

of coordination, agility and balance (TUG) by 2%, increased the number of repetitions on S30 test by 4.1% and the number of meters from 216.4 to 246.8 (14.7%, MIN 6) improving the aerobic capacity. Regarding to cognitive capacity (MMS) EG preserve the cognitive function comparatively to the CG [(EG: pre-test to post-test: 20.7-21.6 points (4.3%) and in the CG: 20.03-19.65 points (-1.9%)]. In balance performance EG showed a significant improvement after the program training ($P=0.014$) and also a significant increase compared to CG ($P=0.037$). These data indicated that the effectiveness of the innovative training program applied during 12 weeks regarding to the prevention of the risk of falls seems to be positive in preserved physical independence and cognitive function mediated in part, by the effectiveness of program training particularly developed to institutionalised elderly people.

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Continuous metabolic syndrome risk score validity for Danish children and adolescents

Jorge Bravo¹, Armando Raimundo^{1,2}

Departamento de Desporto e Saúde, Escola de Ciência e Tecnologia, Universidade de Évora, Portugal; 2. Research Centre of Sports, Health and Human Development, CIDESD; ammr@uevora.pt

A study performed in children (Eisenmann, Laurson, DuBose, Smith, & Donnelly, 2010) showed that a continuous metabolic syndrome risk (cMSr) score, derived from principal component analysis (PCA), was higher in those with the metabolic syndrome (MS) and that the cMSr score raised progressively with the number of adverse risk factors, validating the cMSr score in 7-9 years old children. Their study suggests the application of such approach to validate a cMSr score for older youth. Our study aims to assess the validity of a cMSr score for Danish children and adolescents. Data included 1812 youth between 9.0-15.99 years old who participated in the European Youth Heart Study (EYHS) framework in Denmark (Riddoch et al., 2005). The cMSr was calculated based on the risk factors considered by the current International Diabetes Federation (IDF) definition for children and adolescents (Zimmet et al., 2007), involving three steps: a) all variables were normalized (log10) because of their non-normal distribution; b) PCA with orthogonal (varimax) rotation was applied, and variables with a factor loading ≥ 0.4 , which share at least 15% of variance, were used. Analysis revealed three principal components with eigenvalue ≥ 1.0 for girls and two principal components for boys; c) cMSr was computed by summing the individual principal component scores, each weighted for the relative contribution of the principal components to the explained variance. The cMSr score increased progressively with the number of adverse risk factors, being lowest in the group without risk factors (-0.35 ± 1.4), higher ($p < 0.001$) in the group with one risk factor (0.78 ± 1.6), even higher ($p < 0.001$) in the group with two risk factors (1.98 ± 1.2) and highest in those possessing the MS according to IDF criteria for youth (3.17 ± 1.5). Our results validate the application of the cMSr score for Danish children and adolescent.

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Effects of a functional rehabilitation program designed by the arronches care unit for a patient with stroke: a case report

Ana Simeão¹, Deolinda Pinto¹, Andreia Miranda¹, Catarina Pereira²

1. Arronches Care Unit of Mean Duration and Rehabilitation, Portugal; simeiorita@hotmail.com; 2. Departamento de Desporto e Saúde, Escola de Ciência e Tecnologia Universidade de Évora, CIDESD, Portugal

This study describes the effect of a Functional Rehabilitation Program (FR) designed for the recovery of stroke patients. A new FR approach for stroke patients was experienced obeying the internment protocol used in the Continuing Care Units Mean Duration and Rehabilitation. According to the law (DC 101/2006), the protocol includes the patient initial assessment and the design of an individual FR program of treatment developed until 90 days; moreover, suggests evaluations after 30 days of hospitalization and before day 90

(Girão & Guerreiro, 2011). Case Description: Patient aged 74 yrs, diagnosed with left capsular hematoma striatum due to ischemic stroke. Background: hypertension and alcoholism. In the initial evaluation, the patient was oriented in time and space, he showed left hemiparesis, hearing and visual acuity impairment, motor programming deficit, balance at setting position compromised, inability to walk, and high dependence in basic and instrumentals activities of daily living (BADLs and IADLs). Evolution prognosis: reserved. Intervention: The FR program (5 days/week) incorporated three areas: Rehabilitation Nursing (RN), Physiotherapy (P), and Psychomotor Rehabilitation (PR). The RN performed BADLs relearning with a nurse; the P used the Bobath method; and the PR, as innovation, combined the traditional Brunnstrom method with sensorimotor stimulation targeting ontogenetic reliving. Evaluations were performed in the pre-intervention (PI), after 30 intervention days, and at the end of the program - before day 90. BADLs were accessed using the Barthel Index, and the IADLs using the Lawton Index. Global mobility was measured using Mobility Scale for the Elderly (EMI) and the six minutes walking test. The patient improved BADLs (Barthel, score: PI = 14; 30 days = 37; 90 days = 62) and IADLs (Lawton score: PI = 0; 30 days = 5; 90 day = 7), as well as mobility (EMI score: PI = 0; 30 days = 6; 90 day = 11), having reacquired the walking ability (walking test: PI = 0 m; 30 days = 38 m; 90 day = 50 m). The performed interdisciplinary intervention showed positive effects on the recovery of the stroke patient; specifically induced increases in his mobility and ability to perform BADLs and IADLs. These results suggest that interdisciplinary RF programs including ontogenetic reliving would be effective for the recovery of stroke patients with poor prognosis of evolution.

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Influence of the number of weekly resistance training sessions in health users of an exercise program in a corporate wellness center

Rhodes Serra¹, Marcelo Dias², Roberto Simão¹, Filipe Matos^{3,4}, José Vilaça^{3,4}, Francisco Saavedra^{3,4}

1. Escola de Educação Física e Desportos da Universidade Federal do Rio de Janeiro, Brasil; 2. Laboratório de Fisiologia do Exercício da Faculdade Metodista Granbery, Juiz de Fora, MG, Brasil; 3. Universidade de Trás-os-Montes e Alto Douro (UTAD), Vila Real, Portugal; 4. Centro de Investigação em Desporto, Saúde e Desenvolvimento Humano (CIDESD|UTAD), Vila Real, Portugal; josevilaça@utad.pt

Resistance Training exercises (RT) have been shown to improve physical condition and health. However, very few is known about the influence of the number of weekly sessions in relation to RT practitioners in corporate wellness centers, designed to promote the health of workers. The aim of this study was to investigate the influence of number of weekly RT sessions on body composition (percentage of body fat, lean body mass and waist circumference), strength, flexibility and mental health of adults participating in wellness programs corporative. Sixty seven subjects (39 men and 28 women) aged between 30 and 45 years, were divided into three groups, according to the weekly frequency of training (2, 3 and 4 /week) and were submitted to the same RT methodology with 12 weeks. 10RM tests were performed for bench press, leg press and lat pulldown exercises, assessment of body composition and application of the General Health Questionnaire (GHQ 12) at baseline and after three months of training. All groups showed increases in loads of 10RM for all exercises after three months of training ($p < 0.05$). The flexibility revealed a significant increase pre and post-training for all groups ($p < 0.05$). In QHG 12, significant differences were observed ($p < 0.05$) between the pre and post-intervention for all groups. Only in the group that trained four times a week there was a significant difference ($p < 0.05$) in the percentage of fat, pre- and post-intervention. RT as a component of a corporate wellness program tends to improve strength, body composition, flexibility and psychological state of its practitioners. The number of weekly sessions had no significant impact on most of the variables.

Acknowledgement

Macro-to-Nano Human Sensing: Towards Integrated Multimodal Health Monitoring and Analytics, n.º da operação NORTE-01-0145-FEDER-000016, cofinanciado pelo Fundo Europeu de Desenvolvimento Regional (FEDER) através do NORTE 2020.

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