Tinnitus and Hyperacusis Among Children and Adolescents in Denmark

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Purpose
To gain more knowledge about the apparent mismatch between the epidemiological data regarding tinnitus and hyperacusis in children and young people in the literature and the data reported in clinical studies (1, 2).

Background
Studies report a larger variation in the prevalence of tinnitus in children than in adults. The majority of the studies have not ascertained tinnitus severity and/or complaint behaviour, the age range of children studied varies, and there are differences between definitions and measures. The findings are however broadly similar to the adult population, close to 30% (3). The incidence of tinnitus in children is very low (1). This might mean that some of the prevalence data we have might be wrong, or it might be that children with tinnitus are not able to access clinical services.

Methods
This poster provides an overview of three different studies included in the Doctoral study.

0 Systematic review of prevalence
Aim: To find possible explanations for the high degree of variation between different epidemiological studies a systematic review of data of epidemiology of tinnitus and hyperacusis in children and young people (age 5 to 19) will be performed.
Objective: To investigate which methodological factors may determine differences in prevalence estimates.

As children and young people are seen in various types of services, an overview is provided using a variety of data collection methods, divided into two studies:

1. Overview of present services of diagnosis, referrals and treatment
1.a Audiology departments – diagnosis and treatment. Retrospective study.
1.b Ear, Nose and Throat specialists diagnosis and treatment. Prospective study.
1.c Other centres of treatment

2. Population Studies and a Profile analysis
2.a Hearing status, tinnitus and hyperacusis in a child cohort
2.b Profile Analysis of young people from The Danish National Health Survey (NATSUP) Cross-sectional study

Results
Not all studies are performed yet.
1.c Preliminary results are showing the majority of centres are not treating children with tinnitus.
2.b Data from 2010 has been extradited. Data from 2013 will be issued May or June 2014.

Discussion
Study 1.c highlights the difficulties on getting a broad overview on the treatment.
Data collection is time-consuming and lack of electronic records management systems will probably be a bias for answering correctly for some EPDS’s. There also seems to be a very informal way of referring and lack of National Guidelines could be a part of the reason of the large variation of the service provided.

References:

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FIGURE 1 Overview of present services of diagnosis, referrals and treatment

FIGURE 2 Self-portrait of boy age 8 with tinnitus