

intervention and full gait analysis were analyzed from one institution. Frequencies and descriptive statistics are reported for demographic and surgical history. Paired two-tailed t-tests were conducted to compare the adolescent and adult visits.

**Results:** 106 CP adults, GMFCS I (22%) II (50%) III (23%) IV (5%), 61 males/45 females were tested. Average age was 30+4 years with follow up time 13+4 years since previous analysis. 279 surgical events/1165 procedures were performed, mean per patient 2.6 events/11 procedures. Common procedures were gastrocsoleus complex (88% patients) and hamstring lengthening (80% patients). Gait deviation index and gait velocity were clinically unchanged. Mild residual deformities were reported in 57 patients (54%), 77 limbs. Hip internal rotation, planovalgus and crouch gait are most common residual deformities. 11 patients (6.6%) with 14 limbs had severe deformities, 7 of these deformities were worse compared to prior evaluation however 4 adults were unchanged.

**Conclusion:** Specialized pediatric orthopedic care guided by gait analysis in CP children may optimize the deformity correction and may prevent adult declining mobility although some residual deformities remained.

## Oral presentation 52

### Can environmental features explain differences in community participation between children with cerebral palsy and their typically developing peers?

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**Introduction:** The environment is a known predictor of participation generally. However, little is known about the role of environment in community participation of children with cerebral palsy (CP) in Serbia. This cross-sectional study was aimed to explore the differences between children with CP and typically developing (TD) children related to the environmental features important for community participation.

**Patients and Methods:** A convenience sample included 106 children with CP (60 males; mean age 12.7y [SD 3.4y]; GMFCS-E&R levels I-III=64; IV-V=42), and 132 TD children (64 males; mean age 12.0y [SD 3.1y]). Parents completed the Participation and Environment Measure for Children and Youth (PEM-CY). The number of supports and barriers, and environmental helpfulness and resources scores were calculated. Logistic regression was used to examine the likelihood that environmental features would be rated as supports or barriers and reported as helpful and resources as available/adequate in supporting the child's community participation (controlling for age).

**Results:** Children with CP were 0.91 (95% CI 0.87-0.96) and 0.89 times (95% CI 0.84-0.94) less likely to have available and/or adequate environmental help and resources for participation in the community compared to TD children, respectively. The number of supports ( $p=0.506$ ) and barriers ( $p=0.131$ ) did not contribute significantly to the model.

**Conclusion:** The essential difference between the environmental features significant for community participation of children with CP and TD children is not in the number of barriers or

facilitators. Our finding indicates that difference is in the readiness of the community environment to fulfil its mediating role in participation outcomes through assistance, support and resources.

## Oral presentation 53

### The views and perspectives of adults with cerebral palsy about physiotherapy services

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**Introduction:** Adults with cerebral palsy (CP) experience musculoskeletal pain, reduced balance, declines in mobility and fatigue. As a result, they are likely to require physiotherapy. However, qualitative studies suggest that young adults with CP experience difficulties accessing physiotherapy once discharged from children's services, with lack of quantitative studies. Therefore, this study aims to investigate the views of adults with CP about physiotherapy services in the UK and Ireland, including reasons for accessing physiotherapy, how they access physiotherapy, and satisfaction with physiotherapy. **Patients and Methods:** A cross-sectional online survey was employed. Data collected included personal information, mobility, pain, general health, access to, content and experiences of physiotherapy services, and access to other healthcare professionals. Descriptive analysis was conducted.

**Results:** Participants ( $n=114$ ) were aged 18 to 74 years. The majority were female (81%), lived in England (66%) and were classified as GMFCS level I (9%), II (36%), III (27%), IV (16%) and V (10%). Ninety percent of participants reported a need for physiotherapy but only 33% received physiotherapy services. Reasons for physiotherapy visits included general advice (26%) and stiffness (19%). Participants reported access (43%) and referral (37%) to specialist physiotherapy services difficult. Additionally, participants were not satisfied with the availability (69%) and quality (51%) of physiotherapy services.

**Conclusion:** Although the majority of adults reporting needing physiotherapy, over half of these people did not receive the physiotherapy that they needed and a lack of satisfaction with these services. The study findings can inform development of physiotherapy services for adults with CP.

## Oral presentation 54

### Improving the participation of young children born preterm using the PREP approach

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**Introduction:** Preterm birth continues to be a major public health challenge that has long-term consequences on participation into adulthood. Despite ongoing concerns that the