

Factors Influencing Client Satisfaction with Hospital Services at St. Stephens Hospital Mpererwe Private Not for Profit General Hospital in Uganda

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Abstract

Purpose: The study sought to determine the factors that influence client satisfaction with health services at St. Stephen's Hospital Mpererwe. The study determined the level of client satisfaction, the factors associated with client satisfaction, and variation of client satisfaction across touch points within the hospital.

Methodology: This was a cross-section descriptive hospital-based study. Data was collected from a sample of 100 clients using exit interview method.

Results: The client satisfaction index was 83.9% and net promoter score 76%. The number of prior visits, waiting time, hospital charges, and age of the client were significantly associated with client satisfaction as was assistance to client and professional conduct at key touch points. Client satisfaction at individual touch points was also significantly associated with overall client satisfaction. There was no significant association between gender, religion, and marital status, level of education and means of travel with client satisfaction.

Conclusion and Recommendations: Experience of clients with service at the various touchpoints is important as it has direct implications on the overall level of client satisfaction with hospital services. Touch point monitoring is crucial for improvement of services.

Keywords: Client, Satisfaction, Index, Hospital, Uganda, Touchpoints.

Introduction

Despite the well-established influence of client satisfaction on key health and business aspects, many hospitals and indeed the entire healthcare industry have been slow in identifying and documenting factors influencing customer satisfaction let alone measuring it. As up to 2017 the healthcare industry had trailed the banks, supermarkets and gasoline for three consecutive years ranking number 32 in client satisfaction based on the American Customer Satisfaction Index 2017 Utilities, Shipping and Healthcare Report (Matejka, 2017).

Client satisfaction with health services is based on the way the clients perceive the treatment and care they receive from health care providers (McMillan, 1995,) and is affected by the experiences clients encounter while navigating the different departments and units within the hospital including the gate, reception, registration, triage, medical consultation, laboratory procedures, treatment rooms, surgical

procedures, labour suites, medical and surgical wards, and the pharmacy (Kuronen, 2013). Other factors affecting client satisfaction include ambience, lay out and organization of services.

Regular and comprehensive measurement and assessment of client satisfaction galvanizes managers, administrators, and healthcare workers to initiate strategies and actions that address weaknesses and strengthen the system for better service. The assessment also lays ground for a scientific approach to improvement of services to clients and subsequently increasing hospital revenues for the private not for profit hospitals.

The study sought to determine the factors that influence client satisfaction with health services at St. Stephens Hospital Mpererwe specifically determining the client satisfaction index at the hospital, factors significantly associated with client satisfaction, and how client satisfaction varies across the different touch points.

The study adopted the Donabedian framework with a few modifications to align with the touch point concept (Olomi GA, 2017), and applied the

post-service approach. This approach allows the client to compare their expectation with the level of service obtained immediately after the service has been delivered. This approach is in line with the SERVQUAL instrument cluster developed by Zeithaml and colleagues (Kuronen, 2013).

Methodology

Selection of study area

This cross-sectional study was conducted at St. Stephens hospital, a private not for profit 100-bed general hospital located in Kampala District. The hospital is accredited by the Uganda Protestant Medical Bureau and offers both general secondary inpatient and outpatient services.

Sample size determination

Sample size was determined using the Cochran's formula for infinite populations at confidence level 95%, satisfaction level 50%, and degree of precision 10%. The calculated sample size was 96 however the total number of respondents was 100.

Sampling techniques

The study population comprised of clients who visited the hospital for services between 13th December to 21st December 2019 and those who were discharged in this period. Between 9 am and 5 pm local time, 10 to 12 clients were selected for exit interview daily until the sample size was attained. Consecutive screening and sampling were used to identify and interview the 10 to 12 respondents on each of the days for the period of the study.

Data collection

Data was collected using an interview schedule worded in secondary school level English language. The interview was conducted by a team of five hospital staff selected based on familiarity with interviewing patients using interview schedules. All except 10 patients required translation into Luganda, the predominant indigenous language for the hospital catchment area. Translation was done by one of the healthcare workers on the data collection team

Data analysis

Completed questionnaires were numbered and coded. After coding the data was entered to SPSS version 16. Frequencies and percentages were

computed for categorical and ordinal data. Chi-square statistic was computed for association between the predictor variables and overall client satisfaction, using the cross-tab function of SPSS

The dependent variable for this study was client satisfaction with health services measured using a four-point Likert scale and transformation of the responses into a single satisfaction index.

The dependent variables were socio-demographic factors (age, marital status, level of education, gender, and number of visits to the hospital); hospital attributes (organisation of services, provision of portable water, and suitable lavatories); and service attributes (professionalism of staff and assistance to clients)

Ethical considerations

The study was approved by the hospital management after presentation and review of the objectives and tools and submission of an application to undertake the study. Participation by the respondents was voluntary and all respondents completed and signed a consent form.

Results and Discussion

Socio-demographics

The mean age of the respondents of 30.04 years (SD 11.55) was twice the mean age of the general population of 15.9 years (Plecher, 2020) The proportion of outpatients was higher but still lower than for general hospitals 78.9% vs 90% (MoH, 2018). The proportion of female patients was higher and in line with the national data on per capita utilization of health services by gender (MoH, 2018), although in study the proportion was much higher than the national hospital average, 83.7% vs 60%. This is attributed to the higher female to male ratio (1.27 to 1.00) in urban areas (UBOS, 2018). The percentage of the married respondents was higher than the national average, 68.4% vs 50%, while the percentage of Christians was slightly lower than the general population, 83.7% vs 90% (UBOS, 2018). The proportion with a minimum of secondary education was twice that of the general population which was expected due to urban location of the hospital (UBOS, 2018).

Access and utilisation of services

68.4% of the respondents reached the hospital within 30 minutes while 66.3% used public means the commonest being commercial

motorcycle (locally referred to as *boda boda*) at 42%. Majority of the respondents received all the services that they sought from the hospital (85.7%, n=89) with family planning, laboratory services, ultrasound diagnostics, and admission largely not expected by the clients but nevertheless provided

Factors associated with client satisfaction

The overall satisfaction level was 83.9% which was within the range for developing countries (50% to 95%). This was close to the level observed in Ethiopia where Geberu and colleagues in a comparative cross-sectional study, observed the overall patient satisfaction to be 89.3% (Demiss Mulatu Geberu, 2018) but way above the findings in Tanzania. Olomi et al in a cross-sectional study involving three hospitals using Donabedian model observed that on the overall the level of patient satisfaction with the Health Care Services at Outpatient Departments in Kilimanjaro Region, Tanzania was 20% (Olomi GA, 2017). The net promoter score was 76% with 70% of clients definitive about returning to the hospital for services when needed while 78% definitive about recommending others to the hospital for services.

Previous investigators have explored and established the relationships between a number of factors and client satisfaction with health services (Faiza Manzoor, 2019) (LARUFFA, 2005) (Gadallah, 2003). The factors that have been investigated include demographic, socio-economic, perceptual, and health service attributes. Factors such as service quality, ease of access to the hospital, ease of access to the healthcare providers, and skills of healthcare provider have also been linked to client satisfaction with health services (Rashid Saeed, 2013).

Age was significantly associated with client satisfaction with health services ($p=0.014$). This finding is corroborated by Olomi et al and Guirguis et al (Guirguis WW, 1992). On the contrary Gadallah et al and Ghose and Vivek did not find significant association between age and client satisfaction with health services (Gadallah, 2003) (Ghose & Vivek, 2011). There was no significant association between gender and client satisfaction with health services ($p=0.422$). Although surprising, this finding was corroborated by Gadallah and colleagues (Gadallah, 2003) and Ghose and Vivek (Ghose &

Vivek, 2011). On the contrary Geberu and colleagues in their study demonstrated that gender was an important determinant of client satisfaction with health services with female clients being more likely to be satisfied than the male clients (Demiss Mulatu Geberu, 2018). Level of education was found not to be significantly associated with client satisfaction with health services ($p=0.873$) and this was corroborated by Gadallah et al, and Guirguis et al (Gadallah, 2003) (Guirguis WW, 1992)). On the contrary Nabbuye-Senkandi and colleagues observed significant association between education and client satisfaction (Juliet Nabbuye-Sekandi, 2011). This study did not demonstrate significant association between client satisfaction with health services and other variables, namely marital status, religion, and means of travel to the hospital ($p=0.731, 0.858, 0.350$ respectively). On a similar note, Guirguis et al did not observe significant association between marital status and client satisfaction with health services.

A moderate number (43.9%) indicated that they had visited the hospital for services at least three times over the period of three months prior to the study. Statistical analysis showed that there was significant association between number of prior visits to the hospital and client satisfaction ($p=0.028$). On the contrary Olomi et al who did not find significant association with respect to frequency of visits and perception about charges. Regarding waiting time, majority of the clients (71.5%) did not perceive that they had been delayed at the hospital. Statistical analysis showed that waiting time was independent of inpatient or outpatient status ($p=0.703$) but was significant with respect to client satisfaction $p=0.033$. This finding was corroborated by Geberu et al (Demiss Mulatu Geberu, 2018) and Nabbuye et al (Juliet Nabbuye-Sekandi, 2011) thereby underscoring the importance and relevance of waiting time which is an opportunity cost to clients.

There was significant association between hospital charges and client satisfaction. The significant association between charges and client satisfaction $p=0.046$, was corroborated by Nabbuye et al (Juliet Nabbuye-Sekandi, 2011) and Ghose and Vivek (Ghose & Vivek, 2011). This finding is logical given that charges may constrain access to certain types of services or cause anxiety and hinder constructive

engagement with the health service delivery system.

On average 94% of the respondents indicated that they received adequate assistance at the different. The perception of assistance by clients at the touch points was observed to be significantly associated with the overall client satisfaction for the laboratory, billing point, pharmacy, labour suite and lavatories with p values 0.042, 0.000, 0.000, and 0.020 respectively. This underpins the importance and relevance of these touch points in provision of health services at the hospital. Relatedly, there was significant association between client satisfaction with respect to professionalism of cadres at the touch points of gate, cashier, laboratory, and pharmacy with p values of 0.004, 0.000, 0.007, and 0.007 respectively. Finally, there was significant association between client satisfaction at designated touch points and overall satisfaction for gate, laboratory, cashier, pharmacy and labour suite with p values 0.000, 0.000, 0.000, 0.001, and 0.003 respectively. From these findings is apparent that client perception of assistance, professionalism, and satisfaction at touch points varies from one point to another.

The findings by Ghose and Vivek in a cross-sectional study conducted in Mahatma Gandhi Medical College and Research Institute, Puducherry corroborate the results of this study concurring with the significant association with respect to pharmacy and billing (Ghose & Vivek, 2011). Similarly, Manzoor and colleagues observed a significant association between laboratory services and patient satisfaction (Faiza Manzoor, 2019).

Variation of client satisfaction across touch points

The results indicated that levels of satisfaction varied across the different touch points in clustering format. Majority of the clients reported high levels of satisfaction with services at the consultation, reception, cashier, and gate at 94%, 93%, 86% and 86% respectively. These were followed by treatment room, laboratory, ward, pharmacy and x-ray at 82%, 80%, 76%, 75% and 71% respectively. Referral, labour suite, canteen, theatre, and lavatories were perceived as trailing by the clients at 56%, 53%, 50%, 47%, and 39% respectively. The satisfaction with waiting time closely mirrored satisfaction with professionalism. The study findings show that laboratory, gate, reception, consultation, pharmacy, cashier, and treatment room were leading in satisfaction with waiting time at 95%, 93%, 91%, 88%, 87%, and 82% respectively while referral, discharge, and canteen were trailing at 20%, 37%, and 43% respectively. The level of satisfaction with other service attributes (Table1) was highest on quality of equipment closely by courtesy of staff while availability of drinking water, speed of service and post-discharge follow-up were trailing.

Conclusion and Recommendations

This study has demonstrated the importance of assisting clients and exhibiting professional conduct of staff at various touch points at St. Stephens Hospital, Mpererwe, as well as support services such as lavatories and provision of portable water. Additionally, a touch point monitoring plan should be developed and implemented.

Table 1. Levels of satisfaction with other service attributes

Service attribute	% very satisfied	% somewhat satisfied	Not at all satisfied	% not sure	n
Organisation of services	67.8	27.6	2.3	2.3	87
Cleanliness of the hospital compound	76.6	20.2	3.2	0	94
Cleanliness with the rooms and wards	79.3	13.8	2.3	4.6	87
Equipment used by health workers	93.4	7.9	1.3	10.5	76
Courteousness of the hospital staff	91.0	7.8	0	1.2	77
Interest of hospital staff in serving patients	86.1	13.9	0	0	71
Follow up of hospital staff after leaving hospital	37.7	6.6	18.0	37.7	61
Availability of drinking water	20.7	15.9	22.0	41.4	82
Ease of identification of health workers	81.4	14.1	1.2	2.3	86
Availability of information to clients	63.2	20.6	5.9	10.3	68

Speed of service	48.8	36.9	11.9	2.4	84
Value from services	75.9	14.5	3.6	6.0	83

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