

Physiotherapy for infants born preterm

Preterm birth

Every year approximately 15 million babies are born preterm (< 37 weeks of gestation). Globally, preterm birth is a leading cause of death for children under the age of 5. Additionally, preterm birth has effects on neurodevelopmental functioning, and motor disorders such as cerebral palsy and developmental coordination disorder are common.



Motor development

Motor actions are essential for development and learning. Early perceptual-motor experiences within cultural and social contexts forms cognition. Neuroplasticity, the ability of the brain to change in structure or function in response to experience, is most powerful during the first three years of life. Best practice for children with motor problems is to intervene early and capitalize on this critical development period.

Recommendations

Assessment of motor development and early intervention for motor problems should begin during the first months of life. Physiotherapists should be key members of neonatal follow-up and early intervention teams. Physiotherapists using evidence-based assessment methods identify infants and toddlers with motor problems early and can provide intervention to improve development and health.



Early Identification

Using evidence-based assessment methods improves the accuracy of the assessment, as well as increases the likelihood of early identification and timely intervention. Furthermore, it decreases the variability between assessors and hence, increases equality and patient safety. To improve early identification, assessing quality of movement is recommended, as well as performing repeated assessments.

Early Intervention

- Family-centered therapy
- Empowering the parents
- Positioning and handling (facilitation) to promote infants' activity and respiration
- Task specific and goal directed
- High intensity/many repetitions during the day
- Responsive to the individual infant's medical and behavioral state.

Definitions



Preterm birth

Preterm birth: birth before 37 weeks of gestation

Moderate to late preterm: gestational age (GA) 32 – 36 weeks

Very preterm: GA 28 – 32 weeks

Extremely preterm: GA < 28 weeks

Corrected age

Represents the age of the child from the expected date of delivery. Corrected age is calculated by subtracting the number of weeks born before 40 weeks of gestation from the chronological age. Appropriately used from birth up to 3 years of age.



References

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