



# A Review of Hearing Loss Prevalence and Its Association with Ototoxic Medication Use in HIV-Positive Adults Attending Gauteng Clinics, 2002

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## Abstract

Hearing loss is a public health concern. The burden may be higher in populations with HIV due to the disease itself and exposure to ototoxic medications. In South Africa, high HIV prevalence and the common use of potentially ototoxic antiretroviral and anti-tuberculosis drugs require a focused examination of this issue in clinical settings. This review aimed to synthesise evidence on the prevalence of hearing loss and to evaluate its association with ototoxic medication use in HIV-positive adults attending public health clinics in Gauteng Province. A systematic review of published and grey literature was conducted. Studies were identified through electronic databases and manual searches. Inclusion criteria encompassed research involving HIV-positive adult populations in Gauteng clinics, reporting on hearing loss and/or ototoxic drug exposure. Data were extracted and analysed thematically. The review identified a notable scarcity of dedicated studies. Available evidence, though limited, suggested a higher prevalence of hearing loss in this population compared to HIV-negative groups. A recurring theme linked hearing impairment to prolonged use of specific antiretroviral drugs and treatments for opportunistic infections. One key finding indicated an association between high-frequency hearing loss and cumulative exposure to aminoglycosides. The limited evidence points to a potentially elevated risk of hearing loss among HIV-positive adults in Gauteng clinics, with ototoxic medication exposure being a plausible contributing factor. The review highlights a critical gap in routine audiological monitoring within standard HIV care. Implement routine baseline and periodic audiological screening for HIV-positive patients, particularly those prescribed known ototoxic medications. Develop standardised clinical guidelines for monitoring ototoxicity in this population. Further robust, longitudinal research is required to quantify prevalence and establish causal relationships. hearing loss, ototoxicity, HIV, antiretroviral therapy, South Africa, public health This review consolidates the limited existing evidence on

hearing loss and ototoxic medication use in a key South African HIV population, identifying a significant research gap and providing a basis for clinical practice recommendations.

**Keywords:** *HIV/AIDS, ototoxicity, sensorineural hearing loss, prevalence, Gauteng Province, antiretroviral therapy*

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