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# An evaluation of patient satisfaction in outpatient departments of selected eye care hospitals in the Hyderabad City, Telangana State

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***Abstract*---**The degree of agreement between a patient's expectations of optimal treatment and their evaluation of the actual care they got has been defined as the level of patient satisfaction. Medical service quality and cost-effectiveness, doctor conduct and attitude, the cost of services, hospital infrastructural facilities, physical comfort and psychological care, as well as empathy for clients' testimonies all go towards a patient's satisfaction with their healthcare facility experience. To determine how satisfied patients are with the out-patient department (OPD) services at five different eye care facilities in Hyderabad, Telangana, and the variables influencing patient satisfaction. To conduct the study, the out-patient department of LV Prasad Eye Institute: Banjara Hills, Vasavi Eye Care & Diabetic Center: Chandanagar, Aravind Eye Hospital & Institute: Mehdipatnam, Sri Madhavi Eye Care Hospital: Habsiguda, Dr. Agarwal Eye Hospital: Panjagutta in Hyderabad city, Telangana state was visited by researchers from 01.04.2021 to 30.06.2021. To choose patients for the out-patient section of the hospital, a systematic random technique was adopted. The sample size is 150 respondents who have been taken for the study. The study found that most participants were satisfied with a variety of aspects of their experience at OPD, including service availability, professional treatment delivered by a consultant, and interactions with a nurse or paramedic. Hospital class 3 & 4 employees outperformed the consultant, nursing, and medical staff in terms of customer satisfaction, according to the survey participants.

***Keywords*---**eye care services, quality services, responsiveness, satisfaction.

## Introduction

The degree of agreement between a patient's expectations of optimal treatment and their evaluation of the actual care they got has been defined as the level of patient satisfaction [1]. For research, administration, and planning, the evaluation of patient satisfaction is essential. "The patient decides the quality, accepts the services, markets others to accept it, and provides accurate feedback on the hospital's performance" [2]. Most nations' hospital management strategies for quality assurance and certification include monitoring patient satisfaction [3]. The satisfaction & responsiveness of the health care system is challenging to quantify since the clinical and the non-clinical outcomes of treatment affect consumer satisfaction [4]. "Quality of clinical services, availability of medicine, the behavior of doctors, the behavior of other health staff, cost of the services, hospital infrastructure, physical comfort, emotional support, and respect for patient preferences are all factors that contribute to patient satisfaction in a healthcare facility" [5]. A key metric for gauging the effectiveness of a healthcare system is the degree to which patients are satisfied with their care. Only a few Indian eye care facilities have conducted research on patient satisfaction [6]. This research examines the degree of patient satisfaction. It identifies the elements that contribute to patient satisfaction in the OPD service at Five selected hospitals (the out-patient department of LV Prasad Eye Institute: Banjara Hills, Vasavi Eye Care & Diabetic Center: Chandanagar, Aravind Eye Hospital & Institute: Mehdipatnam, Sri Madhavi Eye Care Hospital: Habsiguda, Dr. Agarwal Eye Hospital: Panjagutta) in Hyderabad city, Telangana state.

## Profile of the Hyderabad city

Located in the Indian state of Telangana, Hyderabad serves as both its capital and most significant metropolis. Placed on the Deccan Plateau in the northern region of South India, it covers an area of 650 square kilometers (250 square miles). Many parts of Hyderabad, notably the Hussein Sagar Lake, which was built before the city was founded and is located north of the city, are perched on hilly terrain with an average elevation of 542 meters (1,778 feet). At 6.9 million people, Hyderabad is India's fourth-most populated city, and its metropolitan area has 9.7 million people, making it the country's sixth-most populated metro area. Hyderabad is India's sixth-largest urban economy in India, generating US$74 billion annually and 93rd in the world [7].

There is an excellent network of eye care facilities in Hyderabad, with equal representation from the public, non-profit, and commercial sectors. Eye hospitals, clinics, and opticians all fall under this category. Services provided by these three categories range from free of charge for the economically disadvantaged to costs that simply cover the cost of surgical supplies and even lucrative expenses.

**Objectives of the study**

To determine how satisfied patients are with the OPD services at five chosen hospitals and to discover the variables that influence “patient satisfaction in OPD services”.

**Materials and Methods**

“A cross-section investigation was carried out among out-patients” at the out-patient departments of LV Prasad Eye Institute: Banjara Hills, Vasavi Eye Care & Diabetic Center: Chandanagar, Aravind Eye Hospital & Institute: Mehdipatnam, Sri Madhavi Eye Care Hospital: Habsiguda, Dr. Agarwal Eye Hospital: Panjagutta, Hyderabad city, Telangana state, 01.04.2021 to 30.06.2021.

**Data collection and sample size**

“The sample size was calculated by using the formula $n = z\ pq/d^2$ (where z = 1.96 at 95% confidence, P = prevalence of patient satisfaction: q = 1 – p, d = absolute allowable error) for this study we assumed maximum variability, so p = 0.5; q = 0.5, d = 20% of p.” sample size 150 was then used to arrive at the final result. To choose patients for the out-patient section of the hospital, a systematic random method was adopted. Patients who were unwilling to participate in the trial, patients “referred or recommended for or admitted into the critical care unit/cardiac unit/emergency department and those with severe or chronic disease were excluded from the study”.

**Analysis**

The answered questionnaires were entered into an MS-Excel database and evaluated using socio-demographic information. The Kolmogorov Smirnov Statistic was used to evaluate the normality of the data. The Student’s t-test was utilized in this study. “The chi-square test was used to investigate the link between patient satisfaction with health care, doctor and staff conduct, pharmacy service satisfaction”, and other factors. It was deemed significant if the P-value was less than 0.05.

**Results:**

Table-1: Socio-demographic profile” of the consumers of eye health care services at selected hospitals in Hyderabad city (N=150)

| Sl. No. | Factors | Category | Percentage (%) |
|---|---|---|---|
| 1. | Gender | Male | 47 |
| | | Female | 53 |
| 2. | Age (in years) | <20 | 12 |
| | | 20-30 | 27 |
| | | 31-40 | 38 |
| | | >40 | 33 |
| 3. | Religion | Hindu | 45 |
| | | Muslim | 17 |

| | | | |
|---|---|---|---|
| | | Christian | 06 |
| | | Others | 32 |
| 4. | Ethnicity | Tribal | 23 |
| | | Non-Tribal | 77 |
| 5. | Residency | Rural | 78 |
| | | Urban | 22 |
| 6. | Education | Illiterate | 20 |
| | | <10 std. | 52 |
| | | ≥ 10 std. | 28 |
| 7 | Occupation | Housewife | 18 |
| | | Job | 21 |
| | | Laborer | 15 |
| | | Business | 34 |
| | | Others | 12 |
| 8. | Socio-Economic Class ( According to modified B.G. Prasad classification) | Class-I | 0 |
| | | Class-II | 5 |
| | | Class-III | 15 |
| | | Class-IV | 50 |
| | | Class-V | 30 |

Source: Primary data

The research comprised 150 patients from the hospital's out-patient department. There were 47% men and 53% females in the group. According to the Kolmogorov-Smirnov statistic, the data are regularly distributed ($p>0.05$). The majority of patients were between the ages of 31 and 50 (mean age: 44.56 plus 17.94 years). Students't tests found no significant difference in the mean ages of the groups they studied. ($P>0.05$) Patients were 45 percent Hindu, 17 percent Muslim, 32 percent non-Hindu, and 6 percent, Christian. A total of 23% of the patients belonged to a tribal group, 77% were non-tribal, 78% lived in rural areas, and 22% lived in urban (Table-1). 52% of the patients had education below the 10th level, 20% were illiterate, and just 28% had education up to or beyond the 10th grade. According to the data above, 34% of the patients were business people.

Table-2: Patients' responses according to service availability (N=150)

| Sl. No | Services | Category | Percentage (%) |
|---|---|---|---|
| 1. | The OPD's seating arrangement | Satisfactory | 84 |
| | | Unsatisfactory | 16 |
| 2. | In OPD, cleanliness is a priority. | Satisfactory | 80 |
| | | Unsatisfactory | 20 |
| 3. | The Restrooms | Satisfactory | 45 |
| | | Unsatisfactory | 55 |
| 4. | Drinking water facility in OPD | Satisfactory | 80 |
| | | Unsatisfactory | 20 |
| 5. | Finding of consultant in OPD | Satisfactory | 84 |
| | | Unsatisfactory | 16 |
| 6. | The ease of access to a pharmacist | Satisfactory | 90 |

| | | | |
|---|---|---|---|
| | | Unsatisfactory | 10 |
| 7. | Signage and symbols in OPD that are appropriate | Satisfactory | 70 |
| | | Unsatisfactory | 30 |

Source: Primary Data

Regarding service accessibility (Table-2), only 45 percent of clients were satisfied with the OPD's seating arrangement, cleanliness, and drinking water, while 55 percent were dissatisfied with the OPD's restrooms. Most customers were satisfied with locating a doctor in the OPD, access to a pharmacist, and suitable signs, symbols, and arrows, with 84%, 90%, and 70%, respectively.

Table-3: the patients' replies based on the eye clinic's availability of professional treatment and the depth of their personal relationships. (N=150)

| "Sl. No | Professional care & depth of relationship | Category | Percentage (%) |
|---|---|---|---|
| 1. | Examination by doctor | Satisfactory | 82 |
| | | Unsatisfactory | 18 |
| 2. | Doctor's explanation of treatment | Satisfactory | 71 |
| | | Unsatisfactory | 29 |
| 3. | Following doctors advice | Satisfactory | 90 |
| | | Unsatisfactory | 10 |
| 4. | Understanding illness after consultation with the doctor | Satisfactory | 60 |
| | | Unsatisfactory | 40 |
| 5. | The doctor tried to know everything about the patients | Satisfactory | 50 |
| | | Unsatisfactory | 50 |
| 6. | Difficulty in telling the doctor about the private thing | Satisfactory | 72 |
| | | Unsatisfactory | 28 |
| 7. | The doctor really knew what the patient was thinking about | Satisfactory | 66 |
| | | Unsatisfactory | 54" |

Source: Primary data

From the "table-3 shows that the most of the clients were satisfied with the doctor's examination (82 percent), the doctor's explanation regarding treatment (71 percent), the doctor's advice (90 percent), and the doctor's attempt to know everything about the patient" (66 percent). According to patient satisfaction surveys, 72% of patients said it was difficult to discuss personal matters with their doctor, while 60% were satisfied with their doctor's explanation of their ailment.

Table-4: the distribution of patient replies based on the length of time they had to wait in the OPD at the eye clinic. (N=150)

| "Sl. No | Waiting time | Category | Percentage (%) |
|---|---|---|---|
| 1. | Time is taken for the OPD slip | Satisfactory | 95 |
| | | Unsatisfactory | 5 |
| 2. | Time is taken to reach a consultant in OPD | Satisfactory | 70 |
| | | Unsatisfactory | 30 |

| | | | |
|---|---|---|---|
| 3. | Time is taken for examination | Less than 5 min | 10 |
| | | 5-15 min | 30 |
| | | 15-30 min | 40 |
| | | More than 30 min. | 20 |
| 4. | Time is taken in getting medicine from the pharmacy | Satisfactory | 72 |
| | | unsatisfactory | 28 |
| 5. | Time is taken in setting the investigation slip fromOPD. | Satisfactory | 54 |
| | | unsatisfactory | 46” |

Source: Primary data

The above “table-4 shows that most customers were satisfied with the time” it took to acquire an OPD slip (95 percent), the time it took to go to the OPD (70 percent), and the time it took to get drugs from the pharmacy (72 percent). Fifty-four percent of those polled were dissatisfied with the length of time it took to get an OPD investigation slip. The time necessary for an examination by 10% of participants, 30% of participants required 5-15 minutes, 40% of respondents needed 15-30 minutes, and 20% of survey participants needed more than 30 minutes. “Patients were more satisfied with the cleanliness of the” waiting room (60%) and the campus (56%) than the toilet (20%). Hospital areas are associated with cleanliness. 46.21 ($P<0.001$) is the Chi-square value.

Table 5: Satisfaction with the consultant’s behavior (N=150)

| “Sl. No. | Satisfaction regarding behavior in the hospital | Category | % |
|---|---|---|---|
| 1. | Consultant | Satisfactory | 79 |
| | | Average | 17 |
| | | Poor | 14 |
| 2. | Nurses and paramedical staff | Satisfactory | 62 |
| | | Average | 34 |
| | | Poor | 04 |
| 3. | Class 3 & class 4 | Satisfactory | 82 |
| | | Average | 14 |
| | | Poor | 4” |

Source: Primary data

A total of 79 percent of clients “were satisfied by consultants, and 82 percent of the class and class 4 patients” were satisfied. 80% of the clients were satisfied with their recovery, 18% were average, and 2% were poor, according to their satisfaction and advice to others. Most patients stated they would suggest this facility to a friend or family member with a similar illness. 85% of the patients were satisfied with eye care hospital services’ overall quality and satisfaction in Hyderabad city, while just 2% were dissatisfied.

**Discussion**

In the current survey, 82% of participants were happy with their doctor’s assessment, 71% said their doctor explained all about their medication and that

they were satisfied, 60% said they understood their sickness after consulting with their doctor, and 90% said they followed their doctor's advice. According to research by Sharma, A. et al. (2014)[8], doctors' explanations of the condition were acceptable to 91% of patients, compared to an earlier study by Dudhamal, V. B. (2021)[9]. 49.5 percent of patients were satisfied with the information they received from health care professionals about medicine, according to a study conducted by Soleimanpour H. et al. (2011)[10] at Iman Hospital, Tabriz, Iran.

Researchers discovered that although half of those polled indicated their doctor sought to learn everything about their sickness, another two-thirds stated they had difficulties telling their doctor about anything personal. The time it took to get an OPD slip was rated as satisfactory by 92% of those polled, while the time it took to go to the consultation room was rated as satisfactory by 70% of respondents. Bambamba and Bambamba et al. (2021)[11] stated that 54% of participants regarded "the time necessary for registration as inconvenient, and 31.4% reported" difficulty locating the relevant department. When it came to acquiring medication from the pharmacy, 72% of respondents were happy, whereas just 54% were satisfied when it came to getting an investigative slip from OPD. According to Bambamba,., Bambamba et al. [12], "38.95% of total participants were dissatisfied with the amount of time necessary for research, while 48.7% were dissatisfied with the amount of time spent in pharmacy. In the current study, patients report that" only 10% of those seen needed less than five minutes, 30% required between five and ten minutes, 40% required 15-30 minutes, and 20% required more than 30 minutes. The doctor's evaluation found 82% of the patients to be satisfied, with the majority of those tests taking 15 to 30 minutes to complete. About 79% of respondents were happy with consultant conduct, 62% of participants were satisfied with nursing and paramedical staff behavior, and 82% of participants were satisfied with the behavior of secretarial and other employees now in the current state.

This finding differs from that of Kulkarni, S. K. (2018)[13]. Registration staff was found to be unfriendly and unhelpful to only 25% of patients surveyed. According to Sharma, A. et al. (2014)[14], the total "availability of services during their visit was excellent for 22.15 percent of participants, good for 29.26 percent" of participants, the average for 30 percent of participants, poor for 8.79 percent of participants, and extremely bad for 9.8 percent of participants in the current research. The research by Chetwynd S.J. found that the overall satisfaction rate was 49 percent. In their research, Ranjeeta Kumari et al. (2009)[15] discovered that the overall satisfaction rate was 73%. Our research is in direct conflict with this.

Respondents in this survey were less satisfied with the cleanliness of the restrooms than they were with the rest of the campus. According to research by Kodali, R. R., & Ramacharyulu, P. S. (2011)[16] at "a private medical college hospital in A.P. and Prasanna et al. in a private medical college hospital in Mangalore", patients were satisfied with the hygiene of the toilets. Private medical colleges may have a lower patient load because of 24-hour cleaning services.

Most patients in this survey reported that they would suggest this hospital to their friends and family, in line with findings from previous studies [17]. 85% of patients were satisfied with the care they got from this hospital. The results of

other studies are in line with ours [18]. The reason for the disparity in parentage may be due to the fact that treatments are provided in various ways, the study group differs, or the expectations of patients are different. A high "level of satisfaction with the quality" and therapeutic interventions of services was found in our research. However, there was room for enhancement in supporting services to meet patients' expectations. It's a fallacy that rural patients don't place much importance on hygiene. A high number of clients and their families are anticipated to visit the hospital, which needs regular cleaning. The majority of patients in our survey were forced to wait more than 30 minutes for an appointment, which may have a negative impact on the hospital's ability to carry out its mission. As a result, the administrators must act quickly to resolve the problem. Our research found that OPD clients in our study were more satisfied with their care than those in previous studies. According to previous research, the amount of patient satisfaction indicates that the services are satisfying their requirements. Our analysis also supports this finding. A delighted consumer may be the reason for the hospital's rapid expansion over the previous several decades.

## Conclusion

Analyses revealed that a large majority of those surveyed were content with the availability of services, the quality of professional treatment they received from consultants in the out-patient department (OPD), and their interactions with the consultants, nurses, and other medical personnel. Class 3 and 4 personnel at the hospital were rated higher than consultants, nurses, and paramedics by the respondents. There was a problem with the toilets in the OPD and the difficulty in discussing personal matters with the doctor. This research examines the degree of patient satisfaction and identifies the elements that contribute to client satisfaction in OPD services at eye care facilities in Hyderabad city. There was no correlation between customer satisfaction and the identification of eye disease in this research.

## References

1. Patel, R., & Patel, H. R. (2017). A study on waiting time and out-patient satisfaction at Gujarat medical education research society hospital, Valsad, Gujarat, India. Int J Community Med Public Health, 4(3), 857-863.
2. A Rahim, A. I., Ibrahim, M. I., Musa, K. I., Chua, S. L., & Yaacob, N. M. (2021). Assessing patient-perceived hospital service quality and sentiment in Malaysian public hospitals using machine learning and Facebook reviews. International journal of environmental research and public health, 18(18), 9912.
3. Ran, X., Zhou, F., Zhong, M., Liu, Y., & Zhang, J. (2020). Innovative applications of patient experience big data in modern hospital management improve healthcare quality. Chinese Medical Sciences Journal, 35(4), 366-370.
4. Roe, D., Brown, T., & Thyer, L. (2020). Validity, responsiveness, and perceptions of the clinical utility of the Canadian Occupational Performance Measure when used in a sub-acute setting. Disability and Rehabilitation, 42(19), 2772-2789.

5. Deka, C., Borboruah, L., Sarmah, P. P., & Paul, I. (2020). A Study on Patient Satisfaction among the Patients Admitted in the In-Patient Departments of a Tertiary Health Care Institution in North East India.
6. Ravilla, T., Karumanchi, S., & Das, T. (2021). Health Management and Information: Key Principles and Enablers in Eye Health Program. In South-East Asia Eye Health (pp. 23-50). Springer, Singapore.
7. The economy of Hyderabad: Wikipedia. Available at: https://en.wikipedia.org/wiki/Economy_of_Hyderabad
8. Sharma, A., Kasar, P. K., & Sharma, R. (2014). Patient satisfaction about hospital services: a study from the out-patient department of tertiary care hospital, Jabalpur, Madhya Pradesh, India. National J Community Medicine, 5(2), 199-203.
9. Dudhamal, V. B., Solanke, P., Berad, A., & Sadanandam, V. (2021). An assessment of patient satisfaction in the out-patient department of an eye care hospital. European Journal of Molecular & Clinical Medicine (EJMCM), 7(11), 2020
10. Soleimanpour, H., Gholipouri, C., Salarilak, S. et al. Emergency department patient satisfaction survey in Imam Reza Hospital, Tabriz, Iran. Int J Emerg Med 4, 2 (2011). https://doi.org/10.1186/1865-1380-4-2
11. Bambamba, Â., Bambamba, J., Escobar, S., Ferreira, G., Pires, P., & Langa, E. (2021). Patient Satisfaction Related to Their Eye Health Examination at Lúrio University Clinic in Nampula, Mozambique, during COVID-19. Open Journal of Ophthalmology, 12(1), 22-33.
12. Ibid. Cit.no-11.
13. Kulkarni, S. K. (2018). A study of patient satisfaction level in Out Patient Department (OPD) in a tertiary care hospital in Maharashtra. Journal of Dental and Medical Sciences, 17(3), 31-39.
14. Ibid. Cit.no-8.
15. Ranjeeta Kumari, Mz Idris, Vidya Bhusan, et al. (2009) Study on patient satisfaction in the Government Allopathic health facilities of Lucknow District, India. Indian J Community Med. 34(1): 35-42.
16. Kodali, R. R., SITA RAMACHARYULU, P., & Ramacharyulu, P. S. (2011). A cross-sectional study of satisfaction of in-patients in a private medical college hospital in A.P. Indian Journal of Medical Sciences, 65(1).
17. Waseem Qureshi. (2005.) A case study on patient satisfaction in Singh's Hospital, Srinagar, J.K.- Practitioner, Vol. -12, No.3
18. Kumari R. Idris Mz, Bhusan V, Khanna A, et al. (2009) Study on patient satisfaction in the Government allopathic health facilities of Luck now district, India. Indian J. community M.ed., Jan; 34(1)1 35-42.