Complete Prevalence Of Otitis Externa In UK: A Survey In West Lancashire, UK

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Citation

Abstract
To provide complete prevalence and age distribution data on diagnosed otitis externa in UK, a population survey was performed in the West Lancashire County, a representative area of the North West. Out of a total population of 108378 individuals, 52237 males (48.2%) and 56141 females (51.8%), a random sample of 21657 subjects, 10708 males (49.4%) and 10949 females (49.6%), was selected to undergo a complete review of computerized GP medical records for diagnosis of otitis externa (ICD-9 380.1 and sub-groups and/or 380.2 and sub-groups). Prevalence of diagnosed otitis externa was 3.6% in males and 4.2% in females. Total otitis externa prevalence was 3.9%. All ages were affected with a peak incidence in children aged 5-16 years and a new high plateau in adults aged 35-65. This study provides the first large-scale prevalence estimation of diagnosed otitis externa.

INTRODUCTION
Otitis externa is an inflammatory disorder of external ear which may be acute or chronic. Otitis externa is defined as chronic when the duration of the inflammatory process exceeds 3 months.

Otitis externa is ICD-9 coded 380.1 and sub-groups and 380.2 and sub-groups.

This study aims to provide complete prevalence and age distribution data on diagnosed otitis externa in UK. The term complete prevalence refers to the estimated population of people who were alive at the time of the study who previously had a diagnosis of otitis externa regardless of how long ago the diagnosis was, or if the patient is still under treatment or is considered cured.

MATERIALS AND METHODS
A population survey was performed in the West Lancashire County, a representative area of the North West England.

The West Lancashire population is of approximately 108378 individuals, 52237 (48.2%) males and 56141 (51.8%) females (Census 2001).

21657 subjects, 10708 males (49.4%) and 10949 females (49.6%) were randomly selected and their computerized Primary Care Medical Records searched for diagnosis of otitis externa (ICD-9 codes 380.1 and sub-groups and 380.2 and sub-groups).

Complete prevalence and age distribution were studied.

RESULTS AND ANALYSIS
The complete prevalence in males was of 3.6% (384 subjects) and in females was of 4.2% (462 subjects) with a total prevalence of 3.9% in the population of this study.

Rates of occurrence were not equal in males and females being the diagnosis more frequent in females. This was more evident between the 3rd and 6th decade of life (ratio M/F 3:4). All ages were affected, with a peak incidence in children aged 5-16 years and a new high plateau in adults aged 35-65.

DISCUSSION
All UK residents are registered with the NHS Primary Care Services and most of the General Practice Surgeries have paperless or paper-light medical records. This offers the outstanding advantage to perform quick and effective large population searches in the GP electronic database.

The results of this study can not compared with previous studies on similar scale. Otitis externa appears to be a common presenting complaint in Primary Care.

This comes hardly as a surprise.
It is likely that mild forms of otitis externa may be undiagnosed and that the actual prevalence of otitis externa could be even higher than the one reported in this study.

The peaks in the age bands 5-16 and 35-65 are not explained by this study. Also the reasons behind the higher prevalence of otitis externa in females aged 35-65 are not addressed.

CONCLUSION
Otitis externa is a common complaint in Primary Care. A more specific use of the coding system could offer useful highlights about the prevalence of the various forms of otitis externa and the reasons behind the age peaks of prevalence and the slightly higher prevalence of this condition in females.

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I hereby certify that I had full access to all the data in the study and I take responsibility for the integrity of the data and the accuracy of the data analysis.

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References
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