Health, social and economical consequences of sleep-disordered breathing: a controlled national study.

https://arctichealth.org/en/permalink/ahliterature138159

Author: Poul Jennum
Jakob Kjellberg

Author Affiliation: Danish Center for Sleep Medicine, Department of Clinical Neurophysiology, Faculty of Health Sciences, University of Copenhagen, Glostrup Hospital, DK 2600 Glostrup, Denmark. poje@glo.regionh.dk

Source: Thorax. 2011 Jul;66(7):560-6

Date: Jul-2011

Language: English

Publication Type: Article

Keywords: Adult
Age Distribution
Aged
Aged, 80 and over
Continuous Positive Airway Pressure - economics
Cost of Illness
Denmark - epidemiology
Employment
Epidemiologic Methods
Female
Health Care Costs - statistics & numerical data
Humans
Male
Middle Aged
Sex Distribution
Sleep Apnea Syndromes - economics - mortality - therapy
Socioeconomic Factors
Young Adult

Abstract: The objective direct and indirect costs of sleep-disordered breathing (snoring, sleep apnoea (SA) and obesity hypoventilation syndrome (OHS)) and the treatment are incompletely described.

Using data from the Danish National Patient Registry (1998-2006), 12,045, 19,438 and 755 patients were identified with a diagnosis of snoring, SA and OHS, respectively. For every patient, four age-, sex- and socioeconomic-matched citizens were randomly selected (48,180, 77,752 and 3020, respectively) from the Danish Civil Registration System Statistics Direct costs were extracted from the Danish Ministry of Health, Danish Medicines Agency and National Health Security and indirect costs were based on data derived from the Coherent Social Statistics.

Snoring, and especially SA and OHS, were associated with significantly higher rates of health-related contact, medication use, unemployment and accounted for increased socioeconomic costs (especially indirect costs). These effects increased with the severity of SA and patients with OHS had the lowest employment rates. The income level of patients with SA and OHS who were employed was lower than that of employed control subjects. The annual excess total direct and indirect costs for patients with snoring, SA and OHS were €705, €3860 and €11,320, respectively. Patients with snoring, SA and OHS received an annual mean excess social transfer income of €147, €879 and €3263, respectively. These socioeconomic consequences were present up to 8 years prior to the first diagnosis in patients with SA and OHS, and further increased with disease advancement. Treatment with continuous positive airway pressure (CPAP) reduced mortality in patients with SA but not in those with OHS within an observation period of 2 years.

Sleep-disordered breathing has major socioeconomic consequences for the individual patient and for society. Although CPAP treatment reduces mortality, earlier disease detection could have a greater impact on disease complications.

Notes: Comment In: Thorax. 2011 Jul;66(7):556-821502105

PubMed ID: 21199816 View in PubMed