ABSTRACT

Background: Patient satisfaction is the level to which the patients’ experience that their needs and expectations are being met by the service provided. The aim of the study was to measure and improve the quality of eye care services at Lumbini Eye Institute and Research center (LEIRC)/Shree Rana Ambika Shah Eye Hospital (SRAHEH) both pediatric and adult groups.

Methods: A cross sectional study with descriptive analysis was done from November 2018 to April 2019 at LEIRC, Bhairahawa Nepal. Five hundred seventeen (517) patients were enrolled by systematic random sampling, segregating 201- In patients, 205 – adult and elder patients and 111 pediatric patients. Interview was taken from the patients using the questionnaire which was already used in Arvind Eye Care System, India after validating in our context. Data was entered and analyzed using IBM SPSS -20 version.

Results: Among 517 respondents Female (54%) respondents were more than male. Overall patient satisfaction was almost ninety-eight percent were satisfied. Similarly, more than eighty (83.94) percent felt the reasonable cost in service charge and almost sixty five percent respond the reasonable waiting time. Ninety percent patients expressed their interest to recommend their friends or relatives to the hospital.

Conclusions: Majority of the patients were satisfied with the overall services of the LEIRC. However, there is need to reduce longer waiting time of the patients.

INTRODUCTION

Quality in health care is a global issue. In developing countries, the demand for better and low-cost health services is increasing due to increased population. Patient satisfaction is the key to upgrade any health care centers. It is the level where the patient experience, their needs and expectations are fulfilled throughout the services. Competition among the service providers provided wider opportunities to patient to select the hospital. Uptake of the eye care services depends on the quality of service delivered.

Patient satisfaction is varied in different dimensions. patient satisfaction may be influence through social situation and their expectations. Initially, researchers focused on the patient satisfaction as per clinical outcomes but now patient satisfaction is shifted to final outcome for evaluating and improving health and care services. Being an emerging issue, different eye care centers are doing the study on patient satisfaction to improve their internal service according to the demands of the population.

Lumbini Eye Institute and Research Center (LEIRC)/ Shree Rana Ambika Shah Eye Hospital (SRAHEH) is a tertiary level of eye care center; located at western part of the Nepal, runs the different subspecialty services in eye care. So, it is crucial to know it’s service level from the patients’ point of view. In this regard, we intended to perform patient satisfaction survey to evaluate the quality of eye care services at LEIRC of both pediatric and adult groups in outpatient department with covering inpatient department.

METHODS

A descriptive cross-sectional study was conducted in Lumbini Eye Institute and Research Center from November 2018 to April 2019.

Sample size was calculated by assuming 50% patient are satisfied, at 95% confidence interval, 5% margin of error, 80% power, using the formula n = z^2PQ/e^2, the calculated sample size was 384 but this research was conducted among 517 sample. Sample was selected by using Systematic random sampling among enrolled patient, in which every 5th patient was selected from different three locations of LEIRC: Pediatric participants (111) enrolled from pediatric counseling room, Interview was taken with guardians in the pediatric; adult...
participants taken from adult OPD counseling room (after providing medicine or optical, and in patient (201) were taken from post-operative counseling unit at the time of discharge. All new and old patients visiting to adult OPD, pediatric and IP department in Lumbini Eye Institute and Research Centre, Bhairahawa were included in this study and Patients unwilling to participate in the study were excluded from this study.

Informed written consent was obtained from all participants. Privacy and confidentiality were maintained during the interview. Ethical approval was taken from the Institutional review committee of Lumbini eye Institute and Research center. Data was collected by Trained B. optometry and ophthalmic science students (who were not exposed in clinical posting) took the interview with the patient by using the valid schedule (questionnaire) which was already used in Aravinda Eye Care System, India. Likert scale was used to measure the satisfaction level (excellent -1, Good-2, Average -3 and Poor-4). Information was collected regarding all major services provided unit of the LEIRC.

Data were entered and analysis was done by using IBM SPSS 20 version. Patient who expressed excellent, good and average tend to satisfy with the services. We used mean and standard deviation to summarize continuous variables and proportion to summarize categorical variable.

RESULTS

A total of 517 consecutive participants were interviewed. The mean age of the participants was 45.63 ± 23.98 years with range 1 to 90 years. In the study, Females were more participated than male. Occupations of the participants were more from Farmer, House wife, and students respectively and least from business. From the age perspective Fifty-one to Seventy years group were more participated (Table 1).

Registration represents the patient’s entry in the hospital and admission represents the preparedness for the surgery. In the process of registration, in regards of care and respect almost ninety nine percent were satisfied, ninety four percent satisfied with the clarification of doubt and overall, ninety eight percent were satisfied from the staff guidance to clinic.

In patients (201) were admitted for the surgery. In the admission and discharge procedure ninety nine percent participants were satisfied. Within total outpatients (316), overall, ninety nine percent patient expressed satisfaction from the perspectives of respect and care along with clarification of procedure, almost ninety eight percent satisfied with the instruction for medication and next visit in in screening and counseling services provided in LEIRC (Table 2).

Table 1: Distribution of study sample according to baseline characteristics  

| Baseline characteristics | Number (%) |
|--------------------------|------------|
| Age group (years)        |            |
| 1-9                      | 82 (15.86) |
| 10-19                    | 51 (9.86)  |
| 21-30                    | 10 (1.93)  |
| 31-40                    | 28 (5.42)  |
| 41-50                    | 62 (11.99) |
| 51-60                    | 117 (22.63)|
| 60-70                    | 126 (24.37)|
| >70                      | 41 (7.93)  |
| Gender                   |            |
| Male                     | 239 (46)   |
| Female                   | 278 (54)   |
| Occupation               |            |
| Farmer                   | 195 (37.72)|
| Housewife                | 146 (28.24)|
| Service                  | 12 (2.32)  |
| Business                 | 10 (1.93)  |
| Student                  | 116 (22.44)|
| Other                    | 38 (7.35)  |

Table 2: Patients view towards Registration, admission, screening and counselling procedure

| Patients view                                         | Satisfied n (%) | Unsatisfied n (%) | No doubt n (%) |
|-------------------------------------------------------|-----------------|-------------------|----------------|
| Registration(n=517)/admission and discharge (n=201) process |                 |                   |                |
| Care and respect                                      | 506 (99)        | 5 (1)             |                |
| Clarity of doubts                                     | 485 (94.8)      | 7 (1.9)           | 19 (3.7)       |
| Guidance to the clinic                                | 503 (98.4)      | 8 (1.6)           |                |
| Clarification in the procedure                         | 198 (99)        | 2 (1)             |                |
| Screening and counselling at OPD(n=316)               |                 |                   |                |
| Care and respect                                      | 313 (99.1)      | 3 (0.9)           |                |
| Clarity of doubts                                     | 308 (97.4)      | 4 (1.26)          | 4 (1.26)       |
| Clarification in the procedure                         | 313 (99.1%)     | 3 (0.9)           | -              |
| Instructions for medication and next visit            | 310 (98.14%)    | 6 (1.86)          | -              |

Similarly, overall, ninety-eight percent participants were satisfied with the problem listing attitude of the doctors, ninety nine percent were satisfied at care and respect, almost ninety-nine percent were satisfied in the clarification of treatment procedure and towards attention given by the doctors. In respect of nursing care in IPD, from the perspective of care
and respect almost ninety-eight percent were satisfied, almost four percent were unsatisfied in the clarification of doubt, in regards of clarification in the procedure ninety nine percent were satisfied and six percent patients were unsatisfied in aspect of attention given by the nursing care (inpatient ward) (Table 3).

Table 3: Patients view toward doctors and Nursing care services

| Doctors’ services (n=517)                                      | Satisfied | Unsatisfied | No doubt |
|---------------------------------------------------------------|-----------|-------------|----------|
| Care and respect                                              | 512(99)   | 5(1)        |          |
| Clarity of doubts                                             | 509(98.5) | 8(1.5)      |          |
| Clarification in the procedure                                | 514(99.4) | 3(0.6)      |          |
| Instructions for medication and next visit                   | 510(98.6) | 7(1.4)      |          |
| Nursing care in IPD (n=201)                                   | 197(98.1) | 4(1.9)      |          |
| Care and respect                                              | 174(86.56)| 8(3.8)      | 19(9.45) |
| Clarity of doubts                                             | 197(98)   | 4(2)        |          |
| Instructions for medication and next visit                   | 196(97.5) | 5(2.5)      |          |
| Attention given to the patient                                | 189(94)   | 12(6)       |          |

Table 4: Participants view towards available facilities in the hospital

| Participants view towards available facilities in the hospital | Excellent n(%) | Good n(%) | Average n(%) | Poor n(%) |
|---------------------------------------------------------------|----------------|-----------|--------------|-----------|
| Canteen                                                       | 5(0.9)         | 35(6.8)   | 37(7.2)      | 440(85.1) |
| Drinking water                                                | 55(10.6)       | 229(44.3) | 154(29.8)    | 79(15.3)  |
| Toilet                                                       | 34(6.6)        | 177(34.2) | 190(36.8)    | 116(22.4) |
| cleanliness                                                   | 61(11.8)       | 271(52.4) | 156(30.2)    | 29(5.6)   |
| Waiting area                                                 | 26(5.03)       | 235(45.5) | 228(44.1)    | 28(5.4)   |
| Lab investigation                                             | 51(9.9)        | 326(63.1) | 110(21.3)    | 30(5.8)   |
| Security                                                      | 83(16.1)       | 379(73.3) | 52(10.1)     | 3(0.6)    |

Almost ninety percent participants expressed their interest to recommend their friends or relatives in this hospital (Table 6).

Table 5: Overall satisfaction

| Overall Satisfaction in the hospital | Frequency (%) |
|-------------------------------------|---------------|
| Excellent                           | 95 (18.38)    |
| Good                                | 311 (60.15)   |
| Average                             | 105 (20.31)   |
| Not satisfactory                    | 6 (1.16)      |

Figure 1: Patients view towards available facilities in the hospital

More than ninety five percent patients respond the satisfaction in operation theater services. More than seventy-five percent patients felt no difficulty finding places in the hospital. Similarly, more than eighty percent patients respond the reasonable cost of the services. Almost sixty five percent patients felt the reasonable waiting time to get the services. More than seventy percent patients respond they got help when they needed in the hospital (Figure 1).

More than eighty percent patients were unsatisfied with canteen services, almost seventy five percent patient were satisfied with the available drinking water. More than twenty percent patients were unsatisfied with the toilet services. Almost ninety five percent patient were satisfied with the perspective of cleanliness, waiting area, lab investigation (Table 4).

Table 6: Recommendation to LEIRC

| Recommend to LEIRC | Frequency (%) |
|-------------------|---------------|
| Extremely likely  | 297 (57.4)    |
| In an average     | 169 (32.7)    |
| Not at all        | 51 (9.8)      |

Almost ninety eight percent patients were satisfied from the service provided by the LEIRC (Table 5).

Almost ninety percent participants expressed their interest to recommend their friends or relatives in this hospital (Table 6).
DISCUSSION

This research showed that the mean±SD of the participants was 45.63±23.98 years. Majority of them were female by gender and farmer by occupation. While the research conducted by Rizya showed that majority of them were male and students with age range from 13 to 68 years.

Research showed that most of all the participants were satisfied towards hospital service like in registration, counseling, doctor’s service and nursing care. Around 76.8% of patients were satisfied with the affordability of the hospital services and the overall hospital facilities and environment also high percentage of the patients were satisfied with the patient doctor relationship (87.9%) and relationship with other supporting staff of the department (82%).

More than eighty percent patients were unsatisfied with canteen services; almost seventy five percent patients were satisfied with the available drinking water. More than twenty percent patients were unsatisfied with the toilet services. Almost ninety five percent patients were satisfied with the perspective of cleanliness, waiting area, lab investigation. About 62.2 percent of patients were satisfied in waiting time, 76.8% satisfied with hospital environment and payment for services, 75.5% patients were satisfied in access to care.

Almost ninety eight percent patients were satisfied from the service provided by the hospital. Rizya found that overall patients’ satisfaction level is 76.8% also in research of Gurung showed that 74% were satisfied. Studies conducted to estimate the patient satisfaction with eye care services in South India, Central India, Ghana and Uganda and showed an overall satisfaction of around 78%, 90%, 90% and 79% respectively. Qadri et al showing overall satisfaction of 79.3% in rural Haryana, Deva et al in Kashmir (80%), Kumari et al in Lucknow, (81.6%) and Qureshi et al in Kashmir (72%)

Bhattacharya et al (88%), Jawhar et al (90-95%). In Africa Oli colleagues reported the satisfaction as (83%) in Benin city and Iliyasu and colleagues (83%) from Kano, Nigeria. all almost similar to our finding. The difference in the satisfaction level because of some may factors like services are delivered, differences in the study population, socio cultural differences and variation in levels of literacy. The service charges of our study hospital are cheaper and can be afforded even by patients with low-income sources. That could be the reason to have higher percentage of participants responding reasonable cost.

This study was conducted in single center so the finding of this research cannot be generalized to all the population of Nepal.

CONCLUSION

The study assessing the patient’s satisfactions visited out patient (adult and pediatric) and inpatient department of the Lumbini Eye Institute and Research center revealed a good satisfaction level through different components. Majority of the patients (98%) were satisfied with the overall services of the hospital. A significant number of patients were unsatisfied with care and respect and attention given by the ward counsellor, long waiting time in the services, canteen services. We recommend to LEIRC administration and management to address this unsatisfaction on timely for betterment of service delivery.

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India. Internet J Health. 2009; 8(2): [DOI]

14. Bhattacharya A, Menon P, Koushal V, Rao KLN. Study of patient satisfaction in a tertiary referral hospital. J Acad Hosp Admin 2003; 15: 11-5. [LINK]

15. Jawahar SK. A study on out patient satisfaction at a super specialty hospital in India. Internet J Med Update 2007; 2: 3-5. [DOI]

16. Ofili AN, Oforwe CE. Patients’ assessment of efficiency services at a teaching hospital in a developing country. Ann African Med 2005; 4: 150-3. [LINK]

17. Iliyasu Z, Abubakar IS, Abubakar S, Lawan UM, Gajida AU. Patients’ satisfaction with services obtained from Aminu Kano Teaching Hospital, Northern Nigeria. Niger J Clin Pract 2010; 13: 371-8. [PMID]

18. Gebremedhin EG, Lemma GF. Patient satisfaction with the perioperative surgical services and associated factors at a University Referral and Teaching Hospital, 2014: a cross-sectional study. Pan African Medical Journal. 2017 Aug 8;27(1). [DOI]