BACKGROUND:
The study of exercise training in adolescents with cerebral palsy (CP) has undergone significant development since 2006. Of special interest is the translation of a rehabilitation exercise program into daily activity and participation in an adolescent with CP. This poster details current research addressing the measurement of daily activity of adolescents with CP.

Introduction:
- There is a need to measure daily physical activity in the natural environment of adolescents with CP.
- This study addresses the feasibility and interpretation of the use of the Actigraph® accelerometer in adolescents with CP.

Participants
- 23 adolescents (17M, 6F, mean age: 13.5 years) have been analyzed.
- GMFCS Levels I (n=9), II (n=5), III (n=5), IV (n=4) with a diagnosis of CP.

Methods
- The accelerometer worn for 7 days (range: 5-7 days)
- Wrist and waist accelerometry data were collected and correlated to a daily log kept by the adolescents.
- Data analyzed by one investigator (SN) following the guidelines for general accelerometer use.
- Activity intensity was examined using the cut-points developed by Evenson, et al. (2008) which were recently validated for use in children and adolescents with CP by Clancy, et al. (2011).

Analysis
- Participants showed a high acceptance rate of accelerometers; only concerns expressed regarding the visibility of the device.
- Log sheets show consistent attention to detail.

Results
- Waist activity is much lower than provincial health guidelines (60 minutes MVPA).
- Wrist accelerometry interesting comparison, but not yet validated.
- Participants showed a high acceptance rate of accelerometers; only concerns expressed regarding the visibility of the device.
- Log sheets show consistent attention to detail.

CONCLUSION
- The Actigraph Accelerometer shows promise as a feasible and valid measurement of performance in daily activity of adolescents with CP.
- Preliminary analysis shows a significant depression in activity levels in adolescents with CP.
- The Stay-FIT pilot study is an important first step to developing an effective intervention study focusing on the translation of an exercise training program into the daily activity/participation of children and adolescents with CP.

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