

MISCELLANEOUS ARTICLES**MEASURING PATIENT SATISFACTION IN UCMB HEALTH INSTITUTIONS**

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Abstract

There is growing interest to measure patient satisfaction and collect the views of patients about the services they use. Satisfaction is essential if we have to get people utilize services, comply with treatments and improve health outcomes. This paper reports the experience of Uganda Catholic Medical Bureau in designing an instrument to measure patient satisfaction and be able to develop a satisfaction index for all units that should become a component of comprehensive health care quality assessment. It is hoped that this would interest national partners and health stakeholders to get involved in assessing this important performance parameter that has been forgotten for long.

Introduction

Patient satisfaction is a component of healthcare quality and is increasingly being used to assess medical care in many countries in the world. Until recently, traditional assessments of medical care were done purely in terms of technical and physiological reports of outcomes (Jenkinson et al 2002). It is an established fact that satisfaction influences whether a person seeks medical advice, complies with treatment and maintains a continuing relationship with practitioners (Larsen D.E. et al 1976). In Uganda, one of the Health Sector Strategic Plan (HSSP) (MoH 2000) indicators is the proportion of surveyed population expressing satisfaction with health services. This is meant to measure the quality of service delivery but until now, no baseline value has been found.

In the last seven years, Uganda Catholic Medical Bureau (UCMB) has been urging its units to demonstrate faithfulness to their Mission by working towards improvement in the following performance parameters: efficiency, equity, quality and access. It has been able to show progress using proxies, some of which could be questionable because only a small component of the parameter could actually be measured, and from that, the whole parameter is assumed to improve. In an attempt to improve measurement of quality of services, UCMB took the decision to develop a measure for patient satisfaction that will become one of the main components of quality measurement besides the technical competence and

inputs availability. A survey was, therefore, conducted in early 2004 to collect responses from patients that could be used to develop a satisfaction index.

Definition and components of patient satisfaction

Patient Satisfaction is an expression of the gap between the expected and perceived characteristics of a service. Satisfaction is a subjective phenomenon and could be elicited by asking simply how satisfied or not patients may be about the service. However, it has been found that, questionnaires that ask patients to rate their care in terms of how satisfied they are tend to elicit very positive ratings that are not sensitive to specific processes that affect overall quality (Fitzpatrick R, et al 1983). It is recommended that patients be asked to report on their experiences through specific questions (Jenkins et al 2002). A technique of factor analysis has demonstrated that patient satisfaction is chiefly determined by six dimensions. These including medical care and information, food and physical facilities, non-tangible environment, nursing care, quantity of food and visiting arrangements (Carr-Hill R.A 1992). There are other variants of the grouping of these dimensions, the Picker Institute inpatient survey instrument distinguishes eight (The Picker Institute 2004). A shorter and better-classified grouping that appealed to me more is the United Kingdom's National Health Service experience dimension (Commission for Health Improvement NHS 2004) that is shown below in table 1 and can be used to develop an instrument for measurement more easily.

Table 1: Patient Experience Dimension, Definitions and Clinical Governance Review Codes

Dimension	Definition	Review Codes
Clinical effectiveness and outcomes	The extent to which treatments are effective and services produce positive outcomes. This includes mortality, morbidity, effectiveness and competence.	<ul style="list-style-type: none"> ● Mortality rates following admission and treatment ● Evidence of morbidity following admission and treatment ● Evidence of effective/ineffective practice ● Evidence of competence/incompetence ● Access to services
Access to services	The extent to which patients are able to reach required services and treatments when they are needed and mobilize within them. This includes waiting times, patients' ability to find out about, get referred to and physically get to services, accessibility for diverse populations, and the range of services provided.	<ul style="list-style-type: none"> ● Physical access; bus services; car parks; location ● Responsiveness; waiting times and lists ● Diversity re: disability, ethnicity, poverty ● Range of services in relation to need <p>Organization of care</p>
Organization of care	The extent to which users move smoothly between the necessary service providers through out their healthcare journey. This encompasses the coordination and integration of care, appropriate education for and communication between professionals, and the quality of healthcare transition and continuity.	<ul style="list-style-type: none"> ● Experience of admission care episode ● Experience of diagnosis care episode ● Experience of treatment stage of care episode ● Experience of discharge of care episode
Humanity of care	The extent to which users are treated with dignity and respect in the provision of care, taking into consideration their individual and social needs, values and preferences. This includes the provision of emotional support, alleviation of fear and anxiety, the provision of information and appropriate communication with and involvement of patients and carers.	<ul style="list-style-type: none"> ● Privacy and confidentiality ● Patient involvement in their own care ● Promoting wellbeing ● Delivery of care; respect and dignity; staff attitudes
Environment	The extent to which the physical setting within which care is delivered is safe, comfortable and appropriate to clinical needs and the client group.	<ul style="list-style-type: none"> ● Physical state of facilities ● Catering

Method and Materials

The survey involved administration of a one-page questionnaire to outpatients and discharged inpatients in all UCMB hospitals and lower level units. This was a modified version of PPE-15 questionnaire developed by the Picker Institute (Jenkinson et al 2002). The questionnaire captures at least one aspect of each of the patient experience dimensions shown in table 1. The modifications were meant to make the question more sensitive to the Ugandan context, easily administered in a short time and easily understood and be used in both lower level units and hospitals. Questions on payment made, value for money and an open comment were also added. The full questionnaire is in the appendix 1. It was pretested at a meeting of diocesan health coordinators and found to take 6 minutes to administer and easy to translate.

The lowest sample size calculation (at the 95% confidence level) for the lower level units health centre was based on an estimated daily patient load of 15, 50% expected satisfaction frequency and 10% worst acceptable level. The calculated sample was 4 per unit however, given the need to collect also payment information and mean charges for the services to different groups, these sample sizes were set to 5 for health centre II, 8 for health centre III, 30 for hospital outpatient and 20 for hospital inpatient.

The responses were scored, with a score of 2 being the best and 0 the worst. The data was analyzed with MS Excel. Some questions not sufficiently applicable to lower level units were excluded from total calculated scores for the units. An objective question on waiting time was excluded so as not magnify the weight of time factor, as there was already a subjective question on the same. In addition, it is the subjective time that personalizes the interpretation of waiting and its consequences. Hospitals therefore could get a maximum score of 24 and lower units a maximum of 18. The satisfaction score for an individual patient was the total of the scores and the satisfaction score for a health unit was the mean of the patient scores for that unit. The mean was chosen to enable rating of units with different number of patients' interviewed.

The objectives for the study were to develop an instrument to measure satisfaction and derive an index/score for patient satisfaction for each of the UCMB hospitals and lower units and establish a baseline for future comparison. In addition, the exercise was meant to introduce and interest the health institutions in this performance parameter and work towards its improvement. Secondary objectives were to try to

identify the differences in satisfaction between outpatients and inpatients and between adult males and females. A relationship between fees and satisfaction is still being analyzed.

Results

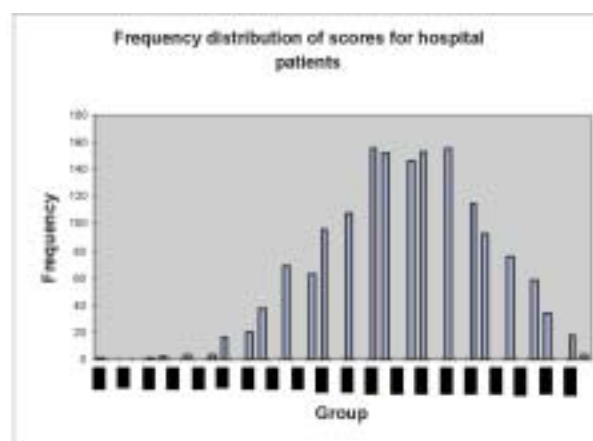
Satisfaction scores

All the 27 hospitals submitted their data with a total sample of 1,580 patients and 205 lower level units with a total sample of 1,524. The distribution of the scores was very close to normal and thus allowed the use of the ordinary parametric methods of analysis. See the frequency distribution for hospitals shown in figure 1 below. Table 2 below gives some summary statistics.

Table 2 Summary statistics for satisfaction scores

	Hospitals	Lower Units
Sample size	1,580	1,524
Mean	14.83	13.52
Median	15.00	13.89
Minimum	0.00	0.00
Maximum	24.00	18.00

Figure 1



Most of the lower level units and hospitals were in higher satisfaction ranges. For our own purposes satisfaction was stratified in to good, fair, poor and very poor corresponding to a score of equal to or above 75%, 50%, 25% and below 25% respectively. Using this stratification only one hospital had good satisfaction and all the rest had fair satisfaction. For the lower units there was much greater scatter, 114 of them good satisfaction, 79 in fair, 9 in poor and 3 in very poor. Figure 2 below shows the variation of hospital scores

arranged in ascending order with the national average score filled in black.

Difference in satisfaction between out and inpatients

Table 3 shows the means and the upper and lower confidence intervals (CI) at 95% confidence level for the means of satisfaction scores of inpatients (IP) and outpatients (OP) in hospitals and lower units. Hospital inpatients have a higher satisfaction than outpatients do and vice versa for in lower units. In both cases (hospitals and lower units) the difference in the means are statistically significant given the non-overlapping confidence intervals. We can therefore summarize that in hospital inpatients are better satisfied than outpatients while lower level units outpatients are better satisfied than inpatients. This is probably not surprising.

Table 3

	Hospitals		Lower Units	
	IP	OP	IP	OP
CI Upper	16.0384	14.23125	13.61141	14.37973
Mean	15.76995	13.97458	13.31026	14.17384
CI Lower	15.50149	13.7179	13.0091	13.96796

Figure 2



Difference in satisfaction between females and males

Although differences were noted in the means of satisfaction scores for males and females these differences were not statistically significant and inconsistent, while the females had a higher mean satisfaction in hospital they had a lower mean satisfaction in the lower units. Details of these are shown in table 4.

Table 4

	Hospital		Lower units	
	Male	Female	Male	Female
CI Upper	14.9268	15.30465	14.09813	13.8583
Mean	14.55714	15.00581	13.8	13.61589
CI Lower	14.18749	14.70696	13.50187	13.37349

Open comments

The 'open comments' question was used to capture other concerns of patients regarding the services they receive. The majority of the concerns were on, improving customer care, increasing staff, improving on buildings, lighting and cleanliness. High charges were the next common concern and especially for the lower level units. Tables 5 and 6 show these and the rest of the comments given.

Table 5 Comments for the lower level units

Position	Frequency	Comments
1	351	Services to be increased (X-ray, Night duty, laboratory, dental, Inpatient, eye, Counseling, Ambulance, School health, blood transfusion, canteen etc.)
2	344	Buildings (old, water, lighting, extension, kitchen, partition, fencing, staff accommodation)
3	282	Staff (increasing number)
4	93	Customer care (reducing waiting time, staff attitude, giving patients directions)
5	82	Drugs (more quantities, more varieties e.t.c.)
6	62	Charges to be reduced
7	52	Cleanliness to be improved (general cleanliness, mosquitoes)
8	48	Toilets and bathrooms (cleanliness, improvement)
9	381	Other

Table 6 Comments for hospitals

Position	Frequency	Response
1	245	Customer care (reducing waiting time, staff attitude, giving patients directions)
2	204	Staff (increasing number)
3	98	Buildings (old, water, lighting, extension, kitchen, partition, fencing, staff accommodation)
4	96	Cleanliness to be improved (general cleanliness, mosquitoes)
5	84	Charges to be reduced
6	83	Services to be increased (X-ray, Night duty, laboratory, dental, Inpatient, eye, Counseling, Ambulance, School health, blood transfusion, canteen etc.)
7	74	Toilets and bathrooms (cleanliness, improvement)
8	35	Drugs (more quantities, more varieties etc.)
9	397	Other

Discussion

Much as satisfaction is a very subjective concept, it is possible to measure it and develop an index that is contextualized for the local circumstances. There is quite a high level of satisfaction for the users of the UCMB hospitals and lower units; however, I do take this with some degree of doubt because ideally the sample population should have been the people in the village. People coming are probably already satisfied or could not go elsewhere anyway. Resources and time could not allow us to embark on a population survey, but this could be a possibility in the future.

Although the results are displayed ranked they are not meant to reprimand the poor performers but to instigate

the poor performers to look in to what improvements they have to make. The full list of concerns expressed by the patients was printed out for each hospital and diocesan health office to study and look in to.

We now have an instrument, and a baseline to follow satisfaction on the future. This can quickly and easily be administered by ordinary literate people with little or no training in research. The scores are easy to interpret and action can be taken on weak points. For example, the results indicate that to improve overall satisfaction for hospital services probably more effort has to be put in improving outpatient services. Probably the inpatient services provided in the lower level units need a much higher level of resource inputs to be appreciated by the users and this may not be achievable

in the current environment thus the lower units could concentrate more on what they can do well - outpatient service. This in any case will only streamline referral system leaving hospitals to concentrate more on more complex - inpatient care.

There is a slow uptake of patient satisfaction in the developing world while it is picking up in the developed world. In countries like Uganda, there is still a big imbalance of power between providers and users of health services. Understanding, documenting and raising awareness with users on satisfaction and its dimensions would redress this imbalance and bring providers to work for clients.

Patient satisfaction has not been taken seriously in Uganda, although it is recognized in the HSSP, no baseline has been established and no national instrument is in development. An attempt is there in the Yellow Star programme that has 3 questions capturing staff attitude and waiting time (Ministry of Health 2002). Patient satisfaction is at the very heart of healthcare; even the most technically competent care is meaningless if it does not satisfy the users. As a country, we are grappling with how to improve utilization of health services that could lead to improvement of health status. Some of these services like deliveries in health units that are probably more sensitive to determinants of satisfaction have nearly stagnated in the last few years at 20-24% (Ministry of Health AHSPR 2003-04).

UCMB has taken up this matter for its health institutions and with this exercise, it is hoped that the health institutions will gain more interest to follow and be responsive to determinants of patient satisfaction. The satisfaction index will be used as one component of a comprehensive quality index. It is also hoped that the instrument developed could be adapted by wider stakeholders to improve the understanding and interest in quantifying this important performance parameter.

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