A Survey of Task Oriented vs. Process Oriented Interventions in Treatment of Developmental Coordination Disorder

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Introduction/Background

• Difficulties performing fine and gross motor tasks
• Struggle with motor planning and organization
• Problems with ADL’s
• Decreased participation and interaction with peers
• Comorbidities
• 5-6% all children affected by DCD

PICO Question

• In children with DCD, is skill specific training more effective than a generalized functional movement program in stimulating improvement in motor performance?

Methods

• Ebsco Host (CINAHL, CINAHL with full-text, MEDLINE)
• Keywords (combination):
  – Developmental Coordination Disorder (DCD) &
    • Task-oriented
    • Process-oriented
    • Evidence
• Results found:
  – 2 articles selected with DCD + Task-oriented or Process-oriented (766 results)
  – 1 article selected with DCD + evidence (122 results)

Approaches

• Task oriented
  – Neuromotor task training
  – Cognitive orientation to occupational performance
• Process oriented
  – Sensory integration training
• Traditional PT/OT

Research Synthesized

• 1 meta-analysis
  – 912 subjects from 26 studies
• 1 evidence to practice commentary
  – Synthesis of meta-analysis, literature review and recommendations from European Academy for childhood disability
• 1 controlled experimental design
  – 39 subjects
Results

- Task oriented and traditional PT/OT more effective than processes oriented\(^1,2\)
- Treatment necessary to improve motor patterns\(^1,2,3\)

Discussion

- Parent and teacher education critical\(^2\)
- Individual approach always best\(^3\)
- Important to treat comorbidities along side DCD\(^1\)

Areas for Future Research

- Long-term effects of treatment approaches\(^2\)
- Cost effective analysis\(^1,2\)
- Refinement to interventions (NTT & CO-OP)

References