

been associated with increased risks of dementia, functional dependence, and mortality. The aims of this study were to describe the prevalence and distribution of MCR and to explore the clinical profiles associated with MCR in rural-dwelling older adults.

**Methods:** The population-based cross-sectional study included 5,021 dementia- and disability-free participants (age  $\geq 60$  years; 56.48% women) in the baseline assessments (March-September 2018) of the Multimodal Interventions to delay Dementia and disability in rural China (MIND-China). The MCR syndrome was diagnosed when the participants had subjective memory complaints and gait speed  $\geq 1$  standard deviation (SD) below the age- (<75 and  $\geq 75$  years) and sex-specific means. We estimated the age- and sex-specific prevalence of MCR. We used logistic regression models to examine lifestyle and clinical factors associated with MCR while controlling for age, sex, and education.

**Results:** The overall prevalence of MCR syndrome was 13.58%, with the prevalence being 11.53% in males and 15.16% in females ( $P < 0.001$ ). The prevalence of MCR was increased with age, from 10.43% in people aged 60-69 years and 15.97% in those aged 70-79 years to 21.71% among those aged  $\geq 80$  years. The demographic-adjusted odds ratio (95% confidence interval) of MCR was 1.30 (1.08-1.57) for being overweight (body mass index 24-27.9 vs.  $< 24$  kg/m<sup>2</sup>), 1.65 (1.32-2.05) for having obesity ( $\geq 28$  kg/m<sup>2</sup>), 1.74 (1.41-2.15) for diabetes, 1.44 (1.20-1.73) for dyslipidemia, 1.59 (1.32-1.91) for having coronary heart disease, 2.17 (1.78-2.65) for having stroke history, 1.52 (1.24-1.86) for having osteoarthritis, and 3.40 (2.70-4.28) for having depressive symptoms. Ever (vs. never) smoking and alcohol consumption were related to odds ratio of 0.65 (0.48-0.86) and 0.71 (0.55-0.91), respectively, for MCR syndrome.

**Conclusion:** The MCR syndrome affects nearly 1 in 7 Chinese rural older adults, and the MCR prevalence appears to be higher in women than in men. Cardiometabolic risk factors (e.g., overweight/obesity, diabetes, and dyslipidemia), osteoarthritis, coronary heart disease, stroke, and depressive symptoms were associated with increased likelihoods of the MCR syndrome.

## FC46: The effectiveness of a multicomponent intervention on caregiver burden and informal care time in home-dwelling people with dementia and their caregivers. Results from the stepped wedge randomized controlled LIVE@Home.Path trial

**Authors:** Berge LI<sup>1,2</sup>, Angeles RA<sup>3</sup>, Allore H<sup>4,5</sup>, Vislapuu M<sup>1</sup>, Gedde MH<sup>1,6</sup>, Ptaschitz N<sup>1,7</sup>, Ballard C<sup>8</sup>, Aarsland D<sup>9</sup>, Selbæk G<sup>10,11,12</sup>, Vahia I<sup>13,14</sup>, Tzoulis C<sup>15,16</sup>, Nouchi R<sup>17</sup>, Husebo BS<sup>1</sup>

1. Center for Elderly and Nursing Home Medicine, Department of Global Public Health and Primary Care, Faculty of Medicine, University of Bergen, Norway.
2. NKS Olaviken Gerontopsychiatric Hospital, Askøy, Norway
3. NORCE Norwegian Research Centre, Bergen, Norway
4. Department of Internal Medicine, School of Medicine, Yale University, New Haven, CT, US
5. Department of Biostatistics, School of Public Health, Yale University, New Haven, CT, US
6. Akershus University Hospital, Norway
7. VID Bergen, Norway
8. University of Exeter, Exeter, UK
9. Institute of Psychiatry, Psychology and Neuroscience, King's College, London, UK
10. Norwegian National Advisory Unit on Ageing and Health, Vestfold Hospital Trust, Tønsberg, Norway

11. Institute of Clinical Medicine, Faculty of Medicine, University of Oslo, Oslo, Norway
12. Geriatric Department, Oslo University Hospital, Oslo, Norway
13. McLean Hospital, Belmont, Massachusetts, US
14. <sup>2</sup>Harvard Medical School, Boston, Massachusetts, US
15. Neuro-SysMed, Department of Neurology, Haukeland University Hospital, Bergen, Norway
16. Department of Clinical Medicine, University of Bergen, Bergen, Norway
17. Department of Cognitive Health Science, Tohoku University, Japan

**Background:** Deinstitutionalization of nursing care in European countries relies profoundly on the mobilization of the caregivers and municipal homecare services. Yet, caring for home-dwelling people with dementia (PwD) can be stressful and resource demanding. The LIVE@Home.Path trial tailored, implemented, and evaluated the multicomponent LIVE intervention on informal caregivers' burden in dyads of home-dwelling PwDs and their families.

**Method:** From 2019 to 2021, we conducted a 24-month multicenter, multicomponent, stepped-wedge randomized control trial including dyads of people  $\geq 65$  years with mild to moderate dementia with minimum 1h/week contact with their informal caregiver. The user-developed Learning, Innovation, Volunteer support, and Empowerment (LIVE) intervention was implemented by municipal coordinators over 6 months periods. In an intention-to-treat analysis, we applied mixed-effect regression models accounting for time and confounding factors to evaluate the effect of the intervention on Relative Stress Scale (RSS), Resource Utilization in Dementia (RUD) and Clinical Global Impression of Change (CGIC).

**Results:** A total of 280 dyads were included at baseline, mean age of PwD was 82.2 years, 63% female, 43% lived alone, 36% had Alzheimer's dementia, median MMSE was 20 (range 0-30) and median FAST score 4 (range 1-7). Caregivers were on average 66 years, 64% female, 49% were the PwDs child. At baseline, 80 dyads were randomized to intervention sequence 1 of which 67 received the intervention, corresponding numbers for sequence 2 and 3 were 97/ 57 and 103/50. During the active intervention period, time spent in personal activities of daily living significantly increased with 2.8 hours/months compared to 1.2 hours/months increase in the control period, total score of RSS was stable in the intervention period (0.36 points) (range 0-60), while it increased significantly in the control period (27.0 points), CGIC increased significantly only in the intervention period (0.5 points) (range: -5 worsening, 5 improvement).

**Conclusion:** Although caregivers reported more care time during the intervention periods, they did not experience more stress which may be related to their increased understanding of dementia. Increase in reported care time might also reflect the increased understanding of dementia, leading to more realistic evaluation of own time contribution.

## **FC47: To use or not to use? Multiple perspectives on residents' alcohol and tobacco use in residential care facilities**

**Author:** Lisanne Van de Graaf-IJzerman

**Objectives:** Residential care facilities (RCFs) provide 24/7 care to older adults with cognitive and/or physical disabilities. RCFs aim to provide person-centred care (PCC) to enhance the quality of life (QoL) of residents. Residents are dependent on their environment to fulfil their needs and wishes, such as drinking alcohol or smoking tobacco. Although alcohol and tobacco use can be experienced as a part of QoL in the final phase of life