

## **ANALYSIS OF HOW QUALITY OF SERVICES INFLUENCES THE CONSUMPTION OF PUBLIC HEALTHCARE SERVICES IN MANDERA COUNTY, KENYA**

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### **Abstract**

*Health is an essential element of human investment in the sense that venture in wellbeing has important direct effects on output and therefore on financial growth and vice versa. Kenya has witnessed significant rise in economic escalation in the last decade however the healthcare indicators such as maternal mortality, under five year child morbidity and generally disease burden are significantly high especially in rural areas. A Country that apportions insufficient healthcare budget has got a severe challenge in reversing or halting healthcare trends. The objective of the study was to determine the influence of quality of service on consumptions of public healthcare service in Mandera County, Kenya. This study used a qualitative research methodology; a cross-sectional descriptive research design involving 384 sampling population and multistage sampling technique was used involving purposive, census and systematic sampling to identify the facilities, healthcare workers and patient or clients respectively. The data was analyzed using SPSS. The study indicates that the respondents would like going to a hospital where customer service is good, the care givers are qualified, reliable laboratory results*

*and with good management. Health care quality on an individual's well-being can be very great, and often will be more important than the quality of other goods or services. Recommendations were that National and County governments should employ medical personnel with skill mixed more so those with specialized skills, equip laboratories with adequate supplies and reagents and ensure hospitals are managed by qualified managers with background management training.*

*Keywords: Public Healthcare Services, Quality of Services, Customer Services, Trained Medical Specialists, Kenya*

## **INTRODUCTION**

The information people have about a healthcare facility and the services it provides usually influences on choices of any healthcare facility. The more information you avail about a particular healthcare service quality increase, the more people makes choices of going to a health provider, than self-treatment. Private hospitals gain more from the awareness creation families have about the quality of services being offered (Moses, 2013). This discovery is similar to that of Thompson (2003), who established absence of adequate healthcare information was related with variances in healthcare uptake in many health facilities, especially between the rural and the urban centres. Kenkel (1990) established that the knowledge people have on health services has an impact on their healthcare seeking conduct. The discovery of Hsieh and Lin (1997) about consumption for healthcare by the old aged in Taiwan needs to be interpreted with care due to the possibility of selection subjectivity of in their study. Moses (2013) in his study established that the time taken by patient to be attended affects their decision such that if time taken to see a healthcare provider is increased patients or clients may decide to self-medicate themselves. However if the perceived quality of healthcare will improve their health status time taken is not considered as an issue and negatively linked self-treatment.

### **Objective of the Study**

To determine the influence of quality of service on consumptions of public healthcare service in Mandera County

### **Research Question**

How does quality of service influence the consumption of public healthcare services in Mandera County?

## LITERATURE REVIEW

### Neoclassical Theory

The neoclassical appreciates that mankind is fixed at the utilitarianism philosophy, *"Nature has put mankind under the government of two sovereign masters, pain and pleasure. It is for these alone to point out what we ought to do, as well as what we shall do... They manage us in all we do, in all we say, in all we think: every effort we can make to throw off our subjection, will serve but to demonstrate and confirm it."* (Bentham, 1789).

People continuously evade pain while they endlessly seek for pleasure, these two are the causes for the development of theory of utilitarian as well as the behaviors of people been seen to maximize utility.

In neoclassical thinking healthcare is seen as length of lifespan healthy days per year that a consumer produces and requires (Grossman, 1972). Sickness comes with pain hence a form of disutility where healthiness gives pleasure and allows more productive days, investments and more productive life.

### Empirical Literature

The citation of the institute of medicine to define healthcare quality as the increased level of good outcome from a healthcare service in 1990 is the most accepted definition of quality globally.

To know the impact of financial burden on client safety in Florida, Encinosa and Bernard (2005) used the data of every patient released from the wards between the years 1996 to 2000, where as Encinosa and Bernard (2005) used the existing standard indicators which measures mortality rates, maternal mortality, hospital related complication and trauma. Sari (2007) found out that well managed healthcare coverage increases quality of services although there is no relationship between the two. He discovered this by using data from hospitals in 16 states from 1992 to 1997.

The value of medical care as compared to level of expertise as replacement by presence of medicines has been mentions by medical professions as a factor in consumption of health care (Sahnet *al.*, 2003; Mwabuet *al.*, 1993; Ellis *et al.*, 2000).

Indeed, quality as related to healthcare remains a challenge to express in the event that someone wants to reflect on all the stakeholders in a comprehensive manner such as hostital clients, healthcare regulators and management. For example, patient's satisfaction in quality of service has much to do with the attitude of medical workers (Greene, 1976). Mangione-Smith and McGylnn (1998) Perception of clients and patient concerning the delivery of quality

healthcare services as well as the attitude of the care givers will determine if they will seek service again in a particular facility(Thomas, 2004).

## RESEARCH METHODOLOGY

The study used a qualitative research methodology; a cross-sectional descriptive research design involving 384 sampling population and multistage sampling technique was used involving purposive, census and systematic sampling to identify the facilities, healthcare workers and patient or clients respectively. Questionnaire was used as research instrument to collect data. Data from the questionnaire was entered into the personal computer by the Principal Researcher and Research Assistant and was checked for consistency and accuracy. The data was then arranged for purposes of analysis, editing, managing blank responses, coding, categorizing and keyed in and using Statistical Package for Social Science version and presented in tabulation.

The study used the regression  $Y = \beta_0 + \beta_1 X_1 + \varepsilon$  for analysis: Where Y is the dependent variable (Healthcare consumption),  $\beta_0$  is the regression constant,  $\beta_1$ , is the coefficients of independent variable,  $X_1$  is how quality of service affects public healthcare consumption, whereas  $\varepsilon$  is error term of 0.05

## ANALYSIS AND RESULTS

### Quality of Healthcare Services

The study sought to determine the influence of quality of service on consumptions of public health care service in Mandera County. The results were recorded in the table 1 below.

Table 1: Quality of healthcare services

Statement	Mean	SD
I like going to a hospital where customer service is good	3.822	1.312
A hospital with doctors and clinical officers is better than a hospital managed by other healthcare workers	3.830	1.160
A private hospital is preferred than a government hospital due to better quality of services	3.921	1.133
Laboratory tests of private hospitals have better and reliable results than those of government hospitals	3.622	1.239
A hospital managed by qualified manager is better than hospital managed by a medic.	3.604	2.125
Government hospitals have a long way to go to achieve high service level of standards	3.724	1.413

The findings of the study revealed that 9% of the respondents strongly disagreed, 14% disagreed, 3% were neutral, 37% agreed while 39% strongly agreed that they like going to a

hospital where customer service is good with a mean of 3.822. On the other hand, 7% strongly disagreed, 10% disagreed, 4% were neutral, 50% agreed while 29% strongly agreed that a hospital with doctors and clinical officers is better than a hospital managed by other healthcare workers with a mean of 3.830. Further, 2% strongly disagreed, 17% disagreed, 3% were neutral 42% agreed while 36% strongly agreed that a private hospital is preferred than a government hospital due to better quality of services with a mean of 3.921. Moreover, 6% strongly disagreed, 22% disagreed, 1% were neutral, 46% agreed while 25% strongly agreed that laboratory tests of private hospitals have better and reliable results than those of government hospitals with a mean of 3.622. Nevertheless, 14% strongly disagreed, 19% disagreed, 1% were neutral, 34% agreed while 32% strongly agreed that a hospital managed by qualified manager is better than hospital managed by a medic with a mean of 3.604. Finally, 13% strongly disagreed, 14% disagreed, 35% agreed while 38% strongly agreed that government hospitals have a long way to go to achieve high service level of standards with a mean of 3.724.

The study above indicates that quality of service on consumptions of public healthcare service in Mandera County as supported by the majority of the respondents. These findings agrees with Ellis *et al.* (1994) that medical quality, assessed in terms of both health staff qualifications and by the availability of drugs increases the probability of a visit to both private clinics and public hospitals. The fact that service information is strongest in determining the demand for health care at private health facilities implies that information about quality of care in the study area is being transmitted through channels that advertise the quality aspects better at private health facilities. The past experience in Kenyan public health facilities of persistent lack of drugs and shortages of inpatient doctors and nurses could still be in the memories of the majority of the households in the rural and slums, discouraging them from using public facilities which currently could be offering good quality services, but about which they are unaware of.

### Regression Analysis

The study sought to carry out the analysis of how quality of service affects public healthcare consumption in Mandera County, Kenya. This factor is quality of public health care services. The regression model was:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where, Y represent the Healthcare consumption,  $X_1$  how quality of service affects public healthcare consumption,  $B_0$  is the model's constant and  $\beta_1$  is the regression coefficients while  $\varepsilon$  is the model's significance from f-significance results obtained from analysis of variance (ANOVA).

Table 2: Model's Goodness of Fit Statistics

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.734 <sup>a</sup>	.539	.503	.1752	1.421

a. Predictors: (Constant), quality of healthcare services

Table 2 shows that there is a good linear association between the dependent and independent variables used in the study. This is shown by a correlation (R) coefficient of 0.734. The determination coefficient as measured by the adjusted R-square presents a moderately strong relationship between dependent and independent variables given a value of 0.503. This depicts that the model accounts for 50.3% of the total observations while 49.7% remains unexplained by the regression model.

Durbin Watson test was used as one of the preliminary test for regression which to test whether there is any autocorrelation within the model's residuals. Given that the Durbin Watson value was close to 2 (1.421), there was no autocorrelation in the model's residuals.

Table 3: Analysis of Variance (ANOVA)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.164	4	.541	11.657	.039 <sup>a</sup>
	Residual	9.775	115	.085		
	Total	11.939	119			

a. Predictors: (Constant), quality of health care,

b. Dependent Variable: Healthcare consumption

The ANOVA statistics presented in the table above was used to present the regression model significance. An F-significance value of  $p = 0.039$  was established showing that there is a probability of 3.9% of the regression model presenting a false information. Thus, the model is significant.

Table 4: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	3.544	.425			8.545	.045
Quality of healthcare services	.644	.874	.241		2.486	.049

a. Dependent Variable: Healthcare consumption

The following regression result was obtained:

$$Y = 3.544 + 0.644X_1 \quad P=0.039^a$$

From the model, when other factors (quality of healthcare services) are at zero, the healthcare consumption will be 3.544. Holding other factors constant, a unit increase in quality of healthcare services would lead to a 0.644 ( $p=0.049$ ) an increase in healthcare consumption.

## DISCUSSIONS

The study shows that the respondents would like going to a hospital where customer service is good with a mean of 3.822. This agrees that quality is of major concern in health care for a number of reasons. These results were in hand with Encinosa and Bernard, (2009) that the effects of health care quality on an individual's well-being can be very great, and often will be more important than the quality of other goods or services. Second, due to the pervasive presence of insurance against health care expenditures, health care consumers are not exposed to the full expense associated with their health care decisions. Thus, in the presence of a reduced role for price, quality looms larger in consumer choice, and serves as an important rationing device.

## CONCLUSION AND RECOMMENDATIONS

It's clear from the study that customers prefer going to a hospital where customer service is good, the care givers are qualified, reliable laboratory results and with good management. Health care quality on an individual's well-being can be very great, and often will be more important than the quality of other goods or services.

Based on the above conclusions the National and County governments should employ medical personnel with skill mixed more so trained medical specialists, equip laboratories with adequate supplies and reagents and ensure hospitals are managed by qualified managers with training in management.

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