

Original Research Article

ASSESSMENT OF THE PATIENT SATISFACTION TOWARDS SERVICES PROVIDED AT COMMUNITY MEDICINE CLINIC IN A TERTIARY CARE TEACHING HOSPITAL OF CENTRAL KERALA

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ABSTRACT

Background: Patient satisfaction is considered to be a vital factor to assess the quality of service of health care facility. A research on patient satisfaction can be an important assessment tool for Gap analysis and to improve upon the gap in the quality of services provided.

Materials and Methods: A descriptive cross sectional study was conducted in a tertiary care teaching hospital from January-April 2023. Those who had availed services from Community Medicine Clinic for animal bite in order to prevent Rabies was included in the study. A questionnaire was created to measure patient satisfaction(NQAS adapted).

Results: Out of the 256 patients who participated in the study, most 201(78.5%) of the patients had been referred from other peripheral health care institutions. Majority of the patients in our study was aged more than 30years 142(55.4%) Majority of the patients were males 138(53.9%) compared to females 117(45.7%) and others comprised 1(0.4%). 186(72.7%).of the patients belonged to SES- BPL category . Most of the patients had been referred to CMC 201(78.5%) from elsewhere.The waiting period for meeting doctor was 16.37± 13.66 minutes.The time spent at the counter was 14.22 ± 11.91 minutes. Most of the patients were satisfied with the available infrastructure.

Keywords: Patient Satisfaction, Community Medicine Clinic, Medical College, Kerala.

INTRODUCTION

Satisfaction in the provision of services can be used as a measure of Performance of the health system. The satisfaction with the service provider is a key factor in determining the patient compliance to the treatment prescribed.^[1] Since patient satisfaction is considered to be a vital factor to assess the quality of service of health care facility, evaluating the patient's satisfaction towards the services seems easier than to assess the quality of medical services that they receive.^[2] Therefore, a research on patient satisfaction can be an important assessment tool for Gap analysis and to improve upon the gap in the

quality of services provided. Health care consumers today, are more sophisticated than in the past and now demand increasingly more accurate and valid evidence of health plan quality. The health care system depends on factors such as availability, affordability, efficiency, feasibility.^[3] Consumer satisfaction regarding services to patients in the Government sector medical care is an aspect that's is usually overlooked. This study aims to find out the level of patients' satisfaction related to different parameters to assure a minimum quality of health care and to ascertain the gaps in quality of services with the quality of health care they received at the outpatient department of Community Medicine -

Community Medicine clinic at a Tertiary care Government Medical College Hospital of Central Kerala.

MATERIALS AND METHODS

A descriptive cross sectional study was conducted in a tertiary care teaching hospital from January-April 2023. Those who had availed services from Community Medicine Clinic for animal bite in order to prevent Rabies was considered as a patient. The instrument used was a pretested and culturally accepted PSS(Patient Satisfaction Survey) questionnaire adapted from the NQAS(National Quality Assurance Standards)- model modified considering the local socio-cultural context.^[4,5] All the patients were interviewed using the questionnaire after getting informed consent.

The sample size was determined using the Cochran's formula $n = (z^2 pq)/d^2$ where n is the sample size, α was set at 5% , $Z = 1.96$ for 95 % level of confidence, prevalence p was 41%^[4], p is an estimated proportion obtained from a previous study and q is (100-p) d is the desired level of precision ,here relative precision was taken as 15%. Here 10% was added to take care of possible nonresponse. The value for Z is as found in statistical tables which contain the area under the normal curve, here $Z = 1.96$ for 95 % level of confidence. Utilizing a descriptive cross- sectional study design and by

systematic sampling an estimated sample of 256 patients were enrolled in the study. Training was given to the data collectors regarding the methodology in detail prior to initiation of study. A pre testing and pilot testing was done to ascertain bottlenecks and the feasibility of the research before the start of the study. The questionnaire was in the vernacular language-Malayalam. Patients were interviewed in the same language. Data was collected regarding their personal, socio demographic details, pertaining to their satisfaction regarding hospital services and treatment availed here. If the statements were 'not clear', it was modified for ease in understanding for comprehension and explained to the patient . Descriptive statistics was utilized and data was analysed using JAMOV software.

Institutional Ethical clearance (Ref: IEC /GMC TSr/2023/051) was obtained from the Teaching hospital's Ethical committee. After obtaining verbal and written consent from each patient, a detailed explanation of the purpose of the study was given to each patient in the vernacular language.

RESULTS

Out of the 256 patients who participated in the study, most 201(78.5%) of the patients had been referred from other peripheral health care institutions (Table1).

Table 1: Socio-Demographic characteristics of the study participants (N=256)

Age(yrs)	Frequency	Percentage
<30yrs	114	44.6
≥31yrs	142	55.4
Gender		
Female	117	45.7
Male	138	53.9
Other	1	0.4
SES		
APL	70	27.3
BPL	186	72.7
Referred		
Yes	201	78.5
No	55	21.5

Majority of the patients were aged more than 30years 142(55.4%). Majority of the patients were males 138(53.9%) compared to females 117(45.7%) and others comprised 1(0.4%). 186(72.7%). of the patients belonged to SES- BPL category. Most of

the patients had been referred to CMC 201(78.5%) from elsewhere. The waiting period for meeting doctor was 16.37+ 13.66 minutes. The time spent at the counter was 14.22 + 11.91 minutes.

Table 2: Distribution of patients' responses regarding Satisfaction rating for Services availed from CMC (N=256)

Attitude	Frequency	Percentage
Excellent	76	29.7
Very Good	82	32
Good	92	35.9
Fair	6	2.3
Listening		
Excellent	71	27.7
Very Good	92	35.9
Listening		

Good	89	34.8
Fair	4	1.6
Total	256	100
Promptness	Frequency	Percentage
Good	174	68
Not adequate	82	32

Good to excellent rating was given for the health care workers' attitude 252(98.4%),listening skills 252(98.4%), and promptness 174(68%) in catering to the patients' needs.

Table 3: Distribution of patients' responses regarding Satisfaction rating of CMC Infrastructure

Washing facilities	Frequency	Percentage
Excellent	42	16.4
Very Good	59	23
Good	118	46.1
Fair	36	14.1
Poor	1	0.4
Seating		
Excellent	48	18.8
Very Good	72	28.1
Good	116	45.3
Fair	20	7.8
Bed		
Excellent	35	13.7
Very Good	79	30.8
Good	107	41.8
Fair	35	13.7
Lighting		
Excellent	57	22.3
Very Good	74	28.9
Good	112	43.8
Fair	13	5
Bio medical Waste Disposal Area		
Excellent	51	19.9
Very Good	66	25.8
Good	117	45.7
Fair	20	7.8
Poor	2	0.8
Drinkingwater facilities		
Excellent	42	16.4
Very Good	61	23.8
Good	123	48.1
Fair	30	11.7
Poor	5	1.9

Most of them opined as good to excellent for 219(85.5%) for the washing facilities for First Aid, 226(62.9%) for the Drinking water facilities in CMC, 221(86.3%) mentioned that the facilities for administration of the immunoglobulin (bed and cot) to the patients in CMC was good to excellent condition, 236(92.2%) considered the seating arrangements for administration of the Anti-Rabies

Vaccine to the patients in CMC was good to excellent condition, 243(95%) were of the opinion that the lighting arrangements for administration of the Anti-Rabies Vaccine to the patients in CMC was good to excellent condition, 243(95%) were of the opinion that the Biomedical waste area in CMC was maintained in an good to excellent condition.

Table 4: Distribution of patients' Satisfaction rating regarding the amenities in Government Hospital

Basic Facilities of the Hospital		
Crowd at Registration Counter	Frequency	Percentage
Large	23	9
Moderate	10	3.9
Small	223	87.1
Pharmacy		

Pharmacy queue	Frequency	Percentage
Long	59	23
Moderate	19	7.4
Short	178	69.5
Promptness		
Good	174	68
Not adequate	82	32
Drug availability		
Excellent	34	13.3
Very Good	36	14.1
Good	105	41
Fair	55	21.5
Poor	26	10.2

Majority of the patients 223(87.1%) reported that the crowd was small and managed well.

DISCUSSION

Majority of the patients in our study was aged more than 30 years 142(55.4%) similar to the study findings by Kaware et al where majority of the patients were (46.75%) in the age group of 15-45 years males. But by unlike in the study by Patnaik where majority of the patients ,439 (30.5%) were between 15 to 30 years of age⁴ . Similarly in the study by Liang H5 where 5112 (32.56%) was in the age group of 25–34 years. Majority of the patients in our study were males 138(53.9%) compared to females 117(45.7%) and others comprised 1(0.4%) similar to the study findings by Kaware et al,^[3] where (71.75%) were males ,and by Liang H5 where 8891 (56.63%) unlike the study by Patnaik where majority of the patients 811 (56.3%) were females.^[4] In our study, majority 186(72.7%) of the patients belonged to SES- BPL category unlike the study by Patnaik,^[7] where only 232 (16.1%), belonged to a lower socio economic class⁴ . Most of the patients in our study had been referred to CMC 201(78.5%) from elsewhere. In our study the waiting period for meeting doctor was 16.37+ 13.66 minutes. The time spent at the counter was 14.22 ± 11.91 minutes almost similar to the study by Patnaik et al,^[7] where the mean time spent at Niramaya by new cases was 14.80±6.09 minutes unlike in the study by Zhang where the waiting time was controlled within ten minutes for most patients. And very few patients waited for over 30 minutes.^[8] The major dissatisfaction is due to the waiting period to consult the doctor. Sufficient time is essentially a prerequisite for effective communication between the patient and the service provider.^[5] Absence of sonar test, no doctor and long waiting time were commonest causes of dissatisfaction.^[9] A major concern of patients was waiting time in the office. To make improvements, a “time-analysis worksheet,” which tracks patients' visits by the minute for the time a patient arrived at the office, entered the exam room, can be considered.^[10] (Table 1)

In our study most of the patients were satisfied with the available infrastructure. Study by Tanzania

reveals that high costs to governments and patients currently limits the supply chain and PEP access .Health infrastructure also needs sufficient cold chain capacity to support improved PEP provision.^[11] An aesthetically designed office, when well-furnished, well equipped with lighting, water, furniture adds to patient satisfaction.^[12] (Table 2,3,4) A small crowd and short queue at the pharmacy were considered as satisfactory in our study but the main concern of patients was waiting time in the office. To improve in this area, the practice developed a “time-analysis worksheet,” which tracks patients' visits by the minute for the time a patient arrived at the office, entered the exam room, was greeted by the doctor and so on.^[11] Satisfaction with medical staff is the most significant factor which has a positive effect on satisfaction with hospitalisation. Physician expertise (with trust and good communication skills) is more important for patients than satisfaction with nurses or other staff.^[13] More staffing per bed as well as a better process and outcome quality were associated with more satisfied patients. Structural, quality characteristics, Satisfaction with the overall health care facilities have a significant impact on patient satisfaction.^[14,15,16] (Table 4).

CONCLUSION

Most patients who visited CMC were satisfied with the clinic.

Recommendations: Periodic Patient Satisfaction Surveys instituted will help to improve upon the quality of services being provided. Policies need to be made to assess patient satisfaction and motivate them to take effective actions to improve patient satisfaction.

Limitations: Inferences cannot be generalized based on this study which was conducted in the OPD only.

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Conflicts of Interest: None declared.

Ethics Approval: This study was approved by the institutional review board. Patient consent for publication was collected.

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REFERENCES

1. Kumari R, Idris MZ, Bhushan V, Khanna A, Agrawal M, Singh SK. Role of prescribers in the level of patient satisfaction: a study in public health care settings. *Indian J Med Sci.* 2013 Jan-Feb;67(1-2):1-12. PMID: 24178336.
2. Kumari R, Idris M, Bhushan V, Khanna A, Agarwal M, Singh S. Study on patient satisfaction in the government allopathic health facilities of Luck now district, India. *Indian J Community Med.* 2009 Jan;34(1):35-42. doi: 10.4103/0970-0218.45372. PMID: 19876453; PMCID: PMC2763650.
3. Sing MM, Chadda RK, Bapna SJ. Assessment of hospital services by consumers: a study from a psychiatric setting. *Indian J Public Health.* 2003 Jan-Mar;47(1):14-21. PMID: 14723290.
4. DeshmukhMA, UpadhyeJJ. Patient satisfaction of outpatient department atESIS hospital, Nagpur, India. *Int J Res Med Sci* 2019;7:918-22.
5. Liang H, Xue Y, Zhang ZR. Patient satisfaction in China: a national survey of inpatients and outpatients. *BMJ Open.* 2021 Sep 7;11(9):e049570. doi: 10.1136/bmjopen-2021-049570. PMID: 34493518; PMCID: PMC8424834.
6. Kaware AC, Hemlata MR, Mangulikar SK. Epidemiological study of patients attending anti-rabies vaccination clinic of tertiary care hospital of Southern Maharashtra, India. *Int J Community Med Public Health* 2016;3:865-8.
7. Patnaik A, Dash A, Pradhan S, Nanda S. Operational efficiency and out of pocket expenditure in attendees of anti-rabies vaccination: A time and motion study. *J Family Med Prim Care* 2022;11:6789-94.
8. Zhang MM, Yu XC, Lu FL, Lu KK. Lean Management Promotes Compliance and Satisfaction of Rabies Vaccines. *Patient Prefer Adherence.* 2021 Jun 3;15:1207-1212. doi: 10.2147/PPA.S305086. PMID: 34113083; PMCID: PMC8184291.
9. Lakew S, Ankala A, Jemal F. Determinants of client satisfaction to skilled antenatal care services at Southwest of Ethiopia: a cross-sectional facility based survey. *BMC Pregnancy Childbirth.* 2018 Dec 6;18(1):479. doi: 10.1186/s12884-018-2121-6. PMID: 30522442; PMCID: PMC6282368
10. White B. Measuring patient satisfaction; *Family practice management* January 1999.
11. Changalucha J, Steenson R, Grieve E, Cleaveland S, Lembo T, Lushasi K, Mchau G, Mtema Z, Sambo M, Nanai A, Govella NJ, Dilip A, Sikana L, Ventura F, Hampson K. The need to improve access to rabies post-exposure vaccines: Lessons from Tanzania. *Vaccine.* 2019 Oct 3;37 Suppl 1(Suppl 1):A45-A53. doi: 10.1016/j.vaccine.2018.08.086. Epub 2018 Oct 8. PMID: 30309746; PMCID: PMC6863039.
12. Prakash B. Patient satisfaction. *J Cutan Aesthet Surg.* 2010 Sep;3(3):151-5. doi: 10.4103/0974-2077.74491. PMID: 21430827; PMCID: PMC3047732.
13. Gavurova B, Dvorsky J, Popesko B. Patient Satisfaction Determinants of Inpatient Healthcare. *Int J Environ Res Public Health.* 2021 Oct 28;18(21):11337. doi: 10.3390/ijerph182111337. PMID: 34769856; PMCID: PMC8582779.
14. Kraska RA, Weigand M, Geraedts M. Associations between hospital characteristics and patient satisfaction in Germany. *Health Expect.* 2017 Aug;20(4):593-600. doi: 10.1111/hex.12485. Epub 2016 Jul 22. PMID: 27447595; PMCID: PMC5512999.
15. Ikechukwu E Obi, Anne C Ndu, Kenneth A Agu, Babatunde I ,Omotowo, Chuka C Agunwa, Arthur C Idoko, Malawi Medical Journal 30 (4); 270-275 December 2018 Patient satisfaction, Hospital, Nigeria .
16. Marzo RR, Bhattacharya S, Ujang NB, Naing TW, Huong Fei AT, Chun CK, et al. The impact of service quality provided by health-care centers and physicians on patient satisfaction. *J Edu Health Promot* 2021;10:160.
17. <https://qps.nhsrindia.org>.