

A study to determine the patient satisfaction and quality of services at the outpatient urology clinic of a tertiary care hospital

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Keywords: Service quality; patient satisfaction; outpatient clinic; urology; surgical clinic

Abstract

Introduction

Patient satisfaction is one of the benchmarks by which the quality of health care services is evaluated. The objective of this study was to assess the patients' satisfaction with services delivered at the urology outpatient clinic of Colombo South Teaching Hospital (CSTH), Sri Lanka.

Method

A descriptive cross-sectional study was done over three months (1.12.2019 – 28.2.2020) at the urology outpatient clinic of a tertiary care hospital in Sri Lanka. A pre-tested, self-administered questionnaire based on the SERVQUAL questionnaire was used to collect data. Seven questions were based on demography and eighteen were aimed at assessing responsiveness, tangibles, empathy and reliability. The Likert scale was used to determine the level of satisfaction.

Results

The study sample constituted of 220 patients. Nearly one third (32%) of them felt the waiting time to be registered at the clinic and to meet a doctor were too long. More than half (59%) said the clinic was overcrowded. However, over 90% of the patients perceived that staff characteristics, laboratory services and waiting time from the date of referral to the clinic appointment were satisfactory. Nearly 93% of the participants would recommend the clinic to a friend or a relative for seeking treatment.

Conclusions

Although patient satisfaction was good in many domains, by developing a better mechanism of giving appointments spread throughout the clinic, patient satisfaction and the quality of services provided at the urology outpatient clinic can be improved further.

Introduction

Service quality is defined as the outcome of an evaluation process where the consumer compares their expectations with the service they have received [1]. Healthcare quality has two separate components, namely technical quality and functional quality [2]. Technical quality refers to the accuracy of clinical diagnosis and surgical procedures and is understandable to medical professionals. Patients perceive functional quality, which includes the satisfactoriness of the service delivery process [3]. Patient satisfaction is used as a benchmark for the evaluation of the quality of health care services of a health care facility [4].

Hence, patient satisfaction is an essential component in the evaluation of health services in addition to the medical outcome and cost of care [5]. Patients' opinions and perceptions can add to the usual indicators of quality in health care as it serves as an important source of information in recognising deficiencies and drawbacks in an institute [6]. Hence, in clinical practice, surveys on patient satisfaction may provide useful data on issues that need change. Furthermore, such information may serve as feedback to clinical staff to identify gaps between patients' expectations and perceptions. This would ensure that the best possible care is delivered to the patients. These reasons have made patients' opinions about health care services an important yardstick and patient satisfaction surveys have been made mandatory in the developed world [7,8].

Sri Lankan health services are recognized globally as a successful low-cost model. This laudable result is believed to be due to the universal adult franchise gained in 1931, high female literacy rate, free education system and free at the point of delivery health care delivery system established in 1951 [9]. According to Universal Health Coverage (UHC) accepted by the United Nations General Assembly in September 2015, we should ensure all people have access to promotive, preventive, curative, rehabilitative and palliative health services when needed and that services should be of good quality [10]. Although Sri Lanka plans to achieve UHC and Sustainable Development Goals and given priority to such policies very few studies had been conducted to evaluate the achievements and challenges in maintaining sufficient quality in the health care delivery system as specified in UHC.

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Received: 02-04-2021 Accepted: 20-07-2021

DOI: <http://doi.org/10.4038/sljs.v39i2.8820>



Colombo South Teaching Hospital (CSTH) is the second-largest Teaching Hospital in Colombo District with 1110 beds. Approximately 1200 patients seek services at the outpatient department daily and 120 patients in the urology clinic per day which are held once a week. Though the quantity of work performed at the urology unit of CSTH has been high despite limited bed strength, the quality of services as perceived by patients has not been studied before [11,12]. Few studies have evaluated the patient satisfaction of services provided by outpatient departments of several hospitals in Sri Lanka [13]. However, studies to determine patient satisfaction at specialized clinics of hospitals in Sri Lanka are scarce.

The objective of this study was to assess the patients' satisfaction with services delivered at the urology outpatient clinic of CSTH, Sri Lanka.

Method

A descriptive cross-sectional study was conducted among patients attending the urology clinic of CSTH from 1 December 2019 to 29 February 2020. Data were collected using a self-administered questionnaire. However, an interviewer was available for any clarifications or help during the completion of the questionnaire. The member of the research team (KPD) who instructed and helped the potential participants and distributed the documents was not a member of the clinical team or the office staff of the urology clinic. This fact was informed to the study participants to minimize the bias that could result when giving information about staff performance.

SERVQUAL questionnaire which is adopted by service quality researchers and practitioners widely and has been proved to be useful in the health sector by many researchers was used for the survey [14,15]. After a pilot study, it was modified to ensure suitability for meeting the study objectives in the urology clinic of a government hospital in Sri Lanka. The questionnaire was translated into Sinhala and Tamil and those versions were back-translated to ensure validity with the help of linguistic experts. The modified questionnaire has basic demographic information and 18 multiple-choice questions aimed at patients' expression on different aspects of the functional quality of services rendered at the urology clinic. The response was based on a Likert scale. The questions were aimed to assess different domains of service quality - eight questions were to assess responsiveness, four for tangibles, three were on empathy, two for assurance and one on reliability.

The sample size was calculated using the Lwanga and Lemeshow formula. As there were no studies found on a similar population on patient satisfaction, the prevalence was set as 50% and estimated that 50% of the study population was

satisfied with the received services, the highest sample size was calculated. The estimated sample size was 187. By taking into consideration an anticipated non-response rate of 15%, the final sample size was 220.

A systematic sampling method was used and every fifth patient seen at the urology clinic during the study period was recruited to the study. The inclusion criteria were adult patients who have attended the clinic at least twice before and volunteering to participate in the research. The newly registered patients on that day and those who did not give consent for the study or were seriously ill to fill the questionnaire were excluded from the study. Data were collected on consecutive clinic days during the three months study period. The approval for the study was obtained from the Ethics Review Committee of the Institute.

Results

A total of 222 patients completed the questionnaire. Two patients were removed from the analysis as they were new patients coming for the first time. The data belonging to the remaining 220 patients were analysed. Most patients (51.4%) were between 55-74 years of age (Table 1). The male to female ratio was 3.6:1. Of the study sample, 172 (78%) patients had studied up to GCE (O/L) only. Nearly half of the patients (109 patients, 49%) had travelled more than 20 km to arrive at the hospital. The urinary stone disease was the commonest (90 patients, 40.5%) illness among the patients. Malingerers were seen in 5.4% (12 patients).

Results of the patients' perceptions regarding the individual questions of the questionnaire are given in Table 2. Patients' detailed responses to few selected questions are given in table 3. Most patients have indicated satisfaction over questions related to tangibles, assurance, empathy and reliability. The areas where patients showed less than 50% satisfaction belonged to responsiveness. The waiting time before registration and to see a doctor was more than one hour for 55.9% and 81.5% of patients respectively. Furthermore, even in areas where the majority of the patients showed satisfaction, the proportion of very happy patients was around 10% (Table 3).

Discussion

Patient satisfaction surveys are used by administrators of health care institutes to improve the surroundings of the institute and facilities and resources available to patients [16]. However, the efficacy of patient-based feedback to improve the skills and attitudes of staff members who provide health care remains controversial [8]. This may be because most such surveys have been initiated and performed by administrators and managers rather than the care providers themselves. In contrast, this study was initiated and

Table 1. Socio-demographic data of the study population

Socio-demographic characteristics n=220	Frequency	%
Age category		
<18 years	2	0.9
19-34 years	10	4.5
35-54 years	69	31.5
55-74 years	114	51.8
>75 years	25	11.3
Gender		
Female	48	21.6
Male	172	78.4
Level of Education		
up to grade 5	41	18.5
up to G.C.E. (O/L)	130	59.5
up to G.C.E. (A/L)	43	19.4
Degree	6	2.8
Distance in km		
1-10	56	25.4
11-20	56	25.4
21-30	66	30.2
31-50	30	13.5
>50	12	5.4
Diagnosis		
Urinary tract infection	34	15.3
Calculi	89	40.5
Malignancies	12	5.4
Benign Prostatic Enlargement	29	13.1
Others	56	25.7
Total	220	100

performed by the care providers themselves. Hence scepticism is less likely and chances of inducing changes based on study results are more likely.

According to the study, areas where patients showed the most dissatisfaction were waiting time for registration at the clinic and consultation of a doctor and toilet facilities of the hospital. Therefore, the important areas that need to be developed are the implementation of an appointment system based on the exact time for consultations. Although medical staff starts the clinic even before the scheduled time of 8 00 am, there is no mechanism to give specific time slots for individual patients. Therefore, almost all patients arrive at the clinic well before the start time of the clinic. This leads to long waiting times for registration and consultation. Attempts at scheduling appointments faced practical difficulties as patients travel long distances and use erratic public transport of the country. This makes it difficult for them to arrive at the clinic exactly at the scheduled time. Yet, healthcare providers of the urology

clinic need to look at a mechanism to reduce this waiting period as much as possible as this is the weakest area identified by the study. The majority of patients attending the urology clinic are men (78.7%) and this will ensure less time of a working day is lost. This would increase the compliance of men attending follow up visits without a miss.

Although 81.5% had to wait for more than one hour to meet the doctor since the arrival at the clinic, 62% were satisfied with the waiting time. It has been shown that dissatisfaction by patients is only expressed when extremely negative events occur [17]. This is more so in Asian countries like Sri Lanka where socio-cultural traditions are such that most patients allow a bigger margin of error before they criticize the health care system which is free of any cost at the point of delivery. To minimize this bias, the study activities like an explanation regarding the study, distribution of questionnaires and filling documents were done in a separate area of the clinic by an investigator who is not a member of the clinic staff. Nevertheless, healthcare providers of the urology clinic should not be complacent about lower rates of patient dissatisfaction.

Although only 17% were dissatisfied with the toilet facilities it is known that when it comes to physical facilities, patients compare it with what they have at home [17]. Therefore, we should consider it as an overestimation of the quality of toilet facilities and attention should be paid to improve it.

Adequacy of space is a perennial problem in tertiary care state hospitals of Sri Lanka due to the expansion of population in surrounding towns and limited availability of land. This leads to space allocation for waiting areas a low priority, when designing clinics and wards. This can be overcome by improving regional hospitals and giving more resources to upgrade the subspecialty units so that patients do not have to travel long distances for specialized services. In Sri Lanka, the state provides a free medical healthcare facility within 4.8 km of every household [9]. However, about 49 % of patients in this study cohort have travelled more than 20 km and this can be prevented by upgrading regional urology units with resources.

It is interesting to see that contribution of both doctors and other health care workers to patient satisfaction have been equally good. There is a general notion that in Sri Lanka health care assistants are recruited based on political affiliations, rather than skills-based objective assessments. This is being criticized as a negative aspect of the Sri Lankan health sector requiring a change in recruiting policy. However, the health care assistants of the urology clinic have performed well in domains like communication and empathy challenging such a notion. Whether this can be extrapolated to all health care assistants in the Department of Health is

Table 2. Patients' response to different questions

Domain	Category	Satisfied		Not satisfied		No comment	
		Number	(%)	Number	(%)	Number	(%)
Responsiveness	Actual time duration						
	from referral to clinic	205	(93.2)	15	(6.8)		
	Appointment for registration in the clinic	97	(44.1)	123	(55.9)		
	to meet a doctor	83	(37.7)	137	(62.3)		
	to obtain medicine	118	(53.6)	58	(26.4)	44	(20)
	Perception on time						
	to obtain a date for the clinic	218	(99)	2	(1)		
	to register at the clinic	141	(64.1)	79	(35.9)		
	to meet the doctor	138	(62.7)	82	(37.3)		
	to get laboratory tests and issuing reports	167	(75.9)	15	(6.8)	38	(17.3)
Tangibles	Space of the clinic	175	(79.5)	45	(20.5)		
	Toilet facilities	141	(64.1)	42	(19.1)	37	(16.8)
	Crowdedness	161	(73.2)	59	(26.8)		
	Staff	176	(80)	64	(20)		
Assurance	Treatment received	214	(97.3)	6	(2.7)		
	Help received to improve knowledge	208	(94.5)	12	(5.5)		
Empathy	Treated everyone equally	217	(98.6)	3	(1.4)		
	Helpfulness of the staff	218	(99)	2	(1)		
	Time taken to explain	207	(94.1)	13	(5.9)		
Reliability	Recommend to a friend/ family	212	(96.4)	8	(3.6)		

questionable. One of the strongest areas of the urology clinic is its ability to give the referred patients an appointment to see the specialist within a week. This is very important to prevent privileged patients from jumping the queue for clinic appointments. This eliminates bribery and corruption that pervades developing countries during the provision of services of state institutes [18]. Sri Lanka is ranked 93rd in the hierarchical order of countries in the world based on the corruption perceptions index – the first being the country with the least corruption [19].

Although patients have felt satisfied in most service delivery areas the proportion who rated those as very good is low in almost all domains. This has to be addressed in the future if we are to improve the quality of services further at the urology clinic. Organising staff development programmes for the health care delivery team members may be relevant in this regard to induce behavioural changes among individuals and

to discuss effective means of developing a patient appointment system.

A higher level of patient satisfaction enhances the compliance of patients to treatment which could lead to positive outcomes of the disease itself [20]. This is especially relevant for long-term management of main urological illnesses like stone disease, prostate problems and cancers which had constituted 58% of the patient population at the urology clinic. Therefore, steps taken to improve patient satisfaction will lead to improved disease outcomes too. This fact is ignored by most practising clinicians who believe that medications and surgical procedures only would benefit patients. At present funds are mostly diverted for improving technical quality with little attention towards functional quality [9]. It is time we try to achieve the right balance between the two.

Results from patient satisfaction surveys might be perceived

Table 3. Patients' response in detail to some selected questions

Patient satisfactory questionnaire characteristics	Frequency	%
Time period from referral to clinic appointment		
Less than 1 week	204	92.8
1-2 weeks	9	4.1
3-4 weeks	6	2.7
More than 4 weeks	1	0.4
Time taken for registration at the clinic		
<30 min	61	27.9
30 min-1 hr	36	16.2
1-2 hrs	87	39.6
>2 hrs	36	16.2
Time taken to meet the doctor		
<30 min	7	3.2
30 min-1 hr	64	29.3
1-2 hrs	149	67.6
>2 hrs	7	3.2
Space of the waiting area		
Very good	21	9.5
Good	102	46.4
Satisfactory	53	24.3
Poor	43	19.4
Very poor	1	.5
Access to toilet facilities		
Very good	4	1.8
Good	65	29.7
Satisfactory	65	29.7
Poor	32	14.4
Very poor	6	2.7
Never used sanitary facilities	48	21.6
Time taken for registration at the clinic		
Very good	15	8.2
Good	62	34.2
Satisfactory	49	26.6
Poor	54	29.9
Very poor	2	1.1
Waiting time before meeting the doctor		
Very good	11	6.0
Good	51	27.7
Satisfactory	62	34.2
Poor	57	31.5
Very poor	1	0.5
Satisfaction on the treatment received for the illness		
Very good	14	6.3
Good	158	71.6
Satisfactory	41	18.9
Poor	5	2.3
Very poor	2	0.9
Time spent by the medical staff for explaining about the illness		
Very good	17	7.7
Good	163	73.9
Satisfactory	27	12.6
Poor	13	5.9
Satisfaction of the helpfulness of the staff in improving the knowledge on the illness		
Very good	15	6.8
Good	154	70.3
Satisfactory	39	17.6
Poor	12	5.4
Total	220	100

as distressing by health care staff [8]. Such anxiety can be prevented if the studies are conducted by the care providers themselves. The Department of health should strive and promote satisfaction surveys conducted by care providers. This can be encouraged if the hospital administrators and managers allocate more funds to improve deficiencies of units that conduct such surveys and identify service gaps objectively. A factor that may have introduced some bias in this study would have been the awareness of both the medical and non-medical staff that the study was ongoing which may have changed their behaviour. However, if such positive behavioural changes would be long lasting, that could be a bonus point for similar studies to be conducted regularly at the unit level.

Although results of patient satisfaction surveys of outpatient department (OPD) services are available, studies on service quality of speciality clinics are scarce in Sri Lanka. The study has important implications for the staff members of the urology team and clinic and for the hospital administrators as the study has correctly identified the areas to be improved to improve the quality of services. Such directed and focused actions would improve the services better than general measures based on assumptions and tradition. Although the study was confined to a single clinic of a surgical sub-speciality of a teaching hospital involving only 220 patients, there is no reason to believe that circumstances are too different in other clinics too. This study instrument can be used to determine the quality of services and to identify gaps realistically in other clinics of the same institute as well as other institutes throughout the country. This would ensure appropriate steps are taken in a focused manner to rectify the deficiencies resulting in improved quality in services of specialized outpatient clinics across the country.

All authors disclose no conflict of interest. The study was conducted in accordance with the ethical standards of the relevant institutional or national ethics committee and the Helsinki Declaration of 1975, as revised in 2000.

References

1. Gronroos C. A service quality model and its marketing implications. *Eur J Marketing* 1990; 18: 36-44. <https://doi.org/10.1108/EUM0000000004784>
2. Chakrawarty A. Evaluation of service quality of hospital outpatient department services. *Med J Armed Forces India* 2011; 67: 221-224. [http://doi.org/10.1016/s0377-1237\(11\)60045-2](http://doi.org/10.1016/s0377-1237(11)60045-2)
3. Bopp KD. How patients evaluate the quality of ambulatory medical encounters. *J Health Care Marketing* 1990; 10: 6-15
4. Nabbuye-Sekandi J, Makumbi FE, Kasangaki A, Kizza IB, Tugumisirize J, Nshimye E, et al. Patients satisfaction with services in outpatient clinics at Mulago Hospital, Uganda. *Int J Qual Health Care* 2011; 23: 516-523. <https://doi.org/10.1093/intqhc/mzr040>
5. Bergenmar Mia, Nylen Urban, Lidbrink Elisabet, Bergh Jonas, Brandberg Yvonne. Improvements in patient satisfaction at an outpatient clinic for patients with breast cancer. *Acta Oncol* 2006; 45: 550-558. <https://doi.org/10.1080/02841860500511239>
6. Avis M, Bond M, Arthur A. Satisfying solutions? A review of some unresolved issues in the measurement of patient satisfaction. *J Adv Nursing* 1995; 22: 316-322
7. Sitzia J, Wood N. Patient satisfaction: a review of issues and concepts. *Soc Sci Med* 1997; 45: 1829-1843. [https://doi.org/10.1016/S0277-9536\(97\)00128-7](https://doi.org/10.1016/S0277-9536(97)00128-7)
8. Boyer L, Francis P, Dautre E, Weil G, Labarene J. Perception and use of the results of patient satisfaction surveys by care providers in a French teaching hospital. *Int J Qual Health Care* 2006; 18: 359-364. <http://doi.org/10.1093/intqhc/mzl029>
9. De Silva A, Ranasinghe T, Abeykoon P. Universal health coverage and the health sustainable development goal: achievements and challenges for Sri Lanka. *WHO South-East Asia J Public Health* 2016; 5: 82-88. <http://doi.org/10.4103/2224-3151.206257>
10. World Health Organization. Health financing for universal coverage
11. Ambegoda ALAMC, Weligamage WAS, Ishak MCM, Gobi U, Suwendiran S, Mahadeva S. et al. A prospective study to evaluate access to elective surgical services in a urology unit of Sri Lanka. *Sri Lanka J Surg* 2018; 36: 5-9. <http://doi.org/10.4038/sljs.v36i1.8474>
12. Sutharshan K, Balagobi B, Gajasinghe S, Sasikumar S, Weligamage A, Ishak M. et al., Clinicopathological profile of malignancies treated in a urology unit over a period of five years. *Sri Lanka J Surg* 2017; 35: 1-5 <http://10.4038/sljs.v34i4.8313>
13. Kalubowila KC, Perera D, Senathilaka I, Alahapperuma C, Withana RD, Kapparage PD. Patient satisfaction of services at the out-patient department of Base hospital, Panadura. *J College Community Physicians Sri Lanka* 2017; 23: 63-70. <http://doi.org/10.4038/jccpsl.v23i2.8105>
14. Rishard MHM, Kodithuwakku SS. An assessment of health service quality: A case of a teaching hospital in central province of Sri Lanka. *Trop Agri Res* 2008; 20: 251-259
15. Babakus E, Mangold WG. Adopting SERVQUAL scales to hospital services: an empirical investigation. *Health Services Res* 1992; 26: 767-786
16. Turnbull J, Hembree W. Consumer information, patient satisfaction surveys and public reports. *Am J Med Qual* 1996; 11: 42-45
17. Williams B, Coyle J, Healy D. The meaning of patient satisfaction: An explanation of high reported levels. *Soc Sci Med* 1998; 47: 1351-9 [http://doi.org/10.1016/s0277-9536\(98\)00213-5](http://doi.org/10.1016/s0277-9536(98)00213-5)
18. Andaleeb Syed Saad, Siddiqui Nazlee, Khanakar Shahjahan. Patient satisfaction with health services in Bangladesh. *Health Policy Planning* 2007; 22: 263-273 <http://doi.org/10.1093/heapol/czm017>
19. https://www.transparency.org/files/content/pages/2019_CPI_Report_EN.pdf (Accessed on 23 October 2020)
20. O'Connor SJ, Shewchuk RM, Trish HQ. Perceptual gaps in understanding patient expectations for health care service quality. *Health Care Manag Rev* 2000; 25: 7-23 <https://doi.org/10.1097/00004010-200004000-00002>