many patients opting for public services due to affordability and accessibility. Patients arrive with certain expectations, and their satisfaction or dissatisfaction is shaped by their actual experiences. However, the effectiveness of the healthcare system largely depends on service quality, which is often overlooked, particularly in developing countries (Subedi & Uprety, 2015). Despite ongoing efforts to improve healthcare services, there remains a gap in understanding patient perceptions and satisfaction with the quality of care at referral hospitals in the southern highlands of Tanzania. This lack of understanding hinders the effective delivery of healthcare services and diminishes efforts to provide patient-centred care and improve health outcomes. Therefore, this study aimed to assess patients' perceptions and satisfaction with the quality of health care services provided at Mbeya Zonal Referral Hospital, Mbeya Region, Tanzania.

Methods

Study area and targeted population

The study was conducted at Mbeya Zonal Referral Hospital, a tertiary care and teaching hospital affiliated with the University of Dar es Salaam, Mbeya College of Health and Allied Sciences, located in Mbeya region, Tanzania. (UDSM-MCHAS). According to the East African Health Research Commission, the hospital serves an estimated eight million people across six regions:



Mbeya, Njombe, Iringa, Rukwa, Ruvuma, and Katavi, which together have a population of approximately 7,967,700 people (EAHRC, 2024). Mbeya Zonal Referral Hospital provides specialized care for patients with various medical needs that exceed the capabilities of primary healthcare facilities in the region. The hospital consists of twenty departments and serves as the primary referral centre for cases from nearby regional hospitals in the southern highlands. Its services include units for surgery, general medicine, psychiatry, paediatrics, obstetrics, maternal health, dental care, ophthalmology, and otorhinolaryngology.

Study Design

This was a hospital-based descriptive cross-sectional study conducted between May and June 2024. The inclusion criteria encompassed all adult inpatients and outpatients in waiting areas and wards at the Mbeya Zonal Referral Hospital, who provided consent by signing a consent form. Participants were required to be able to read and write and be mentally and physically fit. Exclusion criteria included adults unable to provide consent, those unable to read and write and those who were not mentally or physically fit.

Sample size estimation

The sample size was calculated based on the number of patient encounters in January 2024, with a 5% margin of error, a 95% confidence interval, and the 20% highest proportion from a previous study (Ga et al., 2017). The necessary sample size was 245.

This was calculated using the formula:

 $n = (1.96/ w)^2 p (1-p)$

Where: n = sample size (minimum sample size)

W = margin of error on P (3%) = 0.03

p = the highest proportion 20% = 0.20.

Therefore, $n = (1.96)^2 \times 0.2 \times 0.2 / (0.05)^2 = 245.4$

The sample size used was 245.

Sampling procedure

Stratified random sampling was employed to ensure representation from diverse patient groups. Strata included inpatients, outpatients, and different medical departments (e.g., medical, surgical, paediatric). Random samples were drawn from patients attending each stratum to ensure a well-balanced representation.

Data collection

Data collection was done using a structured questionnaire to capture qualitative participant data. The questionnaire was divided into three parts: social demographic data, assessing perception and satisfaction of patients with health care services at a referral zonal hospital.

Data management and analysis

The data were inserted in an Excel format database and compiled, summarized and analyzed using the statistical software Stata Version 23. Descriptive statistics such as frequency (%) for categorical and mean and standard deviation for numerical data were used to summarise the data. The analysis determined the association between perceptions and satisfaction with participants' demographic factors, where the association odds ratio and respective p-values were calculated. The p=0.05 was used as a cut-off point to test statistical significance between variables.



Ethical Considerations

Ethical approval for this study was obtained from the University of Dar es Salaam's Department of Medical Research and Field Studies Institutional Review Board (IRB) (REF: TBR-2020-04-12010). Permission to conduct research at Mbeya Zonal Regional Hospital was obtained from the Executive Director of Mbeya Zonal Referral Hospital. Participants' rights to privacy, anonymity and confidentiality were implemented. Before participation, voluntary consent was sought from all participants. Each participant received a written information sheet detailing the study's purpose, potential benefits, and a statement that there were no foreseeable risks. Confidentiality was maintained throughout the research process, including data collection, management, and report writing, ensuring that participants' names and personal information were not disclosed to any third party.

Results

Socio-demographic characteristics of study participants

A total of 246 participants were enrolled in this study, yielding a response rate of 100%. Of these, 117 (47.6%) were males, and 129 (52.4%) were females. The mean age of participants was 37.82 years (SD = 14.33). Approximately half of the participants (52.9%) were aged 34 years or younger. A majority (59.4%) were married. Most participants had attained a secondary education level (41.2%), and a significant proportion were self-employed (37.4%) (**Table 1**).

Table 1: Demographic characteristics of study participants (N=245)

Variable	Frequency (n)	Percentage (%)
Age		
≤ 34 years	130	52.85
35-54 years	77	31.30
≥ 55 years	39	15.85
Sex		
Male	117	47.56
Female	129	52.44
Marital status		
Single	75	30.49
Married	146	59.35
Divorced	16	6.50
Widow/Widower	9	3.66
Education level		
University/college	95	38.78
Secondary	101	41.22
Primary	36	14.69
No formal education	13	5.31
Employment		
Self-employee	92	37.40
Government employee	49	19.92
Private sector employee	27	10.98
Unemployed	78	31.71

Patient's perception of healthcare services at Mbeya Zonal Referral Hospital (MZRH)

Among the 244 patients who responded, 169 (69.3%) had a positive perception of the quality of healthcare services at MZRH, while 75 (30.7%) reported a negative perception (**Figure 1**). **Table 2** provides a detailed summary of patient responses regarding the quality of services offered at MZRH. Of the 248 participants, 214 (87.4%) agreed that the medical services were comprehensive and effectively addressed their health needs. Almost all patients (245, 99.6%)

expressed satisfaction with the cleanliness and hygiene standards of the hospital facilities. Approximately half of the participants (54.7%) felt that the medical staff communicated effectively regarding their treatment and care. Similarly, 56.5% of patients were satisfied with the waiting times for appointments and consultations.

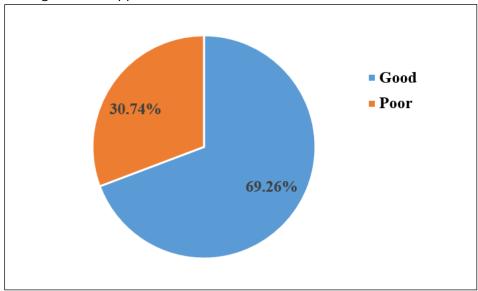
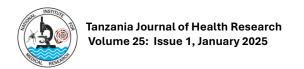


Figure 1: Overall patients' perceptions with the quality of health services provided at MZRH

Table 2: Patients perception with health care services provided at MZRH

S/N	Variable	Frequency (n)	Percentage (%)		
1	In your opinion, are the medical services provided at MZRH comprehensive and effective in addressing your health needs?				
	Completely agree	130	53.06		
	Partially agree	84	34.29		
	Neutral	25	10.20		
	Partially disagree	4	1.63		
	Completely disagree	2	0.82		
2	How would you rate the cleanliness and hygiene standards of the hospital facilities?				
	Excellent	79	32.11		
	Good	138	56.10		
	Average	28	11.38		
	Poor	0	0		
	Very Poor	1	0.41		
3	Do you feel that the medical staff at MZRH communicate effectively with patients regarding their treatment and care?				
	Yes	134	54.69		
	Sometimes	104	42.45		
	No	7	2.86		
4	Are you satisfied with the waiting times for appointments and consultations at MZRH?				
	Very satisfied	16	6.50		
	Satisfied	123	50.00		
	Neutral	41	16.67		
	Dissatisfied	35	14.23		
	Very dissatisfied	31	12.60		



Patients Satisfaction with Healthcare Services at MZRH

Among the 244 participants, 161 (66.5%) reported being satisfied with the healthcare services provided at MZRH, while 81 (33.5%) expressed dissatisfaction (**Figure 2**). **Table 3** provides a detailed summary of participants' satisfaction levels. A total of 189 participants (77.1%) were satisfied with the attention and care they received from the medical staff during their visits. Additionally, 209 participants (85.0%) felt that their privacy and confidentiality were respected during interactions with the medical staff. Satisfaction with the overall treatment outcomes was reported by 113 participants (46.3%). Finally, 208 participants (85.3%) were satisfied with the overall care received at MZRH.

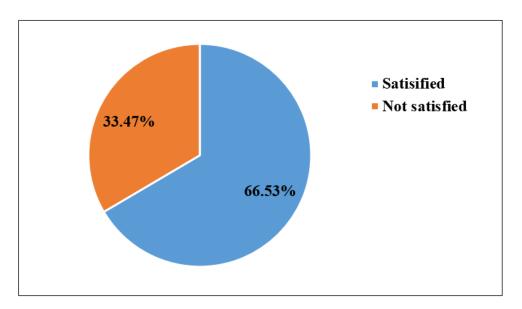


Figure 2: Overall patients' satisfaction with healthcare services provided at MZRH

Table 3: Patients satisfaction with health care services provided at MZRH

S/N	Variable	Frequency (n)	Percentage (%)	
1	How satisfied are you with the level of attention and care provided by the medical staff during your visits to MZRH?			
	Very satisfied	73	29.80	
	Satisfied	116	47.35	
	Neutral	33	13.47	
	Dissatisfied	18	7.35	
	Very dissatisfied	5	2.04	
2	Do you feel that your privacy and confidentiality are respected during your interactions with the medical staff at MZRH?			
	Completely satisfied	145	58.94	
	Somewhat satisfied	64	26.02	
	Neutral	19	7.72	
	Somewhat dissatisfied	14	5.69	
	Completely dissatisfied	4	1.63	
3	How satisfied are you with the overall outcome of your treatment and care received at MZRH?			
	Yes, always	113	46.31	
	Sometimes	118	48.36	
	No	11	4.51	
	Never	2	0.82	



4	How satisfied are you with the overall outcome of your treatment and care received at MZRH?			
	Very satisfied	72	29.51	
	Satisfied	136	55.74	
	Neutral	22	9.02	
	Dissatisfied	12	4.92	
	Very dissatisfied	2	0.82	

Association between perception, satisfaction, and participants' demographic factors

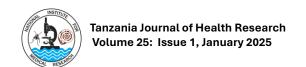
In multivariate analysis (**Table 4**), marital status was significantly associated with participants' perceptions of healthcare quality. Being married was associated with a lower likelihood of having a better perception of healthcare services at MZRH than being single (AOR = 0.260, 95% CI: 0.096-0.424, p = 0.025). Employment status also showed a significant association; being a private sector employee was linked to a reduced likelihood of good perception of healthcare services compared to being self-employed (AOR = 0.262, 95% CI: 0.121-0.403, p = 0.013). Similarly, being unemployed was significantly associated with a lower chance of perceiving the quality of healthcare services positively (AOR = 0.390, 95% CI: 0.224-0.556, p = 0.027).

Table 4: Association between levels of perceptions and satisfaction with participants' demographic factors

	Perception		Satisfaction			
	Prevalence			Prevalence of		
Variable	of good	AOR	P-value	satisfied	AOR	P-value
	perception	(95% CI)		patients	(95% CI)	
	n (%)	(n (%)	,	
Age						
≤ 34 years	85 (66.4%)	Ref		84 (66.1%)	Ref	
35-54 years	53 (68.8%)	1.812	0.152	47 (61.0%)	1.058	0.886
≥ 55 years	31 (69.3%)	2.740	0.069	30 (79.0%)	1.977	0.199
Sex						
Male	81 (69.2%)	Ref		76 (66.1%)	Ref	
Female	88 (69.3%)	0.927	0.807	85 (67.0%)	0.980	0.947
Marital status						
Single	54 (73.0%)	Ref		22 (71.2%)	Ref	
Married	96 (66.2%)	0.260	0.025*	90 (62.1%)	0.423	0.054
Divorced	12 (75.0%)	0.710	0.654	11 (68.8%)	0.441	0.261
Widow/Widower	7 (77.8%)	0.459	0.430	8 (100%)	-	-
Education level						
University/college	58 (61.1%)	Ref		53 (56.4%)	Ref	
Secondary	74 (74.8%)	1.493	0.262	70 (71.4%)	1.943	0.062
Primary	24 (66.7%)	0.904	0.844	27 (75.0%)	2.198	0.135
No formal education	13 (100%)	-	-	11 (84.6%)	3.900	0.122
Employment						
Self-employee	71 (78.9%)	Ref		63 (71.6%)	Ref	
Government	31 (63.3%)	0.491	0.135	26 (53.1%)	0.696	0.421
employee						
Private sector	14 (51.9%)	0.262	0.013*	19 (70.4%)	1.379	0.559
employee						
Unemployed	53 (68.0%)	0.390	0.027*	53 (68.0%)	0.678	0.342

^{*}P<0.05, Statistically significant; AOR, Adjusted Odds Ratio; CI, Confidence Interval

Discussion



This study assessed patients' perception and satisfaction with the healthcare services provided at Mbeya Zonal Referral Hospital (MZRH). The response rate of 100% was higher compared to similar studies, such as one in Saudi Arabia with a response rate of 91.2% (Al-Rubaish et al., 2011) and another in Karachi with 92.2% (Hussain et al., 2018). In this study, 69.3% of patients reported a positive perception of the quality of healthcare services at MZRH. These findings align with a study conducted at Mwanayamala Hospital in Dar es Salaam, Tanzania (Khamis & Njau, 2014). However, a study at Muhimbili National Hospital in Tanzania reported that patients perceived services at Muhimbili National Hospital as superior (Muhondwa et al., 2008).

This study's overall patient satisfaction level was 66.5%, slightly higher than the 55.5% reported in Pakistan (Ansar et al., 2021) in a study of tertiary government hospitals. Additionally, our findings exceed those from a study in Ethiopia, where 46% of patients were satisfied with the healthcare services provided at tertiary hospitals (Asamrew et al., 2020). However, an investigation in Iran found a much higher satisfaction rate of 83% among patients at a tertiary care hospital (Hajifathali et al., 2008). Differences in sample size, assessment tools, and the nature of healthcare facilities may explain these discrepancies. Despite the relatively high satisfaction levels observed in this study, they remain lower than those reported at Muhimbili National Hospital, where most patients expressed satisfaction with the services received (Muhondwa et al., 2008). Muhimbili National Hospital, as a tertiary referral hospital at the apex of Tanzania's healthcare system, likely provides a higher level of care and services than lower-level facilities such as Mbeya Zonal Referral Hospital.

In this study, marital status was significantly associated with patients' perceptions of healthcare quality. Married participants were less likely to report a positive perception of the quality of services compared to single participants (AOR = 0.260, p = 0.025). This contrasts with studies in Turkey, where no significant association between marital status and satisfaction was found (Akin & Erdogan, 2007; Ozturk et al., 2020). The discrepancy may stem from differences in participant demographics and sample sizes. Unmarried individuals may face barriers to healthcare access, such as limited insurance or disposable income, and may engage in riskier health behaviours, potentially influencing their perception of healthcare services (Waite, 1995).

Regarding employment status, this study found that being unemployed was associated with a lower likelihood of a positive perception of healthcare services (AOR = 0.390, p = 0.027) than being self-employed. These results are consistent with studies in Pakistan (Arslan et al., 2012) and Turkey (Ozturk et al., 2020), which showed that individuals with higher income levels were more satisfied with their nursing care and had better perceptions of healthcare services. However, other studies (Akin & Erdogan, 2007; Ipek Coban & Kasikci, 2010; Nilüfer Tuğut, 2024; Ozlu et al., 2010) found no significant association between employment status or income levels and patient satisfaction.

This study had limitations. First, a cross-sectional study cannot establish causal relationships between the variables of interest. Second, patient satisfaction was assessed based on self-reported responses, which did not account for changes in the technical quality of healthcare services. Self-reporting is prone to response bias, which may have influenced the accuracy of the participants' perceptions and satisfaction levels.

Conclusion

In two-thirds of the study participants, patients' perception and satisfaction with healthcare services provided at Mbeya Zonal Referral Hospital were reported to be good. Marital status and employment status were significant demographic factors that affected the perceptions and satisfaction of the study participants about the healthcare services at Mbeya Zonal Referral Hospital. To create an impact of positive perception and reasonable satisfaction from patients, healthcare workers need more efforts to address the needs of patients while optimizing care. The key areas of concern should include improving communication skills, showing compassion,



politeness, and active listening, the availability of essential drugs, and improving clinicians' skills. Furthermore, healthcare policies should focus on patients' interests on the ground, as it indirectly improves patient satisfaction and perception. Future research should focus on the facility-based factors that influence patients' perceptions and satisfaction.

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Authors' contributions

ECT conceived the study, collected data, and performed analysis. TEN and TBR provided data interpretation and wrote and approved the manuscript.

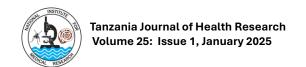
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Competing interests: None

Availability of data and material: This published article includes all data generated or analysed during this study.

References

- Akin, S., & Erdogan, S. (2007). The Turkish version of the Newcastle Satisfaction with Nursing Care Scale used on medical and surgical patients. *Journal of Clinical Nursing*, 16(4). https://doi.org/10.1111/j.1365-2702.2006.01583.x
- Al-Rubaish, A. M., Rahim, S. I. A., Abumadini, M. S., & Wosornu, L. (2011). Academic job satisfaction questionnaire: Construction and validation in Saudi Arabia. *Journal of Family and Community Medicine*, *18*(1). https://doi.org/10.4103/1319-1683.78630
- ANSAR, F., NAVEED, H., KHATTAK, A., & SAAD, M. (2021). Perception of patients regarding quality of healthcare services at public and private tertiary care hospitals. *Innovare Journal of Medical Sciences*. https://doi.org/10.22159/ijms.2021.v9i3.41334
- Arshad, S., Andrabi, H., Hamid, Shamila, & Masooda, S. (2012). Measuring patients satisfaction: a cross sectional study to improve quality of care at a tertiary care hospital. *East African Journal of Public Health*, 9(1).
- Arslan, S., Nazik, E., Tanriverdi, D., & Gürdil, S. (2012). Determining the level of satisfaction of patients in nursing care and health services. *TAF Preventive Medicine Bulletin*, *11*(6). https://doi.org/10.5455/pmb.1-1328186255
- Asamrew, N., Endris, A. A., & Tadesse, M. (2020). Level of Patient Satisfaction with Inpatient Services and Its Determinants: A Study of a Specialized Hospital in Ethiopia. In *Journal of Environmental and Public Health* (Vol. 2020). https://doi.org/10.1155/2020/2473469
- EAHRC. (2024). East African Health Research Commission. Accessed on April 2024.
- GA, O., IB, M., & RN, M. (2017). Patients' Level of Satisfaction with the Health Care Services Received at Outpatient Departments in Kilimanjaro Region, Tanzania. *Journal of Patient Care*, 03(01). https://doi.org/10.4172/2573-4598.1000124
- Hajifathali, A., Ainy, E., Jafari, H., Moghadam, N. M., Kohyar, E., & Hajikaram, S. (2008). Inpatient satisfaction and its related factors in Taleghani University Hospital, Tehran, Iran. *Pakistan Journal of Medical Sciences*, 24(2).
- Hussain, M., Rehman, R., Ikramuddin, Z., Asad, N., & Farooq, A. (2018). Inpatient satisfaction at different public sector hospitals of a metropolitan city in Pakistan: a comparative cross-sectional study. *Hospital Practice* (1995), 46(2). https://doi.org/10.1080/21548331.2018.1427410



- Ipek Coban, G., & Kasikci, M. (2010). Reliability and validity of the scale of patient perception of hospital experience with nursing care in a Turkish population. *Journal of Clinical Nursing*, 19(13–14). https://doi.org/10.1111/j.1365-2702.2009.03125.x
- Jain, A., Mishra, N., & Pandey, C. (2016). A study to assess patient satisfaction in out patient department of a tertiary care hospital in north India. *International Journal of Community Medicine and Public Health*. https://doi.org/10.18203/2394-6040.ijcmph20151586
- Juma, D., & Manongi, R. (2009). Users' perceptions of outpatient quality of care in Kilosa District Hospital in central Tanzania. *Tanzania Journal of Health Research*, 11(4). https://doi.org/10.4314/thrb.v11i4.50176
- Khamis, K., & Njau, B. (2014). Patients' level of satisfaction on quality of health care at Mwananyamala hospital in Dar es Salaam, Tanzania. *BMC Health Services Research*, 14(1). https://doi.org/10.1186/1472-6963-14-400
- Muhondwa, E. P., Leshabari, M. T., Mwangu, M., Mbembati, N., & Ezekiel, M. J. (2008). Patient satisfaction at the Muhimbili National Hospital in Dar es Salaam, Tanzania. *East African Journal of Public Health*, 5(2).
- Nilüfer Tuğut, Z. G. (2024). Nursing Service Satisfaction Level Of Patients At Gynecology And Obstetrics Unit Of A University Hospital And Some Affecting Factors. *Journal of Education and Research in Nursing*, 21(3), 38–44.
- Obi, I. E., Ndu, A. C., Agu, K. A., Omotowo, B. I., Agunwa, C. C., & Idoko, A. C. (2018). Patient satisfaction with services at a tertiary hospital in south-east Nigeria. *Malawi Medical Journal*, 30(4). https://doi.org/10.4314/mmj.v30i4.10
- Ozlu, Z. K., Ozer, N., Arslan, S., & Cantekin, I. (2010). Satisfaction of patients staying in day surgery clinic from nursing services. *Pakistan Journal of Medical Sciences*, 26(2).
- Ozturk, H., Demirsoy, N., Sayligil, O., & Florczak, K. L. (2020). Patients' Perceptions of Nursing Care in a University Hospital. *Nursing Science Quarterly*, *33*(1). https://doi.org/10.1177/0894318419881798
- Patrick Olanrewaju, O., Omoseni Oyindamola, A., Oluyemi, J., Funmilayo Joy, G.-F., Oluwatosin Idowu, O., & Oladotun Ayotunde, O. (2020). Patient Satisfaction with Healthcare Service Delivery in an ART Treatment Centre in Nigeria. *International Journal of HIV/AIDS Prevention, Education and Behavioural Science*, 6(2). https://doi.org/10.11648/j.ijhpebs.20200602.13
- Subedi, D., & Uprety, K. (2015). Patients' satisfaction with hospital services in Kathmandu. Journal of Chitwan Medical College, 4(3). https://doi.org/10.3126/jcmc.v4i3.11936
- Virk, A., Kalia, M., Gupta, B. P., & Singh, J. (2013). A Study to evaluate Patient expectation and satisfaction in a tertiary care teaching Hospital. *Healthline*, 4(2).
- Waite, L. J. (1995). Does marriage matter? *Demography*, 32(4). https://doi.org/10.2307/2061670
 Wang, W., Malilo, N. H., & Ibrahim, M. (2020). Measuring patients' perceived service quality of healthcare services delivery in public hospitals in Tanzania. *International Journal of Economics*, Commerce and Management, 8(2).