Methods Up to 2113 participants from the MRC National Survey of Health and Development, a British cohort study followed since birth in 1946, were included in analyses. Stressful life events, including divorce and death of a loved one, between ages 36 and 60–64 were counted (max score: 32). Mastery (Pearlin Mastery Scale), symptoms of anxiety and depression (General Health Questionnaire-28), wellbeing (Warwick-Edinburgh Mental Wellbeing Scale) and fear of falling (yes/no) were ascertained at age 68. Standing balance was assessed at age 69 using the one-legged stand test with eyes closed (max: 30 seconds). Linear regression models were used to examine associations between each psychological factor and log-transformed balance in sex and fully-adjusted models. Adjustments were made for height, body mass index, socioeconomic position, physical activity, smoking history, osteoarthritis, diabetes, cardiovascular events and presence of respiratory symptoms at age 68–69.

Results In sex-adjusted models, all five psychological factors were associated with balance performance; these associations were maintained after adjustment for covariates. In fully-adjusted models: for every additional stressful life event, individuals had a 2% (95% CI 0.3% to 3%) decrease in balance time; there was a 2% (1%–2%) increase in balance time for every 1 point increase in mastery; for every SD increase in depressive symptoms and wellbeing, there was a 5% (2%–8%) decrease and 5% (2%–9%) increase in balance time respectively; those who reported fear of falling had 17% (9%–25%) lower balance time when compared with those who had no fear.

Conclusion Experiencing a greater number of stressful life events, greater levels of anxiety and depression, lower wellbeing, lower mastery and fear of falling were all associated with poorer balance performance at age 69. These associations were robust to adjustment for a wide range of potential confounders. This suggests that psychological factors may be suitable targets for intervention aimed at reducing balance impairments in older adults. Future research should consider how these psychological factors interrelate and if they operate on similar pathways.

OP28 COMMUNITY CULTURAL ENGAGEMENT AND INCIDENT DEPRESSION IN OLDER ADULTS

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Background 1 in 4 older adults in the UK is affected by depression, which is associated with a range of physical health outcomes. So there is a recognised need to identify behavioural interventions that might protect against the development of depression. Over the past decade, research has demonstrated the effects of community cultural engagement (which combines a number of protective factors including social interaction, cognitive stimulation and gentle physical activity) on the treatment of depression. This has included studies on active cultural engagement (such as singing, dancing and crafts) and receptive cultural engagement (including visiting museums and galleries). But as yet there is little research on community cultural engagement and prevention of depression. Consequently, this study aimed to explore whether cultural

engagement in older adults is associated with a reduced risk of developing depression over the following decade.

Methods This study used data from the English Longitudinal Study of Ageing: specifically data from Wave 2 (2004/2005) across every biennial wave through to Wave 7 (2014/2015); a total of 6 waves and a decade of data. We selected individuals who had no indication of depression at baseline using the Centre for Epidemiologic Studies Depression Scale (CES-D; score of <3) and used logistic regression models to explore the odds of developing depression at any wave over the following 10 years in relation to how often people engaged in community cultural activities (including visiting museums/galleries, attending the theatre/concerts/opera, and going to the cinema). For all analyses, we controlled for all identified socio-demographic confounders, health confounders (including sensory impairment, chronic conditions and pain) and social confounders (including other forms of social/civic engagement).

Results There was a dose-response relationship between frequency of cultural engagement and the risk of developing depression independent of socio-demographic, health-related and social confounders. This equated to a 34% lower risk of developing depression for people who attended every few months (OR=0.66, 95% CI 0.46 to 0.96, p=0.03) and a 50% lower risk for people who attended once a month or more (OR=0.5, 95% CI 0.33 to 0.76, p=0.001). Results were robust for sensitivity analyses exploring reverse causality and alternative CES-D thresholds.

Conclusion The results presented here suggest that cultural engagement is an independent risk-reducing factor for the development of depression in older age. In light of these data, it is suggested that behavioural intervention studies are designed to test further whether community cultural engagement can causally decrease the risk of developing depression.

OP29 A MEASURE TO IMPROVE ASSESSMENT AND MANAGEMENT OF SYMPTOMS AND CONCERNS OF PEOPLE WITH DEMENTIA IN CARE HOMES: DEVELOPMENT AND MIXED METHODS EVALUATION

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Background Detection and management of physical symptoms and psychosocial concerns for people with dementia is essential to reduce suffering. Measures used in routine care can support assessment and change care processes to improve outcomes. We aimed to develop and conduct a feasibility and process evaluation of the mechanisms of action (MOA), acceptability and implementation requirements of the Integrated Palliative Care Outcome Scale for Dementia (IPOS-Dem) to improve comprehensive assessment and management of symptoms and concerns of residents with dementia in care homes.

Methods A mixed methods interventional design informed by the MRC framework and underpinned by a theoretical model of expected MOA. Study conducted in three care homes involving residents with dementia, family, care staff and health professionals. IPOS-Dem V1 was developed from the validated IPOS through a scoping review of symptoms and concerns common in dementia. Two sequential phases followed. Phase