symptoms of any mental disorder. Older age and never having been married were associated with less likelihood of having symptoms of an affective disorder. Those with cognitive impairment were more likely to have had symptoms consistent with an affective disorder. Comorbidity was predictive of increasing disability on the SF-12 but rates of mental health consultation were low, even for those with multiple disorders.
Conclusions: Community-dwelling elderly Australians experience substantial rates of mental disorders. Demographic correlates of mental disorder in this elderly population appear to differ from those established in younger populations. Mental disorder in elderly Australians is associated with significant disability, but rates of specialist mental health consultation is low.

Innovative ways of treating comorbid diabetes type II and depression: piloting the 'MADE-IT' program

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Background: Both diabetes and depression are considered 'chronic' conditions and affect an increasing number of people each year. The pilot phase of an innovative eight-session treatment program using an integrated CBT and diabetes education model was undertaken, prior to commencing a larger randomized controlled trial.
Methods: Participants with diabetes type II were recruited from two specialist diabetes clinics in New South Wales. Screening was conducted for depressive symptoms (BDI-II), Problem Areas in Diabetes (PAID) Scale, psychological distress (K10) and quality of life. Those with scores >15 on BDI-II were invited to participate. Participants were evaluated on physical and psychological measures pre/posttreatment, and tracked each 2 weeks on BDI-II, PAID Scale and fasting BGL's. Data were analyzed using matched paired *t*-tests. Qualitative information on the acceptability of the program was gathered.
Results: Thirteen subjects (7 men/6 women) aged 36–69 years attended sessions once a week for 8 weeks. Significant postintervention improvement was detected in depressive symptoms ($P \leq 0.001$), improved diabetes knowledge ($P = 0.008$) reported number of PAID ($P = 0.029$) and psychological distress scores ($P = 0.001$).
Conclusions: The 'MADE-IT' program marries evidence-based interventions for depression and diabetes and looks at the connections between the disorders. The program uses a small group context and has a standardized leader's manual and participant handbook to assist enhance treatment fidelity. While outcomes are positive, the sample is small and no control comparison was included. Further evaluation of the program will be undertaken with a multisite randomized controlled trial in the near future.

Complex mental activity and risk for dementia

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Background: This paper will review our work in the area linking complex mental activity and dementia risk, focusing on epidemiological evidence and potential underlying mechanisms based upon *in vivo* metabolic and structural neuroimaging.
Methods: A quantitative parametric meta-analysis of cognitive dementia studies. Mechanistic studies include a longitudinal study of cognition and magnetic resonance imaging volumetry as well as a randomized control trial of a memory training intervention with pre- and postmagnetic resonance spectroscopy of the medial temporal, frontal and occipital lobe.
Results: Meta-analysis of 22 cohort studies showed a significant reduction in risk for dementia incidence based on history of high complex mental activity (odds ratio: 0.54, confidence interval: 0.49–0.59). Longitudinal analysis found that a history of complex mental activity was significantly associated with a slower rate of hippocampal atrophy over 3 years after controlling for relevant confounders ($P < 0.01$). Furthermore, differential rates of hippocampal atrophy accounted for the different rates of cognitive decline in the high- and low-mental-activity groups. Systematized memory exercise selectivity increased phosphocreatine-creatine signal in the medial temporal lobe over our 5-week intervention.
Conclusions: There is compelling epidemiological evidence that complex mental activity is associated with a lower risk for dementia and cognitive decline. We have found that part of this association may be mediated by differential hippocampal atrophy. This link was further supported by finding selectively increased phosphocreatine-creatine in the medial temporal lobe as a consequence of focused memory exercises, particularly because upregulation of this high-energy buffer system has a neuroprotective effect in mouse models of neurodegeneration.

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