

The persistence and longitudinal impacts of sleep disturbances in care home residents with dementia

Background: Sleep disturbances are common in people living with dementia, with a prevalence of 40%. These disturbances may be the reason people with dementia move into a nursing or residential care home. However, there is little research into the persistence and long-term impacts of sleep disturbances in this population, and this has practical implications on if and how these disturbances should be treated, and we aimed to investigate this.

Method: We used data from the MARQUE (Managing Agitation and Raising QUality of life) cohort study, with data collected from 1483 care home residents with dementia every four months for 16 months; the largest care home study in England, UK. Outcomes collected at every time point included quality of life, hospital admissions, mortality, medication, and sleep disturbances; which were defined as either any symptoms or clinically significant cases when the symptoms were more frequent and severe (defined as score ≥ 4 on the Neuropsychiatric Inventory sleep item).

Result: Most participants were female (69%), with a median age 86 years. Nearly a third of residents (31%) had a clinically significant case and nearly half (47%) of residents had symptoms of sleep disturbance across the study. Of those with clinically significant cases at baseline, 16% remained persistent cases, 46% fluctuated, and 38% did not have a clinically significant case again. Furthermore, residents with clinically significant cases longitudinally had a lower quality of life (regression coefficient -3.94, 95% confident intervals (CI) -4.82—-3.06), and were significantly more likely to be prescribed sleep medications (odds ratio (OR) 1.57, CI 1.02–2.42). Residents who had a clinically significant case at baseline were more likely to have a hospital admission at follow-up (OR 1.52, CI 1.07–2.14), but were not more likely to die during follow-up (hazards ratio 0.93, CI 0.71–1.22).

Conclusion: As sleep disturbances fluctuate or persist in most residents who have them, this highlights the importance of treatment for these disturbances, as they mostly will not resolve without it. As these disturbances also negatively impact people with dementia's quality of life and increase the likelihood of hospital admissions, they are therefore a priority for treatment.