Pediatrics

Pediatric physiotherapy is effective in the management of perinatal conditions, conditions diagnosed in early childhood, and injuries sustained throughout childhood and the transition to adult care. Pediatric physiotherapy improves physical function and quality of life.[1,2] Its long-term benefits are significant and include reducing disability and the need for surgery or other more costly invasive interventions resulting in a decreased burden on future use of health care services.[3,4]

Role of Physiotherapy in Pediatrics

Pediatric physiotherapy services treat a wide variety of acute and chronic conditions in different settings, from acute care hospitals, to the community and schools. Pediatric physiotherapists assess, diagnose and treat neurological, developmental, cardiorespiratory and orthopedic conditions in children up to 18 years of age, with a focus on improving function and increasing independence. Physiotherapy has a positive and significant impact on pulmonary function, motor control, muscle strength, and physical endurance in pediatric patient with chronic conditions such as cerebral palsy, cystic fibrosis, and juvenile idiopathic arthritis.[1,2,5,6] Physiotherapy interventions focus on movement and improvements in function to increase both the child's and family's quality of life. Improved function and involvement in daily activities provides more opportunity for social engagement.

Impact on Patient Experience

Pediatric physiotherapy services result in high patient and caregiver satisfaction.[3]

- Physiotherapists provide individualized treatments to children with family/caregiver involvement resulting in high satisfaction of services.[7]
- Physiotherapists are valued links to the family within the health care system and advocate for services to improve the health of the child.[3]
- Physiotherapists, as part of an inter-professional team, assist in the transition to adult care by ensuring continuity of care.[8]

Impact on Population Health

Early physiotherapy intervention to improve motor development in pediatric cases has a significant positive impact on health outcomes.[8]

- Physiotherapy improves mobility, enabling greater opportunities for improvements in function and increasing independence.[6]
- Physiotherapy significantly reduced the risk of pulmonary complications in postoperative pediatric cardiac surgery, with an absolute risk reduction of 18.3%.[1]
- Exercise programs by physiotherapists, including aerobic and strength training, for children with chronic diseases and disability leads to improved physical fitness, quality of life, strength, pulmonary function and functional abilities.[2,5,6]

Impact on Health Care Costs

Pediatric physiotherapy has a significant impact on reduced utilization of health care services.[3]

- Long term benefits of providing physiotherapy services to pediatric cases include a reduction in need for surgery and specialized physician services later in life, specifically for hip mobility in children with cerebral palsy.[4]
- Outpatient physiotherapy services for cystic fibrosis (over a one year period) reduce the number of IV antibiotics days for the year by 10 resulting in a cost savings of $104,000.[9]
- Physiotherapy decreases the amount of physiotherapy required to achieve positive health outcomes.[3]

Summary

Physiotherapy assessment and management of pediatric cases results in significant long-term health benefits and decreased burden on future use of care services. Early physiotherapy management of motor development and mobility issues produces long-term positive impacts on health and enables the child to increase their independence. Pediatric physiotherapy also plays a significant role in ensuring the continuation of treatment while transitioning from child to adult care.

Key References:

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The value of a health care service is more than its proven cost-effectiveness. Quality of life, access, and continuity of care and integration of services are equally important criteria when looking at the broader concept of value.

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