



“A STUDY OF SELF-MEDICATION PRACTICE OF USING EAR DROPS AMONG THE EAR, NOSE, AND THROAT PATIENTS IN CENTRAL INDIA”

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ABSTRACT

There are no strict implementation of laws on dispensing of drugs by the chemists in our country hence many patients use nonspecific combination drugs by themselves resulting in more harm. The aim of this study was to determine the prevalence and to analyse topical ear drop self-medication practices among the patients in ENT OPD of a tertiary hospital in Central India.

METHODOLOGY: It was a questionnaire based cross sectional observational study conducted in the department of ENT from January 2021 to June 2021.

RESULTS: A total of 500 patients out of a total of 1500 patients seen during the study had ear problems. Of which 320 (64%) respondents had engaged in self-medication with topical ear drops. Their ages ranged between 2 and 70 years with a mean age of 35.6 ± 21.1 years. There were 300 males and 200 females. The major reason for self-medication was that their ailments were minor in about 40% and the most common indication for self-medication was ear blockage with hearing impairment (30%). Pharmacy/chemist shops (70%) were major sources of information for those that self-medicated.

KEYWORDS

Self-medication, ear drops.

INTRODUCTION

It's a common practice in our country to put some hot oil etc in the ear whenever the child complains of pain in the ear. Ear ache, ear blockage is the usually the most common indication for usage of such hot oils. Apart from the oils, there are also people who put metallic objects in the ear to clean the ear.

Self-medication is still an important public health problem worldwide.[1] In economically deprived communities, most episodes of illness are treated by self-medication. According to the World Health Organization, self-medication is defined as “the selection and use of medicines by individuals to treat self-recognized illness or symptoms.”[2] Self-medication is also explained as one involving the act of acquiring medication without a prescription, resubmitting an old prescription to procure medication, sharing medications with others or utilizing a medication that is already available in the residence.[3] Although self-medication practice is common in both developing and developed countries, higher degree of prevalence was found in the developing world.[4,5] The higher degree of prevalence in the developing countries could be attributed to many causes such as the ability to obtain wide range of drugs over-the-counter (OTC), poor regulatory practices, limited access to health-care facilities,[6,7] and the availability of illegal sellers of medications.[8] Despite efforts to limit prevalence of self-medication, its increase was evident in different countries[9] which may pose serious threats to the health of individuals and larger societies. Although self-medication may be difficult to eliminate, intervention can be made to discourage the rampant practice. The aim of this study was to determine the prevalence and to analyse topical ear drop self-medication practices among the patients in ENT OPD of a tertiary hospital in Central India.

METHODOLOGY:

It was a questionnaire based cross sectional observational study conducted in the department of ENT from January 2021 to June 2021. All the patients who had ear problem and gave their consent to participate in the study were interviewed using a previously prepared and pretested semi-structured questionnaire. Parents of patients below the ages of 16 years were requested to assist in completing the questionnaire. Patients who did not consent to the study and old patients of the ENT clinic on follow-up visits were excluded and also excluded from the study are those who have used other topical agents such as a nasal drop or spray and throat spray were excluded from the study. Data obtained were analyzed using SPSS Statistics Software Version 20.0 (2011) and presented in simple tables and charts.

RESULTS:

Out of 1500 patients seen in the ENT OPD during the study, a total of 500 had ear problems which were included in the study. Their ages ranged between 2 and 70 years with a mean age of 35.6 ± 21.1 years. There were 300 males and 200 females. 40% were Hindu, 30% were

Muslims, 20% were Buddhists and 10% were others like Jain, Christian, etc. 20% had yellow Ration card i.e. were below poverty level, 60% had orange ration card while 20% had white ration card. (Table 1)

Table 1 showing socio-demographic characteristics of the study population:

Characteristic	Number	Percentage
Gender:		
Male	300	60
Female	200	40
Age in years:		
0-20	80	16
20-40	300	60
40-60	80	16
60-80	40	8
Religion:		
Hindu	200	40
Muslim	150	30
Buddhist	100	20
others	50	10
APL/BPL		
BPL (Yellow ration card)	100	20
APL	400	80

Of which 320 (64%) respondents had engaged in self-medication with topical ear drops. The major reason for self-medication was that their ailments were minor in about 40% and hence they knew what to do. 10% had financial problem to consult a doctor and 20% said that there was no ENT doctor near them. (Table 2)

Table 2 showing indications and reasons for self-medication.

Indications for self-medication	Number	Percentage
1. Ear blockage with Hearing impairment	150	30
2. Ear ache	125	25
3. Itching in the ear	100	20
4. Ear discharge	100	20
5. Wax in the ear	25	5
Reasons for self-medication		
1. Minor ailment	200	40
2. No ENT doctor nearby	100	20
3. Long waiting time	80	16
4. Same problem earlier so had previous prescription	70	14

The most common indication for self-medication was ear blockage with hearing impairment (30%), ear ache (25%), ear discharge (20%), itching (20%) and wax in the ear (5%). Pharmacy/chemist shops (70%)

were major sources of information for those that self-medicated. Other sources were family and friends (15%) and other health workers (15%). The most common ear drop used was combination of beclomethasone, neomycin and clotrimazole (30%), benzocaine with turpentine oil for ear wax (25%), gentamycin (20%), chloramphenicol (15%) while 10% couldn't remember or brought the ear drops. (Table 3)

Table 3 showing sources of information and the drugs used

Sources of information	Number	Percentage
1. Pharmacy/chemist	350	70
2. Family and friends	75	15
3. Health workers	75	15
Ear drops used:		
1. beclomethasone, neomycin and clotrimazole	150	30
2. benzocaine with turpentine oil for ear wax	125	25
3. gentamycin	100	20
4. chloramphenicol	75	15
5. don't remember	50	10

DISCUSSION:

It's a common practice to Self-medicate among patients with ear problems. Moreover, it has important roles in the care of minor ailments and symptoms but not without its inherent side effects. The highest proportion of those who practice self-medication was in the age group 21–40 years in this study.

In this study, the prevalence of topical ear drop self-medication was 64.0%. This is higher than the 31% reported by Afolabi *et al.*[10] Other studies that also recorded low prevalence are 42% in Ondo and[11] 27.5% in Ethiopia.[12] Similarly, higher prevalence of 81.8%[13] was recorded in Sudan. The higher prevalence of self-medication in this study may be attributed to shortage in the number of health facility and ENT specialist in the area.

In this study, the major indication for self-medication was ear blockage with associated hearing impairment (30%), this was followed by earache in 25% of our respondents. Other indications are ear discharge, itching in the ear and ear wax. Afolabi *et al.* in their study reported earache as being the most common indication for using topical ear drops.[10] He noticed that respondents usually responded quickly to pain trying to find ways to relieve it.

However, this is rather dangerous as it is widely believed that human malpractices such as inadequate dosing, incomplete courses and indiscriminate drug use have contributed to the emergence and spread of antimicrobial resistance.[14] Other reasons for self-medication given by our respondents in this study are nonavailability of expert/health service and financial constraint. Bamgbaye *et al.* reported inaccessibility to a health facility as a leading promoter of self-medication in their study.[15] It was noticed in a study that the concentration of few available specialists in the urban centers where most of the tertiary health-care facilities are sited has contributed to the lack of access to ENT specialists.[10]

Majority of our respondents got their information about drugs they had used through pharmacy/chemist shops. This was consistent with previous studies.[16] It is a major source of concern as people have free access to OTC drugs, which are presumably believed to be readily available and cheaper.

The most common ear drop used was combination of beclomethasone, neomycin and clotrimazole (30%), benzocaine with turpentine oil for ear wax (25%), gentamycin (20%), chloramphenicol (15%) while 15% couldn't remember or brought the ear drops. This is similar to study done by Afolabi *et al.*[10]. Prolonged use of topical ear drop antibiotics and corticosteroids will often result in fungal (otomycosis) super infection[16] and the most common complaint in otomycosis is aural fullness and pruritis deep inside the canal which may mimic other allergy. The limitation to this study includes that it may not be representative of general population since it is a hospital-based study and also since it is self-reporting, there is always a problem of recall accuracy and unverifiable information.

CONCLUSION:

Majority of the respondents in this study practiced self-medication using different topical ear drops. There is a need for adequate public

health education to create awareness among people on the danger of self-medication and to enact or enforce the law to reduce access to OTC drugs. Healthcare should be made available and avoidable at primary health-care level.

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