

**Methods:** We conducted a cross sectional study on patients attending TC, NC and MC (n=443, response rate=85.9%). We used a stratified sampling approach, in which similar numbers of patients were enumerated in each type of clinic. Eligible patients were invited to complete the validated Primary Care Assessment Tool (PCAT), which includes 8 domains contact-accessibility, first contact-use, continuity of care, coordination of services, comprehensiveness-services available, comprehensiveness of services received, community and family centeredness and community orientation. Total and domain specific scores for each type of clinic were calculated. To test our hypothesis, multiple multivariate analyses were conducted to compare the total and domain PCAT scorings, controlled for patients' demographic and health characteristics (case-mix adjustment).

**Results:** After case-mix adjustment, NC patients reported a significantly higher total PCAT score than those visited TC. However, TC scored significantly higher in certain domains. Total score for MC and TC did not differ significantly but their performances in different domains differ significantly. Details will be presented.

**Conclusions:** Inclusion of CM services within national health system may not lead to higher overall primary care quality, but it may improve performance in certain domains.

#### Workshop 14, Day 2, 12 Apr

2nd Parallel Sessions  
11:30–12:45  
Logan Hall

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#### A systematic review and meta-analysis of yoga for depression

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**Purpose:** Yoga has been shown to improve mental symptoms in physical conditions and mental disorders. However, no meta-analysis on yoga for depression has been conducted. The aim of this review was to systematically assess and meta-analyze the effectiveness of yoga for depression.

**Method:** Medline/PubMed, Scopus, the Cochrane Library, PsycINFO, and IndMED were screened through August 2012. Randomized controlled trials (RCTs) comparing yoga to control conditions in patients with depressive disorders or individuals with elevated levels of depression were included. Main outcomes were severity of depression and remission rates, secondary outcomes were anxiety, quality of life, and safety. Risk of bias was assessed according to Cochrane guidelines. For each outcome, standardized mean differences (SMD) or risk ratios (RR) with 95% confidence intervals (CI) were calculated.

**Results:** Eleven RCTs with a total of 527 participants were included. Two RCTs had low risk of bias and 9 RCTs had high risk of bias. There was moderate evidence for short-term effects on severity of depression (SMD=-0.65; 95% CI -1.08 to -0.23; P<0.01) but not on remission rates (RR=2.69; 95% CI 0.56 to 12.90; P=0.21) or anxiety (SMD=-0.11; 95% CI -1.03 to 0.81; P=0.81). Subgroup analyses revealed moderate evidence for effects only in individuals with elevated levels of depression but not in patients with depressive disorders; and moderate evidence for effects of meditation-based yoga interventions but not for complex or exercise-based yoga interventions. No RCT reported safety data.

**Conclusion:** This meta-analysis found moderate evidence for short-term effects of yoga on severity of depression. Meditation-based yoga forms seem to be most effective for treating depression; and individuals with elevated levels of depression seem to gain greater benefit than those with manifest depressive disorders. While the low methodological quality of the included studies limits the interpretability of the results and safety of the intervention remains unclear, yoga, especially meditation-based yoga forms, could be considered an ancillary treatment option for individuals with elevated levels of depression.

#### Workshop 22, Day 2, 12 Apr

4th Parallel Sessions  
16:45–17:45  
Elvin Hall

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#### Motivational and psychological factors predicting lifestyle changes after an integrative medicine inpatient program

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**Purpose:** A healthy lifestyle is an important factor in the treatment of a variety of chronic diseases. The aim of this study was to identify motivational and psychological predictors for lifestyle changes after an integrative medicine inpatient program using the transtheoretical model and the health locus of control model.

**Methods:** Internal medicine patients' (N=2486; 80% female; 53.9±14.3 years) practice frequency for aerobic exercise, meditative movement therapies, and relaxation techniques; and nutrition behavior was assessed at admission to a 14-day integrative medicine inpatient program; and 3, 6, and 12 months after discharge. Lifestyle changes were regressed to sociodemographic and clinical characteristics, quality of life, mental health, and variables from the transtheoretical model (stage of change and self-efficacy) and the health locus of control model (internal, external-social, and external-fatalistic health locus of control).

**Results:** Short-term increases were found for frequency of vegetable intake and aerobic exercise; short- and long-term changes for frequency of fast food intake, meditative movement therapies, and relaxation techniques (all p<0.01). After controlling for sociodemographic and clinical characteristics and health status, self-efficacy predicted increased frequency of vegetables intake at 3 months. Improved practice frequency of aerobic exercise was predicted by self-efficacy at 6 months; and by lower external-social locus of health control at 12 months. Improved practice frequency of meditative movement therapies was predicted by being in the stage of preparation at 3 and 6 months. Improved practice frequency of relaxation techniques was predicted by being in the stage of preparation, lower external-social health locus of control, and higher internal health locus of control at 3 and 6 months; and by higher exercise self-efficacy at 12 months (all p<0.05).

**Conclusion:** Lifestyle changes after an integrative medicine inpatient program were partly predicted by variables from the transtheoretical model and the health locus of control model. Considering these factors might improve adherence to health-promoting lifestyle behavior after lifestyle modification programs.

#### Workshop 16, Day 2, 12 Apr

2nd Parallel Sessions  
11:30–12:45  
Clarke Hall

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#### Viscum album L. extracts composed of triterpene acids and mistletoe lectins exhibit synergistic apoptosis induction in paediatric Ewing's Sarcoma cells in vitro

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**Purpose:** Aside from Osteosarcoma, Ewing's Sarcoma is the most abundant form of bone sarcoma in children and adolescents. This malignancy derives from a mesenchymal stem cell and is associated with poor therapeutic outcome and prognosis. Viscum album L. extracts (VAE) are popular in complementary cancer medicine but little is known about its effects on paediatric Ewing's Sarcoma cells. The biologically effective compounds of mistletoe include hydrophilic lectins (ML) and visco-toxins and hydrophobic triterpene acids. Triterpene acids are difficult to extract and hardly solubilised in water. All commercially available VAE