

## Tilmelding af Foredrag

### Foredragets titel

Association between Hospital-Diagnosed Tinnitus and Suicide

### Forfatter(e)

M Mølhave (1), S Udholm (1), K Hawton (2,3), T Ovesen (1,4,5), A Erlangsen (6,7)

### Afdeling/praksis

- 1: Department of Otorhinolaryngology, Head and Neck Surgery, Gødstrup Hospital, Denmark
- 2: Oxford Health NHS Foundation Trust, Warneford Hospital, Oxford, UK
- 3: Centre for Suicide Research, Department of Psychiatry, University of Oxford, Oxford, UK
- 4: Department of Clinical Medicine, Aarhus University, Denmark
- 5: University Clinic for Flavour, Balance, and Sleep, Gødstrup Hospital, Denmark
- 6: Danish Research Institute for Suicide Prevention, Mental Health Centre Copenhagen, Denmark
- 7: Center of Mental Health Research, Australian National University, Canberra, ACT, Australia

### Uddannelsesniveau

M Mølhave: reservelæge, PhD-studerende  
S Udholm: reservelæge, DMSci  
K Hawton: DSc, FMedSci  
T Ovesen: DMSci  
A Erlangsen: PhD

### Introduktion

The aim of this study is to investigate whether people diagnosed with tinnitus have a higher incidence rate of suicide compared to people not diagnosed with tinnitus.

### Materiale/metode

This retrospective cohort study uses Danish nationwide, longitudinal, population-based register data from 1 January, 1990 through 31 December, 2021. It includes all individuals aged 15 years or older living in Denmark. The main outcome was Death by suicide. Poisson regression models were used to estimate adjusted incidence rate ratios (IRR) with the 95% confidence intervals (CI).

### Resultater

Among 7,438,007 individuals (49.8% males) observed over 144,050,344 person-years, 85,677 (57.7% males) were diagnosed with tinnitus. In all, 23,824 suicide deaths were identified, of which 225 had tinnitus. Suicide rates were 24.2 and 16.5 per 100,000 person-years for those with and without tinnitus, respectively, giving an adjusted IRR of 1.4 (95% CI 1.2-1.6). Individuals with three or more tinnitus-related hospital contacts had an adjusted IRR of 2.3 (95% CI, 1.6-3.3), compared to one, IRR of 1.3 (95% CI, 1.1-1.5), suggesting a dose-response association. A temporal association was suggested by a higher suicide rate within a year after last hospital contact (IRR, 1.6; 95% CI, 1.1-2.3) versus seven years ago (reference, 1.0). High suicide rates were found for individuals with tinnitus and mental disorders, especially mood and alcohol use disorders.

### Diskussion

The findings reveal an association between tinnitus and suicide, particularly among individuals with co-existing mental disorders. Increased suicide rates were linked to a higher number of hospital contacts for tinnitus and a marker of disease severity.

**Forfatters fulde navn**

Martin Mølhave

**Forfatters email**

[mmolhave@gmail.com](mailto:mmolhave@gmail.com)