



## Evaluation of the Level of Quality Health Care Accorded to Patients in Selected Public and Private Hospitals in Kiambu and Nairobi Counties in Kenya

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### Abstract

To evaluate the level of quality health care provided to patients in public and private hospitals in Kiambu and Nairobi counties. This study evaluated the level of quality health care provided to patients in Mbagathi District Hospital, Jamaa Mission Hospital (Nairobi), Kiambu District Hospital and Nazareth Mission Hospital (Kiambu) in Kenya. Descriptive cross sectional study design was used, where qualitative and quantitative approach was applied for data collection. Data was collected, recorded for three months, and analyzed at  $p \leq 0.05$  test of significance using SPSS statistical package. The relationship between variables was tested using Chi-square and the result was presented in graphs and tables. Purposive sampling was used to choose the location. Observation checklists were used by interviewers and proportional cluster sampling method was used to calculate sample size (800) of hospitalized patients above 18 years. Sample size in each cluster was determined according to the proportion of hospitalized patients. Systematic sampling was used in order to select the patients to be interviewed. The Heads of Departments were interviewed using both self- enumerated and in-depth interview guides. The study revealed the following; the majority of inpatients admitted were female in all hospitals of the study (deleted a statement here). The results shows that there was no gender inequality in health care provision both male and female were treated equally. The study also shows that there was relationship between occupation and education level with courtesy and respects of the health providers those with high education and in employment were served with respect and courtesy while those unemployed and low education were not served with courtesy and respect by health providers showing discrimination of social classes. However, the clients credited the doctors for their positive attitude. The study revealed that there was no relationship between motivation and quality. The evaluation study results shows that both Mission and Government hospitals considered the aspect of quality care though, there is still a lot to be done in order to achieve the high level of quality health care as set by the Ministry of Health (MOH) especially in the government set up. The study recommends the use of continuous evaluation to help in identifying the elements of quality health care that can be improved using the limited resources available as a starting point. The findings would be important for both public and private hospital managers, Ministry of Health, policy makers and other stakeholders.

**Keywords:** Quality health care; Kiambu; Nairobi; Descriptive cross sectional study design

### Introduction

Controversy surrounds the role of government and private sector in delivery of health service, particularly in hospitals. Due to increasing competition in the healthcare industry, many institutions are under pressure to use innovative tools in order to improve performance and maintain advantages competitive Igleston et al. [1].

Large segments of the population in developing countries like Kenya, Uganda, Tanzania, Ghana, Mozambique, Ethiopia, and Nigeria are deprived of access to basic health care. Without appropriate health support and delivery system in place, adverse effects are felt in all other sectors of economy. In simple terms, an ailing nation equates to an ailing economy as manifested by lower income earning capacity of households and loss in productivity in those sectors that sustain the economy. The problem of access to quality health care is particularly common in the four districts of the study. It is ethically good practices that methods of interventions be evidence based.

Kols and Serman [2] noted that patients' needs are dynamic and are continuously influenced by the cultural, economical, demographic, social and environment. For health services to satisfy these needs health systems need to undergo continuous transformation in accordance to prioritized needs of the consumers by evaluating the level of quality of health care in both private and public institutions.

In recent decades, carrying out an evaluation on quality health has been found to be the most useful tool for getting patients views on how

to provide care. This is based on two major principles: patients are the best source of information on quality of health services provided and patients' views are the determining factors in planning and evaluating quality of health care.

### Methodology

#### Background information of the study areas

The study was conducted in Kenya in level four hospitals at Mbagathi District hospital, Kiambu District hospital (government), Jamaa Mission hospital and Nazareth Mission hospital (private/Mission). Kiambu District hospital and Nazareth Mission hospital are situated in Kiambu County which has a population of 1,623,282 while Jamaa Mission hospital and Mbagathi District hospital are situated in Nairobi County having a population of 3,138,295. The study was

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exploratory approach using a descriptive cross sectional design, where a qualitative and quantitative approach was used for data collection. The study population was composed of 800 (sample size) hospitalized patients above 18 years and all the clinical departmental heads who attended at hospital during the study period. The study was carried out from May to July 2012.

### Sampling procedure

The research was carried out in Mbagathi District hospital, Kiambu district hospital, Jamaa Mission hospital and Nazareth Mission hospital in Kiambu and Nairobi counties; Purposive sampling was used to select the institutions where the study was conducted and to select heads of departments who were knowledgeable in their areas of influence to be interviewed as key informant. The sample population was selected by systematic random sampling; sample size (800) was determined using proportional cluster sampling method. Four hospitals were selected purposively and formed the first cluster that was two private/Mission hospitals and two government hospitals and different wards in each hospital were selected as the second cluster. Sample size in each cluster was determined according to the proportion of hospitalised patients above 18 years in different wards and heads of department were selected purposively.

Quality of services within the hospital was determined using structured and semi structured questionnaires, observation checklists and assessment checklists were used by the interviewers. The interviewers selected were knowledgeable in English, Kiswahili and Kikuyu in case some clients do not understand English. Systematic sampling was used to select the patient to be interviewed. Every second patient was selected until the required sample size was met. The participants were interviewed in the hospital while still in the wards after discharge and the questionnaires were completed by the interviewers.

All heads of departments that directly deals with the patient care were selected for interviews. Both self- enumerated and in-depth interviews were carried out on them to establish the existence of quality health care within the different departments in the hospital and assessed their perception on whether they assure quality care. Interviews were carried out on all days other than Sundays. If the patient who was selected refused to participate or was unable to answer the questions, the next person on the hospital registration form was selected as a replacement. The questionnaires were developed in four parts: demographic characteristics; rate of patient needs to medical services; satisfaction (including behaviour of staff and doctors, availability of professionals and other services) and motivating factors. Four categories of instruments were used, this was, Self- enumerated ranking scale, semi- structured questionnaire, in-depth interview guide and structured questionnaires also observation checklists and assessment checklists were used. Interview guides were used to collect information from the key people who were departmental heads. The interviewers selected were knowledgeable in English, Kiswahili and Kikuyu in case some clients do not understand English.

Qualitative and quantitative methods of data collection were used. Secondary data source was used to obtain information from recent census, other official statistics and even previous surveys for the purpose of enriching the data collection. Primary quantitative data was collected using self-enumeration matrix questions rated on a Likert scale and response graded with different values ranging from 1-5. Qualitative data was collected using observation checklists, in-depth interview guides with probing questions where necessary. These were administered to all heads of clinical departments as key informants.

The quantitative questionnaires were sorted out, arranged in order by date of interview and given identification numbers sequentially depending on each set of questionnaires. The areas that required post coding were identified and given codes indicating the values next to variable labels in each questionnaire. In case of open-ended questions the response was categorized and assigned numbers accordingly. Results were presented in tables and graphic forms using percentage, frequencies and cross tabulation [3]. The statistical assessment used was Chi- square to determine the relationship between variables, data was analyzed at  $p \leq 0.05$  test of significance using Statistical Package of Social Science (SPSS).

## Results

### Reasons for seeking health services in the hospitals

Among the reasons given by respondents for seeking health services at the hospitals, the majority 53.9% mentioned due to proper treatments, 14.2% near to their residence, 11.5% referred, 9.1% qualified competent staff, cheap 6.9% and 0.1% were admitted because of emergency of their sickness (Figure 1).

### Availability and affordability of drugs and services

Type of facility, among the respondents who attended to Government hospitals 11.4% strongly agreed and 72.5% who received medication in Mission hospitals strongly agreed that they received prescribed drugs within the hospital. The remaining majority who received services in Government hospitals disagreed that they did not receive all prescribed drugs, instead they were told to buy from outside the hospital pharmacy. This shows that there was a relationship between type of hospital and availability of drugs.

The respondents in the Government hospitals 6.5% strongly agreed, 57.9% agreed that the price of the services were reasonable, 10.1% did not comment since they were covered by the insurance companies. While the rest disagreed that the prices of the services were high as compared with the quality of the services they received. In the Mission hospitals 79.9% strongly agreed that the service quality was worth the amount paid, 15% agreed too. While the remaining small number did not know since the payment was done by employers and insurance companies.

Most of the clients 40.4% strongly agreed and 43.3% agreed that they received all the drugs that were prescribed while the rest disagreed that they did not get all the prescribed drugs and were told to buy from outside the hospital pharmacy. Among the respondents 35.3% agreed that the cost of drugs given was reasonable and 26.3% felt that the cost

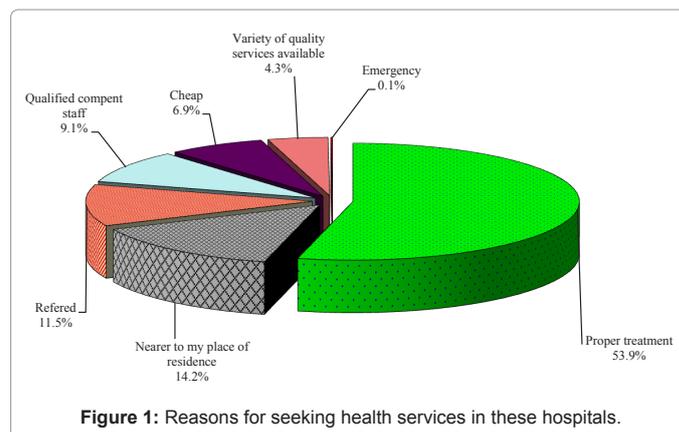


Figure 1: Reasons for seeking health services in these hospitals.

of the drugs given were expensive they wished the price to be reduced. Other respondents 19 % were undecided whether the price of drugs was worthy or not (Table 1).

The results indicates that the respondents 9.6% strongly disagreed and 26.2% disagreed that the cost of the services offered at the Hospital was not worth the services offered to them, while 35.3% agreed and 9.9% strongly agreed that the cost of the services offered at the Hospital was reasonable as compare to the services offered to them. Majority of the clients agreed 50.3% and 30.7% strongly agreed that they would recommend the services to others and the remaining number disagreed that they would not recommend the services in the hospital to somebody else (Table 1).

The following were the reasons for recommending the services to others, were proper treatment 40%, responsiveness 30%, qualified staff 11%, handle complication 10.6% proper communication 9.4%, other reasons included were; cheap, assurance, proper management, availability of drugs and discipline of the staff. Reasons for not recommending the services to others were the services are expensive, poor caring, poor sanitation, slow or delays, lack of proper beddings, congestion, staffs not serious, equipment not adequate, staff harassments (rude), negligence, lack of essential drugs, poor diet, poor caring, poor treatments, bed sharing, lack of security on clients property, discriminations among others those were most comments

in Government hospitals. While in Mission hospitals small number of respondents who said would not recommend services to others mentioned expensive.

### Patient waiting time

The result indicates that the respondents who sought health services in study hospitals 43.7% strongly agreed that they spent adequate time before being seen by the health provider. While 38.4% agreed that they spent time before being seen by health provider. The 3% did not know whether the time they spent waiting to be served by the provider was reasonable and the rest said that the time they spent waiting to be served was too long.

Majority of the respondents 57.2% felt that they spent adequate time less than 30 minutes while the rest of clients waited between 30 - 1 hour before being served on arrival and others waited more than 1 hour felt that they spent a lot of time waiting to be served . Majority of clients who felt that the time they spent waiting for services was too long, most of them mentioned in the registration points 58.5%, consultancy room 16 .1% and laboratory 14.8%. The results shows that the majority were satisfied with the length of time the providers spent while attending to them and the small number disagreed with the time spent by the providers while attending to them. Some clients claimed that they were not given time to explain themselves as shown in table 2.

Statements	Responses											
	Agree		Strongly agree		Undecided		Disagree		Strongly disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
You were supplied with drugs that were prescribed	310	40.4	328	43.3	25	3.3	75	9.8	25	3.3	767	100
Instruction was given on how to take medication	276	34.8	394	49.6	41	5.2	77	9.7	6	0.8	794	100
Instructions understood fully	236	29.6	425	53.3	44	5.5	89	11.2	4	0.5	798	100
Told the side effects of drugs	137	17.2	312	39.1	78	9.8	258	32.4	12	1.5	797	100
Medicine available in the hospital	330	41.5	298	37.5	54	6.8	103	13	1.3	10	795	100
The prices of the health services was reasonable	78	9.9	279	35.3	150	19	208	26.3	76	9.6	791	100
You would recommend the services in this hospital to somebody	243	30.7	398	50.3	24	3.0	78	9.9	48	6.1	791	100

Key F = frequency % = percentage

Table 1: Availability and affordability of drugs and services.

Variables	Response	Frequency (n)	Percentage (%)
Time taken to be seen by services provider was reasonable	Agree	307	38.4
	Strongly agree	349	43.7
	Undecided	25	3
	Disagree	58	7.3
	Strongly disagree	61	7.6
<b>Total</b>		<b>800</b>	<b>100</b>
Length of waiting Time to be served	Less than 30mins	455	57.2
	Between 30 – 1hr	196	24.7
	More than 1 hr	115	14.4
	Not applicable	34	3.7
<b>Total</b>		<b>800</b>	<b>100</b>
The department most of time was spent	Registration	459	58.5
	Waiting to be seen by clinician	127	16.1
	Laboratory	116	14.8
	Pharmacy	66	8.3
	X- ray	16	1.8
	Theatre	6	0.5
<b>Total</b>		<b>800</b>	<b>100</b>
The provider spent enough time attending to you	Agree	338	42.3
	Strongly agree	384	48.4
	Undecided	26	2.0
	Disagree	44	6.3
	Strongly disagree	8	1.0
<b>Total</b>		<b>800</b>	<b>100</b>

Table 2: Patient waiting time.

The result indicates that respondents with high levels of education spent adequate time before being seen by health provider. While those with low levels of education felt that they spent a lot of time before seeing a health provider or being served (Table 3 and Figure 2).

The respondents who attended to Mission hospital 252 (66.3%) strongly agreed that the provider spent enough time attending to them and 113 (29.7%) agreed while in Government hospitals 86 (21%) strongly agreed, 271 (66.1%) agreed that the health provider spend time while attending to them the rest disagreed that the health provider did not spent enough time and they felt that they were not examined well for the medication they received especially in the government hospitals.

### State of cleanliness of the hospitals

The overall cleanliness and comfort of the examination room or the place where they received the services majority of the respondents 270 (65.4%) were dissatisfied with overall cleanliness and comfort of the examination room and the places they received services while 97 (23.6%) were satisfied and 22 (5.6%) very satisfied, 12 (2.9%) undecided on the issues of cleanliness and 10 (2.5%) rated the general

cleanliness and comfort of the hospitals as very dissatisfying these was in Government hospitals. While in Mission hospitals out of 366 respondents 8 (2.1%) dissatisfied with overall cleanliness and comfort of the examination room and the places they received services the rest 358 (97.9%) were very satisfied. Clients suggestion on services to be improved the respondents who were not satisfied with the state of overall cleanliness of examination room and the places where they received the services mentioned the following as the areas that needed to be improved, toilet and bathroom 260 (62.9%), beddings 90 (21.7%), wards 58 (14%), the rest mentioned drainage system among others.

The clients suggested in order to improve the state of the above mentioned areas, the following should be done: clean regularly, more subordinate staff to be employed, improve sanitation, improve drainage systems in the hospitals, proper disposal containers to be provided, add more toilets, cut grass, clean compound to remove scattered boxes (Mbagathi hospital), supervision should to be enforced, paint ward equipment, provide enough and clean beddings, labor ward should have curtains around the procedure area to provide privacy to the clients and also they recommended that bed linen to be changed daily and clean bed ridden patients.

The results indicate that the majority of the respondents who attended to Mission hospitals were more satisfied with the level of cleanliness than those in Government hospitals.

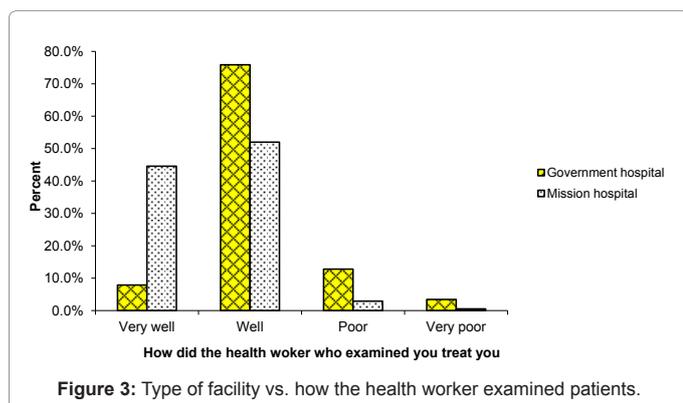
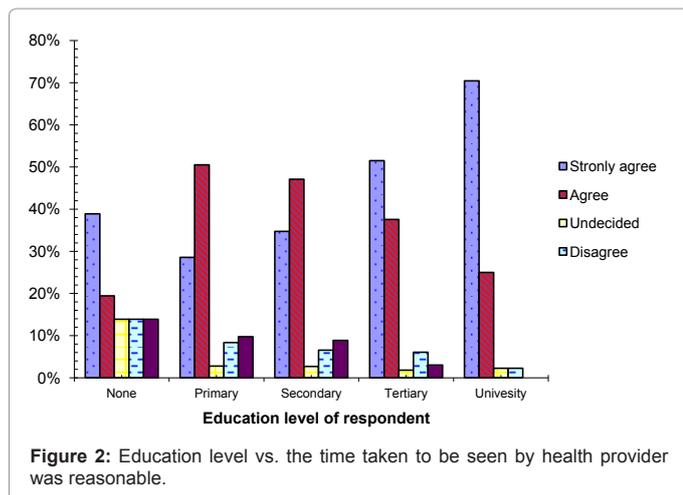
### Client relationship with service providers

Among the respondents in the Government hospitals 21.8% and 37.7% in the Mission hospitals strongly agreed that they asked questions to health providers while 60.5% and 37.7% agreed too, small percentages disagreed that they did not ask any question to health provider in fear of being answered rude and 5.8% (Government hospitals) and 45.9% (Mission hospitals) respondents were satisfied with answers to their questions while 18.5% (Government hospitals) and 4.6% (Mission hospitals) were dissatisfied with the answers given to their questions and few clients were very dissatisfied. Among the clients who responded 21.5% (Government hospitals) and 4.9% (Mission hospitals) admitted that they were uncomfortable discussing their problems with health providers because they were not friendly while 49.6% (Mission hospitals) and 7.7% strongly agreed that they felt comfortable discussing their problems with health providers. Other responses 63.3% (Government hospitals) and 35.7% agreed that were comfortable discussing their problems with health provider (Table 4).

The result indicates that 44.6% of the clients from Mission hospitals and 7.9% in the Government hospitals felt that the health worker examined them very well. While 52% from Mission hospitals and 75.9% in Government hospitals admitted that they were examined well. Small percentages were unhappy with how health worker examined them and felt that they were poorly examined (Figure 3).

### Perception of the clients on the attitude of the service providers

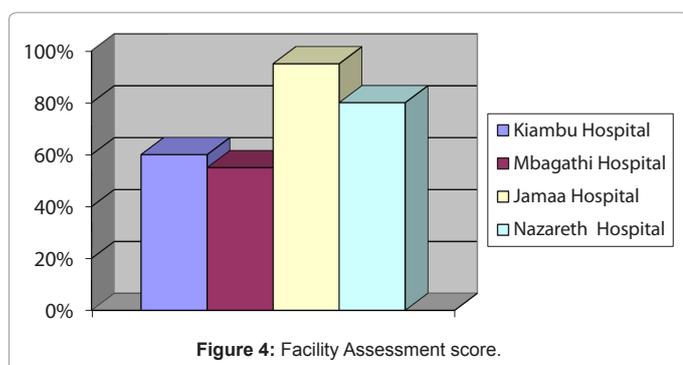
The clients who rated the attitude of the nurses as satisfying



Variable	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
None	38.9%	19.4%	13.9%	13.9%	13.9%
Primary	28.6%	50.5%	2.8%	8.4%	9.8%
Secondary	34.7%	47.1%	2.7%	6.6%	8.9%
Tertiary	51.5%	37.6%	1.8%	6.1%	3.0%
University	70.5%	25.0%	2.3%	2.3%	0.0%

Table 3: Summary of crosstab of education level vs. the time taken to be seen by health service provider.

were 42.9% while 28.6% rated this variable as dissatisfying. The majority of the respondents rated 66% were very satisfied and 26.1% satisfied with the skills and attitude of doctors who attended to them and none of respondents rated the attitude of doctors as dissatisfying. Fifty three of the clients interviewed were undecided on the attitude of the pharmacist, 31.4% were satisfied and 14.6% rated the pharmacist attitude as very satisfying. Majority of the clients 67.5% never responded to this question. Those who responded to this question rated the technologist as having very satisfying attitude 18.9% and 13.2% satisfying attitude. The client interviewed 51.1% were undecided on the attitude of radiologist since they were not attended by them while 33.9% said they were very satisfied with radiologist attitude and 14.3% were satisfied with the attitude of radiologist and skills of handling clients. More than half of respondents were satisfied with the attitude of cashiers while 6.1% rated the attitude of cashiers as dissatisfying as shown in the table 5.



### Facility assessment score

The assessments carried out during study in the four hospitals that are all level four hospitals. The various items in table 6 were assessed whether they are available and the results showed that the standards of the Ministry of health were well observed with few things that needed to be corrected among the four facilities. The following were the results Jamaa Mission Hospital 95%, Nazareth Mission Hospital 80%, Kiambu District Hospital 60%, and Mbagathi District Hospital 55% all the hospitals scored above 50% indicating good performance since the structural is one of the dimension that plays important role in health care quality (Table 6 and Figure 4).

The following were the responses from the head of departments on the assessment on the quality in hospitals of study 25% in Government hospitals respondent yes that there were accessible to telephone within the facility while 57.5% in Mission hospitals said yes that the entire departments are accessible to telephone. 17.5% in government hospitals said not all the departments are accessible to telephone. On staff adequacy 5.9% in Government hospitals and 50% in Mission hospitals agreed that the staffs are enough while 94.1% in Government hospitals and 50% in Mission hospitals said the staffs are not enough. The response whether there are recommended protocol and proper information systems 40% in Government hospitals and 57.5% in Mission hospitals respondent yes while 2.5% in Government hospitals said no. In Mission hospitals the protocol and information system was up to date. 27.5% in Government hospitals and 35% they respondent yes that they had undergone in- service training in the past one year while 15% in Government hospitals and 22.5% in Mission hospitals said that they had not attended in- service training in the past one year.

Statements	Responses											
	Strongly agree		Agree		Undecided		Disagree		Strongly disagree		Total	
	G	M	G	M	G	M	G	M	G	M	G	M
You asked questions to health provider	21.8%	37.7%	60.5%	37.7%	2.4%	.8%	7.5%	6.8%	7.7%	3.8%	416	384
Your questions were answered to your satisfaction	5.8%	45.9%	63.6%	40.2%	7.5%	.8%	18.5%	4.6%	3.6%	.0%	416	384
You felt comfortable discussing your problem with provider	7.7%	49.6%	63.6%	35.7%	6.5%	9.5%	21.1%	4.9%	4.4%	.3%	416	384
You were satisfied with completeness of information given to you	7.2%	56.8%	61.0%	30.8%	7.5%	8.2%	21.2%	3.9%	3.1%	.3%	416	384
Providers were concerned about your needs	4.8%	53.2%	55.8%	32.4%	8.7%	2.9%	24.4%	11%	6.3%	.5%	416	384
The hospital has enough service provider	10.3%	44.8%	59.4%	37.1%	5.8%	3.4%	21.9%	11.9%	2.6%	2.7%	416	384

Key: G = Government Hospitals; M = Mission Hospitals

Table 4: Client relationship with service providers.

Variable	Response											
	Very satisfying		Satisfying		Very dissatisfying		dissatisfying		Undecided		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
Nurses	157	19.6	343	42.9	37	4.6	229	28.6	34	4.3	800	100
Doctors	531	66.4	209	26.1	0	0.0	0	0.0	60	7.5	800	100
Pharmacists	117	14.6	251	31.4	0	0.0	7	0.7	425	53.2	800	100
Technologists	150	18.9	107	13.2	0	0.0	3	0.4	540	67.5	800	100
Radiologists	272	33.9	114	14.3	3	0.4	3	0.4	409	51.1	800	100
Cashiers	126	15.7	474	59.3	14	1.8	49	6.1	137	17.1	800	100

Key: F = Frequency % = Percentages

Table 5: Perception of the clients on the attitude of the service providers.

Statements	Responses Yes or No				Total
	Kiambu	Mbagathi	Jamaa	Nazareth	
<b>Availability</b>					
Signboards showing direction	1	1	1	1	4
Compound well managed	1	0	1	1	4
Health facility licensed	1	1	1	1	4
Have well managed mortuary	1	1	1	1	4
Hygiene in the kitchen maintained & food guideline available	1	1	1	1	4
Safe water available in the facility	0	1	1	1	3
Are patient & staff toilet clean	0	0	1	1	2
Functional placenta bit/ macerator	1		1	1	4
Functioning incinerator	1	1	1	1	4
Functioning drainage system	0	0	1	1	2
Regular & reliable power supply	1	1	1	1	4
Adequate ventilation & lighting in the rooms	1	1	1	1	4
Facility fenced to provide security	1	1	1	1	4
Compound free from insect	0	0	1	1	2
Floors and walls well maintained	1	1	1	1	4
Roofs & windows well maintained	1	0	1	1	3
Standards & procedures available	0	0	0	0	0
In-patient uniform available & in good conditions	0	0	1	0	1
Linen for all beds available & in acceptable conditions	0	0	1	0	1
In-patient receives regular meals of acceptable nutritional values	0	0	1	0	1
<b>Total</b>	12	11	19	16	58
<b>% Total</b>	60 %	55%	95%	80%	72.5%

Key: Yes = 1 No = 0

Table 6: Facility inventory checklist of level four hospitals.

## Discussion

This was a descriptive study that was set out to describe the level of quality in both public and private (Mission) hospitals. The study intended to find out the structure that would be put in place to ensure quality health care is achieved in private and public hospitals. Generally the study focused on clients who were seeking inpatient services (hospitalized patients) and head of department key people with information on quality health care within the hospitals.

### Service quality ratings, to patient choice of the hospital

The majority respondents on places where they usually received health services mentioned government hospital (47%). This study supports Smithson et al. [4] findings that patients considered government health facilities to be better at treating more serious cases than Private-for-profit facilities. However some patients preferred private hospitals (24%) this agrees with Rakodi [5] found that government health facilities are perceived to be slow, lack of drugs for patients, and have staffs that are less motivated in their work and commitment to patients. These findings supports Mwabu et al. [6] that patients in communities that are served by both public and private health institutions prefer private health facilities to public. The main reasons were; slow process of care in government health facilities, unavailability or inadequacy of drugs, and poor attitude of staff toward patients. The main reasons given by the respondents for choosing to attend to health facilities (hospitals) 53% for proper treatments, due to qualified competent staff. This agrees WHO [7] arguments that performance of health care systems depends ultimately on knowledge, skills and motivation of the people responsible for delivering services. Health systems are responsive and require qualified and experienced staff to function well. The same text further states that to perform effectively the health systems need professionally trained and well-motivated personnel who are fairly paid for what they do.

The findings shows that the quality components that attract patients to attend to hospital services were proper treatments, qualified staff, responsiveness, proper communication, assurance, discipline and many others. These findings agrees with the study done by Andaleeb [8] who identified responsiveness as an important component of service quality and characterizes it as the willingness of the staff to be helpful and to provide prompt services. He further defined assurance as the knowledge and behaviour of employees that convey a sense of confidence that service outcomes would match expectations.

### Availability and affordability of drugs and services

Majority of the clients interviewed agreed that they obtained all the drugs that were prescribed for them from Mission hospitals. However majority from government hospitals disagreed and claimed to have been told to purchase from outside the hospital (pharmacy). Similarly it agrees with the statement from the Ministry of Health, [9] that in Kenya chronic shortage of drugs in public health care institutions contributes to inefficiency of quality of services provided. This also agrees with other study findings, in Ghana where limited range of services are offered, the reasons of low attendance were cited as shortage of drugs and prolonged lack of supplies had severely damaged the reputation of government facilities and promoted the use of private practitioners Lafond [10]. The finding also agrees with study of Public sector health facilities done by Dovlo et al. [11] showed that only small percentage respondents received all their drugs from the public sector. Most private health care providers appear to be aware of patients' dissatisfaction with the lack of drugs in health facilities, and therefore endeavour to procure their own drugs. Of those interviewed the majority were given the instruction on how to administer the medication and conveyed that they understood the instructions and were satisfied. This agrees with the study conducted by Matee et al. [12] on patient satisfaction in Dar es Salaam in which the identified areas needing improvement included:

technical quality of care, interpersonal aspects and communications. More than half of the respondents indicated that they were not informed on drugs side effects and this indicates poor interpersonal relationships. The clients felt that the cost of drugs was too high (Mission hospitals) and indicated that *"The costs of drugs in these hospitals are too expensive for common man can afford."* Others felt that the amount of money they paid for the drugs given was worthwhile.

These findings agree with the study done by Mwabu et al. [6] found that the quality of service was good in most private facilities. The availability of drugs and supplies and the amount of communication among health staff and between staff and patients are also important attributes of the quality of service.

### **Patient Waiting Time**

The majority of the clients who sought services at the study hospitals felt that the providers did not keep them waiting for too long to be served on arrival at the facility. However, some were dissatisfied with the length of time waiting for some services. This therefore confirms Seats ii project USAID, [13] argument that the quality improvement processes include relatively simple issues like reducing waiting times for clients. This is in agreement with the finding of a study done by Sajid [14] that efficiency of services refers to promptness of the care given to patients, including issues like waiting time. This also agrees with the study done in Mozambique that the result shows short waiting time and long consultation time were associated with high satisfaction Newman et al. [15]. There was a significance relationship with longer waiting time associated with low level of client satisfactions.

Statistical the results indicates that there was no association between gender and the time taken to be seen by service providers both were served equally (no gender disparity). Though there was relationship between education and time taken to be seen by services provider those with high levels of education were served faster as compared with those with low levels of education same applies with those employed were served faster as compared to those unemployed meaning there was association between occupation and time taken to be seen by service providers.

### **State of cleanliness of the facility**

The majority of the clients rated cleanliness and comfort of the examination room or the place where they received the services as satisfying. Some respondents were dissatisfied with the level of cleanliness and the reasons of their dissatisfaction were poor sanitation of the toilet and blocked bathrooms, dirt couches, blood stain on the floor, presence of rodents within the hospitals, poor drainage systems, most of clients who were dissatisfied with cleanliness and comfort of the places were from the government hospitals. The areas mentioned that needed improvement included: labor ward, orthopedics ward, Tuberculosis (TB) ward, toilet and bathrooms that needed urgent action. The findings of the study concur with that of Davolo et al. [11] which found that sanitation in public facilities was unsatisfactory. The surroundings were described as dirty and weedy and the facilities were not regularly renovated. Statistical by the use of Chi- Square calculation indicates that there was a relationship between the type of facility and the level of cleanliness. The majority of respondents who attendant to Mission hospitals were more satisfied with the level of cleanliness than those in government hospitals.

### **Perceptions of the clients on the attitude of the service providers**

Shelton [16] noted that clients expressed concerns about a variety

of issues such as failure by the service providers to understand the customer's expectation such as clear information, the inconveniences and fragmentation of services, and negative experience with the service providers. The majority of the clients felt that they were treated with courtesy and respect by the staff who attended to them and for these reasons most of them felt comfortable discussing their problems with the service providers. Although some clients felt that the providers were not friendly but instead were very rude making many of the clients fear discussing their problems or asking any question. This agrees with Sagimo [17] that the common causes of patients complains includes factors like bad products or services, cases where service providers are rude, and delays in services provision. The above findings are also supported by Candy et al. [18] statement that health service can ensure that practices are implementing quality standards and have a system in place to learn from critical incidents for example professional attitude, responsible for patient care, knowledge, records and training.

Majority of clients rated the attitude of different categories of the service providers within the hospitals as satisfying, though some respondents mentioned some areas where the service providers needed to improve. These included labor wards where most of client felt that they were harassed and not cared for by nurses. However, most of the clients are very satisfied by the attitude of doctors and they wished all the health providers could emulate the doctor's attitude towards the patients. These affirms the findings of Parsley and Corrigan [19] which state that "nurses are accountable to their actions and professionally they have a responsibility to evaluate the effectiveness of their care". Many respondents felt that their questions were not answered to their satisfaction especially by nurses and therefore they did not understand the instructions given particularly in government hospitals. This agrees with Kaye [20] which indicates a number of factors that appear to shape patients expectations for example word- of mouth, communication, and what patients hear from others; are strong determinants of patient expectations. Clients who felt that their needs were not met formed the majority of respondents (government hospitals), in agreement with Lande et al. [21] who found that health services exist to meet the health needs of patients and therefore, the delivery of health services should be designed to meet those needs.

Those who disagreed with the time spent by providers who attended to them felt that they were harassed and they did not understand the information's that were given. As indicated by the Seats ii project, USAID [22] that service providers knowledge and attitude influenced patients perception of quality services and their ability to obtain and understand, and use information related to any health care services being offered.

Human resource is the most important inputs of health care systems, argues WHO [7]. The performance of health care systems depends ultimately on knowledge, skills and motivation of the people responsible for delivering services. Health care systems are responsive and require qualified and experienced staff to function well. The same text further states that to perform effectively the health systems needs professionally trained and well- motivated personnel who are fairly paid for what they do. One of the problems that must be overcome if Africans' health is to be improved to a satisfactory level is undersupply of sufficiently trained personnel. This is supported by the Ministry of Health [12], that human resources are most important in an organization, in the health sector, trained and experienced human resource is critical for effective and efficient delivery of health care services. This study agrees with the study conducted in 2004 on human resource mapping in Kenya which found, that staffing levels do not meet the prevailing Ministry of Health staffing norms.

## Facility inventory assessment

The assessment was carried out during study period in four hospitals that are all level four hospitals. Several items were assessed including structural whether they are available and in good conditions and the results shows that the standards of the Ministry of health was well observed though some of the things needed to be corrected especially in government hospitals. This was in agreement with the study done by Mwabu et al. [6] in Tanzania which indicated that as far as the status of buildings and other permanent structures are concerned, respondents were asked for their opinions on whether the buildings were frequently maintained or not. Government owned buildings were rated as the worst when compared with those owned by religious organisation and individuals. Government structures are in relatively poorer condition, the government provides only wages and salaries and some basic supplies to make it possible for the services units to continue functioning. Some buildings are so old that major rehabilitation work and a corresponding high capital investment would be required.

## Conclusion

The general objective of the study was to evaluate the level of quality health care provided to patients in public and private/ Mission hospitals in Kiambu and Nairobi counties.

The study revealed the following; the results shows that there was no gender inequality in health care provision both male and female were treated equally. The study revealed that the service quality ratings for patient choice of the hospitals were proper treatment, qualified health personnel, responsiveness, proper communication, assurance and discipline of the health workers.

The study revealed that the important service quality dimensions that played role on level of quality health care' were waiting time, availability and affordability of drugs and services, level of cleanliness in the hospitals, Providers attitudes, level of staffing, technical care, infrastructure and employee motivation. The study revealed that there was discrimination of social classes based on education level and occupation.

On the assessment of the study hospitals the results revealed that in both Mission and Government hospitals they considered the aspect of quality health care, though there was still a lot to be done in order to achieve the high level of quality health care as set by the Ministry of Health especially in the government set up.

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