

**FACULTY OF MEDICINE AND HEALTH SCIENCE MUHAMAMDIYAH  
UNIVERSITY OF MAKASSAR**

Thesis, February 24th 2026

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**ANALYSIS OF EARPHONE USE INTENSITY ON THE EMERGENCE  
OF TINNITUS SYMPTOMS IN GRADE VIII STUDENTS AT MTSN 1  
MAKASSAR**

**ABSTRACT**

**Background:** Tinnitus is a symptom characterized by the perception of abnormal sounds without external acoustic stimulation and may be related to unsafe listening habits among adolescents.

**Objective:** This study aimed to analyze the relationship between earphone use intensity and tinnitus symptoms among grade VIII students at MTSN 1 Makassar.

**Methods:** This observational analytic study used a cross-sectional design. Data were collected on 13–16 October 2025 using an online questionnaire in Google Form. Of 163 respondents, 88 met the criteria after screening. Earphone use patterns and tinnitus symptoms were assessed, and tinnitus severity was measured using the Tinnitus Handicap Inventory (THI). Data were analyzed using Chi-Square and Fisher's Exact tests.

**Results:** Tinnitus symptoms were reported by 64 respondents (72.7%). No significant association was found between tinnitus symptoms and length of earphone use ( $p=0.170$ ), daily duration ( $p=0.883$ ), volume ( $p=0.422$ ), frequency ( $p=0.373$ ), or overall intensity category ( $p=0.465$ ). THI results showed mostly very mild tinnitus (62.5%).

**Conclusion:** Earphone use intensity was not significantly associated with tinnitus symptoms among grade VIII students at MTSN 1 Makassar.

**Keywords:** earphone, intensity of use, tinnitus, adolescents, THI

**FAKULTAS KEDOKTERAN DAN ILMU KESEHATAN  
UNIVERSITAS MUHAMMADIYAH MAKASSAR**

Skripsi, 24 Februari 2026

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**ANALISIS INTENSITAS PENGGUNAAN EARPHONE TERHADAP  
TIMBULNYA GEJALA TINITUS PADA SISWA KELAS VIII DI MTSN 1  
MAKASSAR**

**ABSTRAK**

**Latar Belakang:** Tinitus merupakan persepsi bunyi abnormal tanpa rangsangan dari luar dan dapat berkaitan dengan kebiasaan penggunaan earphone yang tidak aman pada remaja.

**Tujuan:** Penelitian ini bertujuan menganalisis hubungan intensitas penggunaan earphone dengan gejala tinitus pada siswa kelas VIII di MTSN 1 Makassar.

**Metode:** Penelitian observasional analitik dengan desain cross sectional dilakukan pada 13–16 Oktober 2025 menggunakan kuesioner online yaitu Google Form. Dari 163 responden, 88 memenuhi kriteria setelah skrining. Pola penggunaan earphone dan gejala tinitus dinilai melalui kuesioner, sedangkan derajat tinitus diukur menggunakan Tinnitus Handicap Inventory (THI). Analisis menggunakan uji Chi-Square dan Fisher Exact.

**Hasil:** Gejala tinitus ditemukan pada 64 responden (72,7%). Tidak terdapat hubungan signifikan antara tinitus dengan lama penggunaan ( $p=0,170$ ), durasi ( $p=0,883$ ), volume ( $p=0,422$ ), frekuensi ( $p=0,373$ ), maupun intensitas total ( $p=0,465$ ). Derajat tinitus berdasarkan THI paling banyak kategori sangat ringan (62,5%).

**Kesimpulan:** Intensitas penggunaan earphone tidak berhubungan signifikan dengan gejala tinitus pada siswa kelas VIII di MTSN 1 Makassar.

**Kata kunci:** earphone, intensitas penggunaan, tinitus, remaja, THI