

primary gains were related to postural stability in the seated position. These findings highlight the necessity of personalized rehabilitation programs and long-term follow-up to maximize functional independence.

Implications: This study underscores the fundamental role of combining multiple evidence-based rehabilitation methods and techniques to optimize functional outcomes in neurofunctional rehabilitation. The findings emphasize that a multimodal approach—integrating different therapeutic strategies—enhances functional independence and social participation more effectively than isolated interventions. Future research should further explore the synergy between various rehabilitation techniques and advocate for their broader integration into healthcare and educational policies, ensuring expanded access to specialized and comprehensive care.

Keywords: Cerebral Palsy, Neurological Physiotherapy, Rehabilitation, Motor Activity, Patient Participation, Longitudinal Studies

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DEVELOPMENT OF MOBILITY PERFORMANCE IN BRAZILIAN CHILDREN AND ADOLESCENTS WITH CEREBRAL PALSY

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Background: Parents of children with cerebral palsy (CP) have desires for changes in their children's mobility. Knowing the level of mobility of these children is crucial for guiding the prognosis and aligning family expectations.

Objectives: To identify the development of mobility performance in Brazilian children and adolescents stratified by each level of the Gross Motor Function Classification System (GMFCS).

Methods: This is a multicenter study, which included 313 Brazilian children and adolescents with CP (aged 2 to 18 years). Mobility performance was assessed by the Gross Motor Function Family Report (GM-FR), and the classification level was determined by the GMFCS. To identify mobility performance, the nonlinear regression model developed by Palisano (2000) was used.

Results: A total of 368 evaluations were performed, with a mean age of 7.21 years (± 3.746). The GMFCS level proved to be a strong predictor and explained 78% ($R^2 = 0.78$; $p < 0.001$) of the variation in mobility, while age was not a predictor ($R^2 = 0.23$; $p < 0.061$). The predicted GM-FR scores differed across the five mobility curves: [level I (N = 63) = 89.1; level II (N = 70) = 80.6; level III (N = 40) = 56.7; level IV (N = 60) = 32.8; level V (N = 128) = 13.9]. The difference in the predicted GM-FR score between the GMFCS levels was, on average, 19.88 points, with the smallest difference between levels I and II (8.9 points). The age at which the children reached 90% of the predicted GM-FR score was: GMFCS I: 4 years; GMFCS II: 6 years and 1 month; GMFCS III: 3 years and 6 months; GMFCS IV: 3 years and 9 months; GMFCS V: 3 years and 11 months.

Conclusion: The classification of children with CP based on abilities and functional limitations is predictive of mobility. Children with GMFCS levels I and II exhibit less variation in mobility between

them, while the other levels show greater variation. Additionally, children with higher GMFCS levels take longer to reach the expected limit.

Implications: The implications of this study highlight that the functional classification of children with cerebral palsy, based on the GMFCS, is a strong predictor of motor performance and mobility. Children in GMFCS levels IV and V reach the expected mobility limit more quickly, in contrast to children with GMFCS levels I and II, who show less variation in performance. This suggests that, for children with higher GMFCS levels, therapeutic interventions should focus on maximizing functional capacity within their level of mobility, given that they face greater limitations. Furthermore, everyday performance skills, as reflected in the GM-FR, emerge as stronger predictors of mobility than chronological age. This finding underscores the need for rehabilitation strategies that consider functionality in real-life contexts, not just motor skills in clinical settings, and highlights the importance of public policies that promote inclusion and accessibility for all children with CP, especially those with GMFCS levels IV and V.

Keywords: Cerebral palsy, Mobility, Capacity, Performance

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CEREBRAL PALSY AND EQUINE-ASSISTED SERVICES: EXPLORING THE BENEFITS OF EQUINE STIMULATION

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Background: Cerebral palsy (CP) is a movement and posture disorder caused by a non-progressive brain injury. Various interventions can support children with CP, including equine-assisted services, which have demonstrated positive effects on motor function.

Objectives: This study aimed to evaluate changes in the functional abilities of a child with CP following participation in an equine-assisted services program.

Methods: A case study was conducted with a 4-year-10-month-old male child, using a quantitative research approach. The intervention comprised weekly 45-minute sessions over 12 weeks, totaling eight sessions. Functional assessment was conducted through pre- and post-testing using the Pediatric Evaluation of Disability Inventory (PEDI), which measures performance across three domains: self-care, mobility, and social function. The PEDI also assesses the level of independence, the need for assistance, and the use of environmental modifications to facilitate performance.

Results: Post-intervention, the child exhibited notable improvements. The self-care score increased from 21 to 84, mobility improved from 12 to 17, and social function rose from 10 to 13. These findings suggest a positive impact on functional abilities, as evidenced by the score advancements.

Conclusion: Participation in the equine-assisted services program contributed to enhanced functional performance in a child with CP, as reflected in the post-test results. These findings underscore the potential of equine-assisted interventions as a valuable therapeutic modality for children with CP. Future studies should explore the effects of increased session frequency and duration.