PEDiatric Power Mobility: Functional Solutions for Kids
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When is the right time for power mobility? What are the benefits of providing access to power mobility early in a child’s life? This course will address these questions and help the audience understand and articulate a child’s skills and abilities, prior to prescribing a power wheelchair. Pediatric mobility issues can be extremely complex. It is important for members of the rehab team to differentiate between therapeutic mobility and functional mobility with all clients; but it is particularly important in the pediatric population. Through the use of research and case studies, participants will learn the importance of a thorough evaluation to determine the most appropriate mobility device for pediatric clients. Time will also be allotted for audience participation and discussion.

Why is Early Mobility Important?
Unfortunately, some children are born with different abilities and challenges that keep them from achieving motor milestones at the expected time. Does that mean that they should miss out on all the experiences that other children get from independent exploration? It shouldn’t . . . which is why we need to find ways for children to experience independent mobility as early in life as possible so they can continue to develop cognitive, visual, and social skills that mobility provides . . . all the while working on motor development with the goal of independent walking!

Research strongly supports early independent mobility for several reasons:

Reducing Learned Helplessness - Learned helplessness is a term that applies to any organism which has something done for it constantly. Eventually, that organism doesn’t think it can do that task for itself – so it gives up and stops trying. This is true with children and mobility. In fact, evidence suggests that by the time kids are 4 years old, learned helplessness has fully set in. If we provide a child with independent mobility before age 4 – they will learn independence instead of helplessness.

Improved Visual Development – The visual system is the most intact system at birth, but it cannot fully develop without movement! Take, for example, the following research study: Babies who had just begun crawling were placed on a platform that appeared to be the edge of a cliff. The newly mobile infants had no hesitation in crawling across the platform to their mothers who were calling for them. Several weeks later (after more experience with mobility and the world), the same babies were extremely hesitant to crawl “off the cliff” to their mothers. This demonstrates that mobility has a significant impact on the visual system. With independent movement, perception develops.

Spatial Awareness – When a child has the opportunity to ‘interact’ with the world by feeling and touching it, then they develop spatial awareness. Until that child has the experience of coming in contact with the three dimensional world, the world is just like a page in a book. Mobility and interaction with the environment are critical for the development of spatial awareness.

Attention, Cognition and Problem Solving – Independent mobility offers children a great deal of cognitive processing. Mobile infants need to figure out how to get around objects. All of this information is being stored in their brain so they can build on these experiences and learn to move around their environments more successfully and efficiently.

Social Development and Self Confidence – Children are social beings. So why is it that the child who is unable to move independently is often isolated, quiet, plays alone, or creates “friends” with his hands or toys instead of his peers? Children with mobility impairments often assume the “lesser” role in creative play (for example, always the student – not the teacher; always the baby – not the mommy; etc.) This is likely due to the fact that many of these children did not have the ability to move as freely as their peers; therefore, they fall into the subordinate roles more naturally.
The evidence is compelling, so what is holding parents and clinicians back from allowing infants and young children to experience independent mobility through power?

Parents often feel that giving their child power mobility will keep them from walking. There is no evidence to support this. In fact, children are more likely to improve in their gross motor skills if they have the ability to move independently.

We are also fearful about safety. What we don’t often realize is that safety awareness develops through independent mobility. Just like we pad the corners of the coffee table when our infant is pulling to stand, the programming capabilities of power devices allow you to build in safety parameters in addition to parental supervision – like any child requires.

Transportation is always an issue, as powered devices usually cannot be lifted into the trunk of a care. However, if your child can experience independent exploration in and around the home and in and around the school (through school bus transport), that takes care of the two most common areas where children reside and play. It is important to consider the long-term benefits and consequences when making the decision to provide independent power mobility or dependent manual mobility.

Some parents are afraid that once their child uses powered mobility – they will never stop using power. While it is true that some people will choose to continue to use power mobility for the independence it provides, this doesn’t mean that they are incapable of using other forms of mobility. Often, individuals who use power mobility will also do some walking and may even have a manual device that can be used for transport or very short distance mobility.

In summary – we can’t afford to wait to give our kids independent access to explore the world. We need to do all we can to give them independent mobility experiences that their peers are having so they can be all they can be!

References:


**Speaker Bio**

Amy has been involved in wheelchair seating since beginning her career. Amy worked for Cincinnati Children’s Hospital in the past where she was involved in both outpatient and inpatient settings. She has presented lectures both nationally and internationally. Amy is currently the National Clinical Education Manager for Permobil, Inc. and is an active member of RESNA and APTA (Pediatrics and Neurology Section Member).