

Editor's Corner

Welcome to the first open issue of the Journal. This issue includes four original research articles, two reviews, a case study, and an editorial. As the journal matures, we will publish additional non-themed issues covering relevant topics. In the first article, Effect of Ankle-Foot Orthoses(AFO) on Gait in Typically Developing Children: Developmental Trend in Segmental Coordination, Dan et al. report that wearing AFO induced little change in standard gait parameters in younger children, though it altered the organization of gait and that changes were more pronounced in older children. As gait analysis technology and software continue to improve, additional research regarding normal and abnormal gait of cerebral palsy and other disorders will provide further evidence based medicine for treating all types of gait disorders for both adults and children.

In the second article, Gross Motor Outcomes in Children with Hemiparesis Involved in a Modified Constraint-Induced(CIT) Therapy Program, Gillick and Koppes measure concurrent gross motor and lower extremity functional changes using the Gross Motor Function Measure (GMFM) before and after a modified upper extremity constraint induced therapy program in children with hemiparesis. They document for the first time the improvement in lower extremity function using CIT in the upper extremity. One future hypothesis to be explored is the effect of cortical reorganization with advanced imaging such as functional MRI and/or diffusion tensor imaging. Initiation during inpatient rehabilitation and the potential impact on length of stay will be important future questions to research.

The oral motor mechanisms behind sucking, swallowing and the transition from bottle feeding to cup drinking require sophisticated neuronal input and control. The introduction of commercial training cups to this process and introduced potential further complications for both normal and developmentally delayed children. In the article, Clinical Implications of Design Characteristics, Flow Rates, and Suction Pressure Attributes in Commercially Available Training Cups, Scarborough et al. report on differences in cup design characteris-

tics, quantify residual fluid, differentiate flow rates, and describe variability of suction pressures in a sample of commercially available training cups. Considering the variability of their findings, a call for standardization of training cup design, despite the limitations of the study, is well deserved and warranted.

As the cost of medical care continues to increase and the treatments improve, cost determination of all diseases becomes more relevant. Public health initiation of treatments such as folic acid supplementation have had significant impact on decreasing the incidence of spina bifida. At the same time, improved neurosurgical, urological and orthopedic treatments have not only improved these patients' quality of life, but also lengthened their lives. In Outpatient Medical Conditions Among Children and Adults with Spina Bifida in the United States: Frequency and Expenditures, Lijing et al. examined the outpatient, the most common and costly conditions by age group. Their research showed that diseases of the nervous system for children and adults younger than age 30 years and diseases of the musculoskeletal system for adults aged 30–64 years were the most prevalent. Walker in his editorial explores the implication of their methodology and results on our nation's health care system.

This issue also provides two systematic reviews of the literature and case series. Glickman et al. review Supported Standing Programs and provide a comprehensive review for both adults and children. They conclude that there exists a need for empirical evidence to guide clinical supported standing programs across practice settings with various-aged participants, particularly when considering a life-span approach to practice. Munkwitz et al. review Early Mobilization for Adult Patients with Respiratory Failure: Lessons for the Pediatric Population. Clearly, additional research in this area is also required to develop standards of care and national guidelines for treating these patients.

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