

The group with KOA (GOAJ) showed an average of 2,7 falls in the last twelve months, while the control group (GC) showed an average of 1,4 falls. There was a negative correlation between gait speed and sitting down/standing up time with the number of falls.

**Conclusion:** Women with KOA have decreased functional mobility, and this may contribute to a higher occurrence of falls in this population.

**Implications:** The study shows that women with KOA have decreased functional mobility, which can negatively affect the performance of activities of daily living and the quality of life of this population.

**Keywords:** Arthrosis, Physical Functional Performance, Biopsychosocial Factors

**Conflict of interest:** The authors declare no conflict of interest.

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## ASSOCIATION BETWEEN POSTURAL BALANCE AND FUNCTIONAL STATUS IN POST COVID-19 CONDITION IN NON-HOSPITALIZED PATIENTS

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**Background:** Individuals with post COVID-19 conditions risk to develop short and/or mid term neuromuscular sequelae that may involve changes on balance control. The POST-COVID-19 Functional Scale (PCFS) has the potential to evaluate the general functional capacity, however, if the PCFS can also be used to measure the impact on the balance control over the post COVID-19 functionality, remains unclear.

**Objectives:** To investigate if COVID-19 may impact the balance control and if possible, changes are associated with the functional status of the individual estimated by PCFS.

**Methods:** 60 adults were split into two groups: 30 patients on control group and 30 on post COVID-19 group. Both groups underwent clinical evaluation of balance control based on the following tests: Functional Reach Test (FRT), Berg Balance Scale (BBS), Time Up and Go (TUG), Tinetti Balance Test (TINETTI) and Mini-BESTest (MBT). Besides, the post COVID group answered the PCFS questionnaire. For data statistical analysis, it was used the Student's T Test, comparing the score found on groups' balance tests. The Pearson's correlation test was used to correlate the balance tests and PCFS. The multiple linear regression was used to identify which balance variable may play important role on PCFS' prevision, with significance level of 5%.

**Results:** It wasn't found significant differences ( $p > 0,05$ ) between groups for: BBS (average  $\pm$  control standard deviation and post COVID-19:  $49.200 \pm 7.863$  and  $49.300 \pm 8.322$  points); TUG ( $12.500 \pm 4.925$  and  $11.033 \pm 5.109$  seconds); TINETTI ( $24.467 \pm 4.890$  and  $25.633 \pm 3.873$  points); and MBT ( $22.500 \pm 5.361$  and  $22.967 \pm 4.716$  points). But, for FRT, there was significant difference ( $p = 0,046$ ) between groups post COVID-19 ( $31,333 \pm 6,563$  cm) and control ( $28,083 \pm 5,748$  cm). The balance variables showed significant

correlation ( $p < 0,05$ ) and moderated with PCFS: TINETTI ( $r = 0.584$ ), FRT ( $r = \pm 0.542$ ), MBT ( $r = -0.53$ ), BBS ( $r = 0.415$ ) and TUG ( $r = 0.368$ ). TINETTI was the independent variable that significantly played important role on PCFS' determination ( $R^2$  value was set from 0,368,  $p = 0.004$ ).

**Conclusion:** The results showed that significant changes on postural stability wasn't observed among groups for most balance tests applied, except FRT. Both groups, however, presented reach on FRT above reference value, indicating low fragility and fall risk for the patients. Minor changes on functional status of post COVID-19 group (23 of 30 patients presented grade between 0 and 1) may explain similarities on body balance among groups. Moderated correlations were observed between PCFS and balance tests and, the TINETTI, seems to play important role on PCFS' determination.

**Implications:** In rehabilitation field, the research results indicate the PCFS' implementation to monitor functionality, covering changes on postural balance and other functional outcomes, aiming to improve evaluation methods and intervention on neuromuscular function rehabilitation on the context of post COVID-19.

**Keywords:** Postural balance, COVID-19, post COVID-19 condition, POST-COVID-19 Functional Scale

**Conflict of interest:** The authors declare no conflict of interest.

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## POWERED MOBILITY FOR CHILDREN WITH CONGENITAL ZIKA SYNDROME: LEARNING AND GOAL ATTAINMENT OUTCOMES

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**Background:** Powered mobility training with modified ride-on cars is an innovative intervention option that aims to improve the body functions and participation of children with severe disabilities. In addition to enabling self-initiated mobility, training can result in learning gains in ride-on car use and attainment of rehabilitation goals. Due to their severe motor and cognitive impairment, children with Congenital Zika Syndrome (CZS) may benefit from interventions with modified powered ride-on cars, as such devices are more cost-effective when compared to motorized wheelchairs.

**Objectives:** To describe the results of a powered mobility intervention with modified motorized ride-on cars for children with CZS, considering the outcomes of goal attainment and mobility learning.

**Methods:** This is a pilot study with 12 weeks of intervention and 4 weeks of follow-up. The intervention was guided by a physiotherapist or occupational therapist and consisted of training sessions with modified ride-on cars, lasting 40 minutes, three times a week, at the Clínica Escola de Fisioterapia da Faculdade de Ciências da Saúde do Trairi (FACISA), in Santa Cruz-RN. The outcomes of interest were mobility learning, assessed using the "Assessment of the Use of