Lines and Tubes and Barriers, Oh My!: A Systematic Review of Occupational Therapy's Role in ADL Participation for the Hospitalized Child

Chelsey Boronski, OTS; Juliet Braun, OTS; Lindsay Good, OTS; Meredith Kilduff, MS, OTS; Jenna Zwiebel, MEd, OTS
Faculty Mentor: Rebecca Sinko, OTD, OTR/L
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PICO: Does Occupational Therapy increase participation in ADLs for hospitalized children?

Methods:
- Databases utilized: PubMed, CINAHL, Ovid
- Search Terms (only key search terms listed; italicized = subject headings/MeSH terms)
- P - adolescent; child; child, hospitalized; chronic disease; critical care; critically ill; hospitals, pediatric; inpatient; intensive care units, pediatrics; minors; pediatric; pediatric*
- I - functional skill training; occupational therapy, rehab*; rehabilitation
- C - N/A
- O - Activities of Daily Living, adaptive skills; functional outcomes; independence; participation; self care
- Seventeen articles were included in the systematic review based on inclusion and exclusion criteria. Articles were critically appraised using Law et al. (1998) quantitative review form by primary and secondary reviewers and then evaluated for level and strength of evidence using AOTA guidelines.²³

Results

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<tr>
<th>Theme</th>
<th>Summary</th>
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<tr>
<td>Functional Gains with Inpatient Rehabilitation 5, 10, 12, 14, 16, 18, 19, 23, 30, 33, 34</td>
<td>Moderate evidence supports that inpatient rehabilitation is an effective intervention for improving functional outcomes. Studies defined functional gains in self care, need for caregiver assistance, performance skills and improved WeeFIM scores. Interventions within the Occupational Therapy (OT) scope of practice included: lifestyle and environmental modification, strengthening &amp; endurance, specific training, safety, family training and equipment needs.⁸</td>
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<td>Multidisciplinary Care 5, 10, 12, 14, 23, 30, 31, 32</td>
<td>Moderate evidence supports the use of a multidisciplinary team to improve functional outcomes for the hospitalized child. Care was considered multidisciplinary if two or more disciplines worked together towards a collective goal. In 6 of the 8 articles included, OT was specifically identified as a member of the interdisciplinary team: 5, 10, 12, 14, 30, 32</td>
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<td>Below Age Expectations 19, 20, 23, 33</td>
<td>Insufficient evidence exists to support that children who made functional gains following intervention remained below age level expectations at discharge. It is important to note that discrepancies with performance and age level expectations existed at discharge from inpatient programs, but was not necessarily the case at follow up.</td>
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<td>Feeding Interventions 8, 10, 18, 30, 31, 32</td>
<td>Limited evidence supports the use of feeding interventions to increase participation in mealtime. Interventions included addressing oral sensory needs, decreasing g-tube feedings, and improving use of utensils and drinking containers. The only interventions specific to ADLs included in this systematic review were related to feeding.</td>
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Implications

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<th>Clinical</th>
<th>Research</th>
<th>Education</th>
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<td>Improve functional outcomes with earlier intervention in the pediatric population²⁰, ²³</td>
<td>Develop pediatric outcome measures with increased sensitivity ⁶, ¹⁶, ²⁰, ²³</td>
<td>Educate others on the role of OT in the pediatric hospital setting</td>
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<td>Use multidisciplinary teams to increase functional outcomes ⁵, ¹², ¹⁴, ²³</td>
<td>Conduct rigorous, prospective studies to examine effectiveness of interventions ⁸, ¹⁸, ³⁰</td>
<td>Provide clinicians with professional development to increase awareness of outcome measures and their appropriate use</td>
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<td>Develop specific protocols to utilize clinically and apply to future research ¹⁶</td>
<td>Establish evidence to support the role of OT in the pediatric acute care setting</td>
<td>Design and implement curricula for pre-service education to prepare for pediatric practice within the medical model</td>
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<td>Advocate for a greater role on interdisciplinary teams</td>
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References


