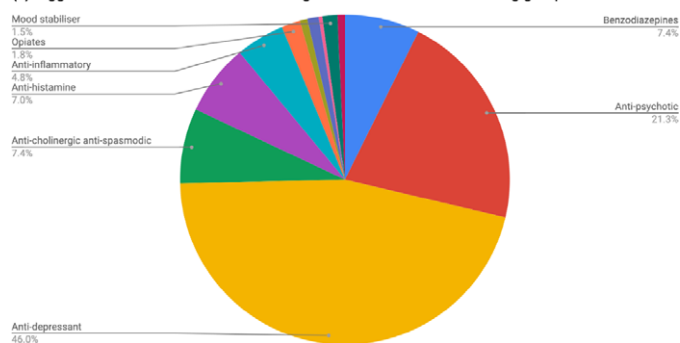


(a) Biggest contributors to the Anticholinergic Burden Score based on drug group



**Conclusions:** This multicentre cross-sectional study found that people with dementia are frequently prescribed anticholinergic drugs, even if also taking cholinesterase inhibitors, and are significantly more likely to be discharged with a higher anticholinergic drug burden than on admission to hospital.

**Conflict of interest:** This project was planned and executed by the authors on behalf of SPARC (Student Psychiatry Audit and Research Collaborative). We thank the National Student Association of Medical Research for allowing us use of the Enketo platform. Judith Harrison was su

**Keywords:** dementia; Cholinesterase Inhibitors; Alzheimer Disease; Muscarinic Antagonists

## EPP0841

### Use of benzodiazepines and related drugs and the risk of dementia: A review of reviews

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**Introduction:** Benzodiazepines (BZDs) and related drugs (BZRDs) are widely used to reduce agitation, anxiety and sleep disturbances in the elderly, despite concerns raised about their modest efficacy for such indications and risk of severe adverse effects, including acute consequences on cognition. Recently, some studies have also raised concerns about the long-term effect of BZDs, suggesting their association with an increased risk of cognitive decline and dementia.

**Objectives:** To review published synthesis studies on the risk of dementia development due to BZDs/BZRDs use.

**Methods:** An electronic search was conducted in PubMed. Meta-analysis, systematic and non-systematic reviews examining the

association between BZDs/BZRDs and subsequent dementia were included. No language nor publication date restrictions were applied. Search results other than synthesis studies were excluded. Studies were screened for relevance based on predefined inclusion and exclusion criteria.

**Results:** Overall, 246 results were obtained. After initial screening, nine studies were included. From these, three were systematic reviews with meta-analysis of observational studies (cohort and/or case-control), one was a systematic review from observational studies and five were non-systematic reviews. Most studies found an association between BZDs/BZRDs and subsequent dementia, with meta-analysis studies reporting an increased risk (OR) between 1,38 and 1,78, even after controlling for protopathic bias. However, difficulties in establishing a causal relationship are reported due to the considerable clinical and methodological heterogeneity of the primary studies.

**Conclusions:** Most studies suggest an association between the use of BZDs/BZRDs and dementia risk, highlighting that their prescription should be cautious, prevented or reduced to attenuate this risk.

**Keywords:** dementia; Cognitive decline; Benzodiazepines; Z-drugs

## EPP0842

### Combined exercise programs as protective factor against depression later in life: A systematic review

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**Introduction:** Exercise has been repeatedly reported as an effective means of preventing and treating mood disorders. Therefore, there is a significant research interest for the way exercise is connected with depression and the effectiveness of different exercise parameters as intensity, duration and modality. There is significant research evidence supporting the hypothesis that exercise can alleviate the symptoms of clinical depression. Nevertheless, there has not enough evidence to compare the effectiveness of deferent types of exercise as complementary therapy in depression.

**Objectives:** The purpose of the present study was to review the available research concerning the effect of exercise modality in depression and attempt to code and analyze the programs used in elderly (>65).

**Methods:** A systematic review was contacted of randomized control trials published in electronic journals. The electronic data bases PubMed, EBSCOhost and Trip Medical Database were used.

**Results:** Combined programs are predominate used for improving mood in elderly and the combinations used more frequently was short-term, light to moderate sub maximal aerobic exercise combined with dynamic resistance exercise following by Short-term, light to moderate sub maximal aerobic exercise combined with

static exercise. Other psychosocial factors that commonly included in the combined exercise programs are group interaction, mindfulness and music.

**Conclusions:** Combined exercise programs are as effective as simple programs in alleviated the symptoms of depression in elderly. Their advantages over simple programs are that they can promote other health benefits; they are less time consuming and more pleasurable to participants. Therefore, they are good exercise choice for elderly.

**Keywords:** Depression; combined exercise; exercise modality; Elderly

## EPP0844

### Dementia and suicide: What relationship to establish and what risks to consider?

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**Introduction:** Given the marked population aging in the world, the incidence of dementia has significantly increased, becoming a growing health care problem. Suicide is a considerable health issue throughout the life span, being prevalent in older adults, and in many countries the highest suicide rates are found in the elderly. Thus far, the relationship between dementia and suicide remains poorly understood and inconsistent.

**Objectives:** The aim of this study is to do a non-systematic review of the current literature regarding the association between suicide risk and dementia.

**Methods:** We conducted a research using the Medline database, through the Pubmed search engine, using the following key-words: "dementia", "suicide" and "risk factors".

**Results:** Overall, the risk of suicide in people with dementia appears to be the same as that of age-matched general population. However, studies point to the existence of a number of factors that can increase this risk, such as: early age of dementia diagnosis, recent diagnosis, disease awareness and depression, hopelessness, male gender, failure to respond to anti-dementia medication, history of inpatient psychiatric hospitalizations, concurrent medical comorbidities.

**Conclusions:** Studies have reported mixed results as to whether dementia itself is an independent risk factor for suicide. Despite these findings, understanding the risk factors for suicide among people with dementia is crucial and suicide prevention efforts should be carried out in this population.

**Keywords:** dementia; Suicide; Risk factors

## EPP0846

### Effects of cognitive rehabilitation training in elderly with mild cognitive impairment a randomized controlled trial

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**Introduction:** Mild cognitive impairment (MCI) becomes increasingly common. It has been demonstrated high risk of progression to dementia. There are no approved medications for treatment of MCI while cognitive intervention might improve cognitive deficits. However, there have been insufficient evidence supporting the effect of the cognitive intervention.

**Objectives:** To evaluate the effects of a cognitive rehabilitation training in patients with Mild cognitive impairment

**Methods:** A randomized controlled single-blind trial was conducted. Participants aged  $\geq 60$  years diagnosed with MCI were recruited and randomly assigned to intervention group (n=32) or waiting list control group (n=32). The intervention was 3-day weekly sessions of multi-component cognitive rehabilitation training for 3 months. Outcomes were assessed by the Cambridge Neuropsychological Test Automated Battery (CANTAB) to measure the effects of intervention at baseline, 3-month and 6-month follow up within the intervention group and compare between intervention group and control group.

**Results:** The intervention showed significant improvements on the visual episodic memory ( $p < 0.05$ ) and on the executive function ( $p < 0.05$ ) at 3-month follow up. There was a trend towards improvement of cognition between the intervention group and control group, but this effect was not significant. At 6-month follow up, the OTS significantly changed from 3-month follow up, which reflect the maintaining effects of the cognitive training.

**Conclusions:** The cognitive rehabilitation training has demonstrated improvement of the visual episodic memory and the executive function for the elderly with MCI.

**Keywords:** cognitive rehabilitation; CANTAB; mild cognitive impairment; cognitive training

## EPP0847

### Management of behavioral and psychological symptoms of dementia

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**Introduction:** Behavioral and psychological symptoms of dementia (BPSD) are a heterogeneous group of clinical manifestations related to dementia, including apathy, depression, anxiety, delusions, hallucinations, disinhibition, sleep-wake cycle disturbances, aggression and agitation. BPSD have a negative impact on cognitive decline and increase complications.

**Objectives:** Review treatment management of BPSD including non-pharmacological and pharmacological options, but mainly interventional approaches, such as electroconvulsive therapy (ECT).

**Methods:** We conducted a search in PubMed and ClinicalKey with the terms: "Behavioral and psychological symptoms of dementia"; "Electroconvulsive therapy".

**Results:** The vast majority of patients with dementia will develop one or more BPSD. The etiopathogenesis of BPSD is complex and multifactorial, with multiple direct and indirect factors, namely biological, psychological and social aspects and related to changes in cholinergic, dopaminergic, noradrenergic and serotonergic