

ABSTRACT

BACKGROUND: The goal of this study was to obtain representative Kenyan data on the point prevalence of acute otitis media (AOM) and its sequelae (otitis media with effusion [OME] and chronic suppurative otitis media [CSOM]), a major cause of preventable hearing loss in children in developing countries. In Africa, there are limited studies on the prevalence of AOM and its sequelae in children. **METHODS:** Study subjects were children aged 2 to 15 years and were enrolled from randomly selected preprimary and primary schools. After parental or guardian consent, subjects had a questionnaire administered, otoscopy and tympanometry were done, and audiometry was performed on those with ear problems detected on these examinations. **RESULTS:** A total of 9825 (75%) children was from rural schools. The prevalence of CSOM was 15 of 1000, OME was 15 of 1000, and AOM was 7 of 1000 children. Rural Rift Valley schoolchildren had the highest prevalence of CSOM (24 of 1000) compared with other regions (12 of 1000; $P < .0001$). Ear discharge occurred before 3.5 years in 50% of 901 children with ear discharge. A history of ear discharge was associated with abnormal tympanograms (odds ratio [OR], 11.9-19.2) and mild-to-severe hearing loss (OR, 21.6-38.6), even in children without ear disease (OR, 10.7-24.4). **CONCLUSIONS:** The burden of AOM sequelae in Kenyan preschool and schoolchildren is significant, and it occurs mostly in the first 4 years of life. By preventing early recurrent AOM, pneumococcal vaccination might partly avert nonreversible sequelae.