

SPEECH AND HEARING SCREENING CAMPS AND EXHIBITIONS A BRIEF REPORT

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Abstract

To educate the public speech and hearing screening camps and exhibitions were conducted. Hitherto seven camps and eight exhibitions have been conducted at different places of southern Mysore state. The need for such camps and exhibitions and details about these camps have been discussed.

It has been estimated that 5 per cent of our population are suffering from speech and hearing problems (Martin F. Palmer 1963). Several other studies have also been reported on prevalence of hearing loss (Dr Kapur 1967, 16.30 per cent; Dr Gupta 1965, 35.40 per cent; Drs Bhatia and Mishra 1961, 28 and 30 per cent; Dr Jain 1967, 37 per cent; Dr Kameswaran 1967, 17 per cent; Miss Shailaja Nikam 1971, 3.90 per cent of school going children; Viswanath *et al.*, 1971, 22.80 per cent of rural school going children).

Since 1966-72, only 9672 cases have sought help from the specialists at the AIISH, Mysore and probably a similar percentage from the handicapped group might have visited other speech and hearing clinics for help. But this percentage is very low when compared with the total handicapped population. This would lead one to think of the possibilities or problems that a handicapped person may be facing in not seeking help from the specialists.

The possible factors for which an handicapped person being unable to seek help from the specialists may be:

1. Ignorance of the problem and ignorance of the facilities available for the treatment of these problems: A speech and hearing problem may not be identified by the society and even if it is identified, the society may be under the impression that it is not possible to overcome this problem and it is a curse of the god. Some others who would like to overcome these problems may not be aware of the facilities available in this country, as this is a new speciality.
2. Lack of facility—the number of speech and hearing centres in the country is very small. So the people who are in need of these specialists may not be able to approach them because of the distance and other difficulties. Thus people do not get the facility of trained personnel and cannot take proper care.

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3. Attitude of the society—the attitude towards the handicapped in India leaves much to be desired. The average Indian family is ignorant of the true nature of the handicapped condition and rehabilitation aspects. Therefore the society neglects the gravity of the situation as far as the rehabilitation of the handicapped is concerned and thus creating a sense of inadequacy in them.

These factors show that there is a great need for public education, so that these handicapped population can approach the specialists for help and also to change the attitude of the society towards speech and hearing handicapped.

There are many ways by which we can educate the public. Conducting camps and exhibitions is one of them. In this direction the All India Institute of Speech and Hearing, Mysore which is a training Institute has conducted seven (7) camps and eight (8) exhibitions at different places of southern Mysore state under the S. R. S. Projects (V.R.A. IND-38-68).

These exhibitions and camps were conducted to give training to the students in conducting such camps and exhibitions and also to educate the public. These camps also give an idea about the prevalence of speech and hearing problems.

With the help of the Rotarians, Lions and local doctors the screening camps and exhibitions were arranged, pre-camp publicity was done by the local agencies through newspapers, distribution of pamphlets and projection of slides in theatres.

In response to the pre-camp publicity cases with speech and hearing problems voluntarily reported for examination and advise. Therefore the data in this study is restricted to self-referred cases, and may not hold true to the general population. There may have many people who had problem but who did not report for any reasons.

As the case load in the camps was high the time at our disposal was short, we did not test every one for all problems as is routinely done at our Institute. Hence we adopted the categorisation of the cases i.e. the cases were channellised to speech and hearing department depending upon the nature of the problem. For example Stutterers who were able to respond to normal conversation were not directed for hearing evaluation. They were directly sent to Psychological and Speech evaluation.

Method

The Speech and Hearing evaluation was done at different stages. A brief case history was taken. E.N.T. examination was done by an Otolaryngologist. Then they were directed for hearing evaluation.

The Audiometry was done in rooms where the noise level was at satisfactory level for testing purposes. The Audiometry was done with the help of portable Audiometers (Beltone 12-D, Madsen) which were calibrated.

The frequencies tested were 1000 Hz, 2000 Hz, 4000 Hz, and 500 Hz. The presentation level at frequencies at 1 K, 2 K and 4 K were 20 dB and 30 dB at 500 Hz. These levels were validated at the Institute on 50 children with normal E.N.T. and hearing findings (Nikam 1970). The frequencies were presented in the order given above to each subject.

The test was considered positive (i.e. the examinee has failed) if there was no response at the given level in two or more frequencies in the same ear or in the same frequency in both the ears. However, if the test was positive only for 2 K and 4 K in one ear, the other ear being negative the test was extended to 6 KHz and 8 KHz (Presentation level same as in 2 KHz and 4 KHz) as this would facilitate in detecting early progressive S. N. loss cases. The failed positive cases were referred to the Institute for a thorough check-up.

Psychological and Speech evaluations were done after Audiometry. A Seguin form board test was administered for children below 10 years, and for adults Bhatia's battery of intelligence test was administered to assess intelligence of these cases. After this a detailed psychological evaluation was done by a Clinical Psychologist.

Peripheral Speech mechanism was tested to rule out any other organic involvement. Picture cards were used for Articulation testing and Stroboscopic measurements were used for Puberphonia cases. Speech evaluation was done for other speech problems.

Therapy was demonstrated to the cases of Stuttering, Voice and Articulation. Prolongation and Shadowing were demonstrated for Stuttering cases, Voice training for puberphonics and Articulation therapy for mis-articulation cases. Mis-articulated sounds were corrected. They were asked to practice at home. They were asked to report to the Institute if necessary. The other cases were counselled regarding their problem.

Different models, equipment used for diagnosis and therapy, different charts were exhibited to educate the public regarding speech and hearing problems. Speech samples of different speech problems before and after therapy were demonstrated with the help of a tape recorded to give an idea of different speech problems, and the improvement shown by these cases.

Results and Discussion

In all, (2670) 2810 cases were screened for various speech and hearing problems. Out of 2810 cases 1210 had hearing loss and 1186 had speech problems.

Table 1 shows the distribution of cases at different camps. About 60 per cent of the hard of hearing cases had C.S.O.M., wax and other otological abnormalities. The prevalence of high percentage of hearing loss may be due to lack of availability of E.N.T. specialists in the district hospitals, which prevents these cases from seeking proper medical attention at the early stages of the **problem**.

Among Speech problems delayed language was found to be more frequent.

About 322 speech cases were mentally retarded. Table 2 shows the prevalence of speech problems with M. R. Only 172 cases were mentally retarded without any speech problem.

Out of 2310 cases 88 cases reported history of consanguinity. Table 3 shows the prevalence of speech and hearing problems among the cases who reported the history of consanguinity.

TABLE 1

Camp		Stutter- ing	Misarti- culation	Dyspho- nia	Sp. pro- blems with org.ana- mologies	E.N.T. Prob- lems	Miscel- laneous	Total	
Davangere	258	32	107	22	12	27	2	8	468
Kollegal	38	20	30	2	10	1	4	8	113
Chickaballapur:	110	87	41	17	11	6	31	47	350
Mercara	56	39	5	7	3	4	5	5	124
Gauribidunur	165	111	48	32	9	7	7	84	463
Virajpet	266	120	117	31	17	11	9	112	683
Hunsur	317	103	61	21	9	6	5	87	609
Total	1210	512	409	132	71	62	63	351	2810
Percentage	43.08%	18.23%	14.55%,	4.69%	2.52%	2.20%	2.24%	12.49%	100

TABLE 2. Showing the prevalence of speech and hearing problems with Mental Retardation
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Sl. No.	No. of cases	Percentage
1. Delayed Language	223	69.28%
2. Mis-Articulation	48	14.91%
3. Hearing Loss	9	2.79%
4. Stuttering	39	12.12%
5. Cleft palate	3	0.90%
Total	322	100.00

TABLE 3. Showing the prevalence of speech and hearing problems with the history of consanguinity

<i>Sl. No.</i>	<i>Problem</i>	<i>No. of cases</i>	<i>Percentage</i>
1.	Hearing loss	7	7.90%
2.	Delayed language	74	84.22%
3.	Cerebral Palsy	2	2.24%
4.	Mis-Articulation	2	2.24%
5.	Stuttering	3	3.40%
Total		88	100.00

63 cases i.e., 2.24 percent reported different E.N.T. problems, without any speech or hearing problem.

Out of 700 cases who were referred to the AIISH, Mysore for further investigation and treatment, 125 cases have reported and are still reporting. Follow-up cards have been sent for those who have not reported.

This study shows the great prevalence of speech and hearing problems. It is clear that:

1. Such camps and exhibitions should be conducted to:
 - (a) find out the prevalence of speech and hearing problems
 - (b) and educate the public.
2. There is urgent need for the establishment of more and more speech and hearing centers, round the country.

Conclusions

1. The incidence of hearing loss is higher than the speech problems.
2. 60 per cent of the hearing loss cases had abnormal E.N.T. findings.
3. The incidence of Delayed Language is higher when compared with other speech problems.
4. 322 (27.15%) M.R. children found to have speech problems.
5. 88 cases reported history of consanguinity.

These conclusions are drawn from the cases seen at the camps. It must be remembered that these cases were self-referrals.

We do not know if there were more cases with speech and hearing problems who did not report to us nor do we know the characteristics of the universe, ex. the prevalence of consanguinity.

These limit the value of our conclusions to the cases seen. However even if these are only partial cases they are large enough to demand attention. If we hypothesise that there may be more cases who did not report, that only enhances the need for more speech and hearing centres.

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