

## **ABSTRACT**

Information on the prevalence of hearing impairment and related ear pathologies in children in sub-Saharan Africa is scarce. A pilot study for a clinical trial of simple treatments for chronic suppurative otitis media (CSOM) in school children in Kiambu district, Kenya, provided information on the prevalence of hearing impairment and ear pathologies. Five-thousand-three-hundred-sixty-eight children from 57 randomly chosen primary schools in Kiambu district were examined. Simple otoscopy was performed by clinical officers with specialty training in ENT, and hearing testing was performed by trained nurses, using a hand held field audiometer. Microbiological specimens were obtained from those children with CSOM. Five-point-six percent of the children had a hearing impairment of > 30 dB HL in one or both ears, with 2.2% having bilateral hearing impairment. Two-point-four percent had at least one perforated tympanic membrane, and 1.1% had CSOM. Eight-point-six percent of the children had wax obstructing the tympanic membrane. There is evidence of a relationship between hearing impairment and both CSOM and wax obstructing the tympanic membrane. The most common organisms found were *Pseudomonas* spp. (34%), *Proteus* spp. (34%) and *Escherichia coli* (19%). These results are comparable with other studies in Africa and indicate a considerable burden of ear disease in Kiambu district, Kenya