Original Research Article

Assessment of patient satisfaction of services in primary healthcare centers of Shivamogga: a cross-sectional study

Ajay Mallya B.1*, Praveen Kumar N.1, Sridevi N. H.2

1Department of Community Medicine, Shimoga Institute of medical sciences, Shivamogga, Karnataka, India
2Department of Community Medicine, Sri Atal Bihari Vajpayee Medical College and Research Institute, Bengaluru, Karnataka, India

Received: 18 April 2021
Accepted: 11 May 2021

*Correspondence:
Dr. Ajay Mallya B.,
E-mail: forajay.mallya@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: India is the second most populous country in the world. Studies have shown that quality of primary health care in low to middle income countries is very poor. Patient’s perception of quality of health care service provided has strong relation with the utilization the services. Hence it’s important to monitor the health care delivery systems in the country to gain more knowledge about the health care delivery systems.

Methods: A cross-sectional study was conducted in selected primary healthcare centres (PHCs) in Shimoga. 5 PHCs were selected by simple random sampling. 30 patients attending the facility were randomly chosen for exit interview. Data regarding patient’s perception of quality of health care provided by the facility was collected using a questionnaire.

Results: Majority of the participants (68%) found the services provided by the facility to be satisfactory. Patients showed high satisfaction towards explanation provided for the problem by doctor (84%) and cleanliness of the facility (87.3%). Poor satisfaction was seen towards availability of medicines (54%) and behaviour of the paramedical staff (46%).

Conclusions: There is a need to improve the quality of services provided by the primary healthcare centres to achieve better patient satisfaction and utilization.

Keywords: Patient satisfaction, Primary health care, Waiting time

INTRODUCTION

India is the second most populous country in the world. Primary health care (PHC) plays an important role in providing health care facilities in India. With exponential growth of population in India, upholding the standards of primary health care becomes important. According to World Bank data India falls in the group of low-middle-income countries.1 Studies have shown that quality of primary health care in low to middle income countries is very poor due to high rates of wrong diagnosis, incorrect treatment and long waiting time to see a healthcare provider.2 Sustainable development goal (SDG) 3 clearly calls for successful implementation of universal health coverage with access to safe and quality health services, medicines, vaccines for all.3 With this goal in mind the need to access the current primary health care services in India to improve the services and achieve the goals of SDG becomes crucial.

India will soon achieve the World Health Organization (WHO) target of doctor to patient ratio in about 5 years.4 With this development in mind it is also important to know the utilization of the services provided at the primary health care levels. The data will help improve the quality services provided and also help the community be benefited from the achievement of the required doctor patient ratio.
Patient’s perception of quality of health care service provided has strong relation with the utilization the services. Studies done in Bangladesh, China, Nepal, Sri Lanka and Vietnam conclusively prove that the patient’s perception of the health care services provided impacts the utilization of the same.\textsuperscript{5,9}

Most of the studies on performance of primary health care facilities has been done in high-income countries.\textsuperscript{10} India being a developing country, it’s important to monitor the health care delivery systems in the country to gain more knowledge about the health care delivery systems and to promote well-being for all ages.

METHODS

A cross-sectional study was conducted in selected PHCs in Shimoga town from July 2019-September 2019. Purposive sampling technique was used in this study. As per the information obtained from the district health officer of Shivamogga, there are 11 PHCs in the city. 5 PHCs were selected by simple random sampling. 30 patients attending the facility were randomly chosen for exit interview from each of the PHCs to reach the total sample to 150 patients. Permission of the medical officer of the respective PHCs was obtained before conducting the study in each of the facility. Data was collected with the help of a pre-tested questionnaires given to each of the participant willing to participate in the study. The questionnaire contained items to collect socio demographic details, and their perception of quality of health care provided by the facility.

The data were entered into the excel sheet and analysed using statistical package for the social sciences (SPSS) software. The frequencies and percentages were calculated and represented in tables.

RESULTS

In the current study the urban and rural population was both equally represented with 50% of each of the population. Age groups were divided into adults (18-34 years), middle age (35-59 years) and elderly (60 years and above). Majority of the participants belonged to middle age (47.3%). The average age of the participants was 45.1 years. Majority of the participants were females (54%). Among the participants majority of the participants were Hindus 75.3% and Muslims and Christians were 19.3% and 5.3% respectively (Table 1).

Among the participants about 62% said that they travelled to the facility on foot. About 10% reached the facility via own vehicle. 62% of the participants said that, it took them less than half an hour to reach the facility and 76.7% of the population showed satisfaction towards the distance of the facility from their residence. About half the participants said that they waited only five to 10 minutes to see the doctor all the other participants waited less than half an hour to see the doctor. 65.3% of the population said that the waiting time was satisfactory (Table 2).

| Variables | Frequencies | Percentage (%) |
|-----------|-------------|----------------|
| Region    |             |                |
| Urban     | 75          | 50             |
| Rural     | 75          | 50             |
| Age (in years) |     |                |
| 18-34     | 44          | 29.3           |
| 35-59     | 71          | 47.3           |
| ≥60       | 35          | 23.3           |
| Sex       |             |                |
| Male      | 69          | 46             |
| Female    | 81          | 54             |
| Religion  |             |                |
| Hindu     | 113         | 75.3           |
| Muslim    | 29          | 19.3           |
| Christian | 8           | 5.3            |

Table 2: Distribution of patients based on travelling and waiting times (n=150).

| Variables | Frequencies | Percentage (%) |
|-----------|-------------|----------------|
| Mode of transport to the facility |             |                |
| Walk      | 94          | 62.7           |
| Bus/autorickshaw/taxi | 41    | 27.3           |
| Own vehicle | 15 | 10             |
| Time taken for the travel |         |                |
| <Half an hour | 93  | 62             |
| >Half an hour | 57  | 38             |
| Distance of the facility from home |          |                |
| Satisfactory | 115 | 76.7           |
| Not satisfactory | 35 | 23.3           |
| Waiting time in the facility |         |                |
| 5-10 minutes | 76  | 50.7           |
| <Half an hour | 74  | 49.3           |
| Waiting time to see the doctor |            |                |
| Satisfactory | 98  | 65.3           |
| Not satisfactory | 52  | 34.7           |

Among the 150 participants interviewed 29 (19.3) percent of the participants claimed that the doctor was not always available during their previous visits. Only 63.3% of people said that the ability of the doctor to understand the problem was satisfactory. 84% of the participants said that they received satisfactory explanation regarding the problem they had. About 72.7% of participants’ aid that they were satisfied with the privacy of consultation and about one fourth of the participants showed dissatisfaction towards the privacy of consultation. Only about half of the participants (54%) said that they were satisfied with the availability of medicines in the facility. About 67% of the
population said they were not satisfied with the working hours of the facility. Majority of the participants i.e. about 87% were satisfied with the cleanliness of the facility. More than half the participants (54%) were not satisfied with the behaviour of the staff at the facility and when asked about the overall impression of the facility 68% of participants said the facility was satisfactory and 32% of participants showed dissatisfaction (Table 3).

**Table 3: Distribution of patient based on patient’s satisfaction of services provided (n=150).**

| Variables                                | Frequencies | Percentage (%) |
|------------------------------------------|-------------|----------------|
| Availability of doctor on all previous visits | Available: 121 | 80.7 |
|                                           | Not available: 29 | 19.3 |
| Ability of doctor to understand the problem | Satisfactory: 95 | 63.3 |
|                                           | Not satisfactory: 55 | 36.7 |
| Explanation received regarding the problem | Satisfactory: 126 | 84 |
|                                           | Not satisfactory: 24 | 16 |
| Privacy of consultation                   | Satisfactory: 109 | 72.7 |
|                                           | Not satisfactory: 41 | 27.3 |
| Availability of medicines in the facility | Satisfactory: 81 | 54 |
|                                           | Not satisfactory: 69 | 46 |
| Working hours of the facility             | Satisfactory: 101 | 67.3 |
|                                           | Not satisfactory: 49 | 32.7 |
| Cleanliness of the facility               | Satisfactory: 131 | 87.3 |
|                                           | Not satisfactory: 19 | 12.7 |
| Behaviour of the paramedical staff of the facility | Satisfactory: 69 | 46 |
|                                           | Not satisfactory: 81 | 54 |
| Overall impression of the facility        | Satisfactory: 102 | 68 |
|                                           | Not satisfactory: 48 | 32 |

**DISCUSSION**

In the current study majority of the patients (62.7%) travelled to the facility on foot. This was similar to the results found by Jadav where 65.15% of patients walked to the facility in urban health training centre. Majority of the patients (62%) reached the facility in less than half an hour and all (100%) of patients were able to meet the doctor in less than half an hour. This was similar to the finding of study done by Kumari et al where 65.4% of reached the facility by half an hour and 99.5% of patients were able to see the doctor within 30 minutes of reaching the facility. Only 63.3% of the patients said they were satisfied with doctor’s ability to understand their problem and 84% of the patients found that the explanation they received regarding their problem was satisfactory. This was in contrast to the study by Prasanna et al where 81% of the participants found the communication by the doctor good and 97% found explanation regarding the problem satisfactory. Only about half the patients (54%) were satisfied with the availability of medicines in the facility. This was in contrast to the findings of Yenuganti et al where patients had no unsatisfaction towards the pharmacy. Working hours of the facility were seen as satisfactory by only 67.3% of patients. This was in contrast to the study done by Jadhav et al where 88.2% of the patients found the OPD timings convenient. Cleanliness and behaviour of the paramedical staff were seen satisfactory by 87.3% and 46% of the patients respectively whereas Jadhav et al in their study found that the satisfaction of patients towards cleanliness and services of the paramedical staff was 78.2% and 68.3% respectively. Only 68% of the patients showed overall satisfaction towards the facility. This was similar to the findings of study by Yenuganti et al (66.6%).

**CONCLUSION**

Most of the respondents in the study were satisfied with the overall services provided by the primary health care facility. Patients were most satisfied by explanation regarding the problem by the doctor and cleanliness of the facility. Patients were not satisfied with availability of medicines and behaviour of the paramedical staff in the facility. This study shows that there is room for improvement in the quality of services provided by the PHCs. The findings of this study will help in better understanding of the patient’s perception of the services provided and thus help in providing better services in order to improve utilization of the services provided.

**ACKNOWLEDGEMENTS**

Authors would like to thank all the participants for cooperation and willingness to participate in the study. They also acknowledge Mrs. Revathy, biostatistician, department of community medicine, Shimoga institute of medical sciences for statistical inputs and special thanks to the department of community medicine, Shimoga institute of medical sciences, Shivamogga for all the support provide to carry out the study.

**Funding: No funding sources**

**Conflict of interest: None declared**

**Ethical approval: The study was approved by the Institutional Ethics Committee**

**REFERENCES**

1. World Bank Country and Lending Groups – World Bank Data Help Desk. Available at:
https://datahelpdesk.worldbank.org/knowledgebase/articles/906519 Accessed on 15 March 2021.

2. Gage AD, Leslie HH, Bitton A, Jerome JG, Thermidor R, Joseph JP, et al. Assessing the quality of primary care in Haiti. Bull World Health Organ. 2017;95(3):182-90.

3. Goal 3- Department of Economic and Social Affairs. Available at: https://sdgs.un.org/goals/goal3. Accessed on 15 March 2021.

4. Kumar R, Pal R. India achieves WHO recommended doctor population ratio: A call for paradigm shift in public health discourse! J Family Med Prim Care. 2018;7(5):841-4.

5. Andaleeb SS. Public and private hospitals in Bangladesh: service quality and predictors of hospital choice. Health policy and planning. 2000;15(1):95-102.

6. Yip WC, Wang H, Liu Y. Determinants of patient choice of medical provider: a case study in rural China. Health policy and planning. 1998;13(3):311-22.

7. Lafond AK. Improving the quality of investment in health: lessons on sustainability. Health Policy and Planning. 1995;10:63-76.

8. Akin JS, Hutchinson P. Health-care facility choice and the phenomenon of bypassing. Health Policy and Planning. 1999;14(2):135-51.

9. Guldner M, Rifkin SB. Sustainability in the Health Sector: Part 1: Vietnam Case Study. Save the Children Fund. 1993.

10. Macarayan EK, Gage AD, Doubova SV, Guanais F, Lemango ET, Ndiaye Y, Waiswa P, Kruk ME. Assessment of quality of primary care with facility surveys: a descriptive analysis in ten low-income and middle-income countries. Lancet Global Health. 2018;6(11):1176-85.

11. Jadav PA. Satisfaction among the patients attending the health centres attached to a tertiary care hospital in Gandhinagar, Gujarat. Int J Comm Med Public Health. 2018;5(6):2327.

12. Kumari R, Idris MZ, Bhushan V, Khanna A, Agarwal M, Singh SK. Study on patient satisfaction in the government allopathic health facilities of Lucknow district, India. Indian J Comm Med. 2009;34(1):35.

13. Yenuganti VV, Srinivas RD, Sasi KPJ, Narendranath R. Patient satisfaction and waiting times in the primary health centres of South Chennai. Int J Comm Med Public Health. 2021;8(3):1386.

14. Prasanna KS, Bashith MA, Sucharitha S. Consumer satisfaction about hospital services: A study from the outpatient department of a private medical college hospital at Mangalore. Indian J Comm Med. 2009;34(2):156.

15. Jadhav SB, Lokhande GS, Naik JD, Rajderkar SS, Suryavanshi SP, Bhave KR. Measuring patient satisfaction towards quality of outpatient care: a part of Health Systems Research. 2011;1(3):8.

Cite this article as: Ajay MB, Praveen KN, Sridevi NH. Assessment of patient satisfaction of services in primary healthcare centers of Shivamogga: a cross-sectional study. Int J Community Med Public Health 2021;8:3060-3.