

Research Article

Aural health: knowledge, attitude and practice

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ABSTRACT

Background: A majority of the population, both educated and uneducated, is unaware that numerous disorders occur due to unhygienic maintenance of the ears. Ensuring correct aural hygiene limits the risk of ear injury. This study aims to make people aware of common misconceptions and educate them about correct practices of aural health.

Methods: A hospital based cross-sectional study comparing rural and urban populations.

Results: Knowledge, attitude and practice regarding various aspects of aural health were not found to be significantly different in the two populations.

Conclusions: As there are unhygienic practices prevalent among both rural and urban populations, educating people about correct methods of aural hygiene is very important.

Keywords: Health, Aural, Hygiene, Ear, Knowledge, Attitude, Practice

INTRODUCTION

Personal hygiene is the principle by which cleanliness of the external body is maintained. A majority of the population, both educated and uneducated, is unaware that numerous disorders occur due to unhygienic maintenance of the ears. For example, swimmer's ear - a variant of otitis externa - is a commonly acquired infection among people who swim in dirty areas. Our ears not only let us enjoy sound and music, but also play a role in maintaining our balance, which is vital to our ability to function daily. Yet we are not much aware as to how to best care for our ears. Unhealthy or unhygienic personal habits may damage both hearing and balance. There are many risk factors including harmful objects that can penetrate the tympanic membrane, hardened ear wax, allergic reactions and diseases like psoriasis or eczema, listening to personal stereos or exposure to loud noise at the workplace. A certain amount of ear wax is beneficial for maintaining good health as it provides

protection from foreign bodies entering the ear canal.¹ However, people are tempted to use cotton buds or Q-tips, safety pins, and so on to speed up the ear-cleaning process and remove ear wax. In some cases these objects may even penetrate the tympanic membrane and cause perforations.

Sudden hearing loss could be caused by loud noise such as gunfire or the explosion of firecrackers. Other types of noise - from lawn mowers, personal stereos or vacuum cleaners - cause damage over a longer period of time.¹

Ensuring correct aural hygiene limits the risk of ear injury. This study aims to make people aware of common misconceptions and at the same time educate them about correct methods of aural hygiene.

The objectives of the study were to assess the existence of unhygienic or incorrect personal habits relating to the ear and to evaluate current knowledge, attitude, and

practice regarding aural hygiene among both educated and uneducated populations.

METHODS

This was a hospital based cross-sectional study (survey) carried out over 2 months in the ENT OPD of our hospital. The subjects included a combination of rural and urban populations, and the sample size was 100 subjects (50 in each group). Patients attending the Out Patient Department who satisfied the inclusion criteria, i.e., all patients of age 18 to 70, who would be able to answer the questionnaire, were recruited for the study. Attendees of patients and also staff and students of the institution were included as well. 2 groups comprising different populations - rural and urban were compared. One group comprised of poor, uneducated, illiterate patients (education less than standard 5) and their family members attending ENT OPD. The other was of well-to-do, educated subjects comprising the staff and students of the institution. Informed consent was obtained from each

participant before distributing the questionnaire. The participants had to answer the questionnaire as 'yes' or 'no'. Their current knowledge, attitude and practice which was expressed as 'yes' or 'no' was calculated as percentages in the two groups of participants. 'Yes' or 'no' could mean the correct or incorrect habit and this was explained to the participants. The data was tabulated and the current knowledge, attitude and practice about aural hygiene were assessed in the two populations. The occurrence of unhygienic or incorrect habits was noted and expressed as percentages. A chi-square analysis was done to assess whether knowledge, attitude and practice regarding aural hygiene differ in rural and urban populations.

RESULTS

Figures in parentheses denote the 'yes' response. Depending on the question asked, the participants were given a brief explanation if the habit was incorrect and an acknowledgment if they were following the correct habit.

Table 1: Questions regarding aural health.

Questions regarding aural health	K A P rural	K A P urban	P value
1] Do you try to clean your ears with water/ear buds or sharp objects like pencils/hair pins or safety pins?	42 (84%)	37 (74%)	0.326
2] Have you ever had infection of the ear?	11 (22%)	8 (16%)	0.611
3] Has any object, e.g. cotton plug/rubber piece of the pencil etc., got stuck in your ear canal earlier?	4 (8%)	1 (2%)	0.362
4] Have you experienced any difficulty in hearing?	21 (42%)	4 (8%)	0.000
5] Do you blow your nose hard during a cold?	20 (40%)	35 (70%)	0.005
6] Do you use ear drops for ear pain without consulting a doctor?	5 (10%)	1 (2%)	0.204
7] Do you use earphones to listen to loud music?	11 (22%)	41 (82%)	0.000
8] Are you exposed to (industrial) loud noise at your work place?	10 (20%)	5 (10%)	0.262
9] Are you aware of industrial noise exposure?	12 (24%)	35 (70%)	0.000
10] Have you ever been exposed to noisy bombs/firecrackers?	21 (42%)	35 (70%)	0.008
11] Do you have any medical conditions like diabetes mellitus, hypertension, chronic kidney disease or any other?	14 (28%)	0 (0%)	0.000
12] Are you seeking medical help for poor hearing?	2 (4%)	1 (2%)	1.000
13] Do you clean your baby's ears with oil?	12 (24%)	1 (2%)	0.002
14] Are you aware of neonatal screening programs for hearing?	1 (2%)	20 (40%)	0.000
15] Do you get your ears cleaned from roadside quacks?	1 (2%)	0 (0%)	1.000

DISCUSSION

Some of the questions were oriented more towards knowledge while others were oriented towards attitude and practice. Habits or occurrences such as usage of ear buds and earphones, exposure to firecrackers or industrial noise without any prior protection and so on were the common unhygienic or incorrect events encountered among the rural and urban populations. Knowledge about the harmful effects of using ear buds was found to be satisfactory among both communities but in practice a

majority of people in both the groups was following incorrect practice.

Hobson et al.² studied the use of cotton buds and found that 68% of patients were using cotton buds- mainly for removing earwax, but also to relieve itching and to dry the ear. Nussinovitch et al.,³ while studying the risk factors for external otitis, found that the use of a cotton-tip applicator to clean the ear is the leading cause of otitis externa in children and advised against it. Kravitz et al.⁴ found that people usually ignore warnings against use of

ear buds because this practice is common among their family and friends. Fortunately, only a small number of people using cotton buds are actually harmed, though the exact number is yet to be determined. The use of cotton buds inside the ears has generally been condemned worldwide due to well documented complications including trauma, impacted ear wax, infection, and retention of the cotton bud.²

Clark and Bohne⁵ found that despite knowing about the risks of noise, people still continue to listen to loud music, probably because unlike other noisy sounds popular music is enjoyed at a rather high volume before it becomes disturbing. Miyake et al.⁶ also illustrated the risks of using headphones to listen to loud music under noisy conditions. In our study, 22% and 82% respectively of the rural and urban population were found to be using headphones to listen to loud music. A poor knowledge about the harmful effects of using earphones was found to exist in both communities but the practice of using headphones was found to be high in the urban population. Poor socioeconomic status and lack of interest can be a few reasons for a low practice among the rural population.

Our study found that 20% and 10% respectively of the rural and urban populations are exposed to industrial noise. The knowledge about preventing the hazardous effects of noise exposure was poor among the rural population. This could affect regulatory measures that need to be placed to minimize industrial noise exposure and harm.

Overall, the analytical data showed a high prevalence of unhygienic practices among both rural and urban communities. There was no significant difference in the various aspects of ear hygiene. As there are unhygienic practices prevalent among both rural and urban populations, educating people about correct methods of aural hygiene is very important.

Thus there is a range of misconceptions regarding aural hygiene. As this study involves both educated as well as uneducated people, it is clear that misconceptions about aural hygiene are not related to the socio-economic

profile of the community but there is widespread ignorance.

Moreover, the risk factors for common and preventable ear problems are easily identifiable. A simple awareness program would help diminish these problems, thereby reducing considerable morbidity and the need to seek specialist care.

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