THE ROLE OF PHYSIOTHERAPY IN THE DISABLED CHILD

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INTRODUCTION
The Disabled Child

- WHO and The International Classification of Functioning, Disability and Health (ICF)
THE DISABLED CHILD

• Moderate to severe physical disability
• Spectrum of motor impairments
• Congenital or acquired
• Including but not limited to:
  ➢ Cerebral Palsy
  ➢ Traumatic Brain Injury
  ➢ Spina Bifida
  ➢ Spinal Cord Injury
  ➢ Neuromuscular Disease

• The Global burden of Disease: ≈ 9.5 million children 0 -14 yrs with disability of which 1.3 million are classified as severely disabled
ROLE OF PHYSIOTHERAPY

- Physiotherapists focus on gross motor skills and functional mobility, including positioning, transitional movements, use and issue of assistive devices

- Postural management programme
- Positioning
- Education, training and support
- Multi-disciplinary team involvement
- Physiotherapist’s role in palliation
PRINCIPLES OF MANAGEMENT

• Practice specific, relevant and functional skills
• Facilitation of normal movement patterns
• Work for better active participation
• Improve/maintain range of movement
• Improve/maintain muscle strength and control
• Improve/maintain postural alignment
• Parent participation and education

Patients should be assessed individually and treated age appropriately.
APPROPRIATE MANAGEMENT

- Importance of early referral and intervention
- Anticipate progression/effects of condition
POSTURAL MANAGEMENT PROGRAMME

• 24 hours
• Variation in environment, activity and intervention
• Positively impacting on posture and function
• Enhanced communication and participation
• Transitioning through stages of life

➢ Positioner
➢ Wedge
➢ Standing frame
➢ Wheelchair (seating system)
POSTURAL MANAGEMENT PROGRAMME

- Immature skeletal and neuromuscular system
- Biomechanical alignment
- Considerations should be given to:
  - Assistive device for play, feeding, relaxing and independence
  - Stretching positions
  - Sleeping positions
SIDE LYING
STANDING

• Advantages
  o Bone density
    ➢ Decreased incidence of fractures
    ➢ Decreased incidence of hip dysplasia
    ➢ Increased bone growth
  o Improved passive range of movement
    (maintaining neutral alignment)
  o Influences tone
  o Activation of anti-gravity muscles
  o Improved lung function
  o Improved bladder and bowel function
  o Socialisation and interaction
STANDING
THE WHEELCHAIR

• Extensive Research
• Major role under Physio- and Occupational Therapy
• Human Rights Framework – Ability rather than DISablility
• Full assessment of child considering:
  ➢ Diagnosis
  ➢ Age
  ➢ Functional abilities
  ➢ Postural deviations
  ➢ Deformities
  ➢ Environment
  ➢ Function
THE WHEELCHAIR
THE WHEELCHAIR
Pressure Mapping

BEFORE

AFTER
BUGGY
POSTURE CHAIR
WHEELCHAIR
Hybrid Dual Terrain Chair
WHEELCHAIR
Active Urban chair
MOTORISED WHEELCHAIR
EDUCATION AND TRAINING

• Caregiver’s acceptance and understanding of child’s disability
• Child’s capabilities in optimum position
• Focus on abilities rather than disabilities
• Caregiver main role-player:
  ➢ Therapy manager
  ➢ Caregiver included in decisions re: therapy, frequency and intensity
  ➢ Goal setting
  ➢ Therapy incorporated into daily routine
MULTIDISCIPLINARY COLLABORATION

• Ideally collaboration between role players across disciplines to meet common goals
• Therapy and management of one role player directly influences that of another
PHYSIOTHERAPY AND PALLIATIVE CARE

Symptom control:
- Suctioning
- Supportive chest physio
- Importance of movement
- Pain relief

Support for the patient & family
- Positions of rest/comfort
- Back care
- Independence
- Distraction
- Enhanced QOL

Fig. 1. Modern integrated palliative care services model (Frager 1997).
THANK YOU
REFERENCES


• Google Images


• Gunel, M.K. (2011) Physiotherapy for Children with Cerebral Palsy, Epilepsy in Children – Clinical and Social Aspects, Dr. Zeljka Petelin Gadze (Ed.)

• http://www.who.int/mediacentre/factsheets/fs352/en/index.html

• http://www.who.int/topics/disabilities/en/

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