

125 °) and control (flexors 92.29, abductors 99.29, inguinal 131.76). **Conclusions:** Kinesitherapy is important in pregnancy because it improves the level of physical activity and muscle flexibility.

**Keywords:** Kinesitherapy, pregnant women, psychophysical preparation for childbirth

## 6807 - Effect of the COVID-19 pandemic lockdown among individuals with a spinal cord injury in Belgium: An observational study

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**Background and Aims:** Physical activity (PA) is essential for health. During the Covid-19 pandemic, access to PA-facilitating environments was restrained. Despite this, several studies have shown that healthy individuals who were active prior to the lockdown increased their PA during confinement. It remains unknown whether this is true among those with spinal cord injury (SCI). The primary aim was to evaluate the effect of the lockdown on PA levels of active and inactive Belgians with SCI. The secondary aim was to evaluate the effect of the lockdown on social participation, quality of life, pain and fatigue. **Methods:** Participants with SCI were recruited prior to the lockdown. Based on self-report PA-minutes per week, participants were placed in the active or inactive group. They then completed the questionnaires: demographics and medical history, physical activity scale for individuals with a physical disability, return to normal living index, EUROHIS-quality of life, a visual analogue scale for upper-limb pain, and fatigue severity scale. The same questionnaires were completed once more during the lockdown. **Results:** During the lockdown, the active group underwent significant decreases in total, leisure, and household, but not work-related, PA-levels. The less active group experienced a significant decrease in total PA only. The effect size of the impact of the lockdown on PA-level was greater in the active group. Both groups significantly reduced social participation. Other outcomes, namely quality of life, pain and fatigue, were not impacted by the lockdown. **Conclusions:** The PA level of Belgian individuals with a SCI was significantly reduced during the lockdown. Individuals who were active prior to the lockdown were most impacted, especially in leisure-PA activities.

## 6776 - Body-weight-supported treadmill training as a physical therapy mean, to patients with spinal cord injury: A prospective study

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**Background and Aims:** Body-Weight-Supported Treadmill Training (BWSTT) could be a cost-effective alternative to Robotic Assisted Gait Training (RAGT) apparatus and Exoskeletons. Our aim was to investigate the effects of BWSTT on mobility, functionality, muscle spasticity, quality of life, body composition and biochemical

serum indices. **Methods:** Spinal Cord Injured patients underwent BWSTT, for 3 sessions/week for 6 weeks. AIS A and B patients used ARGO. For the investigation of the effects of this intervention, WHOQOL-BREF questionnaire, Modified Ashworth Scale, 10-item Modified Barthel Index, WISCI II, ASIA Impairment Scale (AIS), blood tests and DXA scans, were used at 2-time points, before and after the end of the intervention. **Results:** Data from 26 enrolled patients were analysed. 76.92% male, 52.96±16.31 y.o., T. f. Injury 15.96±13.09 months. 3 AIS A (11,54%) 3 AIS B (11,54%) and 20 AIS D (76,92%). Analysis of Barthel Index scores revealed a statistically significant positive difference (p:0.001) at the end of the intervention: Barthel index score before: 56,92±23,63 and after: 65,58±23,17. Analysis of WISCI II scores revealed a statistically significant positive difference (p:0.011) at the end of the intervention: WISCI II score before: 11,12±8,06 and after: 12,62±7,36. Analysis of Osteocalcin serum concentration data revealed a statistically significant increase (p:0.004) at the end of the intervention: Osteocalcin serum concentration before: 23,13±17,91 ng/ml and Osteocalcin serum concentration after: 27,35±22,31 ng/ml. A correlation with AIS classification was found. **Discussion/Conclusions:** In SCI patients, BWSTT intervention improves mobility, functional ability and increases Osteocalcin in blood serum. BWSTT is a reliable, cost-effective alternative to RAGT and Exoskeleton Gait Training.

## 6731 - Correlation between cardiopulmonary indices and running performance in a 14.5 km endurance running event

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**Background:** Nowadays, recreational long-distance running has become very popular and the number of half marathon participants is continuously growing. Training for a long distance race requires development of specific endurance abilities and its main goal is to produce the desired race performance. The aim of this research was to study whether the race performance of the recreational endurance runners is correlated with their cardiopulmonary indices estimated in the laboratory set. **Methods:** A cross-sectional study design was adopted in order to examine the relationship of 14.5 km running performance with cardiopulmonary parameters. Fifteen recreational long-distance runners from North Greece (aged 41.3 ± 9.2 years) were examined before the endurance running race. The laboratory evaluation of athletes was compromised of the comprehensive medical pre-participation screening and cardiopulmonary exercise testing (CPET) during which parameters such as VO<sub>2</sub>max, VT, RER, VE/VO<sub>2</sub>, VE/VCO<sub>2</sub>, running economy indicators and Oxygen pulse were estimated. **Results:** The results showed that the 14.5 km race performance time was significantly correlated with VT, RER, VO<sub>2</sub>max and peak running speeds achieved during CPET (r=-0.671, p<0.01; r=-0.733, p<0.01; r=-0.531, p<0.05, r=-0.754, p<0.01, respectively) while cardiopulmonary indices of oxygen uptake did not reliably predict the same race end time. **Conclusion:** There is a better correlation of 14.5 km running performance of recreational long-distance runners with CPET speed-related indices at specific workloads than with indices of oxygen uptake, running or respiratory economy. When preparing pace and training strategy, amateur long-distance runners should mostly rely on data related to specific running speeds.