

# Client Satisfaction in 'Ex - servicemen Contributory Health Scheme (ECHS) Polyclinic' : An Experience from India

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## ABSTRACT

**Introduction:** Client or patient satisfaction is considered as one of the desired outcomes of health care and it is directly related to utilization of health services. We aim to study the client satisfaction regarding services in a Health Insurance Scheme Polyclinic for Veterans. **Methods:** This observational and analytical cross-sectional study was conducted at an Ex-servicemen Contributory Health Scheme (ECHS) Polyclinic, India. A structured questionnaire was used for the study for which a total of 400 clients were interviewed. **Results:** Overall, the respondents thought that the services provided by the polyclinic were good. None of the respondents rated the polyclinic to be poor, majority of them (68.8%) rated it to be good, 13.8% rated it to be excellent and 17.5% were just satisfied with the services at the polyclinic. **Conclusion:** The ultimate aim of ECHS is to ensure that the veterans, who have given their best years of life in the service of the nation in extremely hostile conditions, get the best possible preventive, promotive and curative care when they need it most. ECHS of this kind with improvements sounds relevant in context of Nepalese armed forces as well.

**Keywords:** client satisfaction; polyclinic, armed forces

## INTRODUCTION

In the past few decades there has been reawakening of the concept that health is a fundamental human right and a world wide social goal; that it is essential to the satisfaction of basic human needs and to improve the productivity of nations. In 1990, the World Health Organization (WHO) Conference on supporting "Health for All" defined future development in health to be human centered. Health for All meant "The attainment by all peoples of the highest possible level of health" and that as a minimum all people in all countries should

have at least such a level of health that they are capable of working productively and participating actively in the social life of the community they live in. Since then a lot of effort has been made on health investment, patient care and patient's right for quality health care leading to patient satisfaction.<sup>1</sup>

Client or patient satisfaction is considered as one of the desired outcomes of health care and it is directly related to utilization of health

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services. Satisfaction is one of the meaningful indicators of client's experience of health care services. Asking clients, what they think about the care and treatment they have received is an important step towards improving the quality of care, and to ensuring that local health services are meeting clients' needs.<sup>2</sup> Satisfied clients are more likely to maintain a consistent relationship with a service provider. Satisfied patients are more likely to follow specific medical regimens and treatment plans and options. Measurement of client satisfaction adds important information on performance of the system, thus contributing to the organization's total quality management.<sup>3</sup> We aim to study the client satisfaction regarding services in a Health Insurance Scheme Polyclinic for Veterans.

## METHODS

This observational and analytical cross-sectional study was conducted at an Ex-servicemen Contributory Health Scheme (ECHS) Polyclinic, India. The study population included all the ex-servicemen from the army, navy and air force as well as their dependents. Study was conducted for a period of two years. The study was vetted and approved by the Institutional Ethics Committee. Written informed consent was obtained from each study participant.

Assuming 50% of the clients were satisfied with the services of the OPD a sample of 384 was obtained using the formula for estimation of proportion: a total of 400 clients were taken in the study. The study population was again stratified into various population strata viz. Officers, dependents of officers, Junior commissioned Officers (JCOs)/ other ranks

and their dependents. Probability proportional to the size was taken for determining the number of subjects required in each stratum based on one-year workload of OPD. After obtaining the total number of sample required for the study, systematic random sampling was done by selecting every third patient reporting to the dispensary.

Clients who had at least three previous visits, who were above 18 years and who were willing to be the part of the study were included while staff members and family members of the staff who were also beneficiaries of this scheme and working in the same polyclinic were excluded from the study. A structured questionnaire was used for the study, which was vetted for content validity before conducting a pilot study. The polyclinic was divided into 8 different areas and overall satisfaction in each areas and subareas were observed. The questionnaire was applied through personal interview technique by a single interviewer. The data was collected over a period of one year with 100 working days. Sample was restricted to only four samples per day. The interview with the study participants was done between 08:30 hrs. to 12:30 hrs. This is the peak time of functioning of the polyclinic. The respondents were assured of complete anonymity and confidentiality. The data was analysed using SPSS ver 20.0. Median score and Inter-quartile range (IQR) on subareas, areas and overall were calculated.

The service providers expected that the service provided by them would be graded by most of their clients to be at least good in a four point Likert-like scale (where, 1= Poor, 2=



**Fig 1: Overall satisfaction level regarding the polyclinic**

Satisfactory, 3= Good, 4= Excellent). Client's satisfaction towards various services and overall, was determined by a median score in each of the areas, subareas and overall. If the median score was less than 3 in any area or overall, it was considered that a gap existed between the provider's expectation and client's satisfaction towards the services. Correlation analysis was done to find out various attributes related to client satisfaction using Spearman's rank correlation co-efficient. Suggestions regarding improvements in required areas were also analyzed and represented appropriately.

## RESULTS

Majority of the respondents were in the age group 60-75 years and 49% of respondents were female (table 1). The mean age of the respondents was 62 years.

Sixty-nine percent of respondents had attended the polyclinic for more than seven times (table 2). This represents that the utilization of services in this polyclinic was high.

The satisfaction levels and the median score (IQR) in each area as well as overall satisfaction levels and median score are shown in table 3. Clients were found to be happy with the signage system. Half of the respondents said that the signage system was excellent. The parking facilities in the polyclinic were rated good by 43% of the respondents. Fifty-eight of the respondents rated the reception area to be good, 24.8% rated it to be excellent and 17% rated it to be just satisfactory. 4.5% of the respondents rated waiting area to be poor, 21.3% rated it as satisfactory, majority of the clients (61.8%) rated it as good and 12.5% rated it to be excellent. The median score of this question was 3.00 (IQR=1), indicating a good level of satisfaction on waiting area.

Seventeen percent of the respondents said that their experience while waiting for the doctor was poor, 22.7% were satisfied and 59.5% said it was good. The overall median score for this question was 3.00 (IQR= 1), indicating a good level of satisfaction among the respondents. 9.7% of the study population

were not satisfied with the time spent with the doctor and rated it to be poor, 49.5% said it was satisfactory, and 40.8% said it was good.

The overall median score for laboratory area was 3.00 (IQR=1) indicating most of the respondents had rated the laboratory services to be good and were satisfied. 60% of the respondents said that the laboratory services were good while 6% thought that the laboratory services were poor. More than half (57.8%) thought the dispensary was good and 19.8% rated it to be excellent. The overall median score for this question was 3.00, indicating that most of the respondents were satisfied with the dispensary services.

A large proportion of the respondents rated the polyclinic to be good and were satisfied with the services (figure 1). None of the respondents rated the polyclinic to be poor, majority of them (68.8%) rated it to be good, 13.8% rated it to be excellent and 17.5% were just satisfied with the services at the polyclinic. Overall, the respondents thought that the services provided by the polyclinic were good.

The respondents provided few suggestions for further improvements of the services delivered by the polyclinic, which are listed in the table 4.

Correlation analysis of the overall satisfaction of the polyclinic with various other variables was done. Both positive as well as negative correlations were observed and are shown in table 5 and table 6 respectively. The signage system and time spent with the doctor during consultation were found to have weak positive correlation with the overall satisfaction of respondents on the polyclinic. Other variables

**Table 1: Distribution of study population as per age and gender**

Age Group	Male	Female
	Nos. (%)	Nos. (%)
18- 39 years	6 (1.5)	11 (2.7)
40-59 years	52 (13)	68 (17)
60-75 years	100 (25)	85 (21.3)
75 years and above	45 (11.2)	33 (8.3)
<b>Total</b>	<b>203 (50.7%)</b>	<b>197 (49.3%)</b>

**Table 2: Visit to the polyclinic by study population**

Nos. of years visited	Number of times visited		
	3-5 times	5-7 times	>7 times
	Nos. (%)	Nos. (%)	Nos. (%)
3-4 yrs.	1 (0.3)	4 (1)	27 (6.8)
4-5 yrs.	3 (0.8)	3 (0.8)	36 (9)
>5 yrs.	22 (5.5)	28 (7)	276 (69)
<b>Total</b>	<b>26 (6.5)</b>	<b>35 (8.8)</b>	<b>339 (84.8)</b>

that were found to have positive correlation with overall satisfaction of respondents are the registration and reception area, the waiting area, overall laboratory services and dispensary services. The correlation between dispensary services with the overall satisfaction and registration and reception services with client satisfaction was found to be strong and high in this study. The more the

satisfaction at these areas more was the overall satisfaction on the polyclinic.

Some of the variables were found to have weak negative correlation with the overall satisfaction on the polyclinic. These variables are the waiting time at the registration area, waiting time at the waiting area and dispensary. The more the clients had to wait at these areas, the less the overall satisfaction on the polyclinic.

## DISCUSSION

The result of any service encounter in a hospital generates a consumer judgement—either a satisfaction or dissatisfaction. A client is said to be satisfied when the perceived performance of the hospital meets or exceeds the expectations; when the perceived performance is below the expectations, the client is said to be dissatisfied. Patient satisfaction studies allow service users' voice

to be heard and affirm the importance of their experience for improved health care planning.<sup>4</sup> Patient's satisfaction is a multidimensional concept and subjective phenomenon that is linked to perceived needs, expectations and experience in care.<sup>5</sup> More than 95% of the respondents in this study were satisfied with the parking facilities. The results from the present study are comparable with another study in which high satisfaction level was observed with 99.2% of patients being satisfied with parking facilities.<sup>6</sup>

In this study, 92% of the respondents mentioned that they received adequate information from the information counter. The present study is comparable to another study conducted at a tertiary care hospital where 97% of the respondents received adequate information at the reception counter.<sup>7</sup>

A total of 58.2% of respondents rated the reception area to be good and 24.8% rated it to

**Table 3: Client Satisfaction in Different areas.**

Areas	Ratings				Score Median (IQR)
	Poor (1)	Satisfactory (2)	Good (3)	Excellent (4)	
	Nos. (%)	Nos. (%)	Nos. (%)	Nos. (%)	
Signage	0 (0)	91 (22.8)	110 (27.5)	199 (49.7)	3 (2)
Parking	18 (4.5)	106 (26.5)	172 (43)	104 (26)	3 (1)
Registration	0 (0)	68 (17)	233 (58.2)	99 (24.8)	3 (0)
Waiting Area	18 (4.5)	85 (21.3)	247 (61.8)	50 (12.5)	3 (1)
Experience while waiting	71 (17.7)	91 (22.7)	238 (59.5)	0 (0)	3 (2)
Time spent with doctor	39(9.7)	198 (49.5)	163 (40.8)	0 (0)	3 (1)
Laboratory	23 (6)	98 (23)	242 (60)	37 (11)	3 (1)
Dispensary	15(3.8)	75(18.8)	231 (57.8)	79(19.8)	3 (0)
Overall Polyclinic	0(0)	70 (17.5)	275 (68.8)	55 (13.8)	3 (1)



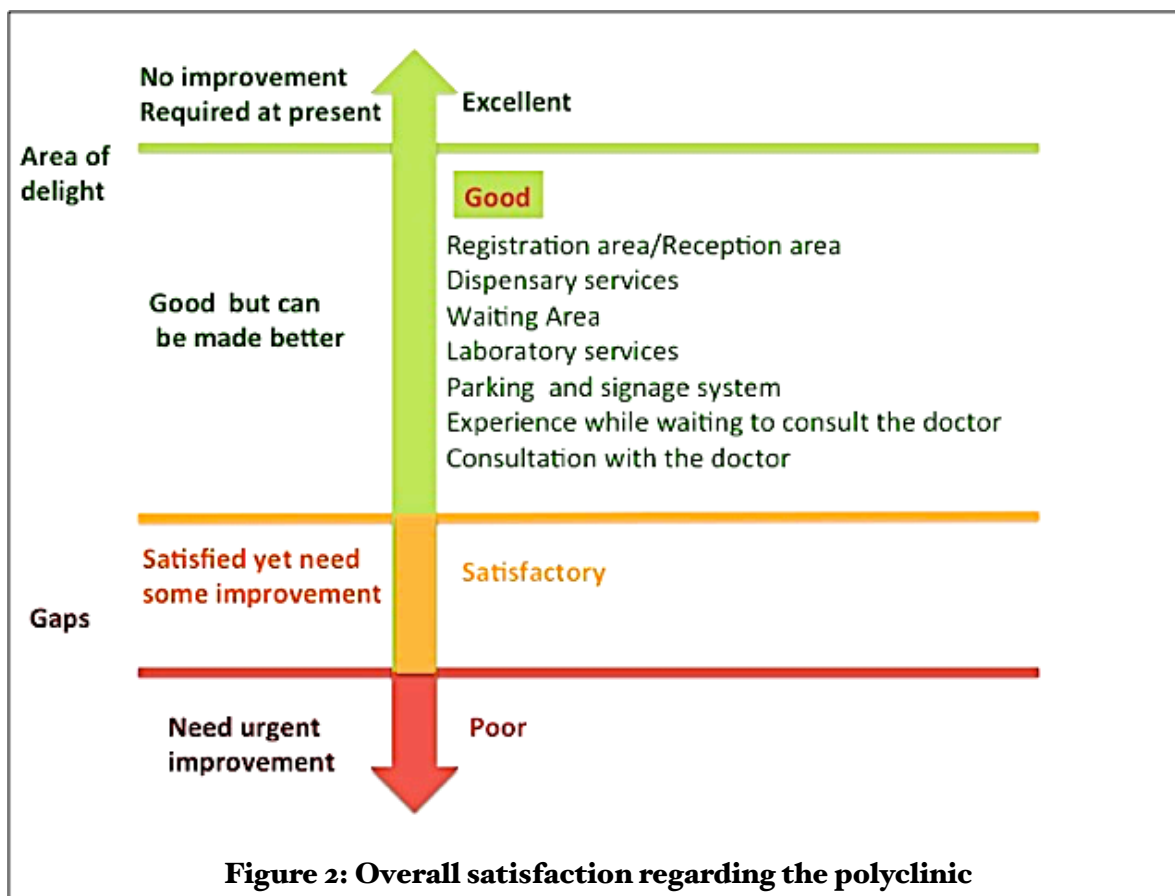


Table 4: Suggestions for Improvements

Suggestions	Nos. (%)
Increase number of staff in dispensary	26 (6.5)
Increase the space in waiting area	20 (5.0)
Increase number of medical specailist	19 (4.7)
Increase the number of doctors	16 (4.0)
Toilets should be clean	11 (2.7)
Increase the number of tests in laboratory	11 (2.7)
Put shades for Parking or grow trees	9 (2.2)
Improve cafeteria facilities	8 (2.0)
Please keep all the tests at same place	7 (1.7)

Table 5: Positive Correlations Observed

Areas	$r_s^*$	p value
Signage system	+0.17	0.01
Parking	+ 0.39	0.01
Registration	+ 0.47	0.01
Waiting area	+ 0.35	0.01
Time spent with doctor	+ 0.17	0.01
Laboratory services	+ 0.34	0.01
Dispensary services	+ 0.57	0.01

\* Spermann’s rank correlation coefficient

be excellent. The findings in the present study are similar to another study which found out that 60% rated the reception area to be good.<sup>7</sup> High level of satisfaction was observed while

receiving information at the counter and dealing with the staff at the reception counter. The waiting area in this study was rated good by 55.5% of the respondents and 18.5% rated it to be excellent. A study conducted in Bangalore compared two OPDs and observed that satisfaction level is generally not high in waiting areas, with only 50-60% rating it to be spacious.<sup>8</sup> However, Vinoi found that 92% of patients were satisfied with the waiting area and physical facilities in the OPD.<sup>9</sup>

Aldana mentioned that the most powerful predictor for client satisfaction in government health services is the provider's behaviour towards the patient, particularly showing respect and politeness.<sup>10</sup> The Lucknow study showed high level of satisfaction regarding behaviour of paramedical staffs (92.5%).<sup>6</sup> A study conducted in Thailand also exhibited similar findings (82.22)% satisfied with the behaviours of the staff.<sup>11</sup>

More than 70% of the respondents had to wait for more than 30 minutes while consulting the doctor in our study. Prahlad, in his study, mentioned that waiting time to consult the doctor depends upon the load of the hospital or health facility.<sup>12</sup> Patro in his study

mentioned that average waiting time was 30-35 minutes.<sup>13</sup>

None of the respondents in this study rated the consultation room to be poor and most of them (60.5%) rated it to be good. Our findings are similar to that of studies conducted in two military hospitals in which 96% and 99% were satisfied with the consultation room respectively.<sup>7,14</sup>

Nearly half of the respondents said that their consultation time with the doctor was 5-10 minutes and 8% said that doctors did not even spend 5 minutes with them. A study conducted in Lucknow found that total consultation time was  $6.6 \pm 3.7$  minutes and 85.2% were satisfied with the consultation time with the doctor.<sup>6</sup> More than 90% of the clients in the present study said that their problems and queries about their illness were explained satisfactorily by the doctor. The study conducted by Athar revealed that 62% of the clients said that the doctors explained their problem really well, and 33% explained it satisfactorily.<sup>7</sup>

Sixty percent of the respondents in the present study said that the laboratory services were good. These findings are similar to a study conducted at a tertiary care centre where majority of the clients said that the laboratory services were good (61%).<sup>7</sup>

Clients in the present study were satisfied with the number of dispensary counters at the polyclinic as 85% felt they were adequate. Study conducted by Athar showed that 66% of the respondents said that the counters at the dispensary were adequate and remaining said that they were not adequate.<sup>7</sup> Sixty-two percent of the respondents in this study said

**Table 6: Negative Correlations Observed**

Areas	$r_s^*$	p-value
Time taken to get registered	-0.04	0.05
Waiting time to consult doctors	-0.26	0.01
Waiting time to get medicines at dispensary	-0.115	0.01
* Spermann's rank correlation coefficient		

that the dispensary staffs explained their medicines satisfactorily and 33.8% felt they were well explained. Mandokhail found out that 81.78% were satisfied with the information and explanation given by the pharmacist.<sup>11</sup> None of the respondents in the present study rated the dispensary to be poor, 57.8% rated it to be good, and 19.8% said it was excellent. A study conducted in a military hospital found that 60% of the respondents rated the pharmacy or the dispensary to be good.<sup>7</sup>

The overall satisfaction of the respondents on the polyclinic was found to be good in the present study as shown in the figure 2, sixty eight percent rated the polyclinic to be good, 13.8% rated it to be excellent and 17.5% were just satisfied with the services at the polyclinic. A similar study observed that the satisfaction level of an Indian naval hospital was rated as good by 67% of the respondents, satisfactory by 30% and poor by 3%.<sup>14</sup> A study in another military hospital found that the overall satisfaction level in a tertiary level military hospital was rated as good by 63% of the respondents, good or satisfactory by 18% and poor by only 1% of the respondents.<sup>7</sup>

Appropriate study design, adequate sample size and appropriate data collection method was the strength of the study. However few limitations of the study were that it was conducted only in a single polyclinic, only one aspect (satisfaction) regarding health services were taken, a single instrument (questionnaire) was used and satisfaction regarding OPD services only were measured.

ECHS needs to expand its network of polyclinics in areas with large density of

veterans. Transport facilities could be arranged to increase the accessibility of the polyclinic. A separate queue system for senior citizens is required. Counters can be added for the registration of JCOs/OR and their dependents. One more medical specialist in the ECHS will definitely decrease the waiting period as well as referrals. Online appointment for consultation is required. Activity analysis of doctors should be conducted to see if the doctors are present in their OPD during the OPD timings.

At regular intervals, workshops can be conducted to improve the doctor- client-relationship. It is recommended to increase the number of tests in the polyclinic so that all can be conducted under one roof. The number of staff as well as number of counters in the dispensary should be increased. A list of “not available” medicines should be made by the dispensary and circulated regularly. Local purchase of ‘highly prescribed but scarce’ medicines should be done to address the shortage of prescribed medicines. Regular auditing of drugs should be undertaken to ensure availability and prevent pilferage. Systems analysis should be conducted in such schemes.

## CONCLUSION

Ex-servicemen have given their best years of life to the forces and deserve the best after retirement. The ECHS has been conceived with the noble objective of providing quality medical care to them. The ultimate aim is to ensure that the veterans, who have given their best years of life in the service of the nation in extremely hostile conditions, get the best possible preventive, promotive and curative



care when they need it most. ECHS of this kind with improvements sounds relevant in context of Nepalese armed forces as well.

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