

EAR BUDS FUELLING SURGE IN HEARING LOSS

By John Musenze

Health experts have raised alarm over a growing number of young Ugandans developing hearing problems linked to prolonged use of earbuds and exposure to loud recreational noise.

Once seen as harmless accessories, earbuds, including earphones, earpods and headphones, are now under scrutiny from ear specialists who say unsafe listening habits are quietly driving a rise in tinnitus and early hearing loss among people aged 12 to 35.

Previously common in older adults, tinnitus is a condition where you experience ringing, buzz and hiss or other noises in one or both of your ears. The noise you hear when you have tinnitus is not caused by an external sound, and other people usually cannot hear it.

Dr Esther Nakasagga, an ear nose and throat (ENT) surgeon at Mulago Hospital, said earbuds and earphones pose particular danger because of how they deliver sound.

"When you use earbuds, the speaker sits directly in the ear canal, very close to the eardrum. If the volume is high, you are exposing the inner ear to intense sound waves without any buffer," Nakasagga said.

She said listening habits among young people have changed dramatically.

"Students study with music. They commute with earphones. They exercise with them. Some even sleep with them. This repeated daily exposure compounds the damage over time."

Across Uganda, hearing loss is no longer viewed solely as a condition of ageing or untreated infections. Increasingly, doctors said, it is becoming a consequence of prolonged exposure to loud sound delivered directly into the ear canal.

According to the World Health Organisation (WHO), more than 466 million people globally live with disabling hearing loss. That number is projected to rise to 630 million by 2030 and nearly 900 million by 2050. In Africa alone, hearing loss could affect 54 million people by 2030 if preventive measures are not strengthened.

In Uganda, national figures indicate that over two million people have some degree of hearing impairment. The 2024 National Population and Housing Census recorded about 273,000 people as hard of hearing and over 41,000 as



A child undergoes an ear check during a medical camp recently. Specialists say unsafe listening habits are driving a rise in early hearing loss among young people

deaf, figures experts believe underestimate the real burden, especially among young people.

What concerns Dr Nakasagga even more is the increasing use of headphones among children.

"We are seeing children as young as three using unregulated headphones. At this age, the child's auditory system is still developing. Early exposure to high-intensity sound increases their lifetime risk of hearing problems. At least one should start using earbuds at 15 and these should be at regulated volume," Nakasagga said.

"Over the past few years, she said, her clinic has recorded a noticeable rise in tinnitus among teenagers and young adults, even when routine hearing tests initially appear normal.

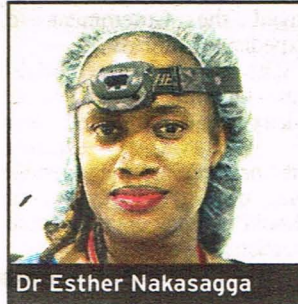
"In nearly two out of five young patients presenting with tinnitus, standard hearing tests may still look normal, but further assessment reveals early high-frequency damage. We are also diagnosing early high-frequency hearing loss among university students and young professionals, typically linked to prolonged earbud use," Nakasagga said.

Sound intensity is measured in decibels. According to international hearing guidelines, sustained exposure above 85 decibels (60% of the volume) can cause hearing damage. Yet many personal listening devices can reach 100 to 110 decibels at maximum volume.

"At those levels, damage can begin within minutes. The inner ear contains delicate



Dr Fiona Kanya



Dr Esther Nakasagga

SOLUTIONS

Ugandans have been urged to adopt safer listening habits. Dr Nakasagga recommends the 60/60 rule – listening at no more than 60% of maximum volume for no more than 60 minutes at a time.

"If you cannot hear someone speaking next to you without reducing your volume, your music is too loud. The moment you find yourself reducing it, it is already danger," she said.

Nakasagga advised using over-the-ear noise-cancelling headphones instead of tight-fitting earbuds, taking regular listening breaks and avoiding sleeping with earphones plugged in.

Doctors also recommended avoiding inserting cotton buds or sharp objects into the ear canal, treating infections early and undergoing routine hearing checks, especially for frequent users of personal audio devices.

"The earlier we detect hearing loss, the better the outcome. Once inner ear cells are gone, we cannot restore natural hearing," Dr Kanya emphasised.

hair cells that convert sound into signals for the brain. Once those cells are damaged, they do not regenerate. The hearing loss is permanent," Nakasagga said.

She said hearing loss progresses quietly.

"It moves from mild to moderate, severe and eventually profound. Many people ignore early signs

like ringing in the ears or difficulty hearing in noisy environments because the damage is painless and gradual," Nakasagga said.

Her concerns

are backed by her research. In a recent

six-month cross-sectional study conducted in Mbarara city among 178 informal sector workers exposed to high noise levels including metal fabricators 19.7%, nearly one in five were found to have noise-induced hearing loss.

"Occupational noise exposure was the strongest predictor. Workers previously employed in noisy environments were more than three times more likely to develop hearing loss. Yet only 23% had adequate knowledge about hearing protection," she said.

Nakasagga added that recreational noise from earbuds compounds occupational exposure.

"Whether it is Beats, AirPods or any brand, repeated exposure to loud sound causes excessive movement of inner ear fluid, damaging the hair cells."

Dr Fiona Kanya, an audiologist and managing Director of Kampala Audiology and Speech Centre, said her clinic has observed a clear shift in patient demographics.

"Previously, most patients with hearing loss were older adults. Over the past few years, we are seeing more teenagers, university students and young professionals presenting with tinnitus and early high-frequency hearing loss," she said.

Tinnitus, she explained, is often the first warning sign.

"Many come complaining of a constant hiss or ringing after long hours of listening to music. Some still test within normal hearing range, but we detect early high-frequency

damage usually linked to noise exposure."

Dr Kanya said unsafe listening practices are becoming a major contributor to hearing loss, alongside infections.

"People focus on cleaning their earphones for hygiene, but they ignore duration and volume. If someone standing next to you can hear your music leaking from your earphones, the volume is already unsafe. The sound is delivered directly next to the eardrum," he explained.

Dr Boniface Otoo, an ENT specialist at Arua Health Centre IV, said noise exposure is no longer limited to factories. He added that many patients delay seeking care and it's why numbers are likely to be more than what is in the records.

"Churches, urban centres, traffic noise and personal music devices are all contributing. When you combine daily earbud use with environmental noise, you increase cumulative damage," he said.

"Hearing loss is painless. By the time patients come to hospital, the damage is often advanced and irreversible."

Records in several regional referral hospitals show steady growth in ENT consultations related to hearing difficulty and tinnitus among adults under 35. Specialists said routine audiometric screening remains limited outside major urban centres, meaning many cases go undiagnosed.

ACCIDENTS

Beyond health implications, the use of earphones has also raised safety concerns, according to the Uganda traffic police.

Traffic police spokesperson SP Michael Kananura says wearing earphones while walking, riding or driving has increasingly contributed to road accidents.

"When someone has both ears plugged, they cannot concentrate, hear hooting, sirens or approaching vehicles. This reduces situational awareness and increases the risk of crashes. It is against traffic safety guidelines," he said.

Kananura said the Police have recorded incidents where pedestrians and bodaboda riders wearing earphones failed to react to traffic warnings.

"Road safety requires full attention. Music should never override safety," Kananura warned.



Experts say earbuds pose a particular danger because of how they deliver sound