Original Article

Analyzing patients satisfaction with eye care services in tertiary hospital

Reefat Nayer[1], Moinuddin Ahmed[2], Ahmed Shahriar[3], Zakia Sultana[4], Subarna Roy[5], Abeed Mozid[6]

Abstract

Introduction: Patients satisfaction regarding medical care organizations like tertiary care hospital is important in the provision of services to patients. Patient satisfaction is a measure of how happy a patient is with their healthcare. Although "patient satisfaction" and "patient experience" are sometimes used interchangeably, they're actually two separate concepts. This effort has a positive impact on health and education sector in Bangladesh. Every year the demand of health care is increasing and health sector facing difficulties to maintaining the principle of high-quality health care delivery system. **Objective:** To analyze the level of satisfaction of patients attending the eye department of National institute of ophthalmology & Hospital, utilize the hospital service and determine the factors related to their satisfaction. **Methodology:** The present study was descriptive, cross sectional carried out in the outdoor, indoor and emergency of National institute of Ophthalmology Hospital, Dhaka from January 2021 to July 2021. Quantitative data has been collected. A sample population 384 patient using random sampling technique through face-to-face interview by using pretested semi structured questionnaire. The An ethical approval was obtained from the North South university public health department. **Result:** The patients were asked to evaluate the overall performance of the hospital. The majority (60.5%) said average and 39.5% said good. **Conclusion:** the patient satisfaction is very important to increase the flow of patient and reduce the burden of eye related service. Quality of care, doctor and staff attitude and behavior need to improve to enhance the satisfaction level of patient. Hospital general hygiene facility also need to improve.
Keywords: Patient satisfaction, eye health, quality of care, hospital management.

Introduction

Hospital health care services is considered is the right of the patient irrespective of public and private sector. Tertiary health care services in Bangladesh are the major place for patient to get quality health care.1 Health care delivery system aim is to improve the quality of service and satisfied the service recipient. The effective healthcare system is integral part of improving the patient care and ensure the basic healthcare. Evidence show that Bangladesh healthcare system is trying to improve its quality of care to fulfill the increasing demand of patients.[2,3] There are many factors that influence the patient satisfaction like-skills of service providers, quality of care, hospital service facility and service cost. Clinical and non-clinical actors also influence the patient satisfaction. We have no good data on such patient satisfaction in Bangladesh and we can't determine the level of patients' satisfaction and how it influence by clinical and non-clinical factors. We need empirical evidence to validate our above assumption and to develop good framework to improve the quality of care and ensure the patient satisfaction of Bangladesh. This study aim was to assess the clients' satisfaction with the services provided in a well reputed multi-disciplinary three tertiary eye hospital in Bangladesh.

1. Assistant Professor, Department of Community Medicine & Public Health United Medical College

2. Professor, Department of Community Medicine & Public Health United Medical College

3. Lecturer, Department of Community Medicine & Public Health United Medical College

4. Assistant Professor, National Institute of Ophthalmology.

5. Epidemiologist, National Institute of Ophthalmology and Hospital, Dhaka.

6. Junior Consultant, National Institute of Ophthalmology & Hospital, Dhaka

Address of correspondence:
Dr. Reefat Nayer
Assistant Professor, Department of Community Medicine & Public Health United Medical College
Email: reefatnayer@gmil.com

Method

Descriptive type Cross-sectional study was conducted in National Institute of Ophthalmology & Hospital received eye care services from outpatient, inpatients and emergency department from January 2021 to July 2021. The patients visiting the ophthalmology departments of the National Institute of Ophthalmology & hospitals will be considered the study population. The population was selected randomly with considering the inclusion criteria and exclusion criteria from the study population. The sample size was estimated using the following formula of cross-sectional survey.

Sample size formula:

$n = Z2\ pq\ /\ e2$

and sample size was 379

A pretested semi-structured questionnaire was used to collect information from the respondents. At first the patients were screened according to the selection criteria. After getting informed consent from the eligible participants, data were collected by face-to-face interview. Data were analyzed using SPSS version 22.

Results

Education Categories	Quality of services n= 171 %	Distance n=111 %	Recommended by others n= 94 %	Low cost n= 3 %	Total n= 379 %
Class 1-2 pass	2.90	1.10	.80	-	4,80
Class 3-4 pass	-	.80	4.00	-	4.80
Class 5-6 pass	21.60	15.70	12.80	.60	50.70
Class 7-8 pass	21.20	11.90	7.2	-	40.30
Total	45.70	29.50	24.80	.60	100.0
$x^2= 76.22$; Gamma V= .13, Lamda λ = .052 df = 12; Sig; P= < .001					

Table 1: Percentage Distribution of education of the Respondents by reasons of selection of the hospital for treatment.

Table-1:The majority (45.2%) of the patient had passed class 5-6, 29.7% had passed class 3-4, 20.1% had passed class 7-8 and 5% had passed class 1-2 . There is a strong association between level of education of respondents and reasons of selection of the hospital for receiving treatment ($x2= 76.22$; Gamma V= .13, Lambda λ = .052   df = 12; Sig; P < .001)
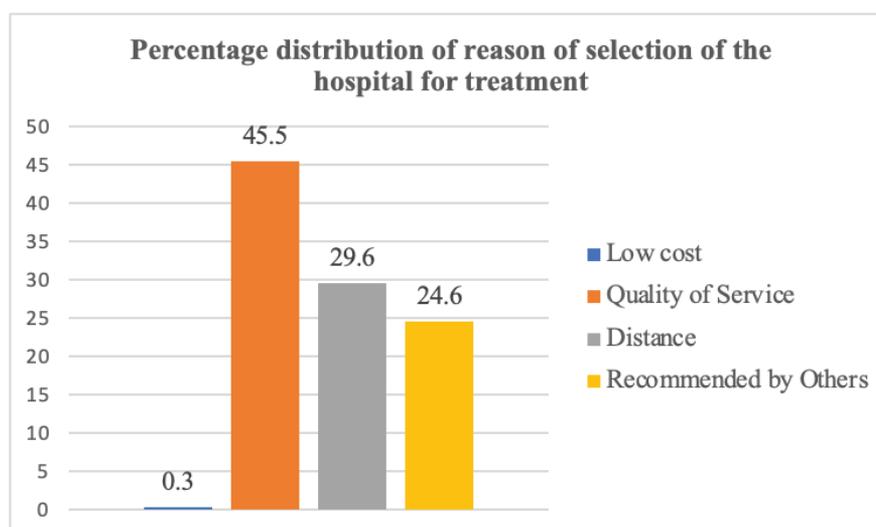

Figure-1: Percentage distribution of reason of selection of the hospital for treatment.

The reasons of visiting hospital were quality of service (45.5%), distance (29.6%), recommended by other (24.6%) and low cost (.3%) respectively (Figure-4).
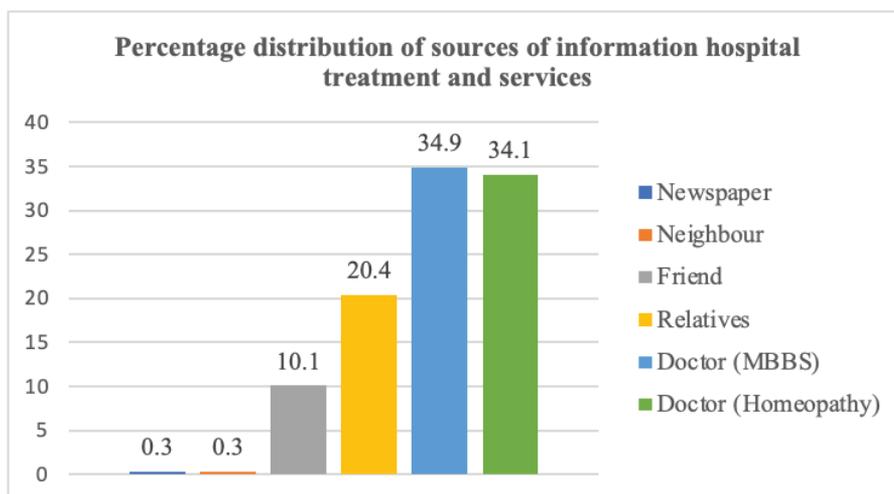
Figure-2: Percentage distribution of sources of information hospital treatment and services
About 34.9% patient informed on hospital treatment from newspaper followed by doctor-homeopathy (34.1%), neighbor (20.4%), friend (10.1%), doctor-MBBS (.3%) and other source (.3%) (figure-1).

Status of general cleanliness of the eye hospital	379.0	100.0
Poor	-	-
Average	142	37.3
Good	237	62.7
Excellent	-	-
Status of cleanliness of cabin or ward		
Poor	-	-
Average	-	-
Good	241	64.0
Excellent	138	36.0
Status of general facilities of the hospital	379.0	100.0
Poor	6	2.0
Average	251	66.5
Good	121	31.5
Excellent	-	-
Status of outdoor toilet facility	379.0	100.0
Poor	165	43.5
Average	214	56.5
Good	-	-
Excellent	-	-

Table-2: Respondent's opinion health and hygiene condition of the hospital.
The status of general cleanliness was good (62.7%) and average (37.3%). The patient was happy with cleanliness in the ward compared to general cleanliness of the hospital. About 64% said that ward cleanliness was good and 36% said it was excellent. The patient was not happy about general facilities of the hospital. About 665% said that the facilities were average, 31.5% said good and 2% said poor. Attendee was unhappy with outdoor toilet facilities. About 56.5% said that the facilities were average and 43.5% said poor.

Characteristics/Variables	Frequency (n)	Percentage (%)
Emergency services of the hospital	**379.0**	**100.0**
Poor	32	9.0
Average	212	56.0
Good	134	35.0
Excellent	-	-
Doctor of emergency department spent time to listen to the patient eye problem	**379.0**	**100.0**
Poor	168	44.0
Average	144	38.0
Good	66	18.0
Excellent	-	-
Emergency department explanation on eye health issue and treatment	**379.0**	**100.0**
Poor	130	34.0
Average	130	34.0
Good	119	32.0
Excellent	-	-

Table 3: Respondents opinion on emergency services
Response to question on hospital investigation facilities average (46%), good (42.5%), excellent (3%) and poor (8.5%). About one- third (34%) was unhappy about medicine facility in the hospital pharmacy, 34% said average and 32% said medicine service was excellent. On an average 56% patient were happy with emergency services of the hospital whereas 35% said it was excellent and 9% said that emergency services were poor. Time allocated by doctor at emergency room to listen the problem of the patient was not satisfactory. About 44% patients were unhappy, 38% said the spent time by doctor was average and 18% said it was good. Emergency department explanation on eye health issue and treatment about 34% said that it was poor, 34% said average and 32% said good.

Characteristics/Variables	Frequency (n)	Percentage (%)
Patient experience on waiting time of outdoor department	**379.0**	**100.0**
Very Long	26	7.0
Long	145	38.5
Average	177	46.9
Reasonable	26	6.5
Not All	5	1.3
Patient experience on waiting time of Inpatient department	**379.0**	**100.0**
Very Long	-	-
Long	-	-
Average	22	6.0
Reasonable	221	58.0
Not All	136	36.0

Table 4: Patient opinion on hospital outdoor facilities and inpatient services
Patient stated about hospital outdoor and inpatient services. In a question to waiting time of outdoor department about 38.5% said that waiting time is long, 46.9% average, 6.5% said reasonable, 7% said very long and 1.3% said not all long. Whereas for the inpatient department waiting time patient satisfaction was quite good compared to outdoor. About 58% said it was reasonable, 36% said it was not too long and 6% said average. About admission process of inpatient department patient was quite happy. About 71% said it was average and 29% admission process was good.

Percentage distribution of patient opinion about charges and costs of services of the hospital
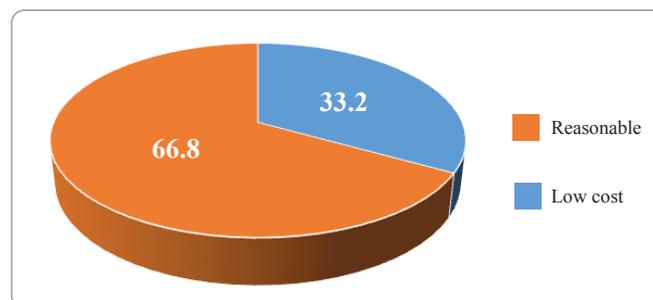

Figure -3: Percentages distribution of patients' opinion about charges and cost of services of the hospital
The important fact is that majority of the patient were happy on charges and cost of services of the hospital. About 66.8% said the charges and cost of hospital was low and 33.2% said the charges and cost is reasonable of the hospital.

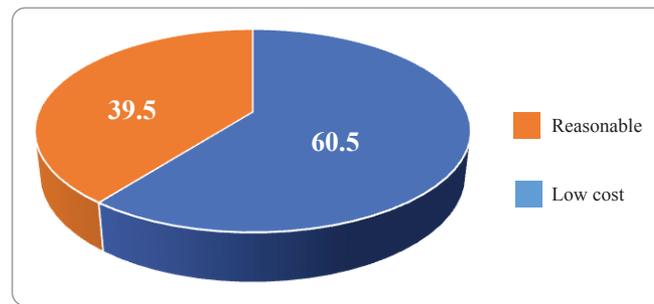**Percentage distribution of patient opinion about overall rating of the hospital**

Figure-4: Percentages distribution of patients opinion about of services of the hospital
The majority (60.5%) said average and 39.5% said good.

Discussion

Patients' satisfaction with an encounter with health care service is mainly dependent on the duration and efficiency of care, and how empathetic and communicative the health care providers are.

Patients' satisfaction is the integral part of understanding the quality services and improve the hospital management strategy. The quality of hospital data is crucial to understand the strength of the organization. Patient satisfaction, the process of evaluation, and comparison of system facility is the key indicators to understand the strength of the hospital1 We had interview 379 patient from the tertiary hospital and data was collected through face-to-face interview. Our synthesis data show that the majority (73%) of the patient aged between 36 and 90 years with a mean age of 49.19± 17.53 years. This statistic means a large number of patients were older and few were younger. About 87% of respondents were married and 13% were single. The level of education of the respondents were very poor and the vast majority of respondents were primary school pass. This statistic indicates that rural poor people and low educated people prefer to receive the treatment from government hospital in Bangladesh. We found association between level of education of respondents and reasons of selection of the hospital for receiving treatment. This meant that rural low level of educated people disseminated hospital treatment issue after returned to local area and they have no option to find another hospital facility due to their low level of education[2,3]. As result of it we

found that 60% patient had experienced of visiting of hospital several times for the treatment purpose. Usually, majority of the patient visit several times of the hospital due to quality of service (45.5%), distance (29.6%), recommended by other (24.6%) and low cost (.3%). The interesting fact is that majority of the patient informed about the hospital treatment from informal channel like homeopathy-doctor (34.1%), neighbor (20.4%), and friend (10.1%). We found association between sources of information about hospital treatment and level of education of the respondents. We also found association between source of information and level of education of the respondents. Hospital outdoor is so busy and we found that vast majority (93.5%) of patients were get admission through outdoor whereas 6.5% admitted through emergency department. The big concern issue is that majority of the patient were unhappy on doctor attitude and behavior. A mentionable portion said that doctor give enough time to listen their eye problems but level of explanation on eye health problem and treatment is poor[5]. Patient opinion about staff attitude and behavior was average and its indicates that patient level of satisfaction is poor. This study finding is very much close with study conducted[8]. they found that patient was not happy to staff attitude and behavior in the tertiary eye care services in Bangladesh. Regarding nurse/optometrist and counselor explanation on treatment and prognosis majority of patient was unhappy. Patient also unhappy about MLOP explanation on treatment and prognosis[8,9]. The patient was

happy with cleanliness in the ward compared to general cleanliness of the hospital. About 64% said that ward cleanliness was good and 36% said it was excellent. The patient was not happy about general facilities of the hospital. About 65% said that the facilities were average, 31.5% said good and 2% said poor. Attendee was unhappy with outdoor toilet facilities. About 56.5% said that the facilities were average and 43.5% said poor. Response to question on hospital investigation facilities and majority of the respondents were unhappy. About one- third was unhappy about medicine facility in the hospital pharmacy. On an average 56% patient were happy with emergency services of the hospital. Time allocated by doctor at emergency room to listen the problem of the patient was not satisfactory. About 44% patients were unhappy, 38% said the spent time by doctor was average and 18% said it was good. Emergency department explanation on eye health issue and treatment about 34% said that it was poor, 34% said average and 32% said good. We asked patient about hospital outdoor and inpatient services. Waiting time of outdoor department patient said that it was long. Whereas for the inpatient department waiting time patient satisfaction was quite good compared to outdoor. The important fact is that majority of the patient were happy on charges and cost of services of the hospital. The satisfaction due to government subsidy in hospital level and charges and treatment cost is low[1]. We asked patient about

their recommendations to refer patient to receive the services from the hospital. The alarming issue is that majority of the were confused. We asked patient to evaluate the overall performance of the hospital and the majority of the respondents said that it was average.

Conclusion

Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice claims It affects the timely efficient and patient care delivery of quality health care.   Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors & hospitals. Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice.

The assessment of patient satisfaction in the Eye Department of a tertiary care public hospital reveals a generally positive experience, with notable strengths in the professionalism and competence of medical staff. However, areas needing improvement include reducing wait times and enhancing the comfort and cleanliness of facilities. Addressing these concerns can significantly elevate overall patient satisfaction and care quality. Continual feedback mechanisms and targeted interventions are essential for sustaining high standards and meeting patient expectations effectively.

References

1. World Health Organization. Global initiative for the elimination of avoidable blindness. 2000. https://apps.who.int/iris/bitstream/handle/10665/63748/WHO_PBL_97.61_Rev.2.pdf.

2. Thylefors B, Negrel AD, Pararajasegaram R, Dadzie KY. Global data on blindness. Bull World Health Organ.1995;73:115–21./pmc/articles/PMC2486591/? report= abstract. Accessed 21 Feb 2021.

3. Arnold J. Global cataract blindness: The unmet challenge. British Journal of Ophthalmology. 1998;82:593–4. doi:10.1136/bjo.82.6.593.

4. Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. PLoS Med. 2006;3:2011–30.

5. Dineen BP. Prevalence and causes of blindness and visual impairment in Bangladeshi adults: results of the National Blindness and Low Vision Survey of Bangladesh. Br J Ophthalmol. 2003;87:820–8. doi:10.1136/bjo.87.7.820.

6. Bourne R, Dineen B, Ali S, Ophthalmology DH-, 2004 undefined. Prevalence of refractive error in Bangladeshi adults: results of the National Blindness and Low Vision Survey of Bangladesh. Elsevier. https://www.sciencedirect.com/science/article/pii/S0161642004001319. Accessed 20 Feb 2021.

7. Alkhamis A. Health care system in Saudi Arabia: an overview. East Mediterr Health J. 2012;18:1078–9. doi:10.26719/2012.18.10.1078.

8. Alkinaidri A, Alsulami H. Improving Healthcare Referral System Using Lean Six Sigma. Am J Ind Bus Manag. 2018;08:193–206. doi:10.4236/ajibm.2018.82013.

9. Tabish SA. Referral System in Health Care. 2010. https://www.researchgate.net/publication/261957501_Referral_System_in_Health_Care. Accessed 20 Feb 2021.

10. Diba F, Ichsan I, Muhsin M, Marthoenis M, Sofyan H, Andalas M, et al. Healthcare providers' perception of the referral system in maternal care facilities in Aceh, Indonesia: a cross-sectional study. BMJ Open. 2019;9:e031484. doi:10.1136/bmjopen-2019-031484.

11. Joarder T, Chaudhury TZ, Mannan I. Universal Health Coverage in Bangladesh: Activities, Challenges, and Suggestions. Adv Public Heal. 2019;2019:1–12. doi:10.1155/2019/4954095.

12. Secondary and Tertiery Healthcare. https://dghs.gov.bd/licts_file/images/Health_Bulletin/ HB2012_CH/HB2012_CH5_Senondary -tertiary -HCare.pdf. Accessed 20 Feb 2021. American Medical Journal of Ethics. November (2013).

14. Attanayake A. Measures of equity, efficiency and quality of selected healthcare service. 2008.

15. Barker, Hall. Practical epidemiology, Churchill Livingstone, Edinburgh.1991;65-68:166-203.