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Assessment of Knowledge, Attitude and Practice Regarding Ear Care in Tertiary Care Institute

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ABSTRACT

Background: The habit of cleaning the external auditory canal (EAC) with cotton buds and other objects is a common practice. The present study was conducted to assess knowledge, attitude and practice regarding ear care in tertiary care institute. **Methods:** 462 subjects of both genders were provided with a questionnaire containing information regarding social status, awareness regarding ear care and other practices. **Results:** Out of 462 subjects, males were 252 and females were 210. 60% responded that cotton bud can damage ear, no by 16% and not sure by 24%, 54% showed benefits of using cotton bud, 20% said no and 26% said not sure. 26% knew about complications of use of cotton bud, 40% were not and 34% were not sure. Source of information of ear care was from media in 45%, friends by 30% and hospital by 25%. The difference was significant (P< 0.05). Knowledge levels was good in 45% and poor in 55%. The difference was non- significant (P> 0.05). Practice levels was high risk in 23% and low risk in 77%. The difference was significant (P< 0.05).**Conclusion:** Most of the subjects had poor knowledge and low risk practice regarding ear care.

Keywords: Ear care, Knowledge, Practice.

INTRODUCTION

Ear as an organ is necessary for the perception of sound and body balance. Cerumen protects the skin of the external auditory canal, assists in cleaning and lubrication. Apart from this it also provides some degree of protection from bacteria, fungi, insects and water.[1] While adequate amount of cerumen is necessary in order to avoid ear infections, excess of it may result in impaction which may cause pain, hearing loss or even dizziness.[2]

The habit of cleaning the external auditory canal (EAC) with cotton buds and other objects is a common practice. It is whispered that the ear needs to be cleaned regularly to free it of dirt in the form of ear wax. This is usually achieved by the insertion of objects into one's own ears most often with Q tips also known as cotton buds. This common practice called Self ear cleaning, has been reported to be very common.[3] The wax resulted from combined secretions of the ceruminous and sebaceous glands and desquamated epithelium from the tympanic membrane and skin lining the external auditory canal form the ear wax, well established that earwax (cerumen) protects, cleans, and lubricates the skin of the ear canal and that the normal canal has a self-cleansing mechanism and does not need to be cleaned.[4]

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Factors such as ear infection, diabetes mellitus, hypertension and excessive use of mobile phone for listening to music at high volume all can reduce hearing.[5] The present study was conducted to assess knowledge, attitude and practice regarding ear care in tertiary care institute.

MATERIALS AND METHODS

The present study was conducted among 462 subjects of both genders. All were informed regarding the study and their consent was obtained. Demographic profile such as name, age, gender etc. was recorded. A questionnaire was prepared containing information regarding social status, awareness regarding ear care and other practices. All were provided with this questionnaire and asked to fill it and return it. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

Table 1: Distribution of subjects

Total- 462		
Gender	**Males**	**Females**
Number	252	210

[Table 1] shows that out of 462 subjects, males were 252 and females were 210.

[Table 2] shows that 60% responded that cotton bud can damage ear, no by 16% and not sure by 24%, 54% showed benefits of using cotton bud, 20% said no and 26% said not sure. 26% knew about

complications of use of cotton bud, 40% were not and 34% were not sure. Source of informationof ear care was from media in 45%, friends by 30% and hospital by 25%. The difference was significant (P< 0.05).

Table 2: Knowledge regarding use of cotton bud

Questionnaire	Number	P value
Cotton bud can damage ear		
Yes	60%	0.02
No	16%	
Not sure	24%	
Benefits of using cotton bud		
Yes	54%	0.01
No	20%	
Not sure	26%	
Complications from use of cotton bud		
Yes	26%	0.05
No	40%	
Not sure	34%	
Source of information		
Media	45%	0.04
Friends	30%	
Hospital	25%	

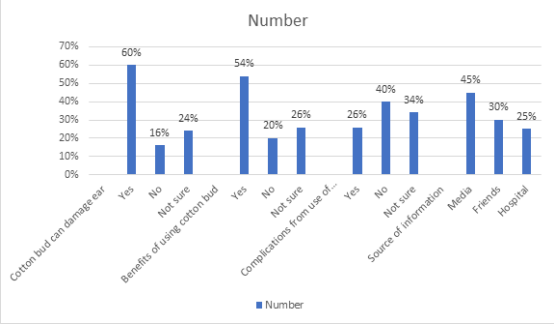

Figure 1: Knowledge regarding use of cotton bud

Table 3: Knowledge levels among subjects

Knowledge levels	Percentage	P value
Good	45%	0.72
Poor	55%	

[Table 3] shows knowledge levels was good in 45% and poor in 55%. The difference was non-significant (P> 0.05).

Table 4: Practice levels among subjects

Practice levels	Percentage	P value
High risk	23%	0.01
Low risk	77%	

[Table 4] shows that practice levels were high risk in 23% and low risk in 77%. The difference was significant (P< 0.05).

DISCUSSION

It is well-known fact that the external auditory canal (EAC) has a perfectly sufficient self-cleaning mechanism and that a cotton bud can work in opposition to this mechanism by pushing the cerumen further back into the EAC, resulting in wax impaction.[6] The continuous application of cotton buds also causes other distressing complications like traumatic injury to the EAC, otitis externa, cotton bud retention, deafness, and a perforated eardrum. The widespread prevalence of their use and the recurrently come across cotton bud-related injuries have made them a common reason for attending ENT surgeons nowadays.[7]

The ideal method of using cotton buds is to clean the auricle – the externally visible part of the ear – only. However, the use of cotton buds for inner ear cleaning is now a very common practice around the world, ranging from an alarmingly high rate of 53% up to 100%.[8] The public uses cotton buds mainly to remove ear wax (cerumen) and water and relieve itchiness, among other reasons. Certainly, there is a widespread belief that it is necessary to remove excess cerumen to maintain a good standard of ear hygiene.[9] The present study was conducted to assess knowledge, attitude and practice regarding ear care in tertiary care institute.

In present study, out of 462 subjects, males were 252 and females were 210. Dosemane et al,[10] found that 500 subjects in different education groups, 66.7%-90% did not know that 'cold' can cause ear infection and 46.7%-75.0% did not know that diabetes and hypertension can reduce hearing. When there is ear pain or discharge, people put ear drops available at home in 48.3%-75.0% across 3 age groups; 58.5%-61.5% across 3 religions and 44.8%-67.9% across 5 education groups. No statistically significant difference was found in the practice of pouring oil into ears across religions. A total of 58.6%-100% daily clean inside the ear and 70-100% use cotton buds.

We observed that 60% responded that cotton bud can damage ear, no by 16% and not sure by 24%, 54% showed benefits of using cotton bud, 20% said no and 26% said not sure. 26% knew about complications of use of cotton bud, 40% were not and 34% were not sure. Source of information of ear care was from media in 45%, friends by 30% and hospital by 25%. Alshehri et al,[11] assessed the knowledge, attitude, and practice of medical students regarding self-ear cleaning. The present study included 258 students, 71.7% of them were males, and 28.3% were females. There were 44.6% of students had good knowledge, while 55.4% had poor knowledge. Regarding attitude, 65.5% of students were cotton bud users, the most common reason for self-ear cleaning was hygiene 40.7%. Regarding practice, there were88.2% of students had low-risk practice.

We found that knowledge levels was good in 45% and poor in 55%. Practice levels was high risk in 23% and low risk in 77%. Alrajhi et al,[12] in their study a total of 378 patients completed the survey. Most respondents (69.6%) confirmed that they had used cotton buds previously. However, only 18% of the respondents suffered ear canal complications

associated with cotton bud use. Respondents reported ear wax impaction as the most common complication (41.2%), followed by ear pain (39.7%). The majority (63.2%) of the respondents stated that they had received at least one educational session warning them against improper cotton bud use. Almost half of the patients were unsure whether cotton buds could cause complications or not. The mean overall rating of the attitude of the patients toward using cotton buds resulted in a score of 12 out of 20, thereby denoting that these patients were slightly inclined toward using cotton buds.

CONCLUSION

Authors found that most of the subjects had poor knowledge and low risk practice regarding ear care.

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