Evidenced-Based Guideline for Occupational Therapists: Pediatric Oncology Symptom Management

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Purpose

The purpose of this project is to synthesize existing pediatric oncology literature on common treatment-related symptoms and translate findings into practical, occupation-based occupational therapy guidelines to support children's participation at home, school, and in the community, with an emphasis on school reintegration.

Research Questions

R1. What current evidence is there around occupational therapy intervention within the pediatric cancer population?

R2. What is the role of occupational therapists in pediatric cancer?

Methods

An extensive literature review was conducted to explore current evidence based best practices for occupational therapists used in pediatric oncology. Keywords related to identified common symptoms treated were used to locate relevant research, which was then analyzed using a level of evidence framework to determine the specific needs and applicability. Additionally, we categorized each evidence-based resource into several broad categories of focused interventions.

Childhood Cancer Demographics

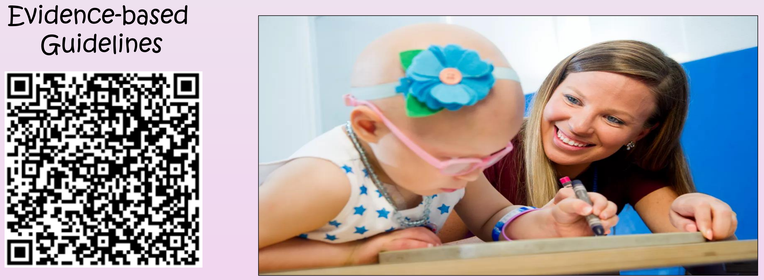
The incidence of pediatric oncology has grown to approximately 15,000 children diagnosed with cancer annually in the U.S. (Ricci et al, 2024). Prevalence is notably higher among non-Hispanic White children, and residents of the Northeast (Price et al, 2025). Survival outcomes have improved significantly since the mid-1970s, with recent data showing five-year survival rates between 83.2% and 87.8% across pediatric age groups (Price et al, 2025). Improved survival rates lead to concurrent and post- cancer symptoms which often go underrecognized, impacting quality of life prompting the need for evidence- based interventions (Price et al, 2025).

Literature Review Table

The table below provides key interventions in the literature surrounding pediatric oncology in occupational therapy. After an analysis of the literature surrounding common performance issues in pediatric oncology was complete, a guideline of evidence informed interventions was created. This resource aims to streamline access to advocate for occupational therapy in pediatric cancer, evidence-informed practices and resources, eliminating the need to search for information. This guideline serves as a tool to help deliver high quality services to children and their families recovering from cancer. References for the listed interventions are found below. A link for the evidence-informed guide is listed below.

Performance Skill & Function Impacted	Evidence Based Interventions
Neurosensory & Neuromotor Gross Motor, fine motor, writing, sensory perception, ADLs, school, play	Goal Oriented Play Game-Based Rehabilitation Sensory Based Interventions Handwriting without Tears MoFis-I Kit Simulation Program
Fatigue & Chronic Pain Reduced endurance, school attendance, play, self-care, ADLs	Environmental Modification Task Adaptation Sleep Hygiene Cognitive Behavioral Therapy Physical Activity
Cognition Decreased attention, problem solving, classroom-tasks/academic work	Early Intervention Functional Based Intervention
Emotional Regulation & Anxiety Reduced endurance, school attendance, play, self-care, ADL	Cognitive Behavioral Therapy Play Social Connectedness & Peer Support Stress Management Psychoeducational

Evidence-based Guidelines



https://together.stjude.org/en-us/medical-care/rehabilitation/occupational-therapy.html

References

Gaps in Literature

- Limited studies specific to occupation therapy interventions for pediatric cancer patients.
- Lack of consensus on best-practice for re-integration into community life for childhood cancer survivors.
- Limited research on efficacy of therapeutic care and transition care for survivors.
- Existing rehab protocols for childhood cancer patients are not consistent across settings.





Implications for Practice and Next Steps

- Application of occupational therapy interventions into practice with pediatric cancer clients.
- Opportunities for focused research topics into inpatient, outpatient, and transitional occupational therapy services for pediatric cancer patients and survivors.
- Support for advocacy to include occupational therapy in treatment team protocols for pediatric cancer patients throughout the treatment process and after.

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https://www.freepik.com/free-photos-vectors/pediatric-cancer-ribbon

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