

Background: Good social connections are proposed to positively influence the course of cognitive decline by stimulating cognitive reserve and buffering harmful stress-related health effects. Prior meta-analytic research has uncovered links between social connections and the risk of poor health outcomes such as mild cognitive impairment, dementia, and mortality. These studies have primarily used aggregate data from North America and Europe with limited markers of social connections. Further research is required to explore these associations longitudinally across a wider range of social connection markers in a global setting.

Research Objective: We examined the associations between social connection structure, function, and quality and the risk of our primary outcomes (mild cognitive impairment, dementia, and mortality).

Method: Individual participant-level data were obtained from 13 longitudinal studies of ageing from across the globe. We conducted survival analysis using Cox regression models and combined estimates from each study using two-stage meta-analysis. We examined three social constructs: connection structure (living situation, relationship status, interactions with friends/family, community group engagement), function (social support, having a confidante) and quality (relationship satisfaction, loneliness) in relation to the risks of three primary outcomes (mild cognitive impairment, dementia, and mortality). In our partially adjusted models, we included age, sex, and education and in fully adjusted models used these variables as well as diabetes, hypertension, smoking, cardiovascular risk, and depression.

Preliminary results of the ongoing study: In our fully adjusted models we observed: a lower risk of mild cognitive impairment was associated with being married/in a relationship (vs. being single), weekly community group engagement (vs. no engagement), weekly family/friend interactions (vs. not interacting), and never feeling lonely (vs. often feeling lonely); a lower risk of dementia was associated with monthly/weekly family/friend interactions and having a confidante (vs. no confidante); a lower risk of mortality was associated with living with others (vs. living alone), yearly/monthly/weekly community group engagement, and having a confidante.

Conclusion: Good social connection structure, function, and quality are associated with reduced risk of incident MCI, dementia, and mortality. Our results provide actionable evidence that social connections are required for healthy ageing.

The influence of the social environment on the functioning and well-being of the person with dementia: a qualitative study

Authors: Marieke Perry, Eline Verspoor, Rene Melis, Myrra Vernooij-Dassen

Objective: Dementia negatively affects the interaction with the social environment by changes in cognition and behavior. On the other hand, the social network may be an important enabler for persons with dementia to make use of their remaining capacities. Mechanisms driving and explaining these interactions are unknown. We aimed to explore how the social environment impacts the functioning and well-being of a person with dementia.

Methods: We performed a qualitative case study, conducting semi-structured interviews. We used the grounded theory approach, as defined by Strauss and Corbin, including alternate data collection and analysis. Per case, the person with dementia, the primary caregiver, significant kin or non-kin network member and the primary healthcare professional were interviewed individually. The interviews were conducted using a topic guide, which was adjusted according to preliminary analyses. Transcripts were coded by two researchers independently, where after axial codes, categories were formulated and a theory including a core phenomenon was identified with the entire research team.

Results: Analyses revealed ‘creating a safe environment’ as a core phenomenon. This relates to encouragement and the created anchor points of the environment to compensate for the inevitable feelings of loss of control that persons with dementia experience. The ways safety is created include active acts of involvement and participation, trust, humor, reciprocity, appreciation and shared experiences. Suspicion, loss of initiative by the person with dementia and the inability to act and correcting by the environment were identified as major challenges to creating a safe environment.

Conclusions: A safe and supporting environment enables persons with dementia to use their remaining capacities. Active participation, trust, humor and reciprocity are key elements to create such a safe environment. These findings show that basic needs of persons with dementia for daily functioning and well-being are similar to these of all humans.

S2: Social functioning in people with dementia and its cognitive and psychiatric consequences

Symposium Overview:

Authors: Andrew Sommerlad, Gill Livingston (University College London, UK), Hideki Kanemoto (Osaka University, Japan), Jennifer Bethell (University Health Network, Toronto, Canada)

Social functioning is fundamental to human experience. The profound social functioning impairments affecting people with dementia are distressing to them and their families and account for significant individual, family and societal burden. There are no effective treatments that improve this major aspect of dementia, so there is urgent need to characterise social functioning decline in dementia and its consequences to inform future therapeutic approaches. In this symposium, an international panel will present perspectives on social functioning in dementia from across the disease course.

Social participation and dementia risk

Authors: Professor Gill Livingston, University College London

In this presentation, we will summarise the observational and interventional evidence linking social participation with dementia risk, the potential mechanisms, and consider what this evidence means for future clinical and policy interventions.

Social participation encompasses several concepts including social activity, contact and support. International observational study evidence finds people who participate less socially in mid or late-life have increased risk of developing dementia. More social contact and less loneliness are consistently associated with less dementia risk in studies with long and short follow-up. However, this is not true of perceived social support.

People who participate socially in late life may be able to do so because they are cognitively intact, so some studies limit their analyses to those without dementia over 10 years before follow-up or consider social participation trajectories. Within social activities, studies use heterogeneous definitions, some including individual activities such as crosswords as social activity, and others requiring group activities and some cognitively stimulating activities. Those with shorter follow-up periods find social activity is more protective, suggesting part of the effect is reverse causality.

The postulated mechanisms for social participation’s effects include increasing cognitive reserve, which provides resilience to neuropathological damage, and improved brain maintenance related to a healthier lifestyle, lower stress response, reduced cellular ageing and inflammatory response. The relationship between social participation, depression and hearing is complex with each reinforcing the other and each being associated with dementia.