Survey on the Services to be Provided by Speech Language and Hearing Professionals, Personnel, and Allied Professionals in India

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Abstract

Introduction: It is essential that the scope of practice of any profession be defined so as to prevent malpractice. This applies to the field of speech and hearing also. This scope of practice should commensurate with the educational qualification of the individuals. Hence, the present study aimed to obtain the views of life members of the Indian Speech and Hearing Association (ISHA) on the services that can be provided by speech and hearing professionals, personnel, and allied professionals in India having different levels of education. Materials and Methods: Using a 28-item checklist, an e-survey was conducted to obtain the views of ISHA life members regarding services that can be provided by speech and hearing professionals and personnel and allied professionals in India. Results: The majority of the participants were of the view that speech and hearing personnel cannot carry out most activities independently. In addition, many indicated that speech and hearing professionals with a master’s degree onward can independently carry out clinical, research, student training, and administrative activities related to the field. They suggested restrictions on the services that can be provided by those having a bachelor’s degree and those having a degree in the special education. Conclusion: The results clearly delineate the services that can be carried out by speech and hearing personnel, professionals with varied levels of education, and by special educators. Incorporating this information in the scope of practice for those with specific levels of education may help in reducing malpractice in India in the field of speech and hearing.

Keywords: Personnel, professionals, scope of practice, speech and hearing services

INTRODUCTION

Lucid information regarding the scope of practice for speech and hearing professionals is required to enable stakeholders know services that can be provided by qualified individuals. The scope of practice of audiology and speech-language pathology varies across countries in terms of the professionals involved, their job description, their educational qualification as well as their job title.[1-8] The minimum education required to carry out certain speech and hearing services are cited in the scope of practice published by different countries.[1-8] The scope of practice of the majority of countries recommends that diploma holders should not be allowed to carry out any speech and hearing services independently.[1,3-8] However, professionals with a Bachelor’s degree in speech and hearing are allowed to practice independently in countries such as Australia,[2] UK,[3] India,[6] and South Africa.[7] In New Mexico,[4] a state in the United States of America (USA), those with a Bachelor’s degree can do so only till 2022. However, individuals with a Bachelor’s degree are not allowed to assess and manage those having vestibular disorders, dysphagia as well as those requiring cochlear implants (CI), and Augmentative and Alternative Communication (AAC). Unlike these countries, professionals with a bachelor’s degree are allowed to independently carry out only screening activities in New Mexico.[4] Further, in countries such as USA,[1] New Mexico, and South Africa,[7] the personnel other than speech and hearing personnel are allowed to rather than speech and hearing professionals. However, in other countries such as Australia,[2] UK,[3] and India,[6] professionals are not allowed to perform any activities that require the expertise of speech and hearing professionals.

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Zealand,[5] and Canada,[8] those with a bachelor’s degree are not allowed to work independently.

In contrast, it has been recommended that only those with a Master’s degree in the field can independently provide speech and hearing services in countries such as the USA,[1] New Zealand,[5] and Canada.[8] These professionals are allowed to work in any set-up where speech and hearing professionals are required. In addition, they are eligible to carry out assessment and rehabilitation services for individuals with dysphagia and vestibular disorders as well as activities related to cochlear implants as well as augmentative and alternative communication. Furthermore, they are permitted to carry out research, academic, and administrative-related work independently.

The job title and job description of speech and hearing professionals and personnel who have different educational qualifications have been separately documented in the scope of practice of many countries. These include the USA,[1] the United Kingdom (UK),[3] Australia,[2] Canada,[8] New Mexico,[4] and South Africa.[7] In India also, the job titles vary depending on the educational qualification of the individual. Those with a diploma in the field are referred to as “personnel” and those with a degree in the field are referred as “professionals.”[6] While personnel with a diploma are titled “Speech and hearing technicians” in India,[6] in other parts of the world, the terminology differs. In the USA, the American Speech and Hearing Association (ASHA) refers to them as “Audiology assistants” and “Speech-language pathologist assistants.”[9] On the other hand, in Australia, they are titled as “Audiometrists.”[2]

Although there are differences in the job titles and courses done by speech and hearing personnel and professionals used across countries, their job descriptions are similar within a professional qualification. As per the scope of practice of Canada, personnel are permitted to independently carry out only specific activities such as creating awareness.[8] Other activities related to the field are to be carried out by the personnel under the supervision of certified audiologists and/or speech-language pathologists with a degree in the field.[4] In Australia, the audiometrists are allowed to work only with adult clients and with school-aged children. However, they are not permitted to be involved in the assessment and management of infants and pre-kindergarten children.[2] However, in New Mexico,[4] India,[6] New Zealand,[5] and Canada[8] those with a diploma are only allowed to practice only under the supervision of those with a qualified degree in the field. In India, the Rehabilitation Council of India has spelt out the scope of practice of speech and hearing professionals and personnel.[6]

The scope of practice provided by RCI is in accordance with the requirements of the United Nations. The requirements include the International Classification of Functioning Disability and Health given by the World Health Organization[9] and the guidelines by the United Nations Convention on Rights of Persons with Disabilities.[10] However, it does not mention how the job description should vary depending on the level of education that the individuals have undergone. This is unlike what is described in the scope of practice by organizations of other countries where the activities are delineated separately for those with different levels of education/job titles.[1-5,7,8]

The inadequate number of speech and hearing professionals in India has led to clients with communication problems seeking help others to alleviate their difficulties, resulting malpractice. Allied professionals such as special educators are authorized to provide specific help to children with special needs to help them participate effectively either in regular schools or in special schools. However, their roles need to be clearly demarcated from that of speech language pathologists, so that professionals provide services that they are trained for. Besides these allied professionals, several individuals without the required qualifications are known to provide services to those with communication problems, based on complaints received by the executive council of the Indian Speech Language and Hearing Association (ISHA). In the absence of demarcation of the services that can or cannot be provided by Speech Language and Hearing personnel, professionals, special educators, and those not authorized to do so, curbing malpractice becomes difficult in India. This makes it difficult to take action against those who provide services beyond what they were trained to do. However, there needs to be a consensus among the ISHA members regarding the responsibilities of speech and hearing professionals and personnel, before the required information can be communicated to regulatory bodies for further action. Hence, the present study was conducted with the aim to obtain the views of ISHA life members on the services that can be provided by speech and hearing professionals, personnel and allied professionals in India with different levels of education.

### Materials and Methods

The information on the views of ISHA life members on the services to be provided in the field of speech and hearing in India was collected through an e-survey. This information was collected with reference to the specific activities that may be carried out by speech and hearing professionals, personnel, and allied professionals. The e-survey was conducted using a checklist that was developed for the purpose. Ethical clearance was taken preceding to the study from the executive council members of ISHA, which included the chairman of the Educational Standards and Ethics Committee.

### Participants

Audiologists and Speech-Language Pathologists who were registered life members of ISHA served as the participants. A total of 2224 speech and hearing professionals were approached to participate in the survey through their registered E-mails. Responses were obtained from 255 of them. The participants had 2 to approximately 35 years of experience in the field, with the majority having more than 10 years of experience.

### Material

The checklist was developed to obtain information on the activities of speech and hearing professionals that included screening and primary prevention, audiological assessment and management, speech-language assessment and management,
and other services. The other services comprised of inclusive education, student training, research, administration, and policy decisions. Content validation of the developed checklist was done by five experienced speech and hearing professionals with at least 20 years of active practice in the field. Based on their suggestions, a few items were reworded, a few were removed, and five additional items were added to the checklist. The final checklist had four major sections with a total of 28-items and each section having 3–13-items [Appendix 1]. The final checklist was transformed into a Google form, with the aim of the e-survey and the instructions given initially. The Google form was designed to obtain the responses from the participants using a drop-down menu, a multiple-choice option, or an open-ended short answer. In addition, options were given for open ended responses to obtain the views that were not covered by the checklist.

Procedure
The link to the Google form was initially sent by E-mail to 2209 registered ISHA life members. Twenty-five mails were not delivered due to changed E-mail addresses. A 1-month duration was given to the members to respond, with two reminders being sent within this period. As new life members enrolled within the month, the reminders were sent to 2224 ISHA life members. The first reminder was sent at the end of the 2nd week and the next at the end of the 3rd week after the initial mail was dispatched. A total of 255 participants replied to the survey by the end of the month.

Data analyses
The data were tabulated in a spreadsheet and analyzed using the descriptive statistics. The percentage of ISHA life members who selected a particular speech and hearing service based on the education level of the service provider was calculated.

RESULTS
The responses of the participants were regrouped under the headings “awareness and screening programs,” “assessment of speech and hearing disorders,” “management of speech and hearing disorders,” “student training activities, administrative head, research and clinical activities,” and “other services.” The “other services” included facilitating inclusive education, providing disability certificate, and serving as expert witness. The regrouping of the contents of the survey was done for ease of analyses. The percentage responses of the 255 participants under each of these categories are represented graphically [Figures 1-5]. A particular speech and hearing service was allocated for a service provider having specific educational levels/qualification, only if the consensus of ≥ 50% of the participants was attained.

Figure 1: Professionals/personnel who can carryout awareness and screening of communication disorders

Figure 2: Professionals/personnel who can carry out audiological evaluation (a), and speech and language evaluation (b). Note: The arrows highlight the minimum qualification required to carryout a particular service
Awareness and screening programs

Among the participants, 51% acceded that all speech and hearing professionals, personnel, and special educators can carry out the activities related to awareness of communication disorders independently. On the other hand, 79% of them recommended that speech, language, and hearing screening should be carried out independently by professionals who had at least a B.ASLP degree [Figure 1].
Assessment of speech and hearing disorders
The majority of the life members of ISHA opined that audiology and speech-language evaluations can be carried out independently by individuals who have at least a bachelor’s degree in the field of speech and hearing [Figure 2a and b]. However, over 80% of the participants preferred vestibular evaluation to be carried out independently by professionals having a master’s degree or Ph.D. in the field [Figure 2a].

Management of speech and hearing disorders
As observed in the activities related to assessment, the majority of the participants were of the view that the minimum educational qualification required to carry out speech, language, and hearing management is a bachelor’s degree [Figure 3]. However, 45% of the participants agreed that preparation of ear molds can be carried out by those with a diploma and higher educational qualification. More than 80% of the participants expressed that mapping of cochlear implant [Figure 3b] as well as dysphagia assessment and management [Figure 3c] should be carried out by individuals with a master’s degree, having either specialization in audiology/SLP or a dual degree. Less than 50% of the participants opined that hearing aid repair can be done by speech and hearing professionals [Figure 3a].

Student training activities
To impart clinical and theoretical training to diploma students in the field, 40% of the participants opined that the training could be done independently by professionals with a bachelor’s degree in speech and hearing. On the other hand, to train bachelor degree students, the majority of the participants (83%) indicated that the teacher should have at least a master’s degree in the field. However, the majority expressed (55%–91%) that those with a specialization in audiology or speech-language pathology were preferred to train those undergoing these specializations at the masters’ level [Figure 4a].

Administrative head
It was almost unanimously opted (97%) that speech and hearing professionals with a Ph. D. degree are preferred to head an institution or an organization independently. In contrast, approximately only 50% of the participants were of the opinion that speech and hearing professionals with a master’s degree could also head a department and get involved in policy decision [Figure 4b].

Research and clinical activities
Almost all the participants opined that speech and hearing professionals with a master’s degree are qualified to carry out research independently (79%). In addition, 78% of the participants felt that speech and hearing professionals with a bachelor’s degree or a higher degree can work independently [Figure 4c].

Other services
The other services analyzed included “facilitating inclusive education”, “providing disability certificate”, and “serving as expert witnesses”. It is evident from Figure 5 that a large number of the participants expressed that both speech and hearing (61%) and allied professionals (74%) can be involved in facilitating inclusive education. In addition, over 65% of ISHA life members were of the opinion that only speech and hearing professionals with a master’s degree can serve as an expert witness and also provide disability certificates.

Table 1 summarizes the activities that can be carried out by speech and hearing personnel, professionals as well as special educators. The table depicts the views of the majority of the life members of ISHA who participated in the study.

**DISCUSSION**

The results indicated that the majority of participants were of the opinion that diploma holders in the field of speech and hearing can independently carry out activities related to “awareness of communication disorders.” The participants probably recommended this in view of the large population in India. This would enable early identification of communication problems as many personnel/professionals would be available to disseminate the required awareness information.

The view of the participants that diploma holders should not work independently, concurred with the recommendations of the World Health Organization. Thus, it is reiterated that diploma workers in the field should not be allowed to work independently, except when creating awareness of communication disorders, using material prepared by speech-language and hearing professionals.

Furthermore, among the open-ended responses given by the participants, mixed opinions were obtained regarding conducting diploma training programs in the field of speech and hearing. A few participants opposed diploma programs...
being conducted as such personnel are preferred to be recruited as they are paid lower salaries compared to degree holders. However, it was also recommended by others to up-grade diploma programs to degree level programs so as to not further increase the number of diploma holders.

The participants also suggested that special educators could carry out “awareness activities related to communication disorders.” In addition, these professionals were recommended to make “referrals to other allied professionals,” “counsel patients and caregivers,” as well as “facilitate inclusive education.” However, majority of the participants did not recommend that they carry out other activities mentioned in the survey. Most of the participants were of the view that special educators should not carryout activities related to screening for communication problems, although their RCI approved curriculum does include screening for various disabilities. Hence, special educators probably could be included as a team member in screening for communication disorders.

Most of the participants suggested that speech and hearing professionals with a bachelor’s degree and/or with higher education in the field can work independently, doing activities mentioned in Table 1. The participants were of the opinion that these professionals could carry out routine activities related to assessment and management of communication disorders. The recommendation regarding speech and hearing professionals working independently in India is in consonance with the scope of practice of countries such as Australia,[2] South Africa,[3] and the U. K.[4] In contrast, in countries such as USA,[1] Canada,[5] and New Zealand,[6] professionals with a bachelor’s degree are not allowed to work independently. Over a period of time, India may also have to make a similar decision as that of USA, Canada, and New Zealand.

However, it was agreed that to provide services regarding the management of dysphagia and mapping of CI, those with

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<th>Table 1: Percentage of participants who recommended specific speech and hearing services to be carried out by professionals/personnel having different levels of educational/qualification</th>
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<td>Screening and primary prevention</td>
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<td>Audiological evaluation</td>
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<td>Electro-physiological evaluation</td>
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<td>Vestibular evaluation</td>
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<td>Interpretation of audiology diagnostic test results</td>
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<td>Speech-Language evaluation</td>
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<td>Assessment and diagnosis of Speech-Language Disorders</td>
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<td>Referral to other professionals</td>
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<td>Counseling patients and caregivers</td>
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<td>Fitting/programming of HA</td>
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<td>Independent research</td>
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<td>Inclusive education</td>
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<tr>
<td>Provide disability certificate</td>
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<td>Serve as expert witness</td>
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✓≥50% responses; ≧40%<50% responses; X<40% responses
In addition, only 50% of the participants opined that hearing aid repair can be done by speech and hearing professionals. The other 50% possibly felt that engineers or those who undergo specific training in hearing aid repairs should do this work.

The majority opined that training for a particular program should be done only by those holding a master’s or Ph.D. degree. This recommendation was probably made as only at the master’s level students usually have extensive practice in presenting assignments, giving them the opportunity to teach their fellow-classmates. Further, the majority felt that those with specific master’s degrees (audiology, SLP, and dual degree) teach their respective programs. This perhaps reflects that the depth of knowledge gained from these specific programs is different.

In addition, most of the participants suggested that those with a master’s degree onwards could serve as an expert witness, be involved in policy decisions, provide disability certification, carry out research activities independently, and head departments and institutions. The additional information gained at the master’s level would have enabled those with at least this level of education to execute these activities more effectively compared to those with a bachelor’s degree.

Conclusions

Thus, it can be noted that the majority of the participants opined that speech and hearing personnel having a diploma cannot carry out any activity independently other than creating awareness about communication disorders. Professionals with a bachelor’s degree onward were considered eligible to carry out activities related to awareness, screening, assessment, and management of communication disorders except for mapping of CI and evaluation and management of dysphagia and vestibular disorders. In addition, most of the participants were of the view that speech and hearing professionals with master’s degrees onward can independently carry out clinical, research, student training, and administrative activities related to the field.

The knowledge about the activities to be carried out independently by speech and hearing personnel professionals with different levels of education, and allied professionals are important to curb malpractice. This information will ensure that services are provided to those with communication disorders only by those who are eligible to do and help regulatory bodies define the scope of practice of speech and hearing personnel, professional, and allied professional.

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Conflicts of interest

There are no conflicts of interest.

References

APPENDIX

APPENDIX 1: ISHA SURVEY-2 ON ACTIVITIES OF SPEECH-LANGUAGE AND HEARING PROFESSIONALS/PERS...