

Study of Assessment of Patient Satisfaction in Outpatient Clinic of Newly Created Department of Geriatric Medicine in a Tertiary Care Hospital: A Questionnaire based Cross Sectional Study

Anup Singh¹, Sandeep Patel²

ABSTRACT

Introduction: Patient satisfaction is cornerstone parameter to evaluate the service of any hospital. This study was planned to assess the level of satisfaction among patients attending Geriatric outdoor clinic in a tertiary care government health facility.

Material and Methods: A pilot cross-sectional study was conducted among 100 eligible geriatric patients attending a government health care facility in Eastern Uttar Pradesh India during December, 2018 and January 2019 using a semi-structured questionnaire covering factors like interpersonal manner of health service providers, accessibility, physical environment, and quality of medical care. Descriptive statistics such as mean, standard deviation, percentiles, and percentages were generated and Chi-square test was applied to look for association between the level of satisfaction and other variables such as income, gender, education and age. Ethical approval was obtained from the Institutional Ethics Committee.

Results: Out of 100 patients, males were 60 and females were 40 with average age of 62.24 ± 9.25 years. Medium satisfaction level was found in 56% and low and high satisfaction was found in 23% and 21% patients respectively. Quality, accessibility and interpersonal played a major role in affecting average satisfaction score. It was also found that other two domains of questionnaire such as availability of resources and physical environment needs to be improved and emphasized more in order to get high level of patient satisfaction.

Conclusion: Although the overall satisfaction level of patients was moderate to high still there is need to strengthen the manpower in outdoor clinic with better environment. Another focus area is better referral services and a safe environment so that the outdoor is in reach of elderly patients in order to improve the quality of care provided.

Keywords: Geriatric, Patient Satisfaction, Quality of Care

INTRODUCTION

Geriatric population is increasing in India and across the world and its estimated that by 2050 it will be more than adolescent age group.¹ Geriatric Outdoor services has been strengthened in various medical colleges of India with the aim to start medical education in field of geriatrics in medical colleges in India. However, as it is an initial stage there ought to be factors which need improvement in making the appropriate geriatric healthcare facility. Satisfaction of patients has been used as an indicator of outcome measurement in healthcare and questionnaire based satisfaction surveys have been extensively used in hospitals

to access the performance. There are many studies done in our country to evaluate patient satisfaction and all of them have emphasised on developing ways to satisfy the patient as the scenario has changed from the past.²⁻⁵ To improve services is a critical challenge for health service providers especially in developing countries and resource constraint setting. So, it become utmost important to find ways to make an environment which is patient friendly. As Department of Geriatric Medicine is newly created in Institute of Medical Sciences, BHU, Varanasi and no satisfaction study has been done in India with respect to geriatric patients, we evaluated the performance of outdoor services in form of patient satisfaction after running outdoor facility for 6 months.

MATERIAL AND METHODS

A cross-sectional study was conducted among 100 eligible geriatric patients attending a government health care facility in Eastern Uttar Pradesh India during December, 2018 and January 2019 using a semi-structured questionnaire.[6] Patients attending Geriatric Department of age more than 55 years with no cognitive decline were taken into study. Patients requiring inpatient care were excluded.

Research tool: The research instrument was a structured questionnaire which was adapted and modified from well-validated questionnaire for primary health care satisfaction used in AIIMS, New Delhi. It was a semi-structured questionnaire consisted of factors like interpersonal manner of health service providers, accessibility, physical environment, and quality of medical care. Total 23 questions are evaluated on 5 point scale [5=Excellent Satisfaction (81–100%), 4 = Good Satisfaction (61–80%), 3 = Satisfied (41–60%), 2 = Dissatisfied (21–40%), 1 = Poor satisfaction (<20%)]. Few questions were stratified on Likert's system

¹Associate Professor and Head, Department of Geriatric Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, ²Research Scholar, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India

Corresponding author: Anup Singh, Associate Professor and Head, Department of Geriatric Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India

How to cite this article: Anup Singh, Sandeep Patel. Study of assessment of patient satisfaction in outpatient clinic of newly created department of geriatric medicine in a tertiary care hospital: a questionnaire based cross sectional study. International Journal of Contemporary Medical Research 2019;6(4):D1-D4.

DOI: <http://dx.doi.org/10.21276/ijcmr.2019.6.4.21>

as “5=strongly agree,” “4=agree,” “3=neither agree nor disagree,” “2=disagree,” and “1=strongly disagree.”⁶

The questionnaire was translated into local language for consistency and translated back again. The study team conducted the interviews maintaining strict confidentiality after obtaining verbal informed consent.

A pretest consisting of 23 questionnaires was done in the Geriatric OPD prior to data collection for testing its reliability and feasibility. “Cronbach’s alpha” coefficient satisfaction factor was determined and the study was only proceeded if “Cronbach’s alpha” value of greater than 0.7 was found. We found Cronbach alpha value of **0.856** and the questionnaire was translated into local language (hindi) for easily understanding for patients and data collector. Socioeconomic status was classified according to “BG Prasad classification”.⁷

STATISTICAL ANALYSIS

Collected data were first entered in to Microsoft Excel software and a data cleansing was performed. Analyzed Data was using SPSS IBM Statistics version 23.0. Descriptive

statistics were in the form of mean, standard deviation and percentage. For categorical data Chi-Square test was used to see the correlation and for continuous data one way Anova was performed. We performed the multiple regression analysis to predict the dependent variable based on the significantly contributing independent variable.

RESULTS

The average age of patient was 62.24 ± 9.25 years with 60% being male with around 43% illiterate and 51 unemployed. Rest of demographic details is given in table 1.

The overall satisfaction was classified into three by dividing the average of all the scores into lower third (low satisfaction), middle third (medium satisfaction), and upper third percentile (high satisfaction).[Table 2] Medium satisfaction level was found in 56% and low and high satisfaction was found in 23% and 21% patients respectively.

Internal Consistency

All the domains showed internal consistency and varied from 0.86 (quality of care) to 0.78 (availability). Test-retest reliability (testing the same questionnaire on the same

Variable(n=100)		Frequency	Percent (%)
Age, Mean \pm SD(years)		62.24 \pm 9.25	
Sex	Male	60	60.0
	Female	40	40.0
Education	Illiterate	43	43.0
	High School	17	17.0
	Intermediate and Above	40	40.0
Employed	Unemployed	51	52.0
	Employed	19	19.4
	Farmer	28	28.6
Income	5571 INR per Capita and above	69	69.0
	2786-5570 INR	19	19.0
	1670-2786 INR	12	12.0

Table-1: Demographic and Socioeconomic Profile of Geriatric Patients:-

Variable(n=100)		Low Satisfaction	Medium Satisfaction	High Satisfaction	P-value
Number of patients (n)		23	56	21	
Age	Mean \pm SD	50.35 \pm 0.71	61.94 \pm 3.75	74.96 \pm 5.74	<0.001*
Sex	Male	19(82.6%)	26(46.4%)	15(71.4%)	0.006*
	Female	4(17.4%)	30(53.6%)	6(28.6%)	
Education	Illiterate	10(43.5%)	29(51.8%)	4(19.0%)	0.017*
	High School	7(30.4%)	7(12.5%)	3(14.3%)	
	Intermediate and Above	6(26.1%)	20(35.7%)	14(66.7%)	
Employed	Unemployed	12(54.5%)	33(58.9%)	6(30.0%)	0.234
	Employed	3(13.6%)	10(17.9%)	6(30.0%)	
	Farmer	7(31.8%)	13(23.2%)	8(40.0%)	
Income	5571 INR per Capita and above	16(69.6%)	41(73.2%)	12(57.1%)	0.435
	2786-5570 INR	5(21.7%)	10(17.9%)	4(19.0%)	
	1670-2786 INR	2(8.7%)	5(8.9%)	5(23.8%)	
Interpersonal	Mean \pm SD	3.35 \pm 1.03	4.55 \pm 0.39	4.90 \pm 0.18	<0.001*
Accessibility	Mean \pm SD	2.26 \pm 0.70	3.06 \pm 0.32	3.39 \pm 0.24	<0.001*
Physical Environment	Mean \pm SD	1.39 \pm 0.50	1.76 \pm 0.30	1.85 \pm 0.20	<0.001*
Availability	Mean \pm SD	2.39 \pm 0.67	3.41 \pm 0.34	3.83 \pm 0.24	<0.001*
Quality	Mean \pm SD	3.72 \pm 0.48	4.39 \pm 0.34	4.79 \pm 0.16	<0.001*

Table-2: Characteristics of Patients in the Study divided into Low, Medium, and High Level of Satisfaction groups

Domain	Cronbach's Alpha
Interpersonal	.793
Accessibility	.800
Physical environment	.862
Availability of Medical resources	.783
Quality care	.866

Table-3: Cronbach alpha representing internal consistency of domains of score

Domains	Beta	Std. Error	t	P-value
Interpersonal score	0.282	0.001	35.501	<0.001
Accessibility	0.301	0.001	42.807	<0.001
Physical Environment	0.155	0.001	32.302	<0.001
Availability	0.134	0.003	18.399	<0.001
Quality	0.391	0.001	79.206	<0.001

Table-4: Multivariate analysis

patients after a duration of thirty minutes) also followed a similar trend like Cronbach alpha.[Table 3]

Multivariate analysis

We performed multiple regressions with average score as dependent variable and other predictor's domain as independent variable. The coefficient of regression estimates shows that one point improvement in quality will lead to 0.39 point improvement in mean score while controlling for other variables. Corresponding values for other domains are 0.30 for accessibility, 0.28 for Interpersonal, 0.15 for Physical environment and 0.13 for availability skills, other variables was not significant. These variables statistically significantly predicted satisfaction, $F(5, 93) = 12217.58$, $p < 0.001$, $R^2 = 0.998$. All five domains added statistically significantly to the prediction, $p < 0.05$. It shows that quality, Accessibility and interpersonal play a major role in affecting average score in the study. [Table 4]

DISCUSSION

According to World Health Organization (WHO), level of satisfaction is an important tool to measure patient healthcare.⁸ Assessing the patient satisfaction response in a pilot study of newly created department after 6 month of its existence gives an opportunity to see the factors which could be emphasized to improve our services. The patients having satisfaction of moderate level were higher in our study which was consistent with other studies.⁹ Overall satisfaction by combining moderate and high satisfaction we found that 77% of patients were satisfied. In the study we found that quality, accessibility and interpersonal played a major role in affecting average satisfaction score. It highlighted that other two domains availability of resources and physical environment needs to be focused more in order to get more satisfaction score. This is accurate finding as still there are lack of doctors in outdoor because of not starting of postgraduate training in geriatrics and lack of adequate faculty members in the department. The location of outdoor and its accessibility is also a concern as being a new department the outdoor facility is not properly located

in the outdoor complex of the hospital and also there are lack of proper sign board and lack of proper referral of geriatric patients to geriatric outdoor from other outdoor clinic which causes delay in getting care. So it emphasized the fact that more doctors should be available and more equipment's should be there with proper referral and display boards to increase the satisfaction level of patients.

While 57% of the population attending the facility were literate, given that the total literacy rate of the district is around 77% according to 2011 census. The majority of the subjects (40%) of the population were educated up to secondary and senior secondary level.

Age had significant impact on satisfaction level of patients with age of patients with moderate satisfaction level were higher than age of patients with lower satisfaction level. Further, male sex and higher education status are had significant impact on satisfaction level of patients. Most of the patients were belonging to upper to middle to upper class. High satisfaction level was found in high to lower middle class of people as compared to low level of satisfaction with lower socioeconomic class people.

Limitation of the study includes a small sample size and use of only outpatient in determining the satisfaction level of patients. However, it does gave an idea on areas which need improvement and emphasized upon.

CONCLUSION

Overall satisfaction level of patients attending geriatric outdoor was moderate to high. Still there is need to improve on manpower in outdoor clinic and better referral services so as to provide quality care to elderly patients. A continuous system of patient feedback system should be used on regular basis to improve health facility for patients.

Acknowledgment

We would like to thank the staff of Geriatric Outdoor Department, S.S.Hospital for contributing in the study

REFERENCES

1. WHO. World Health Day–toolkit for organizers. [Last cited on 2012]. Available from:<http://www.who.int/world.health.day/2012/toolkit/background/en/index.html>.
2. Kulkarni MV, Dasgupta S, Deoke AR, Nayse. Study of satisfaction of patients admitted in a tertiary care hospital in Nagpur. National J Community Med. 2011; 2:37-9.
3. Sreenivas T, Babu NS. A study on patient satisfaction in hospitals. Int. J Mgmt Res & Bus Strat. 2012;1:101-18.
4. 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 Community Med. 2009;34:35–42.
5. Galhotra A, Sarpal SS, Gupta S, Goel NK. A crosssectional study on patient satisfaction toward services received at rural health center, Chandigarh, North India. Ann Trop Med Public Health. 2013;6:240-4.

6. Kumar A, Debbarma B, Singh A, Kumar K, Singh AK, Sethi P, et al. Level of Satisfaction in Patients attending Government Health Facilities of AIIMS, New Delhi, Outreach Outpatient Department, Badsa, Jhajjar, Haryana, India. *Int J Res Foundation Hosp Healthc Adm* 2018;6:22-30.
7. Dudala SR, Reddy KA, Prabhu GR. Prasad's socio-economic status classification—an update for 2014. *Int J Res Health Sci* 2014;2:875-878.
8. Bleich SN, Özaltın E, Murray CJ. How does satisfaction with the health-care system relate to patient experience? *Bulletin of the World Health Organization*. 2009;87:271-8.
9. Sharma A, Kasar PK, Sharma R. Patient Satisfaction About Hospital Services: A Study From The Outpatient Department Of Tertiary Care Hospital, Jabalpur, Madhya Pradesh, India. *National J Community Med*. 2014;5:199-203

Source of Support: Nil; **Conflict of Interest:** None

Submitted: 18-03-2019; **Accepted:** 05-04-2019; **Published:** 23-04-2019