



KNOWLEDGE AND ATTITUDES OF PARENTS OF CHILDREN LESS THAN 5 YEARS REGARDING EAR HEALTH, EAR INFECTIONS & HEARING HEALTH : A CROSS SECTIONAL STUDY

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ABSTRACT

Background

Burden of hearing loss in children less than 5 years are increasing in India and parent's active participation is needed for ear and hearing health. Parent's knowledge and attitudes towards same is the basis for their decisions.

Objective The aim of this study is to assess the knowledge and different practices regarding ear health, infection and hearing health among the parents of children less than 5 years

Methodology A cross sectional structured questionnaire based study was done in a tertiary care hospital in Ahmedabad. Total 230 parents of children less than 5 years were interviewed about their practices for child ear health, knowledge and practices about ear infections and hearing impairment. All answers were analysed.

Results We have interviewed most of mothers and mostly they had only primary education coming from lower socio economic class. 80% of parents were doing faulty ear cleaning practices. About 30 -38% had no knowledge about symptoms, preventions, causes and consequences of ear infections. And 69% believed in home remedies for same. All were concerned about their child hearing health but 77% had no knowledge about preventions, causes and treatment of hearing impairment in child. More than 60% knew about consulting audiologist for same but they had no idea about hearing test and government help for same.

Conclusion There is a general lack of public awareness of ear and hearing health in parents. This study highlighted the need for the National Department of Health in collaboration with ear professionals to develop and implement effective strategies to increase public's awareness of the same. This is crucial to decrease hearing loss load in India.

KEYWORDS :

INTRODUCTION

Ear infections, hearing impairment are major public health concerns. Approximately 360 million people live with disabling hearing impairment worldwide. (WHO 2017) In India, the prevalence of moderate to severe hearing impairment is about 6.3%, which consists of about 63,05,67,000 individuals, who are hearing impaired. Among this, the prevalence of childhood onset hearing impairment is 2% [2]. As per the National Sample Survey Organisation report of 2002 [3], there are 3.062 million people with hearing impairment in India with more number in rural than in the urban sectors. There are lots of faulty practices regarding ear cleaning and infections in parents till date leading to severe complications. Parents still today uses buds, matchstick to clean their child ear and leading to infections, trauma. Most of the parents in rural and even urban area are still not aware of audiology professions. Even lots of people are still not aware about common causes like impacted wax, loud noise, middle ear infections, causing hearing impairment. The literature suggests that public awareness and attitude towards disabilities in childhood are generally poor and often aggravated by superstitious customs and beliefs in developing countries [8,10-12]. India is a developing subcontinent with world's second highest population and considerably high prevalence of hearing loss. For the success of early identification and rehabilitation programs initiated by different public (like, National Program for Prevention and Control of Deafness) and private organizations, the knowledge about the awareness in parents and their attitude towards hearing loss is crucial.

Present study is aimed to know knowledge and practices of parents of children less than 5 years regarding ear health, infections and hearing of child.

This will help to provide starting point for audiologist and health care professionals regarding promotion of ear health and hearing health amongst common people.

METHODOLOGY

About 230 parents of children less than 5 year were included in study. after informed consent preformed structured questionnaire

were filled by direct interviewing them. This questionnaire included their demographic profile, education, practices for cleaning of ear, knowledge and attitudes for ear infections, knowledge about hearing health, attitudes about hearing impairment, awareness about audiology facilities.

RESULTS

Parental information			
Male	26	11%	
Female	204	89%	
Age			
18-27 yrs	83	36%	
28-37 yrs	124	54%	
38-47 yrs	23	10%	
Education			P value (<0.001) significant
none	83	36%	
primary	97	42%	
secondary	32	14%	
Higher secondary	18	8%	
Socio Economical status			P value (<0.001) significant
low	166	72%	
middle	57	25%	
high	07	3%	
Area			
rural	46	20%	
urban	184	80%	

Our study had mainly mothers as informant (89%) and average age was 29.3 yrs (range 18–47). Most of mothers had primary education only(78%) and almost 72% were from low socioeconomic status. As data was collected from tertiary care centre of a city most of mothers were from urban area.

**Awariness about ear hygiene
Ear cleaning practices**

No cleaning	46	20%
bud	60	26%
finger	79	34%
Match stick	27	12%
Others(pen,pencil,key)	18	18%

We observed that 80% parents were believing that cerumen is bad and it has to be cleaned at least once a week and was doing it with different objects and were not aware about of consequences about using this objects.

Knowledge and attitude for ear infections

Knowledge about ear infections symptoms	No knowlege	87	38%
	1 symptom	113	49%
	2 symptoms	28	12%
	>2 symptoms	2	1%
Believing in home remedies for infections	Yes (oil pouring)	159	69%
	no	71	31%
Knowledge about prevention, treatment, consequences of ear infections	yes	82	36%
	no	148	64%

We observed that most of the parents didn't know about anything of ear infections. Some had idea of only one symptom (49%) that is ear discharge. 69% parents were believing that inserting oil will treat ear infections and that they don't need any specialist for same. Almost 64% parents had no idea about how to prevent, consequences of ear infections.

Knowledge and attitudes about hearing health

Knowledge about Preventions, causes, treatment of hearing impairment	yes	53	23%
	no	177	77%
Awareness about audiology facility	no	88	38%
	Audiologist	96	42%
	Hearing test	40	16%
	Government help for treatment	7	4%

When we asked about hearing ,almost all parent were concerned about hearing impairment but 77% were not aware of anything about prevention or causes of hearing impairment in their children which includes hazards of noise, chronic infections and all.42% had idea that audiologist can do something for hearing impairment but only 16% were clear about hearing tests and only 45 were aware about government help and programs like cochlear implant for hearing impairment under school health program by government .

DISCUSSION

There is general lack of knowledge about ear and hearing health in community along with lots of faulty practices going on for self treating ear problems. Despite availability and services of expert audiologist and ENT specialist in all general hospitals general public is still not aware of the same. Unidentified hearing loss in child affects his speech, language, and academic and socio emotional

development. Under ministry of social justice now government of India is also providing free cochlear implant to children less than 5 years and there are 186 hospitals panelled for same but there is lack of knowledge amongst general public for same.

We observed that parents usually used objects to clean their child ears without knowing consequences of using it. Common complications associated with the use of cotton buds include otitis externa, otomycosis, laceration in the external auditory meatus, accumulation of wax and perforated tympanic membrane (Lee et al., 2005). Similar ear cleaning practices were reported in other studies conducted in developing countries such as Malaysia, Nigeria and South India (Gabriel et al., 2015; Lee et al., 2005; Narayansamy et al., 2014).

Parent's knowledge about ear infections were also good but it was not complete and many parent still believed of inserting oil to treat it. Most of them were not knowing about complications and causes leads to ear infections. The practice of inserting oil to treat ear infection has also been reported in rural African communities (e.g. Central Kenya) (Njoroge & Bussmann, 2006)

We observed that most of parents were sensitive about hearing health but they were not aware about hazards of loud noise, infections. In spite of this measures to prevent this was also not appropriate and the most common advise among them suggested cotton in ear. Majority of parents told that they would consult health care worker if any problem with hearing of their child but they were not knowing about audiology facility, government help, or availability of tools / methods for performing hearing test in children also.

Limitation

Present study was done in short period span and most of urban mothers coming to tertiary care hospitals were interviewed. The appropriated data would be obtained if it would have been done on larger scale including rural parents.

CONCLUSION

The findings of this study highlight the urgent call for action by all relevant stakeholders to increase existing public awareness of the audiology profession, hearing assement techniques their non invasiveness and ease of availability in health services.

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