

*Full Length Research Paper*

# Factors determining patients' satisfaction with health care services at Pumwani Maternity Hospital in Kenya

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This study aims to identify factors which determine patients' satisfaction with health care services at Pumwani Maternity Hospital in Nairobi Kenya. It assessed the client's satisfaction with health care services at Pumwani Maternity Hospital in Nairobi, Kenya. A descriptive cross sectional study design was used, purposive sampling method was applied to select the institution and a sample size of 280 of postnatal mothers was calculated from a population of 1000 using Fisher's method. Systematic sampling was used to select the clients. Patient's satisfaction on the quality of services offered to them was determined using observation checklist and structured Likert scale questionnaire for exit interviews to select clients. Data were collected over a period of 3 months, and both descriptive and inferential analysis was done. The study shows that despite the high cost services, inadequate staffing and poor sanitation, the hospital managed to offer quality services that satisfied the majority of clients. 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. The findings would help in implementation of quality health care and improvement for best results of clients' satisfaction.

**Key words:** Pumwani Maternity Hospital, patient, satisfaction, health care.

## INTRODUCTION

In recent decades, determining the level of patient satisfaction 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 patient views are the determining factors in planning and evaluating satisfaction.

Many developing countries like Kenya, Uganda, Tanzania, Ethiopia, Somali, Zimbabwe, Malawi, Nigeria, Ghana among others face the problem of inadequate budgetary allocations and constrained capacity for provision of quality health care to satisfy the patient's needs. This is largely attributed to poverty, poor

economic performance and population growth leading to reduced growth in health sectors, inadequate budgetary allocations and constrained capacity for provision of quality social services including health care. In the face of increasing demands for health services, many Sub-Sahara African countries in the region are anxious to further mobilise public budget resources and at the same time explore new financing modalities, though not many countries have succeeded in putting in place sustainable health care financing policies and strategies (Lambo and Sambo, 2003).

In Tanzania, a survey on patients' satisfaction level with health care services offered in public health facilities indicates that there is need for improvement in technical quality of care, interpersonal aspects and communication (Matee et al., 2006). Since Kenya attained its independence in 1963, there has been massive growth and development of health care systems at various

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levels. The increased population and the demand for health care have outstripped the ability of the government to provide effective health services. However, the Government through its Ministry of Health (MOH) is committed to ensuring that accessible, affordable and effective health services which would promote the well being, improve, and sustain the health status of the Kenyan population, is made available (MOH, 1996). The public institutions were then given the mandate to decentralize these services by establishing quality assurance system in their facility to ensure continuous quality improvement to a level that satisfies their clients or patient's needs. Despite the ongoing reform effort, the majority of the people in many countries still have limited access to quality health services. Community, intrasectoral and intersectoral linkages are still weak. In addition, the existing health sector reform efforts are not adequately linked to both civil services and macroeconomic reform as stated in the development of the National Health sector strategic plan (MOH, 1999 - 2004). In the hospital survey conducted by Ojwang' in 2004, it was noted that lack of supplies was still one of the biggest problems at Pumwani Maternity Hospital. Understaffing and lack of supplies creates unhygienic conditions that pose dramatic threats to the lives and health of the mothers and their babies. Unhygienic condition included the lack of hospital bed linen, bed not being cleaned in between deliveries and patients being made to wipe down the beds and wrap their new born babies with their own clothes or soiled linens.

Kols and Serman (1998) noted that the needs of the patients are dynamic and are constantly influenced by the cultural, economical, demographic, social and technological environment. For health services to satisfy these needs, health systems need to undergo continuous transformation in accordance with priority needs of the consumers and this can only be achieved by continuously determining these needs through patient's satisfaction surveys to ensure quality health care services

## **METHODOLOGY**

### **Background information of the study area**

This study was conducted in Kenya at Pumwani Maternity Hospital, which is situated in Nairobi province. Nairobi City has a population of 2,143,254 according to the national population census of 2009, and Pumwani Division has a population of 202,211. Pumwani Maternity Hospital is the largest maternity hospital in East and Central Africa. It was founded in 1926 as a community-based hospital for low-income earners. It has an average bed capacity of 323 and 70-76 children are born each day (Columbia Encyclopedia, 2004).

This study was carried out with an exploratory approach using a descriptive cross-sectional design, where both qualitative and quantitative methods were used for data collection. The quantitative data were to

give the general description of the study area and the population, while the qualitative data were to address the questions that could not be answered adequately using the quantitative method of data collection.

The study's population is made up of 280 (sample size) clients who attended the maternity services (postnatal mothers) at Pumwani Maternity Hospital during the study period. However, the study was carried out in 2012.

### **Sampling procedure**

The research was carried out in Pumwani Maternity Hospital in Nairobi. The target population was postnatal mothers who delivered in the hospital within the study period. Client's perception on the quality of maternity services offered to them was determined using observation checklists where the interviewer recorded all that was observed, and structured Likert scale questionnaires were used on clients who had already obtained the services from the hospital. Systematic sampling was used to select the client to be interviewed at their exit point. Observation checklist was used to determine the availability of diagnostic equipment that was functional and in use, and Likert scale was used to assess respondents' satisfaction with the services provided.

A structured Likert scale questionnaire was used to conduct exit interviews on clients at their point of exit from the hospital. The interviewer recorded all that was observed during data collection by use of observation checklist. The instrument was designed using simple language (English) that was easily understood by the respondents.

### **Data collection**

Both qualitative and quantitative methods of data collection were used. Primary quantitative data were collected using a self-enumeration matrix question rated on a Likert scale and responses graded with different values ranging from 1-5. Qualitative data were collected using an observation checklist. The interview was conducted at their point of exit after receiving the services. Observation checklists were used to give more information on the existing services in the hospital.

### **Design tool**

Completed study tools were checked for accuracy daily, and where necessary possible follow-ups and corrections were made. Data were entered, checked for accuracy and analyzed using SPSS version 12 statistical package, by use of frequencies and percentages (Sajid, 2007).

### **Data analysis**

Both qualitative and quantitative methods were used in

**Table 1.** Relationship between patient waiting time and clients' satisfaction.

Variable		Satisfaction: You were treated with courtesy and respect by the staff that handled you					Total (%)
		Strongly agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)	
Waiting time	Less than 30 min	85.4	74.6	53.8	57.4	66.7	70.0
	Between 30 min - 1 h	2.4	10.7	38.5	27.9	16.7	15.7
	More than 1 h	4.9	8.2	7.7	10.3	16.7	9.3
	Not applicable	7.3	6.6		4.4		5.0
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 2.** Availability of the drugs in the hospital.

Statements	Responses											
	Agree		Strongly agree		Undecided		Disagree		Strongly disagree		Total	
	F	%	F	%	F	%F%	F	%	F	%	F%	
You got all the drugs that were prescribed	130	46.4	59	21.1	3	1.1	38	13.6	50	17.9	280	100
Instruction was given on how to take medication	147	52.5	40	14.3	24	8.6	43	15.4	26	9.3	280	100
Instructions understood fully	132	47.1	40	14.3	28	10.0	53	18.9	27	9.6	280	100
Told the side effects of drugs	57	20.4	14	5.0	38	13.6	71	25.4	100	35.7	280	100
Medicine available in the hospital	121	43.2	31	11.1	54	19.3	51	18.2	23	8.2	280	100

Key: F = frequency; % = percentage.

the analysis of data. The qualitative data were analyzed using content analysis; this process involved searching through the information collected to identify the key phrases addressing the objectives that appear under the views of each category. The quantitative questionnaires were sorted out, arranged in order by date of interview and given identification numbers sequentially depending on each set of questionnaires. (Nachmias, D1996)

## RESULTS

At 95% level of confidence, the relationship between patient waiting time and client satisfaction was significant with longer waiting time associated with low levels of client satisfaction and vice versa (Table 1).

Most of the clients (46.4%) agreed that they received all the drugs that were prescribed for them while 13.6% disagreed that they did not get all of the prescribed drugs and were told to buy from outside the hospital chemist (Table 2).

Among the respondents, 37.1% agreed that the cost of drugs given was reasonable and 26.4% felt that the cost of the drugs given was expensive; as such, they wished the price to be reduced. Other respondents (18.6%) were

undecided on whether or not the price of drugs was reasonable.

In Table 3, it was observed that majority of the respondents (61.8%) agreed that they got all the services recommended by service providers while in the hospital and a small percentage (12.5%) disagreed that they did not get all the services recommended by services providers while in the hospital. Among the respondents, 35% strongly disagreed and 24.3% disagreed that the cost of the services offered at the hospital was not worth the services offered to them, while 26.8% agreed and 12.5% strongly agreed that the cost of the services offered at the hospital was reasonable as compared to the services offered to them. Majority of the clients agreed (43.6%) and strongly agreed (27.9%) that they would recommend the services in the hospital to others and the remaining number disagreed that they cannot recommend the services in the hospital to somebody else.

### Reasons for recommendation of the services to others

Among the clients who felt they would recommend the

**Table 3.** Availability and affordability of health service.

Statements	Response											
	Agree		Strongly agree		Undecided		Disagree		Strongly disagree		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
You got all the services recommended	173	61.8	61	21.8	6	2.1	35	12.5	5	1.8	280	100
The cost of services was reasonable	75	26.8	35	12.5	4	1.4	68	4.3	98	35.0	280	100
You would recommend the services to somebody	122	43.6	39	13.9	14	5.0	27	9.6	39	13.9	280	100

**Key:** F = frequency; % = percentage.

services offered at PMH to others, the following were the major reasons mentioned. Majority of the clients mentioned good services, 112 (40%); qualified staff, 31 (11%); proper treatment, 22 (7.9%); cheap, 18 (6.4%); handle complication, 10 (3.6%); among others.

**Reasons for not recommending the services to others**

Among the clients who felt they would not recommend the services at PMH to others, some of them gave the following reasons: the hospital services are expensive, 34 (12.1%); poor caring, 9 (3.2%); poor sanitation, 7 (2.5%); and other reasons were poor treatments, harassments, poor diet, bed congestion that is bed sharing, poor security on clients' property, discriminations among others.

**The overall cleanliness and comfort of the waiting area**

The following are the responses given about the overall cleanliness and comfort of the waiting area: 185 (66.1%) of the respondents were satisfied with the overall cleanliness and comfort of the waiting area, followed by 37 (13.2%) who responded very satisfied and 35 (12.5%) were dissatisfied. Other responses were undecided and very dissatisfied which formed 5.4 and 5.1% respectively.

**The overall cleanliness and comfort of the examination room or the place where you received the services**

Majority of the respondents, that is, a total of 127 (45.4%), were dissatisfied with the overall cleanliness and comfort of the examination room and the places they received services, while 97 (34.6%) were satisfied and 22

(7.9%) were very satisfied. It was observed that 17 (6.1%) were undecided on the issue of cleanliness and 17 (6.1%) rated the general cleanliness and comfort of the hospital as very dissatisfying.

Among the respondents, 122 (43%) agreed that they were treated with courtesy and respect by the staff while 68 (24%) felt that they were not treated with courtesy and respect. Other clients, say about 42 (15%) of the respondents strongly agreed and 36 (13%) strongly disagreed and they felt that the provider did not treat them well instead they were harassed.

The majority of the respondents rated 66% were very satisfied and 26.1% were satisfied with the skills and attitude of doctors who attended to them and none of the respondents rated the attitude of doctors as dissatisfying.

**Patient level of understanding service providers' instructions to a patient**

Ninety-nine of the respondents (35.4%) agreed that they understood the instructions given to them while 28.6% disagreed with the statements and 15.4% strongly disagreed while the rest of them (13.9%) were undecided and 6.8% strongly agreed.

**Adequacy of hospital staffing level**

Among the clients who responded, 33% disagreed that the hospital has inadequate health providers while 30% agreed that the hospital has enough health providers and 17% strongly agreed. Other clients (12%) strongly disagreed and 8% remained undecided.

**Observation on the service providers**

It was observed that out of 20 health providers only 8 (40%) welcomes the clients and 12 (60%) do not welcome

the clients, while 7 (33.3%) health providers greet the client but 13 (66.7%) do not. The majority of health providers 17 (87%) offer a seat to the clients and 3 (13%) do not offer seats to clients. Among the health providers observed, 16 (80%) do not observe privacy of the clients while 4 (20%) show concern of the privacy of the clients. Most of health providers 17 (86.0%) examine the clients while 3 (14%) do not and 16 (80%) of health providers instruct the clients on how to administer medication and the rest (20%) do not. A majority health providers at the hospital do not give health education to clients 14 (73.0%) and 6 (27%) do. The observation made which shows that the hospital is understaffed was commonly seen in the labor ward where staff are less and clients are many. Furthermore in the wards, the same nurse in the office is the same nurse serving the clients in the wards.

## DISCUSSION

This was a descriptive study that was set out to describe the factors that determine the implementation of quality health care as a strategy towards improving quality services to satisfy clients' needs at Pumwani Maternity Hospital. Generally the study focused on clients who were seeking maternity services (postnatal mothers) and had given birth at the hospital at that particular time of study.

### Patient waiting time

The majority of the clients who sought services at Pumwani Maternity Hospital 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 they spent waiting for some services. This therefore confirms the argument of Seats ii project (2000) 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 (2007) 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., 1998). There was a significant relationship with longer waiting time associated with low level of client satisfactions.

### Availability and affordability of drugs

Majority of the clients interviewed agreed that they obtained all the drugs that were prescribed for them. However, some disagreed and claimed to have been told to purchase from outside the hospital (pharmacy). Similarly, it agrees with the statement of MOH (1999-2004) 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 studies' 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, 1998).

Of those interviewed a 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. (2006) 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 and indicated that "*The costs of drugs in this hospital are too expensive for common man to afford.*" On the other hand, some felt that the amount of money they paid for the drugs given was worthwhile and for this reason most of the clients would recommend the services at Pumwani Maternity Hospital to other people.

### Availability and affordability of health services

A majority of the clients interviewed agreed that they received all the services recommended to them by Pumwani Maternity Hospital. Most of the clients felt that the services were too expensive for low income earners that form the majority of the clients who attended Pumwani Maternity Hospital.

### State of cleanliness of facility

The majority of the clients rated the overall cleanliness and comfort of the waiting areas as satisfying and the rest of the areas as dissatisfying. 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 hospital, poor drainage system, most of the clients who were dissatisfied with cleanliness and comfort of the places where they received services. The areas mentioned included: labor ward, ward 2, ward 3, toilet and bathrooms that need urgent action.

The majority of the clients, who gave recommendations on some of the areas they thought required improvement suggested modification of elements that would improve sanitation such as clean regularly, add extra subordinate staff, strict supervision, proper disposal, add more toilets and bathroom. Other modification of elements included improvement of privacy in the examination rooms, wards and labor ward. This ranged from provision of a curtain around examination couches and delivery beds, to

increase of the number of beds in the wards to ensure clients did not share beds as this interfered with their comfort, privacy and also posed high risk of infections. This affirms that continuous quality improvement includes improving the relatively simple issues such as improving client's privacy and comfort as stated by Seats ii (2000).

### **Patients' perspective on service provider**

Shelton (2006) 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.

Majority of the clients felt that they were treated with courtesy and respect by the staff who attended to them and for this reason 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 is in agreement with Sagimo (2002) that the common causes of patient complaints are factors such as bad products or services, cases where a service provider is rude, and delays in services provision.

Majority of the clients rated the attitude of different categories of the services providers within the hospital as satisfying, though some respondents mentioned some areas where the service providers needed to improve. This included labor wards where most of the clients felt that they are 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. This affirms the findings of Parsley and Corrigan (1999) which state "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 instruction given. This agrees with the study of Kaye (2000) which indicates that a number of factors appear to shape patient expectations, for example word-of-mouth communication, and what patients hear from others; these are strong determinants of patient expectation.

Clients who felt that their needs were not met formed the majority of respondents, in agreement with Lande et al. (2002) 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. The clients felt that they were not given their needs such as mosquito nets and warm water; while uniform was given to some and not to others, meals were provided late, for example breakfast at 10.00 am instead of 8.00 am so those who had deliveries at night experience

hunger, sometimes the tea provided was cold, delay of lunch which made many of the clients regret going to Pumwani Maternity Hospital, and they even suggested that visiting hours by the relatives should be adjusted to morning hours.

Majority of the clients were forced to share beds with two or three people plus their babies even when other beds were empty and this made a majority of them to be irritated since they were sharing bed and not the cost. Majority of the clients suggested that when beds are shared, the fee charged per night should be shared among the number of clients that shared the bed. Therefore, most of the respondents felt that their needs were not met despite the high cost of the services. Many clients wished to have gone to private institutions to pay more and receive worthwhile services to their satisfaction.

### **Level of staffing**

From the researcher observation, the results indicated that Pumwani Maternity Hospital is understaffed; this was mostly seen in the labor ward where clients are many and nurses and doctors are few, thus every client is crying for help. Therefore, because mothers struggled alone, some ended up delivering dead babies. The same applies in the wards where clients are forced to seek for help from the nurses' offices, since the same nurse is in charge of both the office and the ward. This reflects the study of MOH (1996) that human resources is the most important resources in an organization; in the health sector, trained and experienced human resource is critical for effective and efficient delivery of health care services.

### **Conclusion**

This study revealed that there was a significant relationship with longer waiting time associated with low level of client satisfaction. It revealed that the majority of the providers have a positive attitude towards the clients and therefore the clients were satisfied with their services.

This study revealed that the cost of the services is high as compared to income of clients who attended Pumwani Maternity Hospital. The findings also revealed that the staffing level at the hospital is inadequate as compared to the number of clients. Most of the clients were dissatisfied with the level of cleanliness especially in toilets and bathroom.

The few areas the clients felt should be improved in order to make the services better were mostly related to improving their comfort and privacy. Other requirements are: food should be given on time and there should be waiver of fees to clients who are unable to pay the bills. Furthermore, some service providers need to be friendly to clients especially in the labor ward and other wards, and to stop harassing clients by being rude to them, such

action have made a majority not to ask any question. Nonetheless, the clients credited the doctors for their positive attitude. Finally, the study revealed that most of the clients, however, appreciate the fact that the hospital handles complications, has competent staff, and a variety of equipment and services are available, which are unavailable in most public facilities.

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