

Research Report

TITLE: Caregiver Perspectives on Body-Weight Supported Treadmill Training as an Intervention for Young Children with Cerebral Palsy

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PURPOSE/HYPOTHESIS: Children with cerebral palsy (CP) in Gross Motor Function Classification System (GMFCS) levels IV and V present with challenges that impact their functional activities and participation in family activities. The purpose of this study was to examine caregivers' perspectives on body-weight supported treadmill training (BWSTT) as an intervention for their young children with CP.

NUMBER OF SUBJECTS: Participants included 4 caregivers of children with CP in GMFCS levels IV (n = 2) and V (n = 2) who previously participated in 6 weeks of BWSTT.

MATERIALS/METHODS: Three children diagnosed with CP in GMFCS levels IV and V between the ages of 2 to 3 years participated in 6 weeks of BWSTT, 3 times per week. The type of CP varied for each child: 1 had spastic diplegia, 1 had spastic triplegia and 1 had spastic quadriplegia. The caregivers of the children were asked to participate in face to face interviews after the intervention ended. Four caregivers (1 parent of each child, plus an additional parent of 1 of the children) participated in one-on-one semi-structured interviews using open-ended questions. Interviews were audio recorded and transcribed. Analysis of the interviews was conducted through open coding to identify categories by the principle investigator. A secondary investigator coded 50% of the transcripts to triangulate the coding for trustworthiness. The two investigators then discussed the codes and categories until an agreement was reached to identify the emergent themes and an overarching theme.

RESULTS: The principal investigator and 3-4 research assistants were able to perform BWSTT with all 3 young children without adverse effects. Attendance varied between 16 to 18 sessions, with an average participation rate of 94%. Careful triangulation of the interview data led to the identification of 3 common themes and 1 overarching theme based on caregiver perceptions of the BWSTT program. The themes identified were: 1) Caregiving (support system, physical and emotional strain, routines), 2) Future outlook (optimism, facing challenges, fears/worries), and 3) Importance of therapies (traditional physical therapy, BWSTT intervention, and other therapies as more important than physical therapy). The overarching theme that emerged was: Acceptance of the journey.

CONCLUSIONS: The caregivers reported that after the BWSTT intervention, their children improved in motivation to walk, and also with head and trunk control. Caregivers of the children all expressed the desire to continue the program and stated that they would participate again if given the chance. They also emphasized the importance of other therapies to address issues such as feeding and communication.

CLINICAL RELEVANCE: Caregivers are likely to take time out of their busy schedules to pursue physical therapy treatments that they view as effective in improving their child's gross motor function. Although physical therapy is perceived as vital to their child's progress, it is a small part of the overall journey for these families.

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