

The point prevalence of otitis media with effusion in secondary school children in Pokhara, Nepal: a cross-sectional study.

Mark A1, Matharu V, Dowswell G, Smith M.

Author information

1Basildon and Thurrock University Hospital, Nethermayne, Basildon, Essex SS16 5NL, UK. aparnamark@hotmail.com

Abstract

OBJECTIVE:

Otitis media with effusion (OME) is a condition of uncertain aetiology seen in paediatric practice. It has important sequelae that can result in significant morbidity. Worldwide documentation of OME prevalence in older children is poor as OME is traditionally seen in children below the age of 6 years. Available research in Nepal reports a prevalence of OME in children between the ages of 3 and 8 years as high as 27%. This study aims to establish a reliable prevalence of OME in children between the ages of 9 and 16 years in order to inform public health policy and target limited resources.

METHODS:

This cross-sectional study was undertaken in Pokhara, Nepal. Two different school populations were examined, government and non-government. Children in these schools between 9 and 16 years underwent clinical assessment for OME with otoscopy and tympanometry. Demographic data were also collected to identify potential OME risk factors. For each school population the prevalence of unilateral, bilateral and all case OME was calculated as percentages with 95% confidence intervals.

RESULTS:

A total of 494 children were recruited in this study (government=187, non-government=307). Fourteen were excluded due to impacted cerumen or other ENT pathology making it very difficult to conduct a clinical assessment. In the combined school populations the point prevalence of OME was 12.9%. The peak prevalence of OME was found in children aged 10 years (23.1%). A higher point prevalence of OME was found in the non-government school population than the government school (government=9.3%, non-government=15.0%). This difference was not statistically significant ($\chi^2=3.209$, $df=1$, $p=0.073$). Age was found to be significant predictor of OME.

CONCLUSIONS:

Contrary to its established natural history OME has been found to be widespread in older children in Nepal. No significant predictors of OME were established and rates did not vary significantly between school types. Studies need to be conducted in a larger population to investigate this further. To fully assess disease burden of OME amongst children in Nepal, prevalence in children not regularly attending schools also needs investigation.

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KEYWORDS:

Nepal; Otitis media with effusion; Prevalence; Secondary school

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