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Multifactorial Determinants of Patient Satisfaction Among Medical and Surgical Patients at Nakuru Level 5 Hospital Amidst the Covid-19 Pandemic: A Cross-Sectional Study

Brenda Cheruto[1], Valerie Suge[1], Juliet Nthenya[1]; and Cynthia Peinan[1]

[1]Department of Nursing, School of Medicine and Health Sciences, Kabarak University.

[1]Corresponding Author: valeriesuge@gmail.com

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Abstract

Patient satisfaction is an indicator of quality health care provision and an outcome that is largely dynamic and multifaceted. It is an established standard that evaluates achievement of patient's needs and expectations. During the COVID 9 pandemic, patient care experienced unique challenges and concerns that were occasioned by the enforcement of stringent infection prevention and control measures. This study sought to assess determinants of patient satisfaction at Nakuru level 5 Hospital amidst COVID – 19 pandemics. NL5H is one of the county's teaching and referral hospital in Kenya. A Descriptive cross-sectional design was adopted. Sixty-six randomly selected participants who comprised of hemodynamically stable patients admitted in April and May 2022 were selected and interviewed. Data were collected and entered to Microsoft Excel 2019 and exported to SPSS version 24 for analysis. Descriptive statistics such as frequencies and percentages were used. Chi square tests and logistic regression were used to assess factors associated with patients' satisfaction. Of 66 participants, 51 (76%) were generally satisfied. Gender, education level, waiting time, health care workers' communication behavior, patient referral and level of patient trust had significant association with patient satisfaction at p <0.05 level of significance. On patient related factors, Female participants 58.8% (n= 51) were more satisfied though married male patients (41.1% n=51) who resided in urban areas and those earning less than Ksh.10,000 were least satisfied. At least 54.5% n=66 paid cash to access health care. On health care- related factors 89.6% n=51 participants were satisfied with availability of drugs in the facility however, 65.5% expressed dissatisfaction due to long waiting times of more than one-hour and 65.7% lacked explanation of their health status and treatments options by health care workers. On COVID-19 prevention factors, more than 92% reported satisfaction on availability and adherence to infection prevention measures such as availability of water and soap for handwashing, temperature checks at the hospital entry points, and maintenance of physical and social distancing. More than half, 64.2% of health care workers did not educate participants about COVID 19 and importance of vaccination while 91% n=66 was not satisfied with inadequate provision of masks to individual patients admitted in the wards. Among the 66 participants only 41.8% had been vaccinated against COVID 19. Considering the findings, the institution should implement strategies such as adoption of standard emergency department triage protocol that would lead to effective sorting of patients and hence reduction of patient turnaround time. Regular customer satisfaction assessment and targeted customer feedback plan should be introduced in the hospital and health talk and COVID 19 vaccination campaigns will enhance awareness on COVID 19 disease prevention.

Keywords: Patients, patient satisfaction, determinants, COVID 19

INTRODUCTION

Evaluating the quality of healthcare services provided in hospitals is often measured through patient satisfaction. This measure reflects the perception of healthcare recipients on various aspects of their service experience and how well it meets their expectations(Dunsch et al., 2018). Patient satisfaction is a subjective assessment of the quality and effectiveness of care provided by healthcare organizations and their providers, making it a valuable indicator of healthcare service quality and effectiveness (Tsai et al., 2015). In Kenya, the reported prevalence of in patient satisfaction with healthcare services is 67.8% (O'Connor et al., 2018). Ensuring high levels of patient satisfaction is crucial for the success of healthcare organizations. It has been shown to have a significant impact on patient recovery, and it is influenced by emotional expectations surrounding the healthcare experience. Patient satisfaction can be described as the reaction of healthcare recipients to salient aspects of their experience, expectations, and preferences of the service provided (Kucukarslan and Nadkarni, 2008).

Patient satisfaction has increasingly become a crucial metric for evaluating the quality of healthcare services worldwide. Patients have become more knowledgeable about healthcare, demanding higher standards of medical effectiveness and expenditure (Gădălean et al., 2011). Studies have shown that higher levels of patient satisfaction are associated with better outcomes, including fewer complaints, fewer medical disputes, and better patient recovery rates (Dufrene, 2000; Farzianpour et al., 2015). Globally, developed countries such as the United States, Canada, and the United Kingdom have higher patient satisfaction rates compared to developing countries. In the US, the national average patient satisfaction rating is 74.6%, with hospitals scoring an average of 3.3 out of 5 stars in the Hospital Consumer Assessment of Healthcare Providers and Systems (Raines, 2013). Similarly, Canada has a national average in patient satisfaction rate of 76%, while the UK has a 63% overall patient satisfaction rating, according to the Care Quality Commission (DeCourcy et al., 2012). In Africa, patient satisfaction levels vary significantly across countries. Key African countries such as South Africa and Nigeria have reported patient satisfaction levels ranging from 40% to 65% (Dunsch et al., 2018). In Kenya, the prevalence of inpatient satisfaction with healthcare services is reported to be 67.8%, according to a study by (Kewi et al., 2018).

Patient satisfaction is a complex issue influenced by various factors, including demographic and socioeconomic factors, health status, and patient expectations, as well as healthcare service-related factors like facility quality and staff performance (Batbaatar et al., 2017). However, it is often difficult to gather local data to better understand the unique challenges faced by healthcare providers and patients in a given region. The COVID-19 pandemic made it even more challenging to evaluate patient satisfaction levels, as treatment adherence and satisfaction was reported to have decreased due to pandemic-related issues (Jiwani et al., 2021). For instance, in Kenya, where patient satisfaction with healthcare services was previously reported to be 67.8%, the pandemic caused significant disruptions to healthcare systems, making it difficult to accurately assess patient satisfaction. In South Africa, a survey of public hospital patients found that only 46% of patients were satisfied with the quality of healthcare services provided, with the pandemic exacerbating issues related to long waiting times and poor communication with healthcare providers. Similarly, in Tanzania, a study conducted at Muhimbili National Hospital found that while overall patient satisfaction levels were high, patients were dissatisfied with long waiting times, negative staff attitudes, investigation charges, and high treatment costs (Muhondwa et al., 2008). The pandemic has likely further exacerbated these issues, as healthcare systems have been strained and resources have become more limited.

Regular patient satisfaction metrics are essential for effective patient management, yet many healthcare systems in low and middle-income countries (LMICs) like Kenya suffer from a lack of consistent data. The COVID-19 pandemic exacerbated this issue, further limiting the availability of patient satisfaction data. Addressing this issue is crucial for ensuring that healthcare providers are meeting the needs of patients and delivering quality care. Therefore, we conducted an assessment of the multifactorial determinants of patient satisfaction at the Nakuru Level 5 Hospital during the COVID-19 period.

METHODS

Study Design

The study utilized a descriptive cross-sectional survey design by Setia (2016) to investigate the multifactorial determinants of patient satisfaction at Nakuru Level 5 Hospital amidst the COVID-19 pandemic. The choice of a descriptive cross-sectional survey design was justified due to its ability to collect data at a single point in time, providing a snapshot and a point prevalence of the level of patient satisfaction at the NL5H. This design facilitated the efficient collection of data from a diverse group of patients within a limited time frame. Moreover, the cross-sectional survey design allowed for the evaluation of the proportion of those patients who were either satisfied or dissatisfied establishing preliminary evidence for a causal relationship between patient satisfaction and the various factors, including patient's demographics, their socioeconomic status, healthcare service delivery-related factors and COVID-19 prevention factors.

Study Location

The study was conducted at Nakuru Level 5 Hospital, which is a County public referral hospital located in Nakuru County, Kenya. It is one of the largest hospitals in the county and provides a wide range of healthcare services to patients from Nakuru and surrounding areas. The hospital is a key healthcare facility in the region, serving a large population of diverse socio-economic backgrounds. The hospital has been in operation for many years and has undergone several expansions and upgrades to enhance the quality of care provided. The hospital was chosen as the study location due to its central role in providing healthcare services to the local population, making it an ideal site to investigate the determinants of patient satisfaction during the COVID-19 pandemic.

Study Population

The study's target population consisted of male and female patients admitted to the medical and surgical wards at Nakuru Level 5 Hospital. The average number of patients admitted in the three purposively selected wards was 80, as recorded by the hospital in 2022. To represent the whole population of the area, the target population included patients admitted in the hospital's 4 medical wards and 2 surgical wards, with common conditions including respiratory, genitourinary, endocrine, gastrointestinal, and surgical conditions. To be eligible for participation in this study during the COVID-19 pandemic, patients needed to be 18 years or older, hemodynamically stable, and provide their consent. Patients who did not provide their consent, were under 18 years of age, or were hemodynamically unstable were excluded from the study.

Sample Size

The sample size was calculated using Fisher's formula, which took into account a satisfaction index of 56% obtained from a study conducted in Nyandarua County Referral Hospital (Katuti, 2018). The formula used was: $n = z^2pq/d^2$, where n represents the desired sample size, z is the standard normal deviate corresponding to a 95% confidence interval (1.96), p is the proportion of patients satisfied with inpatient services, q is 1-p, and d is the margin of error at a 95% confidence limit (0.05). The resulting sample size was 66, taking into account a finite population correction factor based on the average number of patients admitted in three purposively selected wards (80).

Sampling Methods

Purposive sampling was used to select the wards from a list of all the wards in the facility (Etikan et al., 2016). This method was chosen because the researchers wanted to include medical and surgical wards in an attempt to represent the whole population of the area. Simple random sampling was then used to select the respondents. The lottery method was used to sample out participants, giving everyone an equal chance of being chosen to participate in the study. Only those who picked "Yes" were selected to participate in the study. This method was chosen because it ensured a fair selection process that allowed all eligible participants to have an equal chance of being selected. The selected participants were then allowed to answer the researcher-administered questionnaires.

Data Collection Tools

To collect data, a researcher-administered questionnaire was utilized. A questionnaire is a standardized list of questions specifically prepared for a particular study. The questionnaire was deemed suitable because it enables the researcher to ask specific and more questions, and it is relatively easy to administer. The questions were designed in both open and closed-ended formats to allow for more comprehensive and diverse responses. The researcher ensured a higher response rate by supervising the completion of the questionnaire, provided adequate time for the respondents to answer the questions, ensured confidentiality, and minimized bias that could result from personal characteristics. The questions were structured with definite, concrete, and predetermined questions to enable a systematic and uniform approach to data collection.

Data Collection Procedure

The participants were provided with informed consent forms and a detailed explanation of the study's objectives by the principal investigators before obtaining their informed consent. The study participants were informed of their right to withdraw from the study at any time without providing a reason. A researcher-administered questionnaire was used to collect data, which consisted of the same questions presented in the same order and exact wording to all respondents to improve the questionnaire's validity and reliability. The questionnaire administration process took approximately 15 minutes. After data collection, the principal investigators checked the completeness and accuracy of each questionnaire. Incomplete questionnaires were shredded, while well-answered questionnaires were securely stored in a lock and key cabinet that only the researchers could access for later analysis. The ward in-charges were contacted to ensure that the participants' schedules for interviews aligned well with the care provision during both morning and afternoon shifts, which occurred at 11 AM and 3 PM daily throughout the study period so as to ensure participants dint risk missing out on planned care.

Data Analysis

The collected data were coded and entered to Statistical Package for Social Sciences (SPSS) software version 24 for analysis. Descriptive statistics were used to analyze the data and calculate the frequency distribution, percentages, mean and standard deviation. The satisfaction index was calculated as a percentage of the number of patients who were satisfied with inpatient services. A chi-square test and logistic regression was used to determine the relationship between the independent variables and patient satisfaction. The level of statistical significance was set at $p<0.05$. The results were then presented using tables, graphs, and charts.

Ethical Considerations

This study was conducted with strict adherence to ethical standards and regulations. Proposal clearance was sought from Nursing Department Research Committee Kabarak University. Ethical approval was obtained from Kabarak University Research Ethics Committee (KUREC) Approval number KUREC-090322 and a research permit from National Council for Science Technology and Innovation (NACOSTI)- The NACOSTI license number is NACOSTI/P/22/16868 and the Applicant Identification Number is 598801. The researchers also sought authority to conduct the study from Nakuru County obtained authorization letter with a reference number: NCG/CDPH/ST/VOL.1/2022/502. Approval and permission to collect data was sought from Nakuru Level 5 hospital administration with a reference number R&EC/PGH/NKU/VOL1/2021.The study participants gave informed consent before their involvement, and they were fully informed of the purpose of the study. To protect the privacy and confidentiality of the participants, the questionnaires were coded with serial numbers, and the data collected were stored securely. Furthermore, the researchers ensured that all necessary COVID-19 safety protocols were observed during the data collection process. They maintained social distancing of at least 1.5 meters, put on personal protective equipment, and sanitized themselves between interviews. The study was conducted in an orderly manner, starting with the medical wards and ending with the surgical wards. The researchers maintained scientific objectivity throughout the study, ensuring honesty and impartiality in their approach.

RESULTS

Factors Affecting Patient Satisfaction at Nakuru Level 5 Hospital

A total of 66 patients admitted both in the medical and surgical wards of NL5H in-patient department participated in the study. Out of the total study participants 51 (76%) were satisfied. Table 1 displays the frequency and percentage distribution of various factors among the study population. These factors include gender, age, education level, waiting time, availability of drugs, provision of information to the patient, and privacy and confidentiality. Among the 66 participants, 54.5% were female, while 45.5% were male. The majority of participants, accounting for 59% of the study population, were aged between 18-45 years, with 24% aged between 46-60 years, and 16.6% aged 60 years or older. Regarding education level, 10.6% of participants had no formal education, 27.3% had primary education, 30% had secondary education, and 31.8% had tertiary education. When it comes to waiting time, 34.8% of participants had a waiting time of below 1 hour, while 65.5% had to wait for more than 1 hour. Regarding the availability of drugs, the majority of participants (89.6%) reported that drugs were available, while only 9% did not have access to them. Concerning the provision of information to patients, 34.3% of participants reported that they received information, while 64.2% did not. Finally, in terms of privacy and confidentiality, 93.9% reported that privacy and confidentiality were ensured and maintained at all times, while 6.06% did not have their privacy and confidentiality maintained.

Table 1:

Factors Affecting Patient Satisfaction at Nakuru Level 5 Hospital During the Covid 19 Pandemic

Factor	Frequency	Percent
Gender		
Male	30	45.5
Female	36	54.5
Age (years)		
18-45	39	59
46-60	16	24
≥60	11	16.6
Education Level		
None	7	10.6
Primary	18	27.3
Secondary	20	30
Tertiary	21	31.8
Waiting Time		
≤1 hour	23	34.8
>1 hour	43	65.5
Availability of Drugs		
Yes	60	89.6 9.0
No	6	
communication		
Good	23	34.3 64.2

Factor	Frequency	Percent
Poor/fair	43	
Privacy and Confidentiality		
Yes	62	93.94 6.06
No	4	

COVID 19 Related Factors that Influence Patient Satisfaction at Nakuru Level 5 Hospital

Table 2 presents the frequency and percentage distribution of different variables related to COVID-19 among the study population. The variables include availability of water, soap, and hand sanitizers, physical distancing, use of gloves and masks by healthcare workers, provision of masks to patients, healthcare worker's knowledge about COVID-19, encouragement to get vaccinated, temperature taken, and COVID-19 vaccination status. Of the 66 participants, 98.5% reported having access to water, while 1.5% did not. 97% of participants had access to soap, while 3% did not. Similarly, 93.04% of participants had access to hand sanitizers, while 6.06% did not. In terms of physical distancing, 98.5% of participants reported practicing physical distancing, while 1.5% did not. Regarding the use of gloves and masks by healthcare workers, 92.5% of participants reported that healthcare workers wore gloves, while 6% did not. 98.5% of participants reported that healthcare workers wore masks, while 1.5% did not. Regarding knowledge about COVID-19, 34.3% of participants reported that healthcare workers explained about COVID-19, while 64.2% did not. 45.45% of participants reported that healthcare workers encouraged them to get vaccinated, while 54.55% did not. In terms of temperature taking, 97% of participants reported that their temperature was taken, while 1.5% did not. Finally, 41.8% of participants reported receiving the COVID-19 vaccination, while 56.7% did not.

Table 2:

COVID 19 Related Factors Influencing Patient Satisfaction at Nakuru Level 5 Hospital

Variable	Categories	Frequency	Percentage
Availability of water	Yes	66	98.5
	No	0	1.5
Availability of soap	Yes	65	97.0
	No	1	1.5
Availability of Hand-sanitizers	Yes	62	93.04
	No	4	6.06
Physical Distancing	Yes	66	98.5
	No	0	1.5
Health care worker wears gloves	Yes	64	92.5
	No	4	6.0
Masks given on Hospitalization	Yes	5	7.5
	No	61	91.0
Health care worker wears mask	Yes	66	98.5
	No	0	1.5
Health care worker sanitizes hands	Yes	43	65.16
	No	23	34.84
Health care worker explains about COVID-19	Yes	23	34.3
	No	43	64.2
Health care worker encourages patients to get vaccinated	Yes	30	45.45
	No	36	54.55

Temperature taken	Yes	65	97.0
	No	1	1.5
COVID-19 vaccination	Yes	28	41.8
	No	38	56.7

Table 3:

Multinomial Logistic Regression of Factors Associated with Patient's Satisfaction

Variable	OR (95% CI)	P-Value <0.05	AOR (95% CI)	P-Value <0.05
Age				
18-45				
46-60	0.90 (0.54-3.56)	0.76	1.22 (0.87-2.35)	0.65
>60	1.56 (1.23-4.87)	0.47	0.96 (0.45-2.67)	0.32
Gender				
Male				
Female	2.172 (0.614-7.684)	0.021*	1.987 (0.114-4.55)	0.013*
Education level				
No formal education				
Primary level	0.558 (0.158-2.45)	0	0.77 (0.238-3.645)	0.245
Secondary level	0.437 (0.113-1.682)	0.228	0.234 (0.212-2.354)	0.233
Tertiary level	0.129 (0.023-0.706)	0.018*	0.229 (0.013-1.706)	0.356
Waiting time				
>1 hour				
≤1 hour	0.317 (0.90-1.123)	0.04*	0.523 (0.402-2.657)	0.003*
Drugs availability				
No				
Yes	2.733 (0.789-9.473)	0.113	1.233(0.567-7.99)	0.233
Communication				
Poor/fair				
Good	0.481 (0.101-2.288)	0.013*	0.035 (0.134-3.887)	0.031*
Patient trust/ confidentiality				
No				
Yes	3.429 (0.442-7.590)	0.041*	2.249 (0.345-5.673)	0.019*

Note. **p-value <0.05. UOR: unadjusted Odds Ratio. AOR: Adjusted Odds Ratio*

To assess factors associated with patient's satisfaction logistic regression was conducted. Findings are summarized in Table 3. Gender, education level, waiting time, doctors' communication behavior, patient referral and level of patient trust had significant association with patient satisfaction at 0.05 level of significance independently. Females, those with tertiary level of education those who were attended to within 1 hour, those that perceived health care providers communication to be good and those who had trust with the health care provider were more likely to be satisfied with the services provided at the hospital.

After adjusting for the variables the following results were found. The likely hood of being satisfied with the services was 1.9 times higher in females than males (AOR=1.987 [95%CI=0.114-4.55] p-value = 0.013). The odds of being fully satisfied was 52.3% among those who were attended within 1 hour than those who were attended after 1hour (AOR=0.523 [95% CI=0.402-2.657] p-value = 0.003). Those who perceived health care provider communication to be good was 3.5% to be satisfied compared to those who perceived communication to be poor (AOR=0.035 [95% CI=0.134-3.887] p-value = 0.031). The odds patient satisfaction was 2.2 times higher among those who had trust with the health care providers than those who had no trust (AOR=2.249 [95% CI= 0.345-5.673] p-value = 0.019). Level of education was not found to be associated with patient's satisfaction.

DISCUSSIONS

Overall, 76% of patients were satisfied with the service delivery they received from the health facility. NL5H is one of the county hospitals in the region and currently a teaching and referral hospital that has been prepared and equipped to provide better care. This study aimed to identify patient-related factors that influence patient satisfaction and found that age, gender, residence, marital status, education level, and monthly income play a significant role. The findings on age indicate that older patients had a higher satisfaction rate, which is consistent with a study by (Kim, 2018). The higher satisfaction rate among males compared to females is contrary to the findings of a study by Bener and Ghuloum (2013) Dessie Referral Hospital, but aligns with the findings of a study by Rod et al., (2016) on gender and patient satisfaction. The majority of study participants reside in urban areas and the independent association between residence and patient satisfaction may be explained by easier access to healthcare facilities. The findings on marital status are in line with a study by Tucker III and Kelley (2000), showing that married individuals have a higher satisfaction rate than singles, widowed, and separated individuals. The higher education level of study participants, particularly secondary education, may have influenced their ability to make informed decisions and thus led to higher satisfaction rates. This finding aligns with a significant relationship between education level and patient satisfaction, as observed in other studies. The higher satisfaction rate among those earning more than Ksh 50,000 is consistent with a study conducted in Shanghai, China, where monthly income was also found to influence patient satisfaction (Mwangi, 2022).

One of the health facility factors investigated was the waiting time from registration to admission. The study found that 45% of study participants waited between 30 to 59 minutes, and this was consistent with findings from previous studies that have shown that the time taken to deliver healthcare services plays an essential role in determining patient satisfaction. Moreover, the amount of time a patient takes to access a healthcare facility also influences patient satisfaction. The study found that 64% of respondents took less than an hour, which is consistent with the suggestion by Naidu (2009) that the lesser the time is taken, the higher the satisfaction while examining the effects of distance on patient satisfaction. Another health facility factor investigated was the mode of payment for the health services provided. The study found that 43% of respondents used health insurance, 54% used cash, and 2% received free health care services. This finding is consistent with the suggestion by Rahmqvist and Bara (2010) that payment for health services provided influences patient satisfaction. Respondents using health insurance and free healthcare services had higher satisfaction ratings.

Availability of health care services such as ordered drugs and laboratories is also essential in increasing patient satisfaction ratings. The study found that 90% of study participants claimed availability of

ordered drugs, and 94% claimed availability of ordered laboratories. This finding is consistent with previous studies (Rahmqvist and Bara, 2010) that have shown that the availability of health care services increases satisfaction ratings of patients. These participants had a 90% satisfaction rating. Finally, the study aimed to investigate the relationship between communication of the healthcare provider and patient satisfaction. The study found that 92% of the respondents claimed to understand the language used by the healthcare provider. However, 64% of them claimed that they did not receive an explanation of the health condition from the healthcare provider. This finding is consistent with a study in China that showed lower satisfaction ratings of 2.51% where a patient did not have an honest and humorous response on the health condition and progress.

Generally, from the study findings, gender, education level, waiting time, doctors' communication behavior, patient referral and level of patient trust had significant association with patient satisfaction at 0.05 level of significance independently. Females with tertiary level of education and those who were attended to within 1 hour, those that perceived health care providers communication to be good and those who had trust with the health care provider were more likely to be satisfied with the services provided at the hospital. The likely hood of being satisfied with the services was 1.9 times higher in females than males while the odds of being fully satisfied was 52.3% among those who were attended within 1 hour than those who were attended after 1hour. Waiting for too long to be attended to was one of the factors that contributed to patient dissatisfaction and patients ended up leaving the hospital without treatment or having to wait for very long before receiving care. Those who perceived health care provider communication to be good was 3.5% to be satisfied compared to those who perceived communication to be poor. Effective communication enhances confidence and trust among the patient and health care providers and further contributes towards a health therapeutic relationship that fosters trust between and enhance patient satisfaction. The odds patient satisfaction was 2.2 times higher among those who had trust with the health care providers than those who had no trust (AOR=2.249 [95% CI= 0.345-5.673] p-value = 0.019). Level of education was not found to be associated with patient's satisfaction.

The study further established that 98.5% of the study participants reported the availability of water for handwashing, and 97% claimed to have used soap and water for handwashing. However, only 94% denied the availability of alcohol hand sanitizer at the hospital entrance. The availability of these measures was appreciated by the study participants, who felt that they were protected from the virus. Concerning body temperature measurement, 97% of the respondents reported having their temperature taken at the hospital entrance. Physical distancing measures were also implemented in the hospital, as reported by 98.5% of the study participants, who also reported that they were not required to share beds. These measures received high satisfaction ratings from the study participants. However, only 7.5% of the study participants reported receiving face masks, indicating the need for improvement in this area.

Healthcare providers' compliance with safety measures was also investigated. Only 34.84% of the study participants reported that healthcare providers sanitized their hands before attending to them. Additionally, only 34.3% of the study participants claimed to have received explanations about COVID-19 disease. However, a higher percentage (92.5%) reported that healthcare providers put on face masks while attending to them. Furthermore, only 41.8% of the study participants had been vaccinated against COVID-19. The current findings are consistent with those of the study by Berhanu (2020), which reported that the availability of hand hygiene facilities and physical distancing measures were significantly associated with patient satisfaction. However, the current study also highlighted the need to improve the provision of face masks to patients and healthcare providers' compliance with safety measures, as well as the need to increase awareness about COVID-19 disease.

CONCLUSION

We conclude as follows:

i. Patient-related factors such as age, gender, marital status, education level, and monthly income were found to influence patient satisfaction. Older patients, married individuals, and those with higher education and income levels had higher satisfaction rates.

ii. Health facility-related factors, such as waiting time, mode of payment, availability of health services, and communication with healthcare providers, were found to be important determinants of patient satisfaction. Patients who experienced shorter waiting times had access to health insurance or free healthcare, had ordered drugs and laboratories available, and received explanations from healthcare providers had higher satisfaction ratings.

iii. COVID-19-related factors, such as the availability of hand hygiene resources, physical distancing measures, and mask-wearing by healthcare providers, were found to be important for patient satisfaction during the pandemic. Patients who had access to handwashing facilities and physical distancing measures were more satisfied, while those who lacked face masks and explanations about COVID-19 expressed dissatisfaction.

RECOMMENDATIONS

i. Patient related factors: Given that older patients had the highest satisfaction rate, healthcare providers should provide special attention to elderly patients and their needs during consultations and treatments.

ii. Health facility related factors: To improve patient satisfaction, healthcare facilities should prioritize reducing waiting times, improving the availability of healthcare services and drugs, and ensuring that healthcare providers communicate effectively with patients.

iii. COVID-19 related factors: The hospital should ensure the availability of adequate protective measures such as face masks, sanitizers, and physical distancing measures for inpatients to prevent the spread of COVID-19 and enhance patient comfort while admitted in the wards. Additionally, the Institution should develop posters and planned health talk series on COVID-19 and campaigns on the importance of getting vaccinated against COVID 19 disease.

Conflict of Interest

The authors declare no conflict of interest

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