Time trends in psychotropic drug use in patients with dementia - a nationwide study

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Background: Neuropsychiatric symptoms (NPS) affect up to 90% of patients with dementia and are distressing for patients and caregivers. Clinical guidelines recommend non-pharmacological interventions as first-line treatment for NPS. However, antipsychotics and other psychotropic drugs are often prescribed for patients with dementia, even though the effect on NPS is very limited. Antipsychotics are furthermore associated with serious adverse events and increased mortality, which have led to safety regulations worldwide. The aim of this study was to investigate time trends of antipsychotic, anxiolytic, hypnotic/sedative and antidepressant drug use in patients with dementia in Denmark from 2000-2010. Methods: The study was based on data from nationwide Danish registers. We included the entire elderly population (age ≥ 65) of Denmark from 2000-2010. We identified patients with dementia and obtained information about redeemed prescriptions for antipsychotic, anxiolytic, hypnotic and antidepressant drugs. One-year prevalence of psychotropic drug use for elderly with and without dementia was calculated. Results: In 2000 800,487 Danish residents were alive and included in the analysis. 19,349 (2.4%) of those were identified as patients with dementia. The prevalence of antipsychotic drug use among patients with dementia decreased by 33% from 31.7% in 2000 to 21.4% in 2010. Antipsychotic drug use among elderly without dementia decreased by 37.5% from 4.8% to 3.0%. Decreasing use of anxiolytics was seen for both elderly with and without dementia (dementia: 2000 vs. 2010; 29.1% vs. 17.0%. Without dementia: 2000 vs. 2010; 15.8% vs. 9.0%) as well as for hypnotics (dementia: 19.3% vs. 12.2%. Without dementia: 18.9% vs. 13.3%). Prescriptions for antidepressants increased by 26% in both groups (dementia: 43.3% vs. 54.7%. Without dementia: 11.2% vs. 14.1%). In 2010 28.1% of nursing home residents with dementia and 15.6% without dementia were treated with antipsychotics. 62.8% of nursing home residents with dementia and 47.2% without dementia were treated with antidepressants. Conclusions: Prescriptions for antipsychotics, anxiolytics and hypnotics for elderly both with and without dementia have decreased from 2000-2010, while prescriptions for antidepressants have increased. Psychotropic drugs are still widely used in nursing homes, which may suggest there is a need for focusing on non-pharmacological therapy of NPS.