

## Geriatric psychiatry

### FC32

#### A quality improvement intervention in geriatric psychiatry care: Results of a pre-post design study

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**Introduction** Innovative approaches are needed to respond to the increasing number of elderly subjects with complex psychiatric conditions who require flexible and rapid responses, avoiding unnecessary hospital admissions. A new organizational model was implemented in our psychogeriatric service in September 2011 consisting of:

- a comprehensive multidisciplinary geriatric assessment;
- a helpline for caregivers for management of acute behavioral problems;
- programmed visits to nursing homes.

**Aims** To evaluate whether the implementation of this program was associated with a reduction in hospital admissions and emergency department visits.

**Methods** This is a pre-post test design study, involving 1197 patients who attended the Old Age Psychiatric (OAP) Unit three years before and three years after the implementation of the organizational intervention (1.09.2008 to 1.10.2014). An index of patient × year was calculated considering the period during which the patient was followed in OAP Unit. Data was obtained from the medical files of all eligible patients regarding demographic variables, number and type of hospital admissions and emergency department visits.

**Results** During the 3 years before the intervention 671.2 patients × years were included (mean age of 75.8 years) while after the intervention this reached 2010.1 patients × years (mean age of 77.8 years). The intervention was associated with a decrease of 44% in psychiatry emergency visits, 48% in general emergency visits, 44% in psychiatric ward admissions and 51% in geriatric ward admissions.

**Conclusions** The implementation of this new model was associated with significant reduction of hospital-based service utilization. Future research should determine if this was coupled with increased health outcomes.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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### FC33

#### Association between physical frailty and cognition in late-life depression

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**Introduction** Cognitive frailty has recently been defined as the co-occurrence of physical frailty and cognitive impairment. Late-life depression is associated with both physical frailty and cognitive impairment, especially processing speed and executive functioning.

**Aim and objectives** In this study, we investigated the association between physical frailty and cognitive functioning in depressed older persons.

**Methods** In a total of 378 patients (>60 years) with depression according to DSM-IV criteria and a MMSE score of 24 points or higher, the physical frailty phenotype as well as its individual criteria (weight loss, weakness, exhaustion, slowness, low activity) was studied. Cognitive functioning was examined in 4 domains: verbal memory, working memory, interference control, and processing speed.

**Results** Of the 378 depressed patients (range 60–90 years; 66.1% women), 61 were classified as robust (no frailty criteria present), 214 as prefrail (1 or 2 frailty criteria present), and 103 as frail (>3 criteria). Linear regression analyses, adjusted for confounders, showed that the severity of physical frailty was associated with poorer verbal memory, slower processing speed, and decreased working memory, but not with changes in interference control.

**Conclusion** In late-life depression, physical frailty is associated with poorer cognitive functioning, although not consistently for executive functioning. Future studies should examine whether cognitive impairment in the presence of physical frailty belongs to cognitive frailty and is indeed an important concept to identify a specific subgroup of depressed older patients, who need multimodal treatment strategies integrating physical, cognitive, and psychological functioning.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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### FC34

#### Association between physical frailty and inflammation in late-life depression

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**Introduction** Although the criteria for physical frailty and depression partly overlap, both represent unique, but reciprocally related constructs. The association between inflammation and frailty has been reported consistently, in contrast to the association between inflammation and late-life depression (LLD).

**Aim and objectives** To determine whether physical frailty is associated with low-grade inflammation in LLD.

**Methods** The physical frailty phenotype, defined as three out of five criteria (weight loss, weakness, exhaustion, slowness, low physical activity level), and three inflammatory markers [C-reactive protein (CRP), interleukin-6 (IL-6), and neutrophil gelatinase-associated lipocalin (NGAL)] were assessed in a sample of individuals aged 60 and older with depression according to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, criteria ( $n = 366$ ).

**Results** The physical frailty phenotype was not associated with inflammatory markers in linear regression models adjusted for sociodemographic characteristics, lifestyle characteristics, and somatic morbidity. Of the individual criteria, handgrip strength was associated with CRP and IL-6, and gait speed was associated with NGAL. Principal component analysis identified two dimensions within the physical frailty phenotype: performance-based physical frailty (encompassing gait speed, handgrip strength, and low