
A-55 Exercise is Medicine®/Poster - EIM - Mental Health

Wednesday, May 29, 2019, 7:30 AM - 12:30 PM

Room: CC-Hall WA2

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Exercise And Physical Activity Promotion Improves Cardiorespiratory Fitness, Symptoms Of Disease And Well-being In Patients With Schizophrenia

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Patients suffering from Schizophrenia (SZ) show low fitness, a sedentary lifestyle and comorbidities like diabetes and cardiovascular diseases, resulting in 20 years less of life expectancy.

PURPOSE: To evaluate the impact of an intervention combining exercise and physical activity promotion (PAP) on cardiorespiratory fitness (CRF), severity of SZ, symptoms of disease and well-being.

METHODS: 35 patients were randomized into an intervention (n=19, aged 39.0 ± 13.6 years, BMI 28.3 ± 7.3) or control group (n=16, aged 36.0 ± 9.3 years, BMI 25.7 ± 5.2), directly after inpatient treatment for SZ. Intervention included two sessions of high intensity indoor cycling (IC; each 45min), and one session of PAP (60min) per week for three months. In months 4-6, the intervention was reduced to one session IC and one session PAP per week. The control group received a physiologically ineffective control intervention. Measurements were conducted at baseline (t0), after three (t1) and 6 months (t2) of intervention, and after 12 months (six-month follow up, t3). Measurements included CRF (bicycle ergometry), severity of SZ (PANSS-Score), well-being (SF-36), and psychological distress (SCL-90).

RESULTS: The intervention improved significantly severity of SZ (t0: 55.4 ± 16.3, t2: 34.8 ± 3.3, p<.05), well-being (t0: 50.4 ± 10.1, t2: 60.5 ± 7.1, p<.05) and psychological distress (t0: 159 ± 47.4, t2: 119.8 ± 34.3, p<.05). For CRF, patients were able to improve their physical capacity, expressed as W/kg (t0: 1.85 ± 0.6, t2: 2.13 ± 0.6, p<.05), but did not significantly improve their peak oxygen uptake, expressed as ml/min/kg (29.0 ± 7.0, t2: 30.5 ± 8.7, n.s.). Six month after the intervention, only improvements in severity of SZ, well-being and psychological distress remained statistically significant (PANSS: 38.0 ± 9.0, SF-36: 59.2 ± 8.0, SCL-90: 119.2 ± 36.6, all p<.05).

CONCLUSION: Exercise and PAP significantly improves CRF, severity of SZ, well-being and psychological distress in SZ patients. Effects on CRF are declining shortly after the end of the intervention. We recommend the implementation of exercise and PAP into the post-acute care of SZ patients. Moreover, it is necessary to further strengthen the sustainability of effects with respect to CRF, in order to prevent fall-backs and health detriments caused by low physical fitness.

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Fitness, Fatness And Survival In Older Adults With Intellectual Disabilities. Which One Is Key?

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Older adults with intellectual disabilities have very poor physical fitness levels. Additionally, overweight and obesity are highly prevalent in this population, even more prevalent than in the general population. Both fitness and fatness have been found to be related to survival in the general population. To improve healthy ageing and survival of older adults with intellectual disabilities we need to know which problem requires our main focus.

PURPOSE: To determine whether fitness or fatness is more important for survival in older adults with intellectual disabilities.

METHODS: As part of the Healthy Ageing and Intellectual Disabilities (HA-ID) study, fitness (comfortable gait speed) and fatness (Body Mass Index) of 874 older adults with intellectual disabilities (≥ 50 years; 61.4 ± 7.8 years) was measured at baseline. All-cause mortality was collected over a 5-year follow-up period. The relationship between fitness, fatness, and survival was analysed with Kaplan-Meier curves and Cox proportional hazard models.

RESULTS: Fitness was significantly related to survival (HR = 0.21, 95% CI = 0.09 - 0.48, p < 0.001), while fatness was not related to survival. People who were unfit and fat were 4.6 (95% CI = 2.0 - 10.7) times more likely to die, and people who were unfit and not fat were 3.6 (95% CI = 1.7 - 7.5) times more likely to die within the follow-up period, than people who were fit, regardless of their fatness.

CONCLUSIONS: Being fit is key for survival in older adults with intellectual disabilities. Our results therefore do not support the emphasis seen in research and practice on reducing weight. The focus should primarily be on improving the fitness of older adults with intellectual disabilities to improve healthy ageing and survival.

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The Effect Of Moderate-intensity Physical Activity On Biopsychosocial Factors Among Veterans With Symptoms Of Ptsd

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(No relationships reported)

Physical activity has been shown to have a positive impact on biopsychosocial variables among individuals who may be experiencing symptoms related to PTSD.

PURPOSE: The purpose of this study was to evaluate the impact of a moderate-intensity physical activity regimen on aerobic endurance, barriers to accessing health care, and symptom severity of PTSD among military veterans.

METHODS: Participants of this study (n=4) engaged in a 4-week physical activity regimen that met two times per week. The dependent variables were aerobic endurance, measured with the Cooper 12 Minute Walk test, barriers to accessing health care, measured with the BACE, and symptoms of PTSD, measured with the PCL-5.

RESULTS: Descriptive statistics and a paired samples t-test were utilized to analyze data. There were statistically significant differences for all dependent variables at the post-assessment level, indicating statistically significant improvements in the PCL-total score (p=.032), BACE-total score (p=.043), BACE-stigma score (p=.032), VO₂max (p=.014), and METS (p=.014).

CONCLUSION: Researchers concluded that a moderate-intensity physical activity regimen may be effective at improving aerobic endurance, perceived barriers to accessing health care, and symptom severity of PTSD among military veterans. Future studies should aim to increase sample size and utilize a laboratory grade assessment for capturing changes in VO₂max and METS. Additionally, future research should aim to investigate the dose-response effect on dependent variables based on varying physical activity intensity levels, duration of intervention, and the duration of acute bouts of physical activity.