



The Influence of Healthcare Providers' Attitude on Patients Satisfaction with Healthcare Services at Tier Three Hospitals of Mombasa County

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Abstract

Introduction: Patient satisfaction with health care services is considered an important factor of quality health care. The provision of quality health care delivery especially in Kenya has often been attributed to inadequate knowledge and skills compounded by broader system failures and low staff numbers. The Mombasa County Referral Hospital has been rated below average on most of the service delivery attributes. The study assessed the influence of healthcare providers attitude on patient satisfaction with healthcare services received in Tier Three Hospitals in Mombasa County. **Methods:** This was a cross-sectional study design. Quantitative data was collected among 360 clients in the outpatient departments of three Tier Hospitals in Mombasa County. The sample population was determined using the Fishers formula and the sample was proportionally distributed. Face-to-face questionnaires were administered to the respondents and data was analyzed using SPSS version 23. **Results:** The study established that less than half 46.1% of the patients are generally satisfied with the healthcare service received in the Tier three hospitals in Mombasa County. Majority (70.8%) of respondents were satisfied with the way health providers explained and listened to them. Less than half (43.0%) of the respondents rated the level of healthcare providers' attitude in the hospitals to be average, (57%) of the respondents said healthcare providers' attitude affects the level of patient satisfaction with healthcare services to a large extent. Care and concern shown by healthcare providers affects the patients' level of satisfaction and healthcare providers' attitude towards the patients to great extents. The multiple regressions results indicate that all factors influencing patient satisfaction with health care services under investigation in this study that is healthcare workers technical skills ($X_1: \beta_1 = .546, P < .001$), care and concern of staff ($X_2: \beta_2 = .442, P < .003$) and dedication/commitment of staff ($X_3: \beta_3 = .291, P < .009$) are significant and positively influences patient satisfaction with healthcare services received in Tier Three Hospitals in Mombasa County. The constant (β_0) is also positive and significant ($\beta_0 = .399, P < .001$). Hence, this study found statistical and significant evidence that healthcare workers technical skills, care and concern and dedication and commitment factors, in a combined relationship, positively and significantly influence patient satisfaction with healthcare services received in Tier Three Hospital in Mombasa County. **Recommendations:** The hospital management should organize in-house staff training on positive customer care to change staff negative attitude in service delivery.

Key Words: Healthcare providers attitude, Patient Satisfaction, Tier Three Hospitals, Mombasa County, Kenya

Introduction

Health service delivery is one of the six pillars of a health system. World Health Organization defines a health system as all the organizations, institutions, and resources that are devoted to producing health actions. The six pillars of health systems are health service delivery, leadership and governance, health financing, human resources for health, medical products, vaccines and technologies, and health management information systems (WHO, 2007).

Patient satisfaction with health care services is considered an important factor of quality health care. Patient satisfaction reflects a health consumer's attitude about service, service providers or patient's health status (Kumar & Tomar, 2014). Patient satisfaction is an important measure of healthcare quality because it offers information on the provider's success at meeting the expectations of the client. In the past, there was not much direct pressure to improve health service quality in developing countries, but now public health services face increased competition from the private sector, along with rising expectations from patients who are more aware of what they need and what is available in terms of medical care. Ensuring that patients receive high quality care therefore relies on a complex set of interconnected roles, responsibilities and relationships between professionals, provider organizations, commissioners, system and professional regulators and other national bodies including the Department of Health (WHO, 2007).

The poor state of customer service in some public hospitals in Kenya has resulted in high turnover and weak morale among staff, making it difficult to guarantee 24 hour coverage resulting in problems with patients care, increased cost of operations due to inefficiencies leading some patients to look for an alternative provider and to spread negative word of mouth. This affects potential clients hence growth of the hospital (Nyongesa *et al.*, 2017). This situation is further worsened by the patients or customers perception of functional issues which they perceive and interact with during the course of seeking treatment such as physical facilities, internal process; interactions with doctors, nurses and other support staff as poor and unresponsive.

African health care systems face daunting challenges and most Africans depend on public health services. The World Health Organization has characterized Kenya as facing an acute shortage of health workers. The shortage of health workers is associated with challenges in recruitment, training and workforce planning (Ndambuki, 2013). Poor performance is as a result of health staff not being sufficient in numbers, not providing care according to standards, not being responsive to the needs of the community and patients, absenteeism, motivation, job dissatisfaction, lack of professional development, poor attitudes, and working conditions. In the way of providing primary health care services, the Government of Kenya and non-governmental institutions have made impressive growth in terms of the establishment of primary health care institutions across urban and rural hard-to-reach settings. However, shortcomings in the delivery of primary care health services have resulted in lesser utilization rates of health services of these facilities (Ndambuki, 2013; Nyongesa *et al.*, 2017).

Nyongesa, Onyango and Kakai (2014) reported that public hospitals offer inadequate services due to the high cost services, inadequate staffing and poor sanitation. The factors identified to determine patient satisfaction were patient waiting time, attitude of the providers, availability of drugs and services, affordability of the services, level of staffing and level of cleanliness. This study sought to establish the influence of healthcare providers' attitudes on patient satisfaction with healthcare services at tier three hospitals of Mombasa County.

This study is grounded on the Primary Provider Theory (Aragon S.J., and Gesell S.B., 2003). It holds that patient satisfaction occurs at the nexus of provider power and patient expectations. It further illustrates that, patient satisfaction is principally the function of an underlying network of interrelated satisfaction constructs namely, satisfaction with primary provider, waiting time among others. In addition, patients' satisfaction is influenced by their individual social environment. This study hypothesized that there is no association between healthcare providers attitude and patients satisfaction with healthcare services provided. In this study patient satisfaction was defined as the measure of the extent to which a patient is content with the health care which they received from the health care provider.

The stakeholders in Tier Three Hospitals of Mombasa County as well as other institutions in the health sector in Kenya would be the key beneficiaries of the findings of this research being carried out in their area of jurisdiction. The findings will inform public health care providers on what patients value as quality in the health sector in Kenya. The information obtained would have additional value in helping policy makers and stakeholders in the planning of human resources capacity building in order to improve service delivery in public health facilities.

The study only included three hospitals, Likoni Sub County Hospital, Tudor Sub County and Port Reitz Sub-County in Mombasa County. However, the results can be generalized to other Tier three hospitals in Kenya since the working conditions are similar. Due to limited time and finances the study only included outpatients clients as the respondents and hence the results can only be generalized for satisfaction for outpatient services.

Methods

Research Design: This was a cross-section study design with quantitative data collection methods. The main tool for data collection was a semi-structured questionnaire.

Study Site: This study was carried out in all tier three hospitals in Mombasa County, namely Likoni sub county Hospital, Tudor Sub County hospital and Port Reitz Sub-County hospitals. The study was carried out in the outpatient departments of the three hospitals.

Target Population: The target population comprised of hospital administration and outpatient clients in the three hospitals. The three hospitals receive approximately, 6000 patients for outpatient services (Mombasa County Medical Records, 2017). In this study, only

adult patients (those of 18 years and above) were included because the predictor variables involved apply more to this category of respondents.

Sample Size: A sample was drawn from 6,000 target respondents including the Administrators and outpatient clients in Port Reitz sub county Hospital, Tudor Sub-County Hospital and Likoni sub county hospital. The study targeted the outpatients who attend the three hospitals during the study time. The sample size was determined using the Fisher Formula. Since the target population was less than 10,000 the following formula was adopted. $n = \frac{n \cdot (1 + n/N)}{1 + n/N}$. The calculated sample was 360 outpatient clients.

Sampling Techniques: The sampling technique used was stratified random method. The sample size of 360 and it was distributed proportionately as per target outpatient population of each hospital (**Table 1**).

Table 1: Sample Size Distribution

Category	Frequency	Ratio (%)	Sample size
Port Reitz	2400	40%	144
Tudor	1400	23%	83
Likoni	2200	37%	133
Total	6000	100%	360

Research Instruments: The researcher collected primary data using a semi-structured questionnaire. The questionnaire used a 5-point Likert scale, which ranged from strongly agree to strongly disagree.

Pretesting of the Study Tools: The pre-test study was carried among 15 respondents at Mvita Health Centre, Mombasa County to find out whether the questions are measuring what is expected. Reliability was tested using a Cronbach's alpha of 0.7 (Zikmund and Barin, 2012). To establish the validity of the research instrument the researcher sought opinions of scholars and experts. This allowed for modification of the instrument thereby enhancing validity. Furthermore, the study assessed the responses and non-responses per question to determine if there was any technical dexterity with the questions asked.

Data Collection Procedure: The study administered the questionnaire individually to all respondents of the study. Data was collected over 30 days period in the three study sites at the outpatient departments.

Ethical Considerations: Prior to commencing the field data collection exercise, the researcher sought ethical approval from the Science, Ethics and Research Committee of Kenya Methodist University and subsequently obtained a research permit from the relevant authorities in Mombasa County. All data collected was treated in confidence and the all study participants signed a consent form.

Methods of Data Analysis: The data collected was first cleaned, then sorted and coded using numerical numbers. The quantitative data collected was analyzed by the use of descriptive statistics using SPSS Version 23 and presented through averages, minimum, maximum, means and standard deviations. Regression analysis was used to measure the degree of association between different variables under consideration. In this study the multiple regression model had one dependent variable (Y) and three independents variables represented by X₁, X₂, and X₃ respectively. The regression model was given by the following equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where Y= patient satisfaction, X₁= Technical skills, X₂= Care and concern and X₃= Dedication/commitment of staffs. Further, $\beta_1, \beta_2,$ and $\beta_3,$ =Regression Coefficients and ϵ = Error term.

Results

Socio-demographic characteristics of respondents

A total of 360 respondents were included in this study. However, 256 (71.1%) fully filled questionnaires were included for the final analysis (See Table 2).

Table 2: Respondents Socio-demographic Characteristics (n=256)

Characteristics	Frequency	Percent
Gender		
Male	93	36.4
Female	163	63.7
Age		
18-25 years	43	16.8
26-40 years	92	35.9
41-64 years	86	33.6
More than 65 years	35	13.7
Years Lived or Worked in Mombasa County		
<5 years	37	14.5
5 to 10 years	86	33.4
10 and 15 years	101	39.5
>15 years	32	12.6
Marital Status		
Married	110	43.0
Single	79	30.9
Divorced	33	12.9
Widowed	10	3.9
Separated	24	9.4
Education Status		
Secondary	62	24.2
Diploma	118	46.1
University degree	44	17.2
Postgraduate degree	32	12.5

In terms of gender, majority of the respondents were female 163 (63.7%) and majority 178 (69.5%) were aged between 26 and 64 years. Over a third of the respondents 101(39.5%) had lived or worked in Mombasa County for 10-15 years and only 37 (14.5%) had been in Mombasa for less than 5 years. Nearly half of the respondents were married 110 (43.0%) and less than a third 62 (24.2%) had secondary level of education with majority 118 (46.1%) having a diploma certificate. Most 147 (57.4%) of respondents were informally employed and majority 138 (53.9%) had enrolled in the National Health Insurance Fund. Nearly a third 72 (28.1%) paid for their treatment using out of pocket

Patients Satisfaction with Healthcare Services

The general objective was to carry out a study on patients' satisfaction with healthcare services at tier three hospitals of Mombasa County. The study results show that majority of the respondents 212 (82.8%) said they visited the hospitals frequently. The respondents were further required to rate on a scale of 1-4 their overall satisfaction with the healthcare services offered in the selected hospitals. The results are shown in **(Figure 1)**.

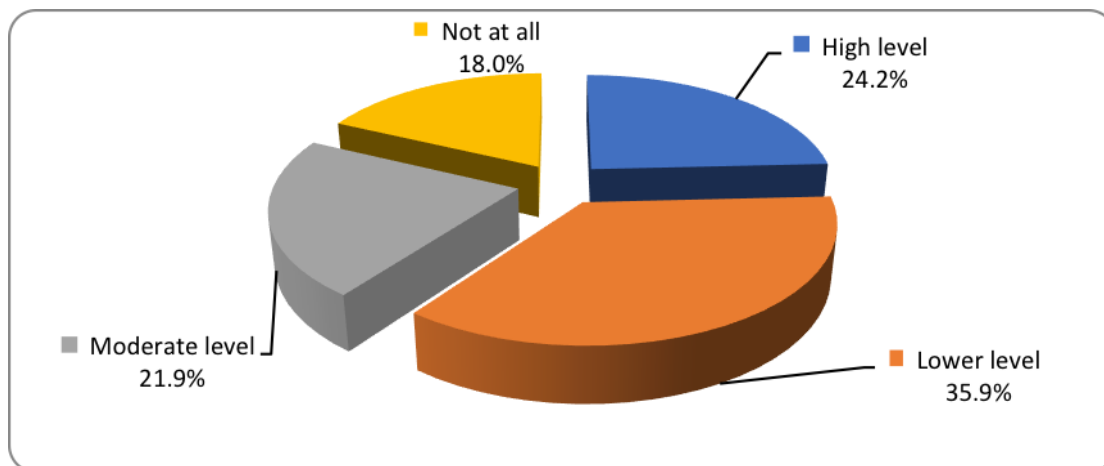


Figure 1: Respondents Overall Satisfaction with Healthcare Services Offered in Tier 3 Hospitals in Mombasa County

The results revealed that, less than a third (24.2%), of the respondents rated their level of satisfaction to be high and (21.9%) indicated that they had moderate level of satisfaction with the healthcare services offered in the hospitals. Majority (53.9%) of the respondents indicated that they were either little or not satisfied with the healthcare services offered in the selected hospitals.

The study further sought to establish the respondents' reasons for their satisfaction with the healthcare services **(Table 3)**. The interpretation of the results was done in relation to the key provided where the means were checked up in the scale to reveal the corresponding measure in a scale of 1 to 5 where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

Table 3: Respondents’ Level of Satisfaction with Healthcare Services Provided

Measure of Patient satisfaction	SD	D	U	A	SA	Mean	SD
	%	%	%	%	%		
a) I am satisfied that the healthcare provider took care of me.	0.0	3.1	44.8	45.8	6.3	3.5530	0.6628
b) The healthcare provider explains the reason(s) for any medical test.	0.0	3.1	49.0	43.8	4.2	3.4940	0.6323
c) The healthcare provider explains things in a way that is easy for me to understand.	0.0	0.0	29.2	62.5	8.3	3.7910	0.5882
d) I am confident of the healthcare provider’s knowledge and skills.	0.0	27.1	6.8	41.4	22.6	3.5320	1.1772
e) The healthcare provider shows respect to what I have to say.	3.7	13.0	27.8	50	5.6	3.4110	0.1925
f) The healthcare provider listens carefully to me.	0.0	3.1	44.8	45.8	6.3	3.5530	0.6628
g) The healthcare provider really cares about me as a person.	0.0	3.6	48.2	42	6.3	3.5130	0.6711
h) The healthcare provider encourages me to talk about all my health concerns.	0.0	27.1	6.8	41.4	22.6	3.5320	1.1772
i) The healthcare provider spends enough time with me.	0.0	4.2	45.8	37.5	12.5	3.5830	0.775
j) I would like the healthcare provider to be present in any medical emergency situation.	0.0	3.7	38.9	38.9	18.5	3.2960	1.797

Key: SD=Strongly Disagree; D=Disagree; U=Uncertain; A=Agree; SA=Strongly Agree

The results show that majority (52.1%) of the respondents agreed that the healthcare providers took care of them. Over three quarters (70.8%) of the respondents said that the healthcare providers explain things in a way that is easy for the to understand. A third (27.1%) of the respondents said that they were confident of the healthcare provider’s knowledge and skills and a similar number said the healthcare providers do not encourage them to talk about all their health concerns. Overall, most of the respondents agreed that they are satisfied with the health care services provided by the health workers.

Healthcare Providers’ Attitude

Healthcare providers’ attitude has an influence on patients’ satisfaction with healthcare services received. The respondents were requested to rate attitude of healthcare providers (**Figure 2**). Less than half (35.9%) of the respondents rated the healthcare providers’ attitude as positive, (21.1%) felt that the healthcare providers’ attitude was negative, while (43.0%) of the respondents rated the healthcare providers’ attitude as average.

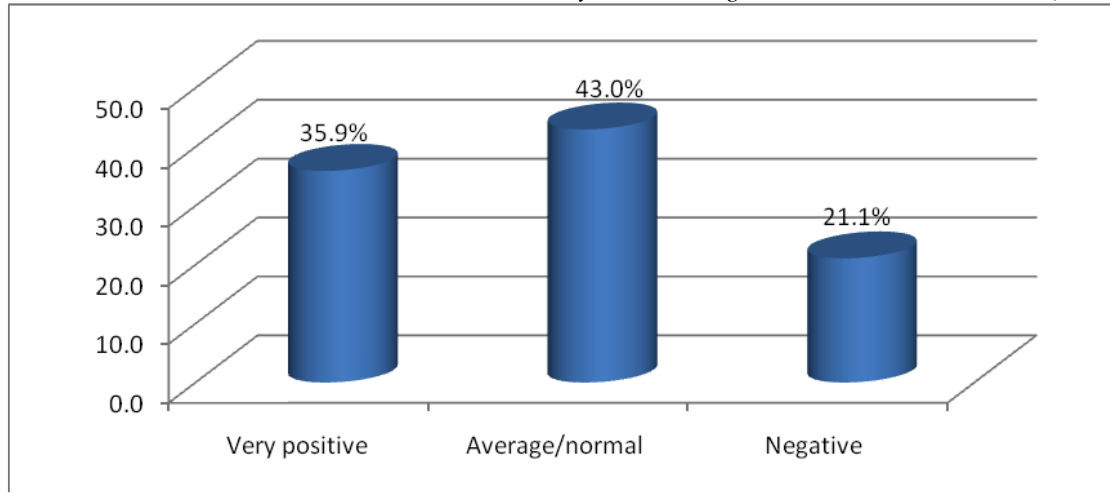


Figure 2: Respondents Perception of Healthcare Providers' Attitude

This study further sought to establish the various aspects of healthcare attitude that affect patients' satisfaction with healthcare services (**Table 4**). From the study, majority of the respondents (60.4%) reported that care and concern shown by healthcare providers was a clear indication to a great or very great extend the healthcare providers attitude with a mean scores of 3.6354 and 3.5313 respectively. Over half of the respondents (55.2%) indicated that staff competence had only little or moderate influence on their perception of staff attitude and hence it had moderate influence on their satisfaction with healthcare services received (mean score 3.4583). Majority of the respondents (91.6%) indicated that healthcare providers' attitude towards the patients influenced their overall satisfaction with the healthcare received (mean score 3.5313).

Table 4: Aspects of Providers' Attitudes affecting Patients' Satisfaction

Aspects	Little	Moderate	Great	Very great	Mean	SD
	%	%	%	%		
a) Health talk given while in the waiting area	21.8	44.6	33.6	29.2	3.3322	1.4923
b) The technical skills of the healthcare providers	16.7	50	27.8	5.5	3.0000	0.8401
c) Healthcare providers' attitude towards the patients.	3.1	45.8	45.8	5.2	3.5313	0.6481
d) Competence of hospital staff	10.4	44.8	33.3	11.5	3.4583	0.8325
e) Care and concern shown by healthcare providers	6.3	33.3	51.0	9.4	3.6354	0.7415

To complement the descriptive results, the researcher conducted a multiple regression analysis to assess the validity of a model, as well as the influence of the independent variables on the dependent variable. The main model under investigation in this study intended to establish the combined influences of the three key factors (technical skills, care and concern of staff and dedication/commitment of staff factors) on patient satisfaction with healthcare services received in Tier Three Hospitals in Mombasa County. This model expressed as:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$$

Where: Y= patient satisfaction with healthcare services, β_0 = Intercept (constant) $\beta_1, \beta_2, \beta_3,$ = slope coefficients representing the influence of the associated independent variable with the dependent variable, X_1 = Technical Skills Factors, X_2 = Care and Concern of Staff Factors, X_3 = Dedication of Staff Factors and ε = error term.

Table 5: Patient Satisfaction with Healthcare Services ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	8.44	3	2.813333	2.912	0.000 ^b
Residual	44.64	253	0.176443		
Total	53.08				

a. Dependent Variable: Y

b. Predictors: (Constant), X_3, X_2, X_1

A multiple regression analysis performed on the three key factors (technical skills, care and concern of staff and dedication/commitment of staff) to test their combined influence on patient satisfaction with healthcare services received in Tier Three Hospitals in Mombasa County. The regression output in **Table 5** containing all the three variables in this study was found to be valid ($F_{(3,253)} = 29.123, P < .001$) meaning the three key factors in this study are good predictors explaining the variations in patient satisfaction with healthcare services received in tier three health facilities in Mombasa County. Further, the study carried out a regression analysis to determine the relationship between patient satisfaction and healthcare providers' attitudes (**Table 6**).

Table 6: Patient Satisfaction with Healthcare Services: Regression Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.399	.287		4.874	.000
Technical skills	.546	.128	.487	4.270	.001
Care and concern	.442	.128	.414	3.460	.003
Dedication/commitment of staffs	.291	.109	.287	2.658	.009

a. Dependent Variable: Y

The multiple regressions results in Table 5 indicates that all factors influencing patient satisfaction with health care services under investigation in this study that is healthcare workers technical skills ($X_1: \beta_1 = .546, P < .001$), care and concern of staff ($X_2: \beta_2 = .442, P < .003$) and dedication/commitment of staff ($X_3: \beta_3 = .291, P < .009$) are significant and positively influences patient satisfaction with healthcare services received in Tier Three Hospitals in Mombasa County. The constant (β_0) is also positive and significant ($\beta_0 = .399, P < .001$).

The value of the constant ($\beta_0 = .399, P < .001$) indicates that patient satisfaction with healthcare services received in Tier Three Hospitals will always exist at a certain minimum even without the three factors (technical skills, care and concern of staff and dedication/commitment of staff) under investigation in this study. The coefficient of X_1 that is ($\beta_1 = .546, P < .001$) indicates that a unit increase in healthcare workers technical skills index leads to an increase in patient satisfaction with healthcare services received indexed by .546 which is statistically significant ($P < .001$). Similarly, the coefficient of X_2 ($\beta_2 = .442, P < .003$) shows that a unit increase in healthcare workers care and concern index leads to an increase in patient satisfaction with healthcare services received indexed by .442 which is statistically significant ($P < .003$). Lastly, the coefficient of X_3 ($\beta_3 = .291, P < .009$) indicates that a unit increase in healthcare workers dedication and commitment index leads to an increase in reimbursement of hospital claims index by .291 which is statistically significant ($P < .009$).

In summary, it therefore follows that, this study found statistical and significant evidence that healthcare workers technical skills, care and concern and dedication and commitment factors, in a combined relationship, positively and significantly influence patient satisfaction with healthcare services received in Tier Three Hospital in Mombasa County.

Discussion

These results show that the client's view on the attitude of the healthcare providers is fundamental in planning and managing their satisfaction with healthcare systems. According to Gonzales (2005) skilled physicians, nurses, administrators and ancillary staff are critical to producing high-quality outcomes and effective quality improvement hence hospital growth. This is a reflection of the observations made by Athar and Abhijit (2014) that a well-performing health workforce is one that is available, competent, responsive and productive.

The results are a reflection of Awuah's (2014) study on the determinants of patients' satisfaction at Sunyani Regional Hospital in Ghana which showed that patients' satisfaction is influenced by a number of factors such as attitudes of nurses toward patients, the capacity to deliver prompt service without wasting time, ability to disseminate information to patients and the availability of up-to-date equipment. According to these results, attitudes of physicians, nurses, administrators and ancillary staff are critical to producing high-quality outcomes and effective quality improvement hence patient satisfaction. The respondents

echoed that the doctor are always in a hurry and do not take time with patients to explain the condition correctly. This affects the patients' understanding of the diagnosis and consequently level of satisfaction with the services offered in the hospitals.

The results are in agreement with Naseer *et al.*, (2012) who established that patient experiences and their expectations with health care services were found to be important determinant of patient satisfaction in Pakistan. These results imply that the healthcare providers and the hospitals have not been attentive to their patients and approach them in an unsatisfactory manner that leaves the patients unhappy.

Conclusion

The study concludes that most of patients were not satisfied with the services received at Tier three hospitals in Mombasa County. The respondents rated the healthcare provides as either average or poor, characterized by the hurried way of explaining the reason(s) for any medical test, the health care personnel do not explain things in a way that is easy for patients to understand, they do not respect the patients and do not take time to listen carefully to patients, all that lead to poor service delivery.

The client's view on the attitude of the healthcare providers is fundamental in planning and managing their satisfaction with healthcare systems. The patients find the healthcare's attitudes to be lacking where the views differ across patients seeking healthcare services in the hospitals which confirms that the hospital have healthcare providers who are generally accountable to their actions and are responsible professionally. The study concludes that since some patients expressed dissatisfaction with the services the health care providers need to do more in the drive towards improving healthcare attitudes in order to improve patient experience and ultimately patient satisfaction.

The study recommends that, the hospital management provides in-house training on value of customer care with an emphasis on positive staff attitude in delivery of health services.

Competing Interests

The authors declare that there have no competing interests.

Authors Contributions

Maryan Duale Barrow conceived and implemented the study. All authors contributed to design of the study, data analysis and manuscript writing. All the authors reviewed and approved the final version of the manuscript.

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