

PREVALENCE OF CHRONIC OTITIS MEDIA IN SCHOOL CHILDREN OF SHEIKH MALTOON TOWN MARDAN

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ABSTRACT

Background: Chronic otitis media is among the most frequently brought issues to the otolaryngology outpatient department. It's a sickness that can be prevented and may cause permanent hearing loss. Children who attend school will have better learning possibilities and fewer difficulties if they get an early diagnosis and prompt treatment. Our study aimed to ascertain the incidence of chronic otitis media in Mardan's Sheikh Maltoon town's school-age youngsters. **Objectives:** Identifying potential risk factors, evaluating the impact on children's health and education, estimating the incidence of the condition, and directing public health initiatives for management and prevention in the neighborhood are all goals of the study on the prevalence of chronic otitis media in school-age children in Sheikh Maltoon Town, Mardan.

Study design: An observational cross-sectional study

Duration and place of study: from April 1 to April 30, 2018, many schools in Sheikh Maltoon Town **Methods:** This research, conducted at many schools in Sheikh Maltoon Town, Mardan, was cross-sectional and randomized. The study ran from April 1 to April 30, 2018. A questionnaire was used to gather data, which was then examined in the ears and subjected to several audiometric tests.

Results: 184 kids between the ages of 7 and 17 signed up for the research. There were 83 female children and 101 male ones. 36 of the 184 children reported hearing loss, and 19 said any ear drainage. Twelve instances included one ear, seven involved both, 17 had a bad stench, and two involved no stink.

Conclusion: Early diagnosis and proper management may help to reduce the disease burden and prevent disabling hearing loss in children.

Keywords: Chronic otitis media, children, hearing loss.

INTRODUCTION

Chronic otitis media is the term for an ear discharge with a tympanic membrane hole that lasts longer than two weeks.^{1, 2} It is further subdivided into active

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and non-active mucosal disorders according to the behavior of the middle ear mucosa. One of the preventable causes of deafness is that most individuals have moderate to severe conductive deafness that delays speech and language development and difficulties with schooling³. The WHO categorizes a prevalence rate as high (3%) and low (1%), respectively.⁴ Otitis media is one of the most frequent causes of childhood ailments and hearing loss. The microorganisms primarily responsible include *Moraxella catarrhalis*, *Haemophilus influenzae*, *Streptococcus pneumoniae*, and *Staphylococcus aureus*⁵. There have been around 20,000 reports of issues connected to chronic otitis media, with children less than five years old, most at risk⁶. It is avoidable if the pediatric population in a community has a chronic otitis media prevalence of more than 1%. I suppose the majority is 4% or more; it is a public health concern that has to be addressed very once¹. Although chronic otitis media is a worldwide ailment, In that case, it is more common in underdeveloped countries such as Pakistan. The four main causes of disease development are poverty, overcrowding, illiteracy, and poor nutrition.^{7,8} The study aimed to determine how frequent chronic otitis media is among school-age children in Sheikh Maltoon Town, Mardan.

METHODOLOGY

Cross-sectional observational research was conducted at many schools in Sheikh Maltoon Town, Mardan. One hundred eighty-four students in all started the study. Children between the ages of 7 and 17 were included in the research, having representation from all age groups in the sample. Both older and younger children were not allowed to participate in the study. The sampling strategy was straightforwardly random. The study ran from April 1 to April 30, 2018. A questionnaire was created to gather information. A manual counting method was used to aggregate the data. SPSS version 20 was used to arrange and tabulate the data.

RESULTS

The research included 184 children with a mean age of 11.14 and a standard deviation of 1.948, ranging in age from 7 to 17. With a 1.2-1 ratio, there were 45.1% females and 54.9% men. Merely 19.6% reported experiencing hearing loss to some extent. In 10.3% of the patients, chronic otitis media was prevalent. In numerous instances, we had an ear discharge. 37% of the ears that were discharged were bilateral, and 63% were unilateral. A total of 9.2% foul-smelling discharge was observed.

DISCUSSION

Chronic otitis media is one of the most prevalent ear conditions, particularly in the pediatric age range. Otitis media may present in a variety of ways, from a quiet case to potentially fatal intracranial complications, including meningitis or a brain abscess. With or without complications, chronic otitis media is a serious health issue. It is more prevalent among the underprivileged in emerging nations. 10.3% of the children in our research experienced persistent otitis media. Compared to pre-

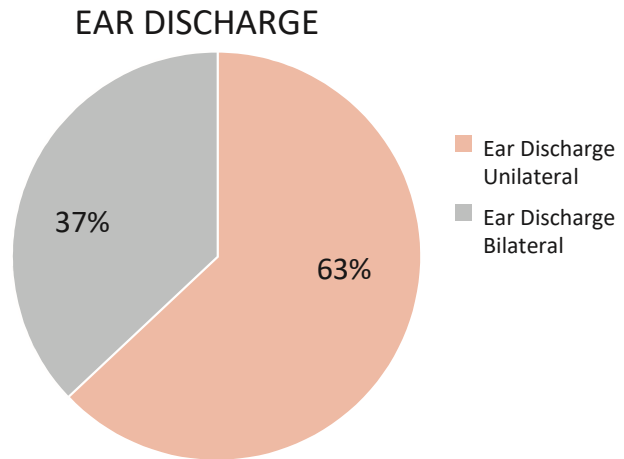


Figure 1

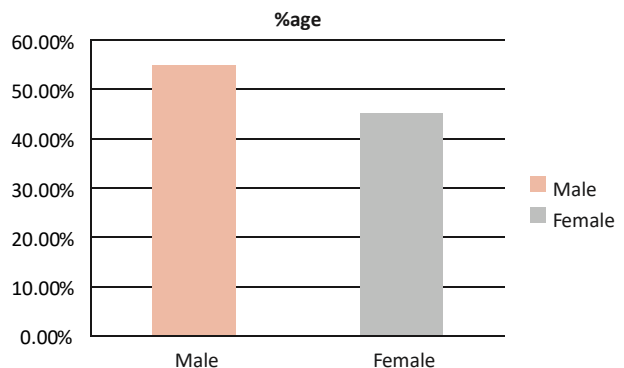


Figure 2

Table 1: Gender Distribution

Male	101	54.9 %
Female	83	45.1 %

vious research, this prevalence is much greater. According to Wakode PT et al., the prevalence of chronic otitis media in school-age children in India is 3.00%. However, Zakzuk et al.'s research of school-aged children in Saudi Arabia revealed a 1.3% prevalence.^{7,8} In their investigation, Minja BM et al. observed a prevalence of 2.6%.⁹ Different geographic areas, socioeconomic levels, environmental circumstances, age groups, and diagnostic criteria might cause these variations in our research. A prevalence of 6% in school-age children was reported by Ologe et al., which is comparable to the results of our research. A prevalence of 12.4% was reported by Biswas et al.¹¹ and 15% by Moris et al.^{11,12} Compared to 45.1% of female children, 54.9% of male youngsters were impacted. This and the research of Prakash Adhikari, which showed 54% men and 46% females, are almost identical.¹³ Pervez et al. found a 48.9%:51.1% male to female ratio. Swimming in filthy canal water may be a contributing reason to ear discharge. The parents' educational attainment is also crucial for illness prevention. In our research, 87.7% of the guardians lacked education, and 91.3% had some education. Of the 8.7%, 14.1% were dads, and 35.9% were moms. In their investigation, Pervez et al. discovered that 60.2% of moms

lacked literacy³. This demonstrates the greater significance of mother education in caring for their offspring.

CONCLUSION

The prevalence of chronic otitis media, though preventable, is very high in school-going children, who may end up with serious complications. School-based ear care education can help the nose chronic otitis media early and reduce reduplication. It can be a useful tool for a community-oriented program.

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Authors Contribution

Concept & Design of Study: Imad1

Data Analysis: Anbrin Afridi2,

Critical Review: Tariq Mahmood3

Final Approval of version: Imad1



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