Original Article

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Level of Satisfaction Among People Living with HIV (PLHIV) Attending the HIV Clinic of Tertiary Care Center in Southern India

Internal Medicine Section

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ABSTRACT

Introduction: Patient satisfaction is an important issue for the health care sector. Hospitals routinely collect patient satisfaction data so that they can improve the quality of their services. There is a dearth of research in the field of satisfaction among people living with HIV (PLHIV) in India.

Aim: The aim of our study was to determine the level of satisfaction among PLHIV attending the HIV clinic of tertiary health centre in Southern India.

Materials and Methods: This descriptive cross-sectional study was done in the HIV clinic attached to Kasturba Medical College (KMC) Hospital, Mangalore, India from August 2012 - August 2013. PLHIV of age more than 18 years were included. During the study period 422 consecutive patients who consented for the study were enrolled. To determine patient satisfaction towards healthcare service, we used the Short Form Patient Satisfaction Questionnaire (PSQ-18). Data was analysed using SPSS Version 11.5 statistical software.

Results: A total of 422 patients were included in the study out of whom 253(60%) were males and 169(40%) were females. Mean age of the patients was 37.08±7.2 years. The median CD4 count was 345 cells/mm^3 (IQR 245-451.2). The mean score for general satisfaction was 4.43±0.48, for technical quality 4.77±0.26, for interpersonal manner 4.59±0.4, for communication 4.64±0.42, for financial aspects 3.20±0.78), for accessibility and convenience 4.50±0.72 and for time spent with the doctor was 4.59±0.45. Subscale scores for general satisfaction, technical quality, accessibility, interpersonal manner, finance and communication were higher in females when compared to males which were found to be statistically significant. Younger PLHIV (≤ 35 years) had significantly higher scores in technical quality, interpersonal manner and time spent with the doctor when compared to older PLHIV.

Conclusion: Patient satisfaction was highest for technical quality and it was lowest for financial aspects. If hospitals wish to improve the quality of health services they should give priority to decreasing costs and improving accessibility.

Keywords: AIDS, PSQ18, Patient satisfaction

INTRODUCTION

Patient satisfaction is the patient's perception of care received compared with the care expected [1]. Measurement of patient satisfaction helps in understanding patients' experiences of health care, identifying problems and evaluation of health care [2]. Increased patient satisfaction leads to increased patient retention and decreases medical malpractice claims [3]. Dissatisfied patients may have worse outcomes as they may not follow treatment plans [4]. Hospitals routinely collect patient satisfaction data so that they can improve the quality of their services. In the modern era patient expectations are increasing but the level of satisfaction is decreasing. Much of the published data about this topic has been obtained from studies conducted in the West. There is limited information about satisfaction studies among people living with HIV (PLHIV) in India, hence the need for this study.

Various dimensions of patient satisfaction have been analysed in studies ranging from emergency and discharge services, technical competence of doctors and interpersonal communication [5]. Variety of questionnaires has been utilized to assess patient satisfaction in various settings [6-9].

AIM

The main aim of our study was to determine the level of satisfaction among PLHIV attending the HIV clinic of a tertiary health centre in Southern India using the Patient Satisfaction Questionnaire Short Form (PSQ-18).

MATERIALS AND METHODS

Study Design and Setting: This descriptive cross-sectional study was conducted in the HIV clinic attached to Kasturba Medical College (KMC) Hospital, Mangalore, India. KMC Hospital is a 500 bedded tertiary care referral institution. The HIV clinic has 2500 registered patients.

Sample Size, Sampling Technique, Study Duration and Study Population: The sample size was calculated as 384 assuming 50% of PLHIV are satisfied with the services provided in the HIV clinic and taking relative precision of 10% and confidence interval of 95%, on adding 10% as the non-response rate the final sample size was 422. PLHIV of age more than 18 years who had visited the HIV clinic at least four times were included in the study. Participants were recruited between August 2012 and August 2013. HIV testing was done according to NACO guidelines in the ICTC centre attached to our institution. The investigator interviewed HIV patients who came to the hospital for consultations. Study participants were selected by non probability sampling. During the study period 422 consecutive PLHIV who gave written informed consent were enrolled. Ethical approval from the institutional ethics committee of KMC, Mangalore was obtained.

Data Collection

The study subjects were told about the details of the study and after obtaining written informed consent they were enrolled. The data was collected by face-to-face interview held in a private room at the study site. The interview lasted for 15 minutes. The data collection tool was a three- part questionnaire; the first part consisted of demographic questions, the second part had HIV related details and the third part was the standard PSQ-18 questionnaire [10].

In the current study, this questionnaire was translated to the local languages Kannada and Malayalam following translation-retranslation procedure. PSQ-18 questionnaire has 18 items. The PSQ-18 yields separate scores for each of seven different

subscales: general satisfaction (2 items), technical quality (4 items), interpersonal manner (2 items), communication (2 items), financial aspects (2 items), time spent with doctor (2 items) and accessibility and convenience (4 items). Patients are asked to score questions using a 5-point Likert scale (ranging from strongly agree to strongly disagree). High scores reflect satisfaction with medical care. After item scoring, items within the same subscale are averaged together to create the 7 subscale scores [7,10].

STATISTICAL ANALYSIS

Data collected was analysed using SPSS Version 11.5 statistical software. Descriptive statistics were done, the qualitative data is presented as proportions and quantitative data is presented as mean (standard deviations) and median (IQR). To find out the association of age and gender with patient satisfaction student t-test was done and p-value of less than 0.05 was considered as significant.

RESULTS

Sample Characteristics-A total of 422 patients participated in the study. Majority of them were males 253 (60%). Mean age of the patients was 37.08±7.2 years [Table/Fig-1]. The median CD4 count was 345 cells/mm^3 (IQR 245-451.2).

Patient Satisfaction scores-The overall score distribution characteristics for the 7 subscales are presented in [Table/Fig-2]. Measured on a 5-point scale (1- lowest satisfaction, 5- greatest satisfaction) the mean score for general satisfaction was 4.43± 0.48, for technical quality 4.77±0.26, for interpersonal manner 4.59±0.4, for communication 4.64±0.42, for financial aspects was 3.20±0.78 and for time spent during the visit was 4.59± 0.45 [Table/Fig-2].

Sociodemographic Variables and Patient Satisfaction: Subscale scores for general satisfaction, technical quality, accessibility and convenience, interpersonal manner, finance and communication were higher in females when compared to males which were statistically significant. Younger age group (≤ 35 years) had significantly higher scores in technical quality, interpersonal aspects and time spent with the doctor [Table/Fig-3,4].

Characteristics	n (%)
Gender	
Male	253(60)
Female	169(40)
Age (years)	
<25	11(2.6)
26-35	156(36.9)
36-45	203(48.1)
>46	52(12.3)
Employment	
Yes	311(73.6)
No	111(26.3)
CD4 count (cells/dl)	
<350	217(51.4)
351-500	128(30.3)
>500	77(18.2)

[Table/Fig-1]: Demographic characteristics of study subjects (n = 422).

Characteristics	Mean ±SD
General satisfaction	4.43± 0.48
Technical quality	4.77± 0.26
Interpersonal manner	4.59±0.4
Communication	4.64 ± 0.42
Time spent with doctor	4.59±0.45
Accessibility and convenience	4.50± 0.72
Financial aspects	3.20 ±0.78

[Table/Fig-2]: Patient satisfaction scores.

PSQ-18 scale	Gender		p -value
	Male (Mean ±SD)	Female (Mean ±SD)	
General satisfaction	4.35± 0.49	4.52± 0.46	0.001
Technical quality	4.76± 0.24	4.87± 0.16	0.001
Interpersonal manner	4.51± 0.40	4.70± 0.37	0.001
Communication	4.57± 0.44	4.73± 0.37	0.001
Financial aspects	3.16± 0.78	3.34± 0.70	0.018
Time spent with doctor	4.56± 0.44	4.63± 0.45	0.154
Accessibility and convenience	4.41± 0.45	4.63± 0.39	0.001

[Table/Fig-3]: Gender and patient satisfaction.

PSQ-18 scale	Age(years)		p -value
	≤35	>35	
General satisfaction	4.44± 0.48	4.40± 0.49	0.45
Technical quality	4.84± 0.19	4.78± 0.23	0.02
Interpersonal manner	4.62± 0.38	4.56± 0.40	0.001
Communication	4.67± 0.41	4.61± 0.43	0.13
Financial aspects	3.20± 0.73	3.26± 0.77	0.45
Time spent with doctor	4.67± 0.42	4.53± 0.46	0.003
Accessibility and convenience	4.51± 0.45	4.49± 0.43	0.70

[Table/Fig-4]: Age and patient satisfaction.

DISCUSSION

This is the first study on PLHIV using Patient Satisfaction Questionnaire (PSQ-18) from Southern India. In our study satisfaction levels were highest for technical quality and lowest for financial aspects. In our study satisfaction scores were high even though our hospital is a tertiary care institute, where patients seeking care are sick. Female patients had higher subscale scores when compared to males.

Patient related factors (age, socioeconomic status), medical aspects of care (trained personnel, use of newer technologies) and non medical aspects (check-in and check-out procedures, communication) are important determinants of patients' overall satisfaction [11,12]. Patient satisfaction has direct effects on retention in HIV care and adherence to Highly Active Antiretroviral Therapy (HAART) [13]. Various aspects of satisfaction among PLHIV have been documented [4,9,14,15]. Studies have used the PSQ-18 questionnaire to assess satisfaction among HIV and non HIV population [6,7,14,16]. PSQ-18 is a valid and reproducible questionnaire which can be used in various settings [17]. Chander V et al., have assessed the level of satisfaction among 59 PLHIV attending an ART center in India (Himachal Pradesh) using the same questionnaire [16]. In their study the mean score for general satisfaction was 3.22 ±0.86, for technical quality 3.03±0.92, for interpersonal manner 3.25±0.93, for communication 2.93± 0.90, for financial aspects was2.38 ± 1, for time spent with the doctor 2.97±0.98 and for accessibility and convenience 2.59±0.97. Our patients had higher scores in all subscales when compared to Chander et al., which implies higher level of satisfaction.

In India PLHIV get medical care via government or private setup. Our government provides free HAART and other medical services through ART centres. Our institution is a tertiary care center that provides medical care to PLHIV at subsidized rates. In our study PLHIV had low satisfaction scores in the financial domain which can be explained by the fact that PLHIV have to pay for HAART and other medical services (lab services) in our institute. PLHIV have to come on weekdays to attend the HIV clinic so they have to skip their work and hence they may loose their wages. Waiting time in hospitals is a well-established predictor of patient satisfaction [18,19]. High outpatient numbers may have contributed to the slightly lower scores on the accessibility domain in our study.

LIMITATION

Our study has some limitations. Data obtained in this study was from a single hospital in Southern India so the results cannot be generalied. The cross-sectional nature of the study has its own limitations.

CONCLUSION

Patient satisfaction was highest for technical quality and it was lowest for financial aspects. If private hospitals wish to improve the quality of health services they should decrease the cost of medical care and improve accessibility. Our study will help policymakers in determining the aspects of care they should prioritize so as to improve PLHIV satisfaction. Hospitals should find a way to provide quality care at affordable prices.

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