

GUEST EDITORIAL

Cochlear implantation in South Africa

Hearing loss is a leading cause of disability worldwide, and is highly prevalent within low- and middle-income countries (LMICs) across the developing world, including sub-Saharan Africa. Untreated hearing loss has far-reaching adverse consequences in terms of language development, cognition and social functioning, as well as educational and employment opportunities.^[1-5] This is particularly so when the degree of hearing loss is severe or profound.

Interventions for hearing loss take into account, *inter alia*, its nature (conductive, sensorineural or mixed) and its severity. Individuals with conductive hearing loss may benefit from surgery. Individuals with mild, moderate, moderately severe and even some severe sensorineural hearing loss can benefit from hearing aids. But when individuals with a severe-profound sensorineural hearing loss obtain inadequate benefit from hearing aids, cochlear implantation may be a life-altering intervention. It has been shown to be a cost-effective solution for severe-profound sensorineural hearing loss,^[6] and is considered to be the most successful implantable healthcare device in terms of the restoration of sensory function.^[7]

Despite being a LMIC, South Africa (SA) has successfully established a national cochlear implant (CI) infrastructure, and has made remarkable advances in the field of cochlear implantation. This is demonstrated by the growing number of CI surgeries performed, as well as the increasing number of countrywide CI programmes and professionals involved in cochlear implantation. This is also an international phenomenon.

Considering the changing criteria and status of CIs in SA, all medical practitioners – general practitioners, paediatricians and all other specialists – need to be informed and remain up to date with these changes.

Owing to the size of this topic, it will be covered in two parts in Continuing Medical Education (CME). Part 1 (this issue) introduces cochlear implantation, briefly sketches its history and sets out the principles of assessment of patient candidacy. Part 2 will look in more depth at the current status of cochlear implantation in SA using data from the South African Cochlear Implant Group (SACIG)'s annual reports. It will also examine the particular challenges in cochlear implantation in the SA context.

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S Afr Med J 2021;112(1):7. <https://doi.org/10.7196/SAMJ.2021.v112i1.16019>