



Short Communication

Patient satisfaction survey: A gateway to quality improvement in primary healthcare in the IAF

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ABSTRACT

Patient satisfaction is an important indicator to assess and improve quality of healthcare services. In Armed Forces Medical Services, studies on patient satisfaction are scant and mainly hospital based. Hence, a study was conducted with an objective to assess patient satisfaction in seven Primary Healthcare Delivery Centers (PHDCs) in one of the operational commands in the Indian Air Force (IAF). Patient Satisfaction Questionnaire Short Form 18 (PSQ-18), a simple tool, was used for the survey. The study was unique in the sense that few centers in the survey were remotely located from tertiary care hospitals and the Medical Officers in these PHDCs were relatively inexperienced. The analysis of the survey clearly brought out distinct differences in certain dimensions of patient satisfaction across the PHDCs. In addition, utility of the Hindi translated version of PSQ-18 was ascertained. Based on the results of the study, few important conclusions were drawn; (a) patient satisfaction could be assessed using simple questionnaire such as PSQ-18, (b) the Hindi translated version of PSQ-18 can also be used as a useful tool depending on the participants' preference, and (c) the observed dimensions affecting patient satisfaction could be addressed through specific interventions. Similar survey is recommended to be conducted across primary, secondary, and tertiary healthcare establishments in the IAF.

Keywords: Patient satisfaction, Survey, Patient Satisfaction Questionnaire Short Form 18 (PSQ-18), Primary Healthcare Delivery Centers

INTRODUCTION

Patients' satisfaction is considered an important measure to assess healthcare outcomes. Measurement of patient satisfaction can be done by qualitative methods such as interviews, quantitative methods based on questionnaire surveys, and mixed methods that use triangulation techniques to draw conclusions. In India, the concept of patient satisfaction has been studied in specific areas of healthcare such as OPD services, medical outcomes, and waiting times.^[1-3] Majority of these studies have utilized the Patient Satisfaction Questionnaire Short Form (PSQ-18) which is a well-researched and validated qualitative technique of evaluating patient satisfaction in different experimental settings. PSQ-18 is a short questionnaire which can be answered by the patients in 3–4 min.^[4] It is proven to be a useful tool in screening surveys to assess patient satisfaction. However, published studies on such surveys are scant with only one study reported from a hospital setting in the Armed Forces Medical Services (AFMS).^[5]

Primary healthcare facilities in the IAF which include Station Medicare Centres (SMCs) and Medical Inspection (MI) Rooms provide medical cover to both the frontline air warriors and

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their families. Level of patient satisfaction at these centers thus has a direct impact on the morale and motivation of the serving personnel. Majority of these centers are remotely located from tertiary healthcare facilities and managed by Medical Officers (including Senior Medical Officers [SMOs]) with limited experience. With this background, the present survey was conducted at multiple Primary Healthcare Delivery Centers (PHDCs) in one of the operational commands of the Indian Air Force (IAF) with the objective to assess patient satisfaction among the seven domains enumerated in PSQ-18. In addition, the survey also assessed the reliability of Hindi translated version of PSQ-18.

SURVEY DETAILS

The survey included inputs from 499 patients (14.3% of the population being provided medical cover) (mean age of 34 ± 9.6 years, median age of 30 years) at seven PHDCs (designated as PHDC 1–7) in one of the IAF operational commands. Patients reporting to these centers with a medical emergency and those below 14 years of age were excluded from this study. Standard PSQ-18 questionnaire along with its Hindi translation was used. Forty (8%) respondents chose to answer the Hindi version of the questionnaire. The average scores of the seven dimensions were calculated as per the standard scoring recommendations.^[4] The differences in the population mean score and mean score of each PHDC for all seven dimensions were tested for statistical significance using *t*-test at confidence limit of 95% ($P = 0.05$). Among all the PHDCs, PHDC-6 demonstrated highest level of patient satisfaction in all dimensions and was followed by PHDC-4. PHDC-3 showed statistically significant low satisfaction on dimensions of “communication” and “time spent with the doctor” whereas PHDC-7 showed statistically significant low satisfaction on dimensions of “time spent with the doctor” and “accessibility and convenience.” PHDC-2 showed lowest statistically significant satisfaction levels. Cronbach's alpha for the translated Hindi version of PSQ-18 was calculated to assess its reliability and was found to be high (0.837).

DISCUSSION

Studies on patient satisfaction in the Indian Armed Forces are scant and mostly hospital based. The organizational structure of IAF is such that majority of its infrastructure is positioned and built up at field locations of strategic importance. Often, these locations are away from Tier I and II cities resulting in limited access to higher levels of healthcare. As a result, major footfall of patients (consisting of serving air warriors, their dependents, and civilians working in these units) is noted at primary centers

located within the campus, that is, SMCs and MI Rooms. Being the first point of contact for providing healthcare services, these centers represent the face of AFMS. Over the years, the infrastructure at these field units has improved substantially allowing more people to stay inside the Air Force campuses, thereby increasing the dependent population on these primary centers to access healthcare services. Parallely, the IAF has also significantly invested in medical infrastructure to offer quality healthcare to its dependent clientele. In spite of all these, there have been many instances wherein the clientele satisfaction has been reported to be inadequate. At few places, it is not an uncommon observation that the dependent personnel have tried to avail medical facilities in the civil setup. Therefore, assessment of patient satisfaction in these healthcare centers is of paramount importance. In view of this, the present survey was carried out to assess patient satisfaction levels in PHDCs (SMCs and MI Rooms) in one of the operational commands of the IAF.

An important aspect of conducting such a survey is the use of appropriate method. Various models to assess patient satisfaction exist in the medical literature; however, for peripheral healthcare centers, questionnaire-based survey offers the most promising and practical tool. The questionnaire should be multidimensional covering important aspects of patient satisfaction yet simple, reliable, and objectively scorable. We used PSQ-18 short form in the present survey which meets the above criteria. This generic questionnaire consists of 18 specific questions which assess patient satisfaction under seven broad domains of healthcare which are: (a) General Satisfaction, (b) Technical Quality, (c) Interpersonal Mannerisms, (d) Communication, (e) Financial Aspects, (f) Time Spent with Doctors, and (g) Accessibility and Convenience.^[4] It is a validated and internationally accepted tool which has been used in assessing patient satisfaction in a variety of scenarios such as primary, secondary, or tertiary care, for different specialist OPDs, for in patient or outpatient services, etc. The satisfaction scores are based on a Likert scale (1–5) and can vary as per the situation in which the questionnaire is administered. The scores can be interpreted for comparison of samples within the population or across the time domain. The results of the present survey clearly bring out the usefulness of PSQ-18 in objective assessment of patient satisfaction in desired dimensions in PHDCs.

The second important aspect in such a survey is to use the questionnaire in a language in which patient understands so that the feedback is reliable. This poses a unique challenge in the IAF set up. Our dependent population at peripheral units comprise people belonging to different region, culture, language, and educational levels. The common language binding all together has often been

Hindi. Therefore, we preferred to carry out the survey using the Hindi version as well. Translation of PSQ-18 in locally spoken languages has been tried in the past with limited success. A study by Shrivastava *et al.* attempted to validate Hindi translation of PSQ-18; however, the reliability of translated questionnaire was found to be poor (low Cronbach's alpha – 0.445).^[6] We addressed this by translating the PSQ-18 to Hindi language and validated it by two separate teams of domain knowledge experts before use. Cronbach's alpha for the translated Hindi version in our study was found to be high (0.837). This also implies that the translated version could be a very useful tool at centers where the target population, specifically the dependents of serving personnel, could have preference to Hindi language; nevertheless, the reliability and validity of the translated version should be high.

The survey offered valuable feedback on important dimensions of patient satisfaction. The overall general satisfaction was found to be positive (mean subscale score of 3.75), however, a subset of domains was found to have lower score. These were “Time spent with Doctor” (3.27), “Technical Quality” (3.61), “Accessibility and Convenience” (3.67), and “Financial Aspects” (3.70). General satisfaction, as a dimension, can be considered as an indirect summation of all other dimensions of patient satisfaction. The centers performing well on other six dimensions had also generally performed well in this dimension. The findings suggest that if targeted interventions to address the lacunae in each of these dimensions could be instituted, it would result in overall improvement of the patient satisfaction levels.

The results of this survey objectively highlight that low doctor-patient ratio does affect patient satisfaction. The domain of “Technical Quality” usually deals with the patient's perception of the facilities available with the treating doctor as well as their clinical acumen. Younger patients were found to be less satisfied in this domain, an observation which commensurate with previously conducted studies.^[7-9] In AFMS, free medical care is offered to the serving personnel and their dependents; hence, the domain of “Financial Aspect” does not appear to be relevant. However, this dimension is still considered important as it reflects the capability to provide local purchase medicines on time and settlement of medical claims in our set up. The domain of “Accessibility and Convenience” evaluates a center's ability to cater for emergencies, ease of getting an appointment, and round the clock availability of medical services.

The survey also provided comparisons between different centers. Whereas, PHDC-6 demonstrated highest level of patient satisfaction in all dimensions, PHDC-2 scored poorly in almost all the domains. The other centers scored high in few dimensions and low in others. Based on the outcomes,

the SMOs of respective PHDCs were apprised of the issues associated with patient care. From improving the registration processes and communication with patients to infrastructure development, the problem areas could be identified and appropriate measures implemented to improve patient care. However, longitudinal follow up could not be conducted to effectively comment on improvement in patient satisfaction following implementation of interventional strategies.

CONCLUSION

This survey was the first of its kind in an attempt to assess patient satisfaction in the IAF peripheral healthcare centers using a simple, yet reliable and objectively scorable method. Few important conclusions could be drawn based on the outcome. First, patient satisfaction could be assessed using simple questionnaire such as PSQ-18. Second, the Hindi translated version of PSQ-18, after its validity, could be used as a useful tool as per the participant's preference, and finally, the observed dimensions affecting patient satisfaction could be addressed through specific interventions. Since the IAF medical services have invested significantly in improving primary healthcare services with improved medical infrastructure, adequate medical education (through I-Reach programs) and provisioning better quality drugs, it is imperative that a feedback from the patients is sought to know their perceptions on what further can be done and how can resources be better channelized. Hence, similar surveys targeted to specific clientele populations are recommended to be conducted across primary, secondary, and tertiary healthcare establishments in the IAF.

Declaration of patient consent

Patient's consent not required as patients identity is not disclosed or compromised.

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Conflicts of interest

Dr VV Joshi is the Chief Editor and Dr NK Tripathy is the Executive Editor of the Journal. They do not have any conflicts of interest.

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