

# Effectiveness of Orientation Program on Communication Disorders for ASHA Workers of Mysuru, Mandya and Chamarajanagar Districts

Savithri S R<sup>1</sup>, Rajasudhakar R<sup>2</sup>, Priya M B<sup>3</sup>, Aishwarya N<sup>4</sup>

<sup>1</sup>Director, All India Institute of Speech & Hearing, Mysuru-06.

<sup>2</sup>Reader in Speech Sciences & Department of Speech-Language Sciences, All India Institute of Speech & Hearing, Mysuru-06.

<sup>3</sup>Lecturer, Department of Speech-Language Sciences, All India Institute of Speech & Hearing, Mysuru-06.

<sup>4</sup>Speech-Language Pathologist (Grade I), All India Institute of Speech & Hearing, Mysuru-06.

Corresponding Author: Rajasudhakar R

## ABSTRACT

Accredited Social Health Activist (ASHA) workers play an important role in educating, creating awareness and implementing any health related program in their community. The present study investigated the knowledge of ASHA workers related to communication disorders prior to and immediately after an orientation programme. Two hundred and eight ASHA workers in the age range of 24-51 years with experience ranging from 1-10 years participated in the study. Three lectures on speech, language and hearing disorders were highlighted by experienced Speech & Hearing professionals to ASHA workers in series of orientation programmes. Results indicated that the knowledge of ASHA workers on communication disorders improved after the orientation program. The pre-test score was 63.6% and the post test score was 80.2% which indicated the benefits of short term orientation programme. The findings of this study suggests that ASHA workers can be effectively involved in identifying and referring clients with communication disorders to concerned professionals at community level.

**Key words:** Sensitization program, Community health worker, Communication disorders, Effectiveness, Orientation program.

## INTRODUCTION

In India, services related to health care, especially for urban populations are provided by Primary Health Centres (PHCs). The main reason for introducing the concept of Primary Health Centre is to integrate curative health facilities as well as give importance to various preventive measures related to health services. [1] They also serve as a basic functional and structural body of health related services to the public. In addition, PHCs were initiated with the objective of providing accessible and affordable health services to people in

rural regions. Presently, in India there are about 25,308 PHCs of which 2,353 PHCs are functioning in Karnataka (Statistical report). [2] According to Census of India 2011, the total number of rural population is 833,087,662 which accounts for 68.84% of the total population of India. Due to large distribution of population in rural areas, it is essential to establish and provide proper health facilities to the people. In accordance with this, the concept of the National Rural Health Mission (NRHM) was introduced by United Progressive Alliance (UPA) government. NRHM was

started initially across different states for the duration of seven years (2005-2012) and has been continued there on.

The pivotal goals of NRHM are (i) to make people to get access for “primary health care” (ii) to provide quality, affordable and flexible access for the primary health care in rural areas, and (iii) to create awareness regarding available health policies.

In addition, the NRHM initiated to develop new cadre of community health worker called ASHA workers (Accredited Social Health Activist) in the year 2005, where these community health workers played a major role in serving people who belong to their community. Simultaneously, they act as the mediator between village community and health centres. The concept of introducing ASHA workers has made greater impact in utilization of health services at the grassroots level and also helped various health programs reach people effectively.

ASHA workers provide the outreach health services at their community level, according to the ASHA guidelines.<sup>[3]</sup> Female residents of the respective village who know to read, write and speak the native language of their respective community or region are eligible to serve as ASHA workers. There would be one ASHA worker per 1,000 populations across all villages in every district. These members are selected from Gramasabha and hence are accountable to the Village Panchayath. These community health workers play an important role in creating awareness about various health programs, motivating and educating rural population to access the existing health services and more importantly, it is done at their doorsteps. The ASHA workers also serve as the connecting bridge between rural population and health care professionals. As a result, ASHA workers generally have a good rapport with the people of their community and are effective in convincing them to receive the essential and available services.

Meeting the health requirement of people at the grassroots level is the need of the hour and ASHA workers play a significant role in ensuring the same. One of the primary responsibilities of ASHA workers is to mobilize the community and facilitate them in accessing health and health related services available at Anganwadi/ Sub Centre/ Primary Health Centers. Today’s need is to meet the health requirement of the people in their community at grass-root levels. Thus, it is highly essential to impart, improvise and assess the knowledge of ASHA workers regarding available services at Primary Health Centre on general health related issues. Especially in a country like India, knowledge and awareness related to speech and hearing problems is minimal in rural population than in urban population.<sup>[4]</sup>

Few attempts were made by professionals working in the field of health related sector who investigated the awareness level, knowledge and various underlining factors contributing to awareness and knowledge among the ASHA workers. The performance, motivation of Community Health Workers (CHWs) and its determinants on India's programme related to Accredited Social Health Activist (ASHA) was assessed.<sup>[5]</sup> A total of three hundred and eighty six CHWs who represented 10% of the total CHWs from few selected districts of Odisha through a multi-stage stratified sampling participated in the study. The authors concluded that community health programmes could motivate and inspire local untrained women in the community. The motivation to perform better solely depended on the willingness to gain social recognition, social responsibility and trust within their community, self-efficacy of CHWs. According to the authors, management of CHWs requires certain modifications in terms of adequate supervision, knowledge enrichment and working modalities.

The knowledge, attitude and practice of ASHA workers towards the health of children below five years of age using a

questionnaire were assessed. [6] The association of these factors with the level of education and total duration of services of ASHA workers were also analysed. A total of one hundred and thirty ASHA workers belonging to Surendranagar district of Gujarat State were selected through simple random sampling. Authors reported that 86.2% of ASHA workers had lack of knowledge about new born care. Almost 70% of them identified the causes of diarrhoea; however, 91.5% of them had lack of knowledge on the signs of dehydration. Approximately, 68.46% had adequate knowledge about measles & pneumonia. Nearly 80.77% of them were aware about signs/symptoms of malaria. Authors concluded from the results of the study that training plays a pivotal role in building capacity and performance of ASHA workers. Also, authors pointed out that such training programs must be well timed and effectively delivered more frequently with improved quality.

The feasibility of involving ASHA workers in new born care was investigated. [7] Thirty three ASHA workers were selected from the districts of Haryana and trained for one day followed by two refresher trainings on different components of neonatal care as well as antenatal care, intranatal care, and recording and reporting new born care. ASHA workers' knowledge related to new born care was assessed through a questionnaire consisting of 11 multiple choice questions. Assessment was carried out before training before training, and immediately after training, and after 3 and 6 months of post training interval. The results revealed that scores obtained by ASHA workers about new born care before training were inadequate or minimal which increased after completing the training module. The authors therefore concluded that ASHA workers might be effectively involved in offering care to new born with adequate knowledge after training. Further, the authors opined that such training programs for ASHA workers would ensure

a stronger emphasis on skill enrichment and practical experience.

A similar study was carried out in Bijapur district of Karnataka. [8] One hundred and thirty two ASHA workers within the age range of 26-30 years were recruited from different PHCs of Bijapur. The knowledge of ASHA workers on antenatal and postnatal care was evaluated through interview method by using a structured proforma. The results revealed that 75% of ASHA workers had the knowledge of antenatal and postnatal care. It was thus concluded that quality of training should be enhanced and refresher trainings should be planned regularly for ASHA workers with the aim to complete the training modules.

The utility of ASHA workers in successful implementation of health and health care services in the rural areas, albeit with adequate training, has been widely reported in the recent past. However, the knowledge of ASHA workers in the area of communication disorders has not been explored much. There is a growing need to create awareness about communication disorders and implement various preventive measures to reduce the same especially among the rural population. This will also facilitate in indirectly understanding the various superstitious beliefs, myths on communication disorders that is prevalent in this population. Hence, the present study aimed to evaluate the effectiveness of orientation program related to communication disorders on the knowledge of ASHA workers belonging to three different districts in the State of Karnataka namely Mysuru, Mandya and Chamarajanagar. Specifically, the baseline knowledge of ASHA workers on communication disorders was evaluated and the pre- and post-test questionnaire scores of ASHA workers belonging to the three districts were compared.

## **METHOD**

### **Participants**

Two hundred and eight ASHA workers in the age range of 24 to 51 years (mean age: 35 years) with experience ranging from 1-10 years participated in the study. Out of 208 participants, 57 ASHA workers were from Gavdagere and Kasaba I hoblis of Hunsur Taluk, Mysuru District, 78 ASHA workers belonged to Kasaba I and Melkote hoblis of Pandavapura Taluk, Mandya District and 73 ASHA workers were from Harave hobli of Chamarajanagar Taluk, Chamarajanagar District of Karnataka State. All the ASHA workers were native speakers of Kannada language and had minimum schooling up to secondary education (8<sup>th</sup> grade to 10<sup>th</sup> grade).

## **MATERIALS**

A set of 25 relevant close ended (Yes/No) questions to assess the knowledge of ASHA workers on communication disorders were prepared in Kannada. The questions were related to causes, features, signs and symptoms, prevention and common treatment options of various communication disorders were covered in the questionnaire. Three Speech Language Pathologists and three Audiologists who were native Kannada speakers with 8-10 years of experience in assessment and management of communication disorders were asked to validate the questionnaire. They were specifically asked to judge the relevance of the questions and also check the sentence structure. Based on the feedback of the obtained, modifications were incorporated and the questions best agreed by the six individuals (3 SLPs and 3 Audiologists) were selected for the study. Thus, the questionnaire was finalized with a total of 15 questions and is given in Appendix A.

## **Procedure**

ASHA workers from each district (Mysuru, Mandya and Chamarajanagar) were invited to the All India Institute of Speech and Hearing, Mysuru on three different days in the months of January and March 2018. They were oriented for one full

day in Kannada on 3 topics related to speech disorders in children and adults, language disorders in children and adults and hearing disorders. Each topic was presented for 45 minutes followed by discussion sessions. The lectures were delivered by qualified Speech Language Pathologists/Audiologists with 3 to 4 years of experience in assessment and management of various communication disorders. Information presented in the first lecture on speech disorders in children and adults comprised of details on cleft lip/palate, stuttering, misarticulation and voice disorders. The second lecture on language disorders highlighted on intellectual disability, cerebral palsy, aphasia, autism and the third lecture was on hearing disorders/ENT diseases and conditions (sensorineural hearing loss, structural anomalies of the ear). Audio and video samples of the disorders were projected during the lecture for better understanding and explanation on the incidence and prevalence of each disorder, causes, signs and symptoms, assessment, management options were also done.

The questionnaire was administered twice, that is before orientation (Pre-test condition) and after orientation (Post-test condition). The ASHA workers were instructed to read the questionnaire carefully and answer each question by marking either "YES" or "NO". A score of +1 was given for the correct answer and no score (zero, 0) was given for the wrong answers. Then, the pre-test and post-test responses were analysed and compiled for further analysis using Statistical Packages for Social Sciences (SPSS), version 21, software. The data was subjected to a normality check using Shapiro-Wilk's test of normality which revealed that the data was skewed. Since the data did not abide to the properties of normal distribution, non-parametric tests such as Kruskal-Wallis test, Mann-Whitney U test and Wilcoxon signed rank test were applied in order to compare between pre and post-test conditions across the three districts.

## RESULTS

The mean scores obtained by ASHA workers in the post test condition (after orientation lectures) were higher compared to the pre-test scores in Mysuru, Mandya and Chamarajanagar districts. Table 1 shows the mean, median and standard deviation of the scores obtained by ASHA workers in pre- and post test conditions across three districts.

**Table 1: Mean, Median and Standard deviation (SD) of the scores in Pre and Post test conditions across three districts**

Districts	Overall Scores			
	Conditions	Mean	Median	SD
Mysuru	Pre test	10.33	10.00	2.09
	Post test	11.74	12.00	1.35
Mandya	Pre test	10.31	11.00	2.17
	Post test	12.31	12.00	1.04
Chamarajanagar	Pre test	11.00	11.00	1.74
	Post test	12.03	12.00	1.11

### **Comparison of pre test and post test scores across districts:**

Kruskal Wallis test was administered to compare the scores obtained by ASHA workers across the three districts separately in the pre test and post test conditions. Results of the Kruskal Wallis test revealed no significant difference ( $\chi^2 (2) = 5.778$ ,  $p > 0.05$ ) in pre-test scores across three Districts indicating that ASHA workers of all three districts had similar amount of prior knowledge on communication disorders prior to the orientation program. However, a significant difference was observed in the post test scores of ASHA workers across the three districts ( $\chi^2 (2) = 8.769$ ,  $p < 0.05$ ). Pairwise comparison using Mann-Whitney U test showed significant difference between Mysuru and Mandya ( $|Z| = 2.818$ ,  $p < 0.01$ ) but not between Mysuru and Chamarajanagar ( $|Z| = 1.40$ ,  $p > 0.05$ ) and between Mandya and Chamarajanagar ( $|Z| = 1.81$ ,  $p > 0.05$ ). Thus, ASHA workers of Mandya district obtained the highest scores in the pre test followed by their contemporaries from Mysuru and Chamarajanagar districts.

### **Comparison between pre test and post test scores within districts:**

The scores obtained by ASHA workers in pre test and post test conditions

were compared within each district. Wilcoxon Signed rank test was used to compare between pre- and post test scores followed by computations of effect size using *Cohen's d*. The results revealed significant difference between pre- and post-test scores for Mysuru ( $|Z| = 4.59$ ,  $p < 0.01$ ,  $r = 0.80$ ), Mandya ( $|Z| = 6.43$ ,  $p < 0.01$ ,  $r = 1.17$ ) as well as Chamarajanagar ( $|Z| = 4.63$ ,  $p < 0.01$ ,  $r = 0.69$ ) districts with large effect sizes. The post-test scores were significantly higher compared to pre-test scores in each of the three districts.

## DISCUSSION

The result of the study revealed several points of interest. **First**, the pre-test score was higher in ASHA workers from Chamarajanagar district compared to those from Mysuru and Mandya districts and it was least in ASHA workers from Mandya district. ASHA workers from Chamarajanagar had attended more number of health related training and induction programs compared to ASHA workers of other two districts. This could have led to better knowledge and consequently higher pre-test scores of ASHA workers from Chamarajanagar prior to the orientation program. **Second**, the overall post-test scores were significantly higher from pre-test scores in ASHA workers of all three districts. This indicated that the ASHA workers have gained considerable knowledge from the orientation program on communication disorders. In terms of percentage, scores increased from 63.6% in the pre-test to 80.2% in the post-test condition indicating that the orientation program was effective. The result of the present study supports the findings of [7] where they reported that the knowledge on new born care had increased after completing the training module in 33 ASHA workers at Haryana. The results are also in consonance with the findings of [6] who reported that the training program had increased the ASHA workers' knowledge, attitude and performance related to health care of children below 5 years of age. **Third**,

although the post-test scores increased significantly compared to the pre-test scores in all three districts and maximal improvement was observed for ASHA workers from Mandya district. ASHA workers from Mandya district are relatively younger in age when compared to those from the other two districts. Hence, the motivation to learn more about communication disorders could have been higher in this group resulting in better performance in assessment after the orientation program as reflected by higher post-test scores. **Fourth**, the variability of scores (as evident from the standard deviation values) reduced in post-test compared to pre-test condition for ASHA workers in all the three districts.

The short term training on communication disorders considerably increased the awareness and knowledge levels of ASHA workers from Mysuru, Mandya and Chamarajanagar districts. Therefore, it is plausible that ASHA workers can effectively deliver their duty in the community in identifying persons with communication disorders and referring them to the concerned professionals.

## CONCLUSIONS

Educating ASHA workers in the field of communication disorders is pivotal for several reasons. It would basically help people in the community to gain knowledge about different communication disorders, various preventive measures and also the possible treatment options. These can be implemented along with the other health and health related services provided by the ASHA workers. This study mainly focused on assessing the knowledge of ASHA workers on communication disorders in the districts of Mysuru, Mandya and Chamarajanagar. A questionnaire was used for assessment before and after an orientation program provided by qualified Speech-Language Pathologists and Audiologists. Results revealed an increase in post-test scores compared to pre-test

scores in all three districts of ASHA workers.

The results of the present study thus provide evidence to the efficiency of short term orientation programmes in enriching the knowledge of ASHA workers. With this knowledge, the ASHA workers can present a clear picture about the impact of communication disorders on day to day life to the community in an effective way. Such orientation programmes should be done frequently for ASHA workers in order to enrich their skills and knowledge on communication disorders. This in turn will help the general public to gain information at the community level about various diagnostic and therapeutic centres or service providers for different treatment options that are available for persons with communication disorders. However, it is essential to again evaluate the knowledge of ASHA workers three months or six months after the orientation program to investigate the long term effect or retention of information. Similar studies can also be done on ASHA workers or other community health workers in other districts or states in future.

## ACKNOWLEDGMENTS

The authors are grateful to the Director, AIISH, Mysuru for permitting us to conduct the study. This article is a part of the project titled '*Survey of Communication disorders by trained ASHA workers in the Districts of Mysuru, Mandya and Chamarajanagar*'. The authors also express their gratitude to all the project staff who directly or indirectly helped in preparing this manuscript and the participants of the study.

## REFERENCES

1. Bhore, K. Government of India, Health Survey and Development Committee, Report, (1946). Volume-1, Delhi, Publications Division.
2. Government of India, Ministry of Health and Family Welfare, Statistics Division, Rural Health Statistics 2014-15.
3. Guidelines on Accredited Social Health Activists (ASHA): Annex1.Ministry of

- Health and Family Welfare; 2005. New Delhi, India.
4. Borneo news online. (2014). <http://www.theborneopost.com/2014/04/24/parents-in-rural-area-lack-awareness-on-autism-and-its-symptoms-says-society/>.
  5. Gopalan, S. S., Mohanty, S., & Das, A. Assessing community health workers' performance motivation: A mixed-methods approach on India Accredited Social Health Activists (ASHA) programme. *BMJ open*. (2012); 2 (5): 5-10.
  6. Mahyavanshi, D. K., Patel, M. G., Kartha, G., Purani, S. K., & Nagar, S. S. A cross sectional study of the knowledge, attitude and practice of ASHA workers regarding child health (under five years of age) in Surendranagar district. *Infection*. (2011); 72: 55-38.
  7. Stalin, P., Krishnan, A., Rai, S. K., & Agarwal, R. K. ASHA's involvement in newborn care: A feasibility study. *Indian Pediatrics*. (2011); 48(11): 897-899.
  8. Shashank, K. J., & Angadi, M. M. A study to evaluate the knowledge of ASHA workers on antenatal and postnatal care in Bijapur district. *International Journal of Research in Medical Sciences*. (2015); 3(9): 2299-2302.

How to cite this article: Savithri SR, Rajasudhakar R, Priya MB et.al. Effectiveness of orientation program on communication disorders for asha workers of Mysuru, Mandya and Chamarajanagar districts. *Int J Health Sci Res*. 2018; 8(11):1-7.

\*\*\*\*\*