



# Determinants of Patient Satisfaction with Outpatient Services at Primary Health Facilities in Mbooni Sub-County, Kenya

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**ABSTRACT:** Patient satisfaction has emerged as one of the most important parameter in measuring quality of health services and outcomes worldwide. At primary health care level, health system is concerned with ensuring that majority of population attains health which is accessible, equitable, available and high priority is put on level of satisfaction. Determinants of patient satisfaction with outpatient health services are known from previous studies done at higher levels of care in urban areas. These determinants may change or not by social context and level of facility. These are not known for patients at rural primary health facilities in Mbooni Sub-County. The main objective of this study was to assess the determinants of patient satisfaction with outpatient services at primary health facilities in Mbooni Sub-County, Kenya. The study was cross-sectional targeting 5,200 patients receiving outpatient services in three health centres per month. A sample of 395 patients was recruited (Fishers formula, 1998) using systematic random sampling procedure. A questionnaire utilising 5-point Likert scale and interview schedules were used to collect data from patients and key informants in one month. Questionnaire data was analysed using frequency tabulation, percentages, Chi-square test and multivariate regression analysis at  $p < 0.05$  level of significance while thematic analysis was done for qualitative data. Response rate was 98.7% where females were more (54.7%) than males. Majority (49.2%) were between 20 and 49 years, 63.8% were married while 43.8% had secondary education and above. Statistically significant more satisfaction was associated with female gender, age 50 and above, married status, low education, shorter waiting time, longer consultation time, cleanliness, shorter distance to facility, staff attitude, staff courtesy and privacy. Drugs supply, laboratory services, staffing, confidentiality and competence were areas of dissatisfaction. Policy makers should ensure there are enough drugs, laboratory equipments, staff, confidentiality, trainings and well motivated staff.

**KEYWORDS:** Patient Satisfaction, Outpatient Department, Primary Health Facilities.

## I. INTRODUCTION

Determining level of patient satisfaction in recent decades has emerged as one of the most important parameter in measuring quality of health services and outcomes worldwide [1]. In order to improve service delivery at primary health care level, health system is concerned with ensuring that majority of population attains acceptable level of health which is accessible, equitable and available irrespective of their socio-economic and geographical location and high priority is put on their level of satisfaction [2,3]. When patients get satisfied with services, they are likely to stay with the hospital for long term and come back or recommend it for others [4].

In developed countries, assessment of patient satisfaction started first in the United States of America (USA) in 1957 from the Nursing department then it continued being rolled out in other disciplines in health care. Measuring patient satisfaction nowadays is legally recognised and is used in accrediting health facilities [5].

In Asian countries, patients were dissatisfied with waiting time at primary health facilities in Saudi Arabia before being attended by a clinician [6]. A study in public health facilities of Madhya Pradesh in India suggested need to increase human resources at lower level health facilities to increase patient satisfaction [7].



In Africa, a study at Extension II clinic in Gaborone, Botswana indicated a need to increase manpower to improve on waiting time [3]. From a study in UsmanuDanfodiyo University Teaching hospital, Nigeria, aspects of care influenced patient satisfaction such as wait time, availability of medicine, competency, courtesy of care provider, privacy, cost of treatment, age and educational status [8]. A Study at University of Port Harcourt Teaching Hospital in Nigeria recommended the need of policy makers to ensure more medical equipments are provided and more staff is employed to provide good health services [9]. Studies in different hospitals in Ethiopia revealed patient dissatisfaction with long waiting hours, laboratory procedures and lack of prescribed drugs from the hospitals pharmacies [10]. A study in Gurh Teaching and Referral hospital in Ethiopia revealed age and educational status to be statistically significant in influencing satisfaction where age group 50 and above were more satisfied with services compared to lower age group of 18 to 29 years and highly educated clients were less satisfied compared to low educated [11].

In East African region, studies were carried out in Iringa district of Tanzania a poor area in a rural set up which revealed that patients preferred to go to health facilities offering high quality consultation and having more knowledgeable staff [10]. At Mulago Hospital in Uganda, a study recommended that in order to make services more patient centred, waiting time should be shortened, costs of services should be affordable for majority of patients, distance travelled to facility should be reasonable and provider technical competency should be improved through regular trainings [12].

In most public health facilities in Kenya, acute shortage of staff to take care of rapidly increasing health care needs is being experienced which has slowed down progress towards realization of universal health coverage [13]. Most health facilities experience acute shortage of essential drugs which contributes to low client satisfaction and diverts relatives of patient to private chemists where prices are high [14]. Most primary health facilities in rural areas experience shortage of basic medical equipments which hinders performance of some procedures and distance travelled to reach the nearest health facility makes some patients not seek health care [15]. The sector also face challenge of few laboratory reagents which hinders diagnosis of some diseases and patient satisfaction with services is likely to be low [16]. In Mbooni Sub-County, no official documentation on determinants of patient satisfaction has so far been done. Keeping this background in mind, the aim of this study was to assess the determinants of patient satisfaction with outpatient services at primary health facilities in Mbooni Sub-County, Kenya.

## II. OBJECTIVES

1. To describe socio-demographic factors affecting patient satisfaction level.
2. To assess service delivery factors affecting patient satisfaction.
3. To assess health provider factors affecting patient satisfaction.

## III. RELATED WORK

Literature search has revealed that patient satisfaction is influenced by both clinical and non-clinical aspects of care and should be viewed as a multi-dimensional concept just like service quality. When measuring it in an organisation, it occurs at multi-levels and needs to be operationalized like service quality. Parasuraman, *et al.*, (1988) came up with a suggestion that when service quality is high, it leads to increase in customer satisfaction and established the SERVQUAL conceptual framework. The most important dimensions of the model are chosen that fit the particular service being measured and it can be adapted or supplemented to fit the situation at hand if necessary. The framework was adapted and used in this study where patient socio-demographics, service delivery factors and health provider factors were the independent variables while client satisfaction was the dependent variable as shown in fig. 1.

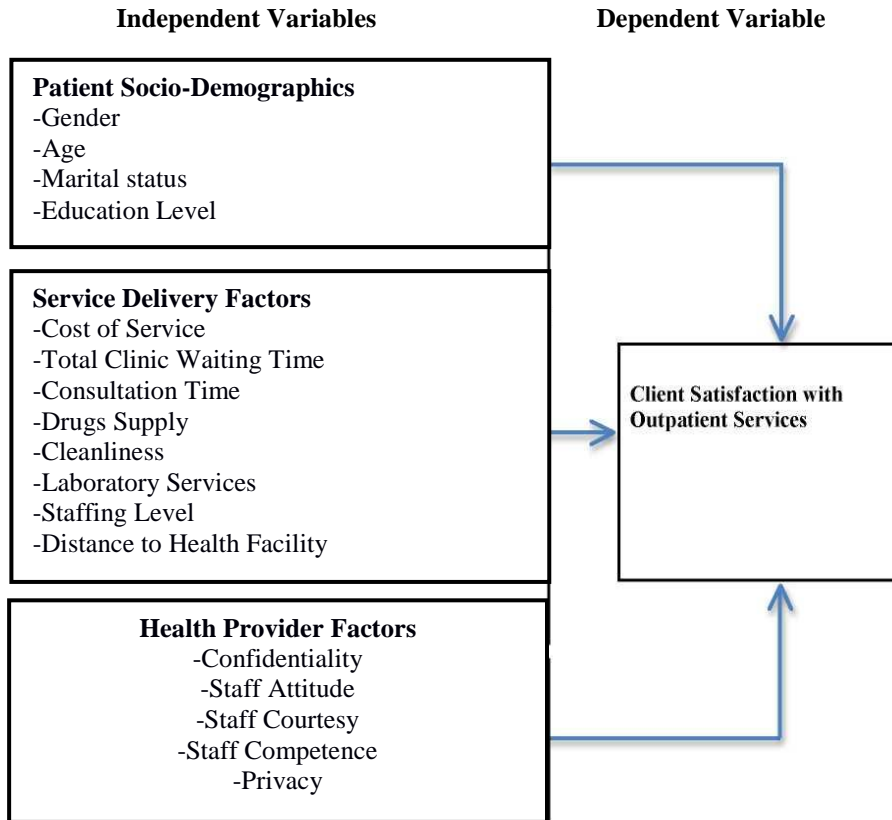


Fig. 1: Determinants of Patient Satisfaction.

#### IV.METHODOLOGY

This study was conducted in three health centres in Mbooni Sub-County, Kenya between 19<sup>th</sup> September 2017 and 18<sup>th</sup>September 2018. It covers an area of 949.20 square kilometres with an approximated population of 184,624. Fig.2 shows the location of study area which lies between latitudes1<sup>0</sup>, 2<sup>0</sup>South and longitudes37<sup>0</sup>, 38<sup>0</sup>East. It borders Mwala Sub-County to the North, Makueni Sub-County to the East, Kilome Sub-County to the South and Machakos Central to the North-West.

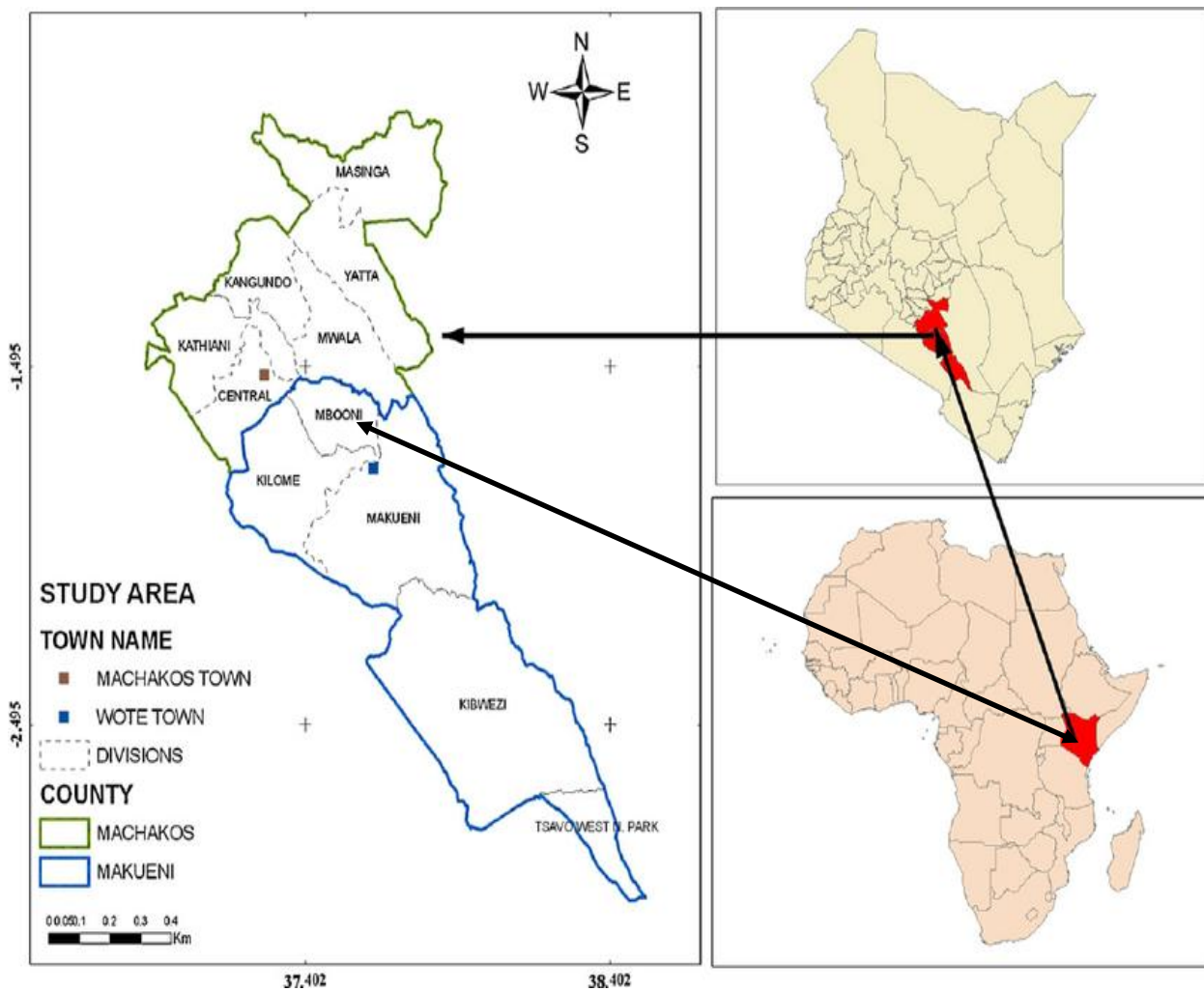


Fig. 2: Map of Study Area.

Cross-sectional descriptive study design was used where the target population included patients who received outpatient services in three health centres per month. Patients who were 15 years and above during time of study and consented participated while those who did not consent were excluded. Key Informants included three health centre in-charges, three health facility committee members, six health staff and three community health workers. Minimum sample size was determined using Fishers formula  $n = z^2 pq / d^2$  where  $n$  = the desired sample size in a population greater than 10,000,  $N$  = estimate of population size (which was about 5,200 patients in a month),  $Z$  = 95% confidence interval,  $p$  = 50% proportion in the target population estimated to have characteristics being measured,  $q = 1 - p$ ,  $d$  = level of statistical significance = 0.05. Sample size for a population more than 10,000 was:  $n = (1.96)^2 (0.5) (0.5) / (0.05)^2 = 384$  and since the targeted population was below 10,000, final sample size was  $(nf) = n / 1 + n / N = 359$ . Adding 10% to cater for possible non-response rate, sample size was 395. Systematic random sampling technique was used to recruit 395 patients to the study after calculating sampling interval as the average number of target population divided by minimum required sample size i.e. =  $5,200 / 395 = 13$ . Population proportional sample size depending on facility workload was 106, 129 and 160 respectively. Simple random sampling was done for the first patient to get the starting point and thereafter, every 13<sup>th</sup> patient was selected to participate in the study after obtaining informed consent. In the event of not meeting eligibility criteria, the next patient was recruited for the study then the process was repeated until required sample size was obtained. For qualitative data, participants with required information were handpicked.



A questionnaire utilising 5-point Likert scale and consisting of closed-ended questions was used to collect data on patient socio-demographic characteristics, service delivery factors and health provider factors for one month. Rating of patient satisfaction was as follows: 1= Very dissatisfied, 2= Dissatisfied, 3= Neutral, 4= Satisfied and 5= Very satisfied. Fifteen Key Informant Interviews were conducted using interview schedules. Questionnaire and interview schedules were translated to a language conversant with respondents. Research instruments were pre-tested using participants with similar characteristics as the actual sample and were not included in the final study then all errors identified were corrected. For the questionnaire 10% of the sample size was chosen for pre-testing. Two research assistants male and a female aged 29 and 32 years respectively with secondary level of education were involved in data collection. Principle researcher trained the two research assistants for one week to avoid inter- research variability.

Data was cleaned, checked for accuracy and completeness, coded and entered into computer for analysis. Data was analysed using statistical package for social sciences (SPSS) version 21.0. Data on objective 1 and 2 were analysed using frequency tabulation and percentages on a 5-Point Likert scale then Chi-square test was computed to check any statistically significant association with value of  $p < 0.05$ . Data on objective 3 was analysed using frequency tabulation and percentages on a 5-point Likert scale. Multivariate regression analysis was computed to check any statistically significant relationship with value of  $p < 0.05$  then analysed data was presented in tables.

Approval to undertake the study was sought and obtained from Maseno University School of Graduate Studies. Ethical approval was obtained from Maseno University Ethics Review Committee (MUERC). Permission to carry out the study was obtained from health centre in-charges and individual participants through informed consent form. Purpose of study was explained to participants before they signed the consent form. All information obtained from participants was treated private and confidential. Participation in the study was voluntary and participants had freedom to decline at any time without penalty. They were assured of no potential harm from this study.

## V.RESULTS

Table 1 shows the socio-demographic characteristics of 390 respondents attending OPD out of a sample size of 395 giving a response rate of 98.7%. There were more females 213 (54.7%) than Males 177 (45.3%). Majority of respondents 192 (49.2%) were aged between 20 and 49 years. Majority 249 (63.8%) were married while minority 51 (13.1%) were divorced or widowed. Half of respondents 195 (50%) had primary education, 171 (43.8%) secondary education and above while few 24 (6.2%) were illiterate.

**Table 1: Socio-Demographic Characteristics of the Respondents (n=390).**

Socio-Demographics	No. of Respondents n (%)		
	Male	Female	Total
<b>Age</b>			
15 – 19	39(10.0)	27(6.9)	66 (16.9)
20 – 49	68(17.4)	124(31.8)	192(49.2)
50 & Above	70(17.9)	62(16.0)	132(33.9)
<b>Marital Status</b>			
Single	61(15.6)	29(7.5)	90(23.1)
Married	86(22.0)	163(41.8)	249(63.8)
Divorced & Widowed	30(7.7)	21(5.4)	51(13.1)



Educational Level			
None	17(4.3)	7(1.9)	24(6.2)
Primary	74(19.0)	121(31.0)	195(50.0)
Secondary & Above	86(22.0)	85(21.8)	171(43.8)
<b>TOTAL</b>	177(45.3)	213(54.7)	390(100)

Table2shows that female respondents 183 (46.9%) were more satisfied than males 112 (28.7%) at (p=0.000). Elderly patients 102 (26.1%) aged 50 years and above were more satisfied compared to younger 47 (12.0%) between 15 to 19 years at (p=0.039). Married respondents 192 (49.1%) were more satisfied than single 63 (26.2%) and divorced or widowed 37(9.5%) at (p=0.008). Respondents who had primary education or none 165 (42.3%) were more satisfied than those who had secondary education and above 130 (33.3%) at (p=0.037).

**Table2: Association of Socio–Demographics and Patient Satisfaction (n=390).**

Variables	Level of satisfaction ( Likerts 5-point scale )										%	p-value
	5		4		3		2		1			
	M	F	M	F	M	F	M	F	M	F		
<b>Gender</b>												
Male/ Female	62	89	50	94	13	9	44	19	8	2	100	0.000
<b>Age</b>												
15-19	9	6	18	14	0	3	12	3	0	1	16.9	0.039
20-49	25	61	14	42	5	7	20	12	4	2	49.2	
50& above	28	22	18	34	8	2	12	4	4	0	33.9	
<b>Marital status</b>												
Single	12	10	28	13	4	3	12	3	5	0	23.1	0.008
Married	36	70	17	69	2	9	29	13	2	2	63.8	
Divorce/Widow	14	9	5	9	7	0	3	3	1	0	13.1	
<b>Educational Level</b>												
None	6	3	5	2	3	0	2	0	1	2	6.2	0.037
Primary	23	46	27	53	4	5	16	17	4	0	50.0	
Sec.& Above	33	40	18	39	6	4	26	2	3	0	43.8	

All respondents received services free of chargehence cost of service was insignificant (p=1.0).Majority 270 (69.2%) of respondents spent 1hour or less to receive all services while minority 120 (30.8%) took more than 1 hour. 236 (60.5%) of respondents who received services in one hour or less were satisfied while 30 (7.6%) were dissatisfied. For those who took more than 1hour, majority 114 (29.2%) were dissatisfied while 1(0.3%) was satisfied with Chi-square test significant at (p=0.000).More than half of respondents 204 (52.3%) spent more than 5 minutes with clinician while less than half 186 (47.7%) spent less. Majority (23.0%) of respondents who spent less than 5 minutes with clinician were dissatisfied with services while those who spent more than 5 minutes, majority (51.3%) were satisfied with Chi-square test significant at (p=0.000).A total of 372(95.4%) respondents were given prescription paper to collect drugs from hospital pharmacy where 162 (43.5%) got more than 75% while 210 (56.5%) got less. Patients who got less than 75% of drugs were more dissatisfied



129 (34.7%) compared to those who got more 3 (0.8%) and this was significant(p=0.000).Majority 310 (79.5%) of respondents were satisfied with cleanliness while minority 74 (19.0%) expressed dissatisfaction which was significant at (p=0.000).Majority of patients who had less than 50% of tests done in health facility where they sought services were more dissatisfied 159 (76.8%) in comparison to those who had more 4 (2.0%) which was significant at (p=0.000).Slightly more than half 218 (55.9%) were dissatisfied with staffing in facilities where they sought services while less than half 90 (23.1%) were satisfied and this was significant(p=0.000).Respondents who lived within a radius of 1 and 5 kilometres from health facility were more satisfied 244 (62.6%) than those who resided beyond 5 kilometres 33(8.4%) and this was significant (p=0.000)as shownintable3.

**Table 3: Association of Service Delivery Factors and Patient Satisfaction.**

Variable	Level of Satisfaction (likerts 5-point scale) n (%)					p-value
	5	4	3	2	1	
<b>Cost of Service(n=390)</b>						
• Free	346(88.7)	37(9.5)	5(1.3)	2(0.5)	0	1.0
• Fee for Service	0	0	0	0	0	
<b>TotalClinicWait Time(n=390)</b>						
• < 30minutes	15(3.8)	11 (2.8)	1(0.3)	0	0	0.000
• 30 minutes-1 hour	3(0.8)	207(53.1)	3(0.8)	29(7.3)	1(0.3)	
• >1hour	0	1(0.3)	5(1.3)	86(22.0)	28(7.2)	
<b>Consultation Time (n=390)</b>						
• < 5 minutes	18(4.6)	69(17.7)	9(2.3)	75(19.2)	15(3.8)	0.000
• 5 – 10 minutes	72(18.5)	54(13.8)	0	1(0.3)	2(0.5)	
• 11 – 20 minutes	50(12.9)	21(5.3)	1(0.3)	0	0	
• > 20 minutes	2(0.5)	1(0.3)	0	0	0	
<b>Drug Supply (n=372)*</b>						
• < 25%	6(1.6)	3(0.8)	0	18(4.8)	6(1.6)	0.000
• 25 – 50%	1(0.3)	2(0.5)	0	71(19.1)	4(1.1)	
• 51 – 75%	12(3.2)	54(14.5)	3(0.8)	27(7.3)	3(0.8)	
• > 75%	153(41.2)	6(1.6)	0	2(0.5)	1(0.3)	
<b>Cleanliness (n=390)</b>						
• Yes	156(40.0)	151(38.7)	2(0.5)	3(0.8)	1(0.3)	0.000
• No	0	3(0.8)	4(1.0)	69(17.6)	1(0.3)	
<b>Laboratory Services (n=207)*</b>						
• Less 25%	0	0	15(7.3)	69(33.3)	18(8.7)	0.000
• 25– 50%	0	0	3(1.4)	66(31.9)	6(2.9)	
• > 50%	6(2.9)	15(7.2)	5(2.4)	3(1.5)	1(0.5)	
<b>Staffing Level (n=390)</b>						
• High	9(2.3)	78(20.0)	27(6.9)	12(3.1)	3(0.8)	0.000
• Low	0	3(0.8)	55(14.1)	174(44.6)	29(7.4)	



Distance to Facility (n=390)						
• 1 km – 5km	138(35.4)	106(27.2)	2(0.5)	35(9.0)	7(1.8)	0.000
• 6 km – 10km	18(4.6)	15(3.8)	3(0.8)	56(14.3)	4(1.0)	
• Above 10km	0	0	1(0.3)	3(0.8)	2(0.5)	

\* 372 patients received prescription order for drugs and 207 laboratory services.

Multivariate regression model in Table 4 provides necessary information to predict the influence of each separate and distinct health provider variables namely, confidentiality, attitude, courtesy, competency and privacy on level of patient satisfaction and the statistical significance. The regression model was presented as  $Y = b_0 + b_1*x_1 + b_2*x_2 + b_3*x_3 + b_4*x_4 + b_5*x_5 + \epsilon$ .....i where Y=Patient Satisfaction (dependent variable),  $b_0$ =Constant,  $x_1$ =Confidentiality,  $x_2$ =Attitude,  $x_3$ =Courtesy,  $x_4$ =Competence,  $x_5$ =Privacy and  $\epsilon$ =Error Term/Residual error. The model was fitted using unstandardized coefficients as  $Y = 0.667 + 0.431x_1 + 0.569x_2 - 0.667x_3 - 0.064x_4 + 0.385x_5 + 0.083$ .....ii. From the model, the first variable constant of 0.667 predicted value of patient satisfaction at  $p = 0.000$  when all other variables were held constant at zero (0). One unit increase of staff confidentiality increased patient satisfaction by 0.431 units with p value 0.000. One unit increase in staff attitude increased patient satisfaction by 0.569 units with p value 0.000. Study revealed that one unit decrease in staff courtesy decreased patient satisfaction by 0.667 units when p value was 0.000. Decrease in staff competence by one unit decreased patient satisfaction by 0.064 units with p value 0.000 and one unit increase in observation of privacy by health staff increased patient satisfaction by 0.385 units with p value 0.000.

**Table 4: Multivariate Regression Analysis of Health Provider Variables.**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.667	.083		8.065	.000
Confidentiality	.431	.049	.523	8.842	.000
Attitude	.569	.060	.439	9.468	.000
Courtesy	-.667	.090	-.319	-7.408	.000
Competence	-.064	.045	.000	.000	.000
Privacy	.385	.093	.600	4.146	.000





Key informants identified a number of challenges and proposed possible solutions. Inadequate personnel especially those on permanent basis was a problem so staffs were forced to work extra hours and employment on permanent basis emphasised. Inadequate funds were drawback in development of infrastructure and purchase of laboratory equipments and reagents. Lobbying funds from county government, community developments fund (CDF) and partners had assisted a lot. Laboratory departments were inadequately equipped forcing patients to get services from nearby health facilities as an alternative. Drugs shortage was a draw back in delivery of health services resulting from high consumption as all services were free. Borrowing drugs from the main sub-county hospital or sending patients to buy from private chemists was done when stocks ran out. Health staff and community health workers complained of poor remuneration. Lobbying through unions like Kenya National Union of Nurses (KNUN) and Kenya Health Professionals Society (KHPS) had seen some allowances being implemented. Community health workers were motivated through participation in national health campaign programmes like immunization and seminars.

## VI.DISCUSSION

The present study highlighted the determinants of patient satisfaction with outpatient services at primary health facilities in Mbooni Sub-County, Kenya with a focus on level of satisfaction. Female respondents were more satisfied compared to males. Results are consistent with study at Mbagathi hospital, Kenya where females were more satisfied than males [17]. Results contradict study at Busia County referral hospital; Kenya where males were more satisfied compared to females [18]. Elderly patients were more satisfied than young. Results agree with study at Jimma University Specialized hospital in Ethiopia where older age group was more satisfied in comparison to younger [10]. On the contrary, a study carried out on women receiving outpatient maternal care services in four Kenyan slums revealed no statistically significant association between age and patient satisfaction [19]. Married respondents were more satisfied than single, divorced or widowed. Study is in agreement with that carried out in health centres of West Shoa zone, Central Ethiopia which showed higher satisfaction among married respondents in comparison to singles [20]. Study mirrors that done at Busia County referral hospital, Kenya where married patients were more satisfied compared to single [18]. It disagrees with that conducted at Mbagathi hospital Kenya where divorced clients were more satisfied than married [17]. Respondents who had low education were more satisfied compared to those who had higher. Study mirrors that at Qassim University in Saudi Arabia [21]. Study is contrary with that done in four Kenyan slums where there was no statistically significant association between education and patient satisfaction [19]. All services were free which is in line with government of Kenya health policy to have services at primary health level affordable to all population groups irrespective of their socio-economic and geographical location hence cost of service was not important in explaining satisfaction statistically. Shorter total clinic waiting time was associated with more satisfaction than longer time. Study agrees with that carried out in Usmanu Danfodiyo University Teaching hospital, Nigeria which showed that longer total clinic wait time caused lower satisfaction [8]. Study mirrors that carried out in Juaben hospital in Ghana where 41% of respondents were satisfied with total time spent at hospital while 59% were not [22]. Respondents who had longer consultation time were more satisfied than those who had shorter time. Finding mirrors study at a tertiary hospital in Nigeria where patients with longer consultation time were more satisfied compared to those with shorter duration [23]. Study contradicts that in Kuwait at primary health care clinics where majority of respondents (87%) reported inadequate consultation time [24]. More than half (56.5%) of respondents with prescription paper for drugs did not get more than 75% from the hospital pharmacy. Finding is similar but lower than that at Jimma University Specialized hospital in Ethiopia where majority of patients (71%) got few drugs from hospital pharmacy [10]. On the contrary, at Pumwani hospital in Kenya majority of respondents (46.4%) agreed that all prescribed drugs were available in the hospital pharmacy while minority (13.6%) disagreed [25]. There was more satisfaction from patients who got more than 75% of drugs in hospital pharmacy than those who procured less. Finding mirrors study in Turakeswar Rural Hospital, India where patients who got above 75% of drugs were more satisfied compared to those who got less [26]. It is also in agreement with study at Deberebirhan referral hospital in Ethiopia where more satisfaction was from patients who got more drugs than those who got few [27]. Majority of respondents (79.5%) were satisfied with cleanliness in the facilities. Study is in agreement but lower than that conducted in Juaben hospital in Ghana which showed 95% of respondents being satisfied with cleanliness of hospital environment [22]. Study contradicts that conducted at Pumwani Hospital in Kenya which recommended improvement in cleanliness [25]. Majority (85.5%) of respondents were not able to get more than 50% of laboratory services. Finding is similar but higher than that at health clinics in Zambia where 56% of respondents rated adequacy of medical equipment as very poor [28]. Finding contradicts study at primary health centres of Kulgam in India where majority of patients got 68% of laboratory services [29]. Slightly more than half of respondents (55.9%) expressed dissatisfaction with staffing. Finding agrees with study in Ghana where inadequacy of staff caused dissatisfaction with



services [30]. Results support studies in Gaborone, Botswana which indicated a need to increase manpower to promote service delivery and facility utilization [3]. Respondents who resided within short distance were more satisfied than those who resided far. Study agrees with that done in Nigeria where there was more satisfaction in facilities located near where patients resided [31]. On the contrary, study in Machakos Level 5 hospital, Kenya found majority of those who found services dissatisfying resided within short distance and minority from long distance [32]. Most respondents (54.8%) were dissatisfied with confidentiality given by staff. Study is in agreement with that done at Mwananyamala hospital, Tanzania where least satisfaction was rated in the way patients records were handled [33]. On the contrary, a study in Ghana rated satisfaction with confidentiality in hospitals at 92% [22]. Staff attitude was appreciated by most respondents (86.6%). Study mirrors that conducted in Turakeswar Rural Hospital West Bengal, India but is higher where 43.8% of respondents were satisfied and 7.5% remained dissatisfied [26]. It disagrees with that done in rural district of Ghana where more patients were dissatisfied [34]. Most respondents (83.3%) were satisfied by staff courtesy in terms of politeness. Results mirror study at University of Port Harcourt Teaching Hospital in Nigeria but are lower where satisfaction with doctor's courtesy was rated at 96.4% [9]. They also agree with study in Hawassa University Teaching Hospital, Ethiopia where staff courtesy was rated at 85.4% [35]. More than half of respondents (53.0%) were not satisfied with the way clinician examined them. This reflects an observation made in several Iranian hospitals that patient satisfaction is dependent on practitioner's knowledge and technical skills [36]. Study contradicts that conducted in public hospitals in Cyprus which revealed more satisfaction with provider's technical competency [5]. Majority of respondents (87.5%) reported more satisfaction with privacy. Results are in agreement but higher than those of study in Nigeria where 71.2% of the respondents reported enough privacy in the consulting room [37]. Study contradicts that done in rural Bengal, India which showed poor perception of services resulting from inadequate privacy [38].

## VII. CONCLUSION

The current study revealed that gender, age, marital status and educational level influenced patient satisfaction. There were dissatisfaction on drug supply, laboratory services, staffing, competency and confidentiality which need policy maker's attention.

## VIII. ACKNOWLEDGEMENT

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