demographics.

Results: APOE ϵ 4 carriers had 50% lower scores of SVLT_delayed recall compared to non-carriers (0.88 \pm 1.65 vs 1.76 \pm 1.75). However, APOE ϵ 4 carriers performed better on other cognitive tests than non- carriers (K-BNT (11.04 \pm 2.55 vs 9.66 \pm 2.82), RCFT (25.73 \pm 8.56 vs 20.15 \pm 10.82), and Stroop test_color response (48.28 \pm 26.33 vs 31.56 \pm 27.03)). APOE ϵ 4 carriers had slightly smaller hippocampal volume than non-carriers (3.09 \pm 0.38 vs 3.32 \pm 0.38), but greater total brain cortical thickness (1.45 \pm 1.55 vs 1.37 \pm 1.24).

Conclusions: We found that APOE e4 genotype is associated with cognition, brain volume in AD, suggesting that APOE e4 genotype can play a very important role in the underlying pathogenesis of AD.

P209: Psychological therapies for depression in older adults residing in longterm care settings: Are they effective?

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Objectives: This systematic review and meta-analysis aimed to (1) assess the effectiveness of psychological therapies for depression in older people living in long-term care (LTC) settings, and (2) investigate differences in effectiveness between types of psychological treatments.

Methods: We included randomised controlled trials (RCTs) with participants aged 65 years and older. Participants were required to present with (a) major depressive disorder (MDD) or (b) symptoms of depression based on a score over a cut-point on a validated depression measure. The study setting was LTC facilities, including nursing homes, assisted-living facilities, and residential aged care facilities, where some level of day-to-day care was provided by staff employed in the facility. Treatments were grouped and classified as cognitive-behavioural therapy, behaviour therapy, or reminiscence therapy.

Results: The literature review identified 19 studies for the qualitative synthesis: 18 were included in a meta-analysis. Results indicated a benefit for psychological treatments on depressive symptoms at end-of-intervention (standardized mean difference (SMD) -1.04, 95% CI -1.49 to -0.58; 18 trials, 644 participants), and at a medium-term follow-up (SMD -0.43, 95% CI -0.81 to -0.06; 8 RCTs, 355 participants), but not in the longer-term (SMD -0.16, 95% CI -0.58 to 0.27; 2 RCTs, 92 participants). There was no difference in outcomes between therapy types.

Conclusion: This systematic review demonstrated positive impacts of psychological therapies on symptoms of depression in older people living in LTC, both immediately after therapy and in the medium term, but longer-term impacts were not demonstrated.

P211: Quality of Life and participation in society of elderly people with aphasia

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Objective: Aphasia is a communication disorder associated with impairments in spoken language, understanding, reading and writing that impacts upon daily activities, participation in society and the quality of life (QoL), and it is common in elderly patients in the context of vascular diseases. We aimed to investigate participation in society and the environmental factors and health-related QoL of elderly people with aphasia.

Methods: People with aphasia whose age was above 65 were included in this study. QoL was assessed by the Japanese version of the Stroke and Aphasia Quality of Life Scale-39 (SAQOL-39) and Life stage Aphasia Quality Of Life scale-11 (LAQOL-11), and the participation in society and the environmental factors as barriers was assessed by the Japanese version of the Community Integration Questionnaire (CIQ) and the Japanese version 2 of the Craig Hospital Inventory of Environmental Factors (CHIEF), respectively. We explored predictors such as aphasia severity, communication impairment, cognitive functions, motor paralysis, activities of daily living (ADL).

Results: We included 58 individuals (43 men; mean age 73.2 [SD 5.7] years) with aphasia after the mean 48 (SD 64.9) months of onset (of stroke, cerebral hemorrhage, subarachnoid hemorrhage, brain tumor, traumatic brain injury). The median of the total score of SAQOL-39 and LAQOL-11 was 3.91 (Quartile Deviation 0.47) out of 5 and 85.0 (QD 12.5) out of 110. The QoL was not associated with aphasia severity assessed by the Standard Language Test of Aphasia (SLTA) which is the most frequently used comprehensive aphasia rating scale in Japan, but poor QoL was significantly associated (Spearman correlations) with increased severity of communication impairment assessed by Communication ADL Test (P = 0.01). Moreover, increased QoL was significantly associated with increased participation in society (P = 0.03) and decreased environmental factors (P = 0.01).

Conclusion: Poor communication ADL may have a negative effect on QoL in elderly people with aphasia. Also, we show that QoL is associated with participation in society. For patients with aphasia after retirement, specific rehabilitation of communication ADL might be beneficial and should be explored in future studies.

P212: The characteristics of neuropsychiatric symptom in mild cognitive impairment with diabetes mellitus.

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Objective: Diabetes mellitus (DM) is known to be one of the risk factors for cognitive decline and dementia. Neuropsychiatric symptom (NPS) is present not only in dementia, but also mild cognitive impairment (MCI). In this study, we examined NPS of MCI with DM and compared MCI with DM and our MCI database to investigate the characteristics of MCI with DM.

Methods: The participants were subjects who were diagnosed as MCI from type 2 DM participants enrolled in Osaka University Hospital. To estimate NPS, we used Neuropsychiatric Inventory (NPI) score.

Results: The number of MCI subjects with DM who were estimated NPS was 19. According to the NPI score, apathy is the most severe symptom in MCI (average score = 2.5±3.3). This result was the same as the score of our