

### **P30: Agitation in Alzheimer's Dementia: Conceptual Framework to Demonstrate the Burden of Illness**

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**Introduction:** Agitation in Alzheimer's dementia (AAD) confers significant humanistic and economic burden; however, factors, and relationships between them, which drive the extent of this burden are poorly understood. The Objectives of this study was to review and gather evidence on the burden of AAD in order to develop a conceptual framework capturing its effects on patients, their families, clinicians (i.e., care teams), and society, which can then be used to guide further research into how the burden of AAD might be reduced.

**Methods:** Evidence on the burden of AAD was identified via a targeted literature review. Data were classified into societal, patient/family/care team, and mitigating factors. A conceptual framework (i.e., a visual representation of variables and associations between them) was developed to map the relationships between factors and illustrate the precedents and downstream effects of agitated behaviors on patient and caregiver outcomes, including healthcare resource utilization (HCRU), costs, and admission to long term care (LTC).

**Results:** Agitated behaviors were found to directly impact caregiving demands in terms of the number of hours required to care for patients. Similarly, levels of caregiver stress (i.e., total caregiver burden, personal strain, role strain, and guilt) were found to be associated with the frequency and intensity of AAD. Burden also extended to care teams via increased HCRU (i.e., pharmacy, outpatient, inpatient, and emergency room visits), and consequently costs, relative to non-agitated patients. Indirectly, through caregiving demands, agitation also affected the rate of placement in formal care and LTC, both of which are associated with incremental costs. Evidence also indicated that mitigating factors such as pharmacological treatment could impact the frequency and intensity of agitated behaviors, potentially affecting downstream HCRU and costs. Limited evidence exists on the optimal means of employing such strategies to limit caregiver demands and stress.

**Conclusions:** This study demonstrated the complex interplay of factors which drive the burden of AAD and the need which exists for novel ways to improve outcomes for those impacted by the disease. Better insight into the mechanism by which agitated behaviors influence caregiver demands and stress could help improve mitigation strategies both within family units and the larger health system.

### **P31: Direct and indirect costs of dementia in Brazil**

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**Objectives:** This study aims to estimate the direct and indirect costs related to dementia in Brazil.

**Methods:** This study is part of the ReNaDe (National Report on Dementia) project, a domiciliary survey conducted with 140 dyads of people with dementia and their caregivers in 17 municipalities in Brazil. We used the cost of illness study Methods to estimate costs. We collected data from the ReNaDe interviews and national records and presented estimates from societal and SUS perspectives. Our total costs encompassed direct medical costs (hospitalizations, outpatient visits, and others) and indirect costs (for instance, the monetary value of informal caregiving hours) (Table 1). We did not consider direct social costs, given limited or inexistent information about cost and services utilization by people with dementia in Brazil. We used the replacement approach to estimate indirect costs.