

# Study protocol: SOcial Lmitations Turn Up DEmentia (SOLITUDE)—Impact of COVID-19 social isolation on patients' cognition and mental health and on carers' wellbeing

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## Abstract

**Background:** Social isolation and loneliness are both known to exert detrimental effects on mental health and cognitive functioning, as well as on medial temporal lobe volume in older adults. Reduced social interactions have also been found to increase the risk of cognitive decline and dementia in older people. Since restrictions to social contacts have been imposed to tackle the current Coronavirus Disease 2019 (COVID-19) pandemic, this study aims to investigate the long-term impact of the resulting social isolation on people with mild dementia and their carers.

**Method:** This study has been implemented using a multi-centre longitudinal observational design to monitor mental health (9-item Patient Health Questionnaire and Neuropsychiatric Inventory Questionnaire), cognitive performance (telephone Mini-Mental State Examination and Telephone Assessment of Cognitive Function) and quality of life (Quality of Life in Alzheimer's Disease) of patients with mild dementia due to neurodegenerative aetiologies, as well as carers' burden (12-item Zarit Burden Interview). Additionally, a structured interview is included to assess the potential impact of social isolation on everyday functioning of patients and carers. Participants are assessed telephonically at three time-points: baseline and two follow-ups after 3 and 6 months.

**Result:** Six centres across the UK have confirmed capacity and capability to recruit up to eighty participants. Between September and December 2020, twenty-nine participants have been recruited across different sites and completed the baseline assessment. Moreover, nine participants have already completed the 3-month follow-up.

**Conclusion:** This study (predicted completion date: July 2021) is expected to provide valuable insights into the potential long-term consequences of lockdown measures on people with dementia and their carers. Moreover, it will enable the identification of potential risk/protective factors for decline in mental health and cognition due to

extensive changes in patients' social environment. Findings from the SOLITUDE study may inform preventative and management strategies for decline in mental function targeting people with dementia, who may be the most affected by social isolation and loneliness.