

Noise exposure and listening behavior in secondary school students

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Ethical review	Approved WMO
Status	Recruiting
Health condition type	Hearing disorders
Study type	Observational non invasive

Summary

ID

NL-OMON49114

Source

ToetsingOnline

Brief title

Music-listening behavior in students

Condition

- Hearing disorders

Synonym

Noise-induced hearing loss, temporary threshold shift

Research involving

Human

Sponsors and support

Primary sponsor: VeiligheidNL

Source(s) of monetary or material Support: VeiligheidNL

Intervention

Keyword: Hearing, Music, Noise exposure, Noise- induced hearing loss

Outcome measures

Primary outcome

The endpoints are the perceived listening behavior as obtained with the *Hearing and Sound* questionnaire, the objective sound levels (in decibel), frequency and duration (minutes) of sound exposure using headphones on a smartphone and self-reported indications of the frequency and duration of listening behavior using headphones and visits to events with amplified music

Secondary outcome

Music listening behavior in secondary school students

Study description

Background summary

Secondary school students are considered to be at risk of hearing loss by exposure to loud music. There seems to be an increase in usage of headphones from portable music players and mobile phones over the last decade. In addition, young individuals are also exposed to loud noise by visiting events with amplified music. Nevertheless, information and measurements on noise levels and duration of exposure are lacking. We hypothesize that noise levels frequently exceed the maximum recreational loudness thresholds, thus putting our youth in harm's way of permanent hearing damage. Hearing is essential in today's high demanding communication-based society. Hearing loss can have an impact on communication and relationships on a personal level, and can negatively affect education and occupation

Study objective

The primary objective of this study is to validate the *Hearing and Sound* questionnaire, developed by *VeiligheidNL*, which addresses exposure to noise through headphone use and visiting events with amplified music. The main study endpoint is to validate the *Hearing and Sound* questionnaire as a tool to

measure noise exposure resulting from headphone use and visiting events with amplified music in secondary school students. The secondary aim is to describe listening behavior in secondary school students

Study design

An observational study conducted by *VeiligheidNL* and the *Gemeentelijke Gezondheidsdienst* (GGD) in the Netherlands. The department of Otolaryngology, Head and Neck Surgery of the Erasmus MC is involved as consultant given its expertise in implementing a smartphone application for measuring listening behavior and reporting on these data.

Study burden and risks

This study is a non-therapeutic, observational study with simple, non-invasive measurements that are considered safe, and therefore pose negligible risks for the participants. The burden for participants is minimal; we ask a few moments to download the mobile application, and to fill in a few short questionnaires. Participants can leave the study at any time for any reason without any consequences. After finishing the study, participants will receive a bol.com voucher. When participants finish the sound level measurement period, they will receive an overview of their own listening behavior during that period.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adolescents (12-15 years)

Adolescents (16-17 years)

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

- Secondary school students
- Aged 12-18 years old
- Written informed consent for participation of the child. In case the participant is under 16 years old, additional written consent from both the parents (or guardian(s)) is required.
- Having a smartphone with Android or iOS operating system

Exclusion criteria

Age below 12 or above 18 years old

No consent child (and both parents/guardian)

No smartphone

hearing impairment or deafness

Study design

Design

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

Recruitment

NL
Recruitment status: Recruiting
Start date (anticipated): 22-12-2020
Enrollment: 125
Type: Actual

Ethics review

Approved WMO
Date: 03-08-2020
Application type: First submission
Review commission: METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL72718.078.20