

# Epidemiology, Co-morbidities and Medication Use of Patients with Alzheimer's Disease or Vascular Dementia in the UK

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## Abstract

Epidemiologic studies on age-specific incidence rates (IRs) separating Alzheimer's disease (AD) and vascular dementia (VaD) in the UK are scarce. We sought to assess IRs of AD and VaD in the UK and to compare co-morbidities and medication use between patients with AD, VaD, or without dementia. We identified cases aged  $\geq 65$  years with an incident diagnosis of AD or VaD between 1998 and 2008 using the General Practice Research Database (GPRD). We assessed IRs, stratified by age and sex, matched one dementia-free control patient to each demented patient, and analyzed co-morbidities and medication use. We identified 7,086 AD and 4,438 VaD cases. Overall, the IR of AD was 1.59/1,000 person-years (py) (95% CI 1.55–1.62) and the IR of VaD 0.99/1,000 py (95% CI 0.96–1.02). For AD, IRs were higher for women than for men, but not for VaD. Except for orthostatic hypotension, the prevalence of all cardiovascular (CV) co-morbidities and exposure to CV drugs was lower in patients with AD than in corresponding controls, whereas the opposite was true for VaD. The lower prevalence of CV diseases in patients with AD may be a true finding or the result of a channelling effect, i.e. the possibility that demented patients with CV diseases may be more likely diagnosed with VaD than AD.

Published in: J Alzheimers Dis. 2013 Mar 1 [Epub ahead of print] doi: 10.3233/JAD-121819  
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