Weight loss interventions have a positive “ripple effect” on untreated partners, but ripple effects in pregnancy are unknown.

PURPOSE: To determine whether prenatal lifestyle interventions that reduced gestational weight gain in pregnant women had a positive “ripple” effect on untreated partner weight.

METHODS: To determine whether prenatal lifestyle interventions that reduced gestational weight gain in pregnant women had a positive “ripple” effect on untreated partner weight.

RESULTS: 122 partners (100% male, 23% Hispanic, 82% married, 48% obese) were randomized to intervention (N=59) or usual care (N=63). There was no intervention or intervention by time interaction effect on partner weight (P = 0.7953). Partner weight trended higher, but weight changes were not statistically significant (P = 0.1204) from study-entry to 35 weeks’ gestation (Mean:0.19 kg; 95% CI: -0.73 to 1.24) or to 12 months postpartum (Mean: 0.82 kg; 95% CI: -0.84 to 1.12 kg).

CONCLUSIONS: There was no evidence of a ripple effect on partner weight. Partner weight gain was 0.82 kg from pregnancy to 12-months postpartum. Partners of pregnant women appear not to experience sympathy weight gain.

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F-58   Free Communication/Poster - Systematic Reviews and Meta-Analyses

Friday, May 31, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

3112  Board #158  May 31 2:00 PM - 3:30 PM
The Effectiveness Of Tai Chi For Rehabilitation Of Post-stroke Patients: A Meta-analysis
Jiao Lu, Lin Liu, Ya Wei Song, Yan Chen, Juan Wei. Nanjing Sport Institute, Nanjing, China.

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(No relationships reported)

Stroke has been a growing public health concern that affects 33 million patients each year worldwide. Most seriously, stroke’s prevalence rate increases each year worldwide. In recent years, tai chi is becoming an increasingly popular means of improving balance function and gait in patients with stroke. However, the clinical effects of tai chi beyond conventional physical therapy remain controversies.

PURPOSE: To systematically evaluate the effectiveness of tai chi for rehabilitation of post-stroke patients.

METHODS: Randomized controlled trials (RCTs) examining the effects of a tai chi training during 4 to 12 weeks for patients with stroke were included by searching 11 electronic databases until September 2018. Two reviewers independently extracted data and scored methodological quality by using the Physiotherapy Evidence Database scale.

RESULTS: 18 RCTs involving 1080 patients were identified for meta-analysis. Meta-analyses were performed using RevMan 5.3 and Stata 12.0.

RESULTS: Our work showed that tai chi was superior to usual rehabilitation for balance function (standard mean difference [SMD], 1.90; 95% confidence interval [CI], 1.14 to 2.66; P < 0.00001), gait speed (mean difference [MD], 0.25 m/s; 95% CI, 0.05 to 0.45; P = 0.01), Fugl-Meyer assessment (SMD, 1.22; 95% CI, 0.15 to 2.30; P = 0.03) and ADL (SMD, 2.21; 95% CI, 0.57 to 3.85; P = 0.008).

CONCLUSION: Based on the current evidence and heterogeneity among studies, tai chi with duration of 4 to 12 weeks can be cautiously recommended to effectively enhance the balance function, gait speed, motor ability of lower extremities, and activities of daily life of post-stroke patients.

3113  Board #159  May 31 2:00 PM - 3:30 PM
Exercise Effects On Cognitive Function And ADLs In Alzheimer’S Disease: A Meta-analysis
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BACKGROUND: Alzheimer’s Disease (AD) is the worldwide leading cause of senile dementia and affects approximately 5.3 million Americans. It is a healthcare issue which is accelerating at a rapid pace. While categorized as a disorder which cannot be cured or slowed, a convincing body of evidence has revealed protective effects of physical activity in mitigating symptoms and delaying progression of the disease.

PURPOSE: To investigate the effects of physical activity interventions on cognitive function and Activities of Daily Living (ADLs) in patients with AD. Based on these results, the design of exercise programs for individuals affected by AD are suggested.

METHODS: A Meta-Analysis was performed to analyze the effectiveness of different exercise modalities in ameliorating cognitive and functional symptoms of AD. Seven specific inclusion criteria were developed to include studies which contained exercise programs designed to improve or maintain aerobic fitness, strength, ADL performance or any combination of thereof.

RESULTS: Fourteen studies, which included 769 patients diagnosed with AD who were 65 years of age or older met the inclusion criteria for the analysis. Calculations for Effect Size (ES) and Confidence Interval (CI) showed that exercise interventions had a moderate positive effect on cognitive function (ES=0.52; CI=0.15-0.89; p<0.001), and a large positive effect on performance of ADLs (ES=0.76; CI=0.19-1.33; p<0.001). Furthermore, interventions that included an aerobic component (Aerobic Training and Multimodal Training) positively influenced cognitive function, while interventions that included resistance and functional training (Resistance Training and Multimodal Training) improved performance in ADLs.

CONCLUSION: While a large variability was found in study design, intervention, duration, and assessment measures, exercise was usually shown to have positive effects on measures of decline in AD. Exercise programs should be incorporated in the management of AD patients. The choice of exercise modality should include both aerobic and strength/functional components to achieve maximum benefit in cognitive function and ADLs performance. Multimodal Training, which includes activities across the metabolic spectrum, shows the greatest promise as an exercise intervention in AD.