conferenceseries.com

World Summit on OCCUPATIONAL HEALTH AND PUBLIC SAFETY

August 09, 2021 | Webinar

A smartphone application to objectively monitor music listening habits among adolescents

Danique E. Paping
Erasmus MC, Netherlands

Background: Many young people are potentially at risk of hearing loss due to unsafe use of personal music players. The first aim of current study was to examine whether adolescents exceed recommended noise exposure limits when using personal music players. Second, we examined which sociodemographic factors are associated with unsafe music listening behavior.

Methodology: In this cross-sectional study, a smartphone application was developed to objectively measure music listening habits among 314 adolescents with a mean age of 13 years and 7 months (SD ± 5 months). The daily noise dose was calculated based on the occupational safety standards. Eighty- five decibels was considered the highest safe exposure level up to e maximum of eight hours. Multivariable logistic regression analyses were performed to examine the association between sociodemographic factors and unsafe listening habits.

Results: 2.2% adolescents exceeded the recommended daily noise dose considering all days the application was active, and 9.8% when only considering listening days. Adolescents with a lower household income and lower level of education were more likely to engage in unsafe listening habits.

Discussion: Results confirm the feasibility of monitoring listening habits by a smartphone application. The majority of adolescents exhibited listening habits that could be considered as safe.

Biography

Danique E. Paping has a master's degree in Medicine and Clinical Epidemiology. She is currently in her third year of her PhD at the department Otolaryngology at the Erasmus MC Sophia Children's Hospital. Her research is embedded within Generation R; a large population- based prospective cohort study from fetal life until young adulthood. The focus of her study is acquired hearing loss in childhood.

d.paping@erasmusmc.nl