

## Age and Ageing

### Title Page

**Title:** The importance of detecting and managing comorbidities in people with dementia?

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## **Commentary**

Dementia is a debilitating condition characterised by global loss of cognitive and intellectual functioning, which gradually interferes with social and occupational performance. It is a common worldwide condition with a significant impact on society. There are currently 36 million people worldwide with Alzheimer's disease (AD) and other dementias [1]. This is expected to more than double by 2030 (65 million) and reach about 115 million in 2050 unless a major breakthrough is made. The worldwide societal costs were estimated at US\$ 604 billion in 2010 and rising [2].

To date research on the specific physical health care needs of people with dementia has been neglected. Yet, physical comorbidities are reported as common in people with dementia [3] and have been shown to lead to increased disability and reduced quality of life for the affected person and their carer [4].

Dementia is most frequently associated with older people who often present with other medical conditions, known as co-morbidities. Such co-morbidities include diabetes, chronic obstructive pulmonary disorder, musculoskeletal disorders and chronic cardiac failure and are common, 61% of people with dementia are estimated to have three or more comorbid diagnoses [5]. Musculoskeletal, genitourinary, and ear, nose, and throat disorders have been reported as highly prevalent, affecting nearly half of people with dementia [6]. Physical comorbidities are often treatable and some may be reversible. Epilepsy, delirium, falls, oral disease, malnutrition, frailty, incontinence, sleep disorders and visual dysfunction are found to occur more frequently in dementia sufferers and untreated can lead to more severe health problems, pain and distress as well as worsening the symptoms of dementia itself [6]. As the severity of the dementia increases, so does the rate of comorbid conditions such as genitourinary disorders [6]. Pneumonia, urinary tract infection and congestive cardiac failure accounted for two-thirds of preventable admissions in dementia with dehydration and duodenal ulcer the next most important [7]. Healthcare costs for treating these problems are high, estimated at being 34% more costly than in age-matched, non-dementia cases [8]. The annual admission rate is double that of patients without dementia [7].

In the UK, NICE guidelines for the treatment of dementia assert that the promotion and maintenance of independence and everyday functioning is a key treatment for those diagnosed with dementia [9]. At the core of this should be a comprehensive assessment of needs, difficulties, and possible co-morbid symptoms. Timely identification of physical symptoms in those with dementia has been linked to decreased risk of hospitalisation [10], reduced healthcare costs [11], and the maintenance of physical comfort and quality of life [12,13].

In addition the diagnosis and management of co-morbid conditions is recognised as being poor, as dementia dominates clinical encounters and shifts attention away from the co-morbidity [14] which can lead to increased morbidity and mortality [15,16]. Unplanned acute emergency medical admissions occur in 18% of people with dementia with a 1.66 unadjusted risk of mortality at six months [17,18]. Co-morbidity, and poor control of co-morbid conditions, results in an increased burden on the care-giver [10,19,20]. These factors combine to significantly increase health and social care costs [21]. People with dementia and comorbidities are more likely to be hospitalised, have longer admissions, and incur higher expenditures for their comorbidities than people without dementia [8,22-24]. Many of these admissions are preventable [25]. However, in practice, persons with dementia are subject to an increased risk of serious delays in the recognition of new or exacerbating symptoms. In a study of nursing home residents with dementia, 48% of residents with acute infections had received no physical assessment [26]. This may in part be down to atypical symptoms, or communication problems on the part of the sufferer, but is also potentially related to a lack of adequate preparation for nurses in this role.

The management of people with dementia is also more complicated with multiple medications and over and under-treatment of conditions [27] with a result that the physical and psychological well-being of this group of people may be reduced. Furthermore the management of co-morbidities can place a significant burden placed on health and social care agencies. Improving the characterisation of relevant comorbidity and the medication used to treat the co-morbidity in people with dementia could

improve the prevention and treatment of complications in a population that sometimes struggle to communicate their needs [28].

Early recognition and treatment of new problems, and exacerbations of existing conditions has been identified as a potential strategy for decreasing the severity, preventing hospitalisation and maintaining both physical comfort and quality of life [12]. There has been limited previous study to determine what the co-morbidity profile of this group of people is. It is therefore assumed that co-morbidities people with dementia present with, share those of the age-matched population. However, this is unclear and has not been previously documented. This is a factor that is recognised as important in order to improve the accuracy of care planning [29]. Given documented difficulties in people with dementia accessing healthcare resources and communicating medical complaints, a greater awareness of all the physical and mental health needs of this group of people is important for health and social care providers to maximise patient wellbeing.

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