

Awareness of hearing and hearing health among rural areas (South Kerala and North Kerala)

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Abstract—Audiologists are health care professionals who assess, diagnose and treat hearing- and balance-related problems (Martin & Clark, 2015). Hearing impairment remains a major public health concern. World Health Organization (WHO) recently highlighted the importance of intensifying action to prevent deafness and hearing loss, as worldwide approximately 360 million people live with hearing Impairment(WHO, 2017). The aim of the study was to compare and provide awareness among individuals on audiology profession about Hearing, hearing loss and hearing health among rural and urban population in South and North Kerala.

A systematic random sampling strategy was used to select participants in rural areas. Every third household in each of the villages visited by the research team and one adult individual per household was requested to participate in the study. A written consent was obtained from all the participants of the study.

A survey questionnaire consisting of five sections and a total of 23 open- and/or closed-ended questions consisting of demographic information, knowledge and awareness of the audiology profession, hearing and hearing loss, ear hygiene. The survey questionnaires was administered by the researcher who was fluent in Malayalam.

Study result reveals that only 41% of participants were aware of the audiology profession, indicating that individuals living in rural communities were not aware of the role of audiologist and the services they provide and when data was Compared from north to south Kerala, south Kerala population showed more awareness about the audiology profession, hearing loss and hearing health.

Highlights of the present study is to develop and implement effective strategies to increase public's awareness of hearing in rural areas in Kerala of the profession and the services provided.

Index Terms— Rural area, awareness, hearing, health, audiology, Kerala, survey, public health

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Introduction

Audiologists are health care professionals who assess, diagnose and treat hearing- and balance-related problems (Martin & Clark, 2015). Hearing impairment remains a major public health concern. World Health Organization (WHO) recently highlighted the importance of intensifying action to prevent deafness and hearing loss, as worldwide approximately 360 million people live with hearing Impairment (WHO, 2017).

The prevalence of disability hearing impairment for both adults and children is the highest in rural areas in Kerala.

There is, however, limited information on the prevalence and causes of hearing impairment in rural areas of Kerala. Rural areas in Kerala are defined as remote areas with poor infrastructure, poor basic utility service provision, low levels of literacy, limited access to health and education services and a high incidence of communicable diseases. Impacted cerumen, middle ear pathology, exposure to excessively loud music and the use of ototoxic medication have been reported as the most prevalent causes of hearing impairment in rural areas (Mulwafu, Kuper & Ensink, 2016; Pullen, 2015; Ramma & Sebothoma, 2016). Most of these causative factors can, however, be prevented, at least partially, by the improvement in the primary prevention of hearing impairment (Olusanya, Neumann & Saunders, 2014).

There is limited information on the general public's awareness of audiology and the role of audiologists. An early study on the awareness of college students' knowledge and awareness of hearing and hearing loss indicate that there is a lack of knowledge and understanding of the existence of and the role of audiologist (Lass, Woodford & Everly-Myers, 1990). Although some survey-based international studies have attempted to provide insight into the general public's awareness of the audiology, hearing and hearing health (Di Berardino et al., 2013; Gabriel, Mohammed & Paul, 2015; Lass et al., 1990; Lee, Govindara & Hon, 2005; Narayansamy, Ramkumar & Nagarajan, 2014).

Method

The aim of this study was to describe individuals' awareness of the audiology profession, Hearing and hearing loss, and hearing health among laymen in south Kerala and north Kerala.

Research context

The research was conducted in rural areas in the south Kerala and north Kerala of different District.

Participants

A systematic random sampling strategy was used to select participants in Rural areas. Every third household in each of the villages was visited by the research team and only one adult individual per household was requested to participate in the study. Individuals were only included if written consent was provided.

Inclusion criteria

- Age of the participants should be within 20 to 50yrs.
- Participants should be from that village
- Participants should understand Malayalam language.

Exclusion criteria

- Participants not within the age range
- Participants should not understand Malayalam

Procedure

A survey questionnaire was used to collect data. The questionnaire consisted of five sections and a total of 23 open- and/or closed-ended questions. The five sections of the questionnaire were demographic information, knowledge and awareness of the audiology profession, hearing and hearing loss, and ear hygiene. The survey questionnaires were administered by the research team fluent in Malayalam.

Result and Discussion

Study result reveals that only 41% of participants were aware of the audiology profession, indicating that individuals living in rural communities were not aware of the role of audiologist and the services they provide and when data was Compared from north to south Kerala, south Kerala population showed more awareness about the audiology profession, hearing loss and hearing health.

South Kerala Participants were further aware of the impact of excessive and prolonged music exposure on hearing. The most prevalent form of noise exposure in these rural villages is music. Music is often played very loudly in most events and even in churches. The use of

cell phones and MP3 players is also quite high as most teenagers and young adults use earphones to listen to music with these devices. The strategies suggested by the participants to protect their hearing from excessive noise exposure were mostly appropriate (e.g. avoid loud music, lower the volume and use ear plugs). However, some participants offered inappropriate suggestions (e.g. use cotton wool, clean ears regularly) or did not know how to protect hearing from excessive noise.

Conclusion

Highlights of the present study is to develop and implement effective strategies to increase public's awareness of hearing in rural areas in Kerala of the profession and the services provided.

References

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