

## Consumer Satisfaction Index of Caregivers of Individuals with Communication Disorders

<sup>1</sup>Ridhima Batra, <sup>2</sup>Gnanavel K. & <sup>3</sup>Goswami S. P.

### Abstract

Consumer satisfaction index or CSI is a rating scale used to express how effective are the services of a professional and/or the institute. A questionnaire with 20 questions was prepared and administered on 130 parents /caregivers of persons with various communication disorders to calculate the CSI for speech, language and hearing services. In group wise analysis, the HL group was most satisfied (73.92%) whereas the MR group was least satisfied (68.09%). The question wise analysis showed that the parents/ caregivers were "very much satisfied" with the fees structure, usefulness of the clinical services at work place/ school, amount of time and support provided by the family members. The areas in which they were "satisfied" included the overall services provided, the number of days per week provided for therapy, counselling, home training provided, improvement in communication skills, the approach of the Institute staff, information regarding various concessional facilities provided by the Government, barrier free environment of the Institute, availability of other medical professionals and usefulness of orientation programs and educational materials. The "fairly satisfied" areas included the time, duration and attention provided during evaluation and therapy, and information provided about the clinical condition during evaluation. These were the gray areas which need to be strengthened for effective delivery of clinical services by the Institute. However, there was no domain in the questionnaire in which "not satisfied" response was obtained. This shows that the Institute is successful in delivering clinical services to the persons with communication disorders. Though this was an exploratory study, the results have reflected the consumer satisfaction index of the Institute as 72%.

**Keywords:** Clinical services, Institute, questionnaire, evaluation, Speech and Language therapy

Consumer satisfaction is used to assess performances of health services in the community. There is a one to one relationship between consumer satisfaction and treatment outcomes. The consumer satisfaction plays an important role in growth and for the betterment of profession. Additionally, this helps the professionals to augment their appeal and increase consumer satisfaction level.

It is imperative that professionals should strive to satisfy the stakeholders with their services. Satisfied consumers usually return and follow up more often and tell other people about their experiences and the quality clinical services they received. This helps to spread awareness about the clinical services provided, so that the rehabilitation can be provided at an early age. This is the best, cost effective mode to create awareness about the clinical services of the institute so as to reach the public who can avail

such services.

In consumer satisfaction research, professionals seek the views of the persons on a variety of issues that will show how effective are the services of the professionals working in an organization/ institution.

Consumers express their satisfaction in many ways. In open-ended questioning they use descriptive terminologies such as delighted, extremely satisfied, very dissatisfied etc. Rating scales are used in surveys where numbers are given to express the level of satisfaction. The lowest number indicates extreme dissatisfaction and the highest shows extreme satisfaction. The scores that are obtained in consumer satisfaction surveys are used to calculate a consumer satisfaction index (CSI). The average or mean score of satisfaction given to each element represents strengths and weaknesses which inturn helps to improve services rendered by the

<sup>1</sup>II M.Sc. (SLP), All India Institute of Speech and Hearing, Manasagangothri, Mysore- 570006, email:canif\_ridhima@yahoo.co.in., <sup>2</sup>II M.Sc. (SLP), All India Institute of Speech and Hearing, Manasagangothri, Mysore-570006, email:vel13feb@gmail.com., <sup>3</sup>Reader & Head, Department of Speech Language Pathology, All India Institute of Speech and Hearing, Manasagangothri, Mysore- 570006, email:goswami16@vahoo.com.

professionals.

The management of a person with communication disorder involves the family members, and professionals, who work as active team members to improve their quality of life. Rehabilitation refers to services such as early detection of the disability, the proper diagnosis and the prompt treatment. Professionals are well trained and experienced in their specialties, and are prepared to meet all the needs of the persons with communication disorders.

Fellendorf (1975) studied the effectiveness of education and health care services to young hearing impaired children and their parents. He reported that the common complaints of parents of hearing impaired children were the lack of communication with the physician and clinician. This was mainly the result of the vocabulary used by the specialist and the limited time spent with the parents during consultation. The result can be parental failure to follow instructions and possibly irreversible damage to the child's development of speech, language and listening skills.

Satisfaction with disclosure of the diagnosis of an autistic spectrum disorder was investigated by Brogan and Knussen (2003) by using a self-report questionnaire. On a rating of satisfaction, 55% indicated that they were satisfied or very satisfied with the disclosure. It was found that the parents were more likely to be satisfied when given written information, opportunity to ask questions, and when their suspicions/doubts were cleared by professionals. These factors were combined into a global index of satisfaction.

Cox, Robyn, Alexander, and Genevieve (1999) prepared Satisfaction with Amplification in Daily Life (SADL) questionnaire for the hearing aid users. 90% critical difference was obtained for the various scores that ranged from 0.9 to 2.0 score intervals on a 7-point rating scale. The questionnaire yielded a global satisfaction score indicating that the SADL scale was clinically acceptable and comprehensive to provide a valid assessment.

In an evaluative study done by Woodward, Santa-Barbara, Levin and Epstein (1978), 279 families having children with academic and/or behavioral problems were given a family satisfaction questionnaire to assess several aspects of the families' satisfaction with services received. Very little dissatisfaction was expressed regarding the availability of services (less than 7%), but a sizeable proportion of families (45%) did not feel that the services provided were comprehensive and adequate.

Parental satisfaction with the process of disclosure of disability was investigated by Slope and Turner (1993) by interviewing 103 parents of children with severe physical disability. Only 37 % of parents were satisfied with the disclosure. Parents were more likely to be satisfied if, they felt that the professional carrying out the disclosure was sympathetic, understanding, approachable, and communicative. These results demonstrated the importance of the parent-professional interaction and an increased emphasis on communication skills in medical training.

In a study done by Hasnat and Graves (2000), interviews with parents of children with developmental disabilities regarding their experiences at the time of disclosure was done. Their level of satisfaction with the process was carried out which was found to be high (82.6%). The major determinants of parental satisfaction with disclosure were directness, understanding of parental concerns and good communication on the part of the disclosing professional, and receiving a large amount of information.

All the above mentioned studies have reported about the satisfaction level of different disordered groups but there are very limited studies wherein a comparison has been made between different disordered groups or measured the satisfaction of caregivers of individuals with communication disorders at institute level. Thus a need arises to assess the consumer evaluation of speech and hearing services provided at institute level for different speech, language and hearing disorders.

#### **Aim of the study**

To calculate consumer satisfaction index (CSI) for the speech, language and hearing services provided to individuals with communication disorders.

#### **Objectives of the study**

To assess the consumer satisfaction of caregivers of individuals with communication disorders receiving clinical services at the All India Institute of Speech and Hearing, Mysore. This would help to understand how successful the Institute is in delivering clinical services to people with communication disorders. This would also give an insight into the areas those need to be strengthened for effective delivery of clinical services by the institute.

#### **Method**

**Subjects:** 130 parents /caregivers of persons with communication disorders mainly Delayed Speech and Language with hearing impairment (50),

mental retardation (20), cerebral palsy (15), articulation disorder (15), learning disability (10), autism (10) and aphasia (10) participated in the study. Only those parents /caregivers were included who were availing the clinical services for more than a month. All the parents/caregivers included in the study were literate and belonged to middle socio-economic status. Mostly mothers participated in the study as they accompanied their children more commonly than the fathers did.

**Material:** A questionnaire was prepared to estimate the consumer satisfaction of speech, language and hearing services provided to individuals with communication disorders. The questionnaire included 20 questions, each having four choices for the answers [1= not satisfied, 2= fairly satisfied, 3= satisfied and 4= very much satisfied]. The last question was an open-ended question in which the parents/ caregivers were asked to give any suggestions which they feel would help the Institute to improve upon the clinical services. The questionnaire is given in appendix-I.

The questions asked were regarding the satisfaction and type of services provided by the institute. The various domains of questionnaire were:

- Time and attention provided during evaluation and therapy.
- Duration and number of days per week provided for speech and language therapy.
- Information provided about the clinical condition by the clinician during evaluation and therapy.
- Home training program provided.
- Improvement in persons' communication skills.
- Fees structure for evaluation and therapy.
- Approach of the Institute staff.
- Information given about the various concessional facilities provided by the Government of India or Government of Karnataka.
- Barrier free environment of the Institute.
- Availability of services provided by the other medical professionals.
- Usefulness of speech language therapy at school or work place.
- Usefulness of various orientation programs and educational materials.
- Amount of time spent by the parents with their child at home.
- Support provided from the other family members.

**Analysis:** Two fold analysis of the questionnaire was carried out. First, a group wise analysis was

performed using Kruskal Wallis H Test and Mann Whitney Test to see which disordered group people were more satisfied and which group people were less satisfied with the clinical services of the Institute.

Secondly, a question wise analysis was done to see in which domains of the questionnaire, the parents/ caregivers were very much satisfied, satisfied, fairly satisfied or not satisfied.

## Results

The results of the study are presented under the following two headings:

1. Group wise analysis
2. Question wise analysis

### 1. Group wise analysis

In this section, scores were assigned to the four responses [1= not satisfied, 2= fairly satisfied, 3= satisfied and 4= very much satisfied] and a total score for each questionnaire was calculated with a maximum score of 76 (19 questions X 4). The mean and the percentage score was obtained for each group which is tabulated and is shown in table-1:

GROUPS	MEAN (S.D)	MEAN PERCENT(%)
HL	56.18(4.91)	73.92
LD	55.40(3.53)	72.89
ART	55.067(5.36)	72.45
AUT	54.80(3.88)	72.10
APHASIA	54.00(3.55)	71.05
CP	53.467(6.12)	70.35
MR	51.75(6.18)	68.09
Total	54.7231(5.22)	72.00

[HL- hearing impaired group, MR- mental retardation group, CP- cerebral palsy group, ART- articulation group, LD- learning disability, AUT- autism group and APHASIA- aphasia group].

**Table 1:** Group Summary

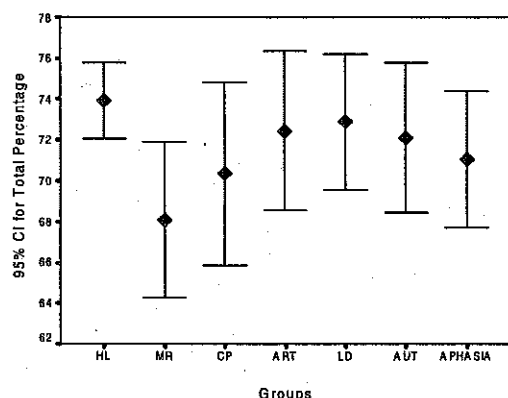
It is obvious from table-1 that the mean percentage was highest for the HL group (73.92%) whereas lowest for the MR group (68.09%). The overall mean percentage was 72% which reflects the overall consumer satisfaction index of the Institute.

Also, a comparison was made between the different disordered groups using the following non-parametric tests:

- i. **Kruskal Wallis H Test** was done which showed that there is a significant difference between the seven groups ( $p < 0.05$ ).
- ii. To study the pair wise difference between the groups, **Mann Whitney Test** was done. The results revealed that there is a significant

difference between the responses given by MR and HL group ( $p < 0.05$ ), MR and ART group ( $p < 0.05$ ), MR and LD group ( $p < 0.05$ ), and MR and AUT group ( $p < 0.1$ ).

iii. The mean and standard deviation of all the groups are graphically represented in graph 1. It can be clearly seen from the error bar graph that the mean of the responses of the HL group are significantly higher than all the other groups whereas mean of the responses of the MR group are significantly lower. Also, the responses of the ART, LD and AUT group are almost similar.



Graph 1: The mean and standard deviation of all the groups.

2. **Question wise analysis:** The results are discussed under the following headings based on the choice of ratings i.e very much satisfied, satisfied, fairly satisfied, not satisfied.

**Very much satisfied:** All the questions were analyzed separately and the results showed that out of 19 questions the consumers stated that they were very much satisfied for five questions (question numbers 10, 11, 16, 18 & 19). Table-2 shows the total frequency and percentage of responses for these questions.

Question no.	Frequency	Percent %
Q 10	79	60.8
Q 11	84	64.6
Q 16	51	39.2
Q 18	45	34.6
Q 19	50	38.5

Table 2: Very much satisfied

The aspects for which the parents/ caregivers were very much satisfied included:

- a) The fees structure for evaluation and therapy (Q 10 & Q 11)
- b) Usefulness of the clinical services at work place/ school (Q 16)

- c) Amount of time spent at home by the parents (Q18) and
- d) The support provided by the family members (Q 19).

**Satisfied:** The parents/caregivers reported that they were satisfied with the services in 11 domains which are listed below.

- a) Overall services provided by the Institute (Q 1 & Q 2),
- b) Number of days per week provided for speech and language therapy (Q 5),
- c) Information provided about the clinical condition by the clinician during therapy (Q 7),
- d) Home training program provided (Q 8),
- e) Improvement in persons' communication skills (Q 9),
- f) Approach of the Institute staff (Q 12),
- g) Information given about the various concessional facilities provided by the Government of India or Government of Karnataka (Q 13),
- h) Barrier free environment of the Institute (Q 14),
- i) Availability of services provided by the other medical professionals (Q 15) and
- j) Usefulness of various orientation programs and educational materials (Q 17).

The total frequency and percentage of responses for these questions is presented in Table-3.

Question no.	Frequency	Percent %
Q 1	63	48.5
Q 2	63	48.5
Q 5	53	40.8
Q 7	69	53.1
Q 8	60	46.2
Q 9	65	50
Q 12	56	43.1
Q 13	54	41.5
Q 14	45	34.6
Q 15	56	43.1
Q 17	51	39.2

Table 3: Satisfied

**Fairly satisfied:** The consumers stated that they were fairly satisfied for three of the questions (question numbers. 3, 4 and 6). The areas of these three questions included:

- a) The time and attention provided during evaluation and therapy (Q 3)
- b) Duration of speech language therapy i.e. 45 minutes (Q 4) and,
- c) Information provided about the clinical condition by the clinician during evaluation (Q 6).

Table-4 shows the total frequency and percentage of responses for these questions.

Question no.	Frequency	Percent %
Q 3	54	41.5
Q 4	46	35.4
Q 6	50	38.5

Table 4: Fairly satisfied

## Discussion

The results of the study have been discussed under the following two headings:

1. Group wise analysis
2. Question wise analysis

### 1. Group wise analysis

The group wise analysis shows that amongst all the disorders groups considered in the study, the mean percentage satisfaction level was highest for HL (73.92%) group followed by LD (72.89%), ART (72.45%), AUT (72.10%), APHASIA (71.05%), CP (70.35%) and lowest for MR (68.09%) group.

The results demonstrate that the satisfaction level of all the groups fall in a continuum with HL group falling at the top and the MR group at the bottom. The more satisfaction shown by the other groups than MR group illustrates that these groups have revealed better progress which is a sign of higher satisfaction by the parents/caregivers. The least satisfaction level of the MR group can be attributed to the fact that the MR group usually shows a slow prognosis in their communication skills due to a global delay in various skills. Thus, a more holistic approach should be used for their rehabilitation. Also, professionals need to spend more time and effort in counseling and developing better clinical strategies for children with mental retardation.

### 2. Question wise analysis

The question wise analysis has shown that over all consumers were either very much satisfied, satisfied or fairly satisfied with most of the clinical services of the Institute. However, the fairly satisfied areas need to be strengthened. It may also be noted that there was no domain in the

questionnaire in which a not satisfied response was obtained on an average which shows that the Institute is successful in delivering comprehensive and adequate clinical services to the persons with communication disorders. The results of the study do represent the accountability shown by the Institute in maintaining the quality of rehabilitation services. These services have a positive impact in improving the quality of life for persons with communication disorders. The high consumer satisfaction index (72%) reflects that the Institute is capable of rendering prompt, proficient and skilful services by the expert professionals in the area of communication disorders.

Overall it was reported by the parents/caregivers that the help and support from health professionals enabled them to manage more effectively the condition of the persons with communication disorders. However, few areas of concern relate to the information they receive about the condition; communication between themselves and health professionals; and managing the condition at school and home.

## Conclusions

An exploratory study was carried out to calculate the consumer satisfaction index for the speech, language and hearing services provided at All India Institute of Speech and Hearing, Mysore. The responses of the parents/caregivers ranged from very much satisfied to fairly satisfied. The group analysis revealed that the parents of HL group were maximally satisfied with the clinical services of the Institute whereas the parents of the MR group were less satisfied with the clinical services of the Institute which can be attributed to the slow prognosis of the communication skills in the MR group.

Though this was an exploratory study in which a small survey has reflected the 72% consumer satisfaction index of the clinical services rendered by the institute. The results have shown an above average performance of the institute in terms of clinical services. However, there are few gray areas in which the clinical services need to be reviewed to maintain and improve upon the consumer satisfaction.

Thus, it is advocated that the professionals should emphasize on evaluating themselves regularly so as to get an adequate and appropriate timely feedback about their clinical services. As the consumers are paying for the services, they have the right to get the best clinical services and it is the duty of the professionals to address the needs of the consumers which is also being addressed in the consumer protection act.

## References

- Brogan, C.A. & Knussen, C. (2003). The disclosure of a diagnosis of an autistic spectrum disorder: determinants of satisfaction in a sample of Scottish parents. *Autism*. March; 7(1):31-46.
- Cox, Robyn, M., Alexander, & Genevieve, C. (1999). Measuring Satisfaction with Amplification in Daily Life: the SADL scale. *Ear Hearing journal*. August; 20(4):306-20.
- Fellendorf, G.W. (1975). Symposium on sensor neural hearing loss in children: early detection and intervention. Delivery systems in the management of hearing impaired children. *Otolaryngologic Clinics of North America journal*. February; 8(1):187-218.
- Hasnat, M.J., & Graves, P. (2000). Disclosure of developmental disability: a study of parent satisfaction and the determinants of satisfaction. *Journal of Paediatrics and Child Health*. February; 36(1):32-5.
- Sloper, P., & Turner, S. (1993). Determinants of parental satisfaction with disclosure of disability. *Developmental Medicine and Child Neurology*. September; 35(9):816-25.
- Woodward, C.A., Santa-Barbara, J., Levin, S., & Epstein, N.B. (1978). Aspects of consumer satisfaction with brief family therapy. *Family Process*. December; 17(4):399-407.

## Acknowledgments

We thank Dr. Vijayalakshmi Basavaraj, Director, AIISH, Mysore for permitting us to take up the study.

## Appendix-I

### Questionnaire

**Serial no.:**

**Case name:**

**Age/Gender:**

**Provisional Diagnosis:**

**Name of the guardian:**

**Duration of therapy attending in AIISH:**

**Please answer the following questions by ticking the correct option**

1. Are you satisfied with the services provided by the Institute?
  - a) Not satisfied
  - b) Satisfied
  - c) Fairly satisfied
  - d) Very much satisfied
2. What do you feel about the services provided by the Institute?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
3. Do you feel the time and attention provided to you during evaluation and therapy is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
4. Do you feel the duration of time provided to you during therapy (ie. 45 min) is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
5. Do you feel the number of days per week provided to you for therapy is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
6. Do you feel the information provided about the clinical condition by the clinician during evaluation is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
7. Do you feel the information provided about the clinical condition by the clinician during therapy is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate



8. Do you feel the home training program provided by the clinician is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
9. Are you satisfied with the improvement in your child?
  - a) Not satisfied
  - b) Satisfied
  - c) Fairly satisfied
  - d) Very much satisfied
10. Do you feel the fees collected by the institute for evaluation is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
11. Do you feel the fees collected by the institute for therapy is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
12. Do you feel the approach of the Institute staff towards you / your child is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
13. Is the information given by the clinician about the various concessional facilities provided by the Govt. of India or GOK?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
14. Is the barrier free environment of the Institute?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
15. Do you feel the availability of services provided by the other medical professionals at AIISH is?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
16. Do you feel that the Speech Language Therapy has helped him /her at school or at work place?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
17. Do you feel the orientation programs /educational material is helping you to know better about him/her?
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
18. Do you feel the amount of time you are spending on him/her at home is
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
19. Do you feel the support you are getting from your family in improving his / her condition is
  - a) Not adequate
  - b) Adequate
  - c) Fairly adequate
  - d) Very much adequate
20. Apart from the above mentioned question would you like to give any other suggestions to improve our services?