

Occupational Therapy in Oncology Care: Experiences with the Pediatric & Adult Populations

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BACKGROUND & PURPOSE

- In the United States, cancer is the second leading cause of death in infants through 14 years of age and the second leading cause of death in adults (American Cancer Society, 2020; Stimler, 2017).
- Cancer survival rates in both children and adults are on the rise due to advances in research (Keegan et al., 2016; Sahin, Akel, & Zarif, 2017).
- Despite an increased survival rate and more effective treatments, patients with cancer experience unmet needs and continue to face ongoing challenges due to the side effects of this disease (Alfano, Ganz, Rowland, & Hahn, 2012; Pergolotti, 2017).
- Physical, cognitive, and psychological side effects from cancer or its treatment may lead to reduced function and the inability for individuals to successfully participate in daily occupations (Allen, 2015; Longpré & Newman, 2011; Sleight & Stein Duker, 2016).
- Occupational therapy (OT) practitioners play a significant role in pediatric and adult oncology care by helping patients achieve optimal performance in their everyday lives (Longpré & Newman, 2011; Sleight & Stein Duker, 2016).
- Evidence of OT's presence in oncology is limited compared to other practice settings, yet it has more recently been demonstrated as being invaluable in helping those with cancer gain control and dignity (He-Strocchio & Longpré, 2016; Pigott, Nixon, Brennan, Trevethan, & Mahoney, 2019).
- **Purpose:** The purpose of the Capstone was to gain advanced knowledge and clinical reasoning skills, acquire insight and experience regarding OT's role in the oncology setting, as well as demonstrate competency in clinical care for children and adults undergoing cancer treatment.

CONCEPTUAL FRAMEWORK

Person-Environment-Occupation (PEO) Model (Law et al., 1996; Strong et al., 1999)

- This model emphasizes a holistic view for understanding the transactive relationship between the person, environment, and occupation and the impact this relationship has on one's occupational performance.
- In applying the PEO model to the Capstone, it was essential to examine the impact of each component of the model. The Capstone student studied each transaction that was limiting the patient's occupational performance, and interventions were formed based on these transactions between the person, the environment, and the occupation.

Biomechanical & Rehabilitative Frames of Reference (Gillen, 2014; McMillan, 2011)

- The biomechanical frame of reference focuses on the restoration of body function such as strength, range of motion, and endurance.
 - This frame of reference was utilized during evaluations as range of motion and strength were assessed. Intervention sessions included both gross motor and fine motor strengthening, range of motion activities, and activity tolerance tasks.
- The rehabilitative frame of reference focuses on adaptation for lost body function and focuses on what the patient can do rather than what he or she cannot do.
 - This frame of reference was utilized throughout the Capstone experience as concepts of adaptation, compensation, and environmental modifications were implemented during evaluations, assessments, and intervention sessions.
- Although these are two separate approaches, for the Capstone experience, they were used in combination to show a continuum of OT intervention.

METHODS & ACTIVITIES

Direct Patient Care

- Direct care of pediatric and adult patients in both outpatient and inpatient settings was an invaluable component of the Capstone experience. The Capstone student attended to all patients with cancer on the site mentors' caseloads, as well as treated additional patients with complex medical diagnoses. Active and positive discussions with the site mentors were also a critical component as the Capstone student gained insight into the needs of patients, their diagnoses, and treatment plans.

Indirect Patient Care

- Interactions and encounters with interprofessional members of the healthcare team were also important to this experience. Co-evaluations and co-treatments with physical therapists in both the pediatric and adult settings, attendance and participation in meetings, as well as active observation with various professionals, all added to indirect patient care experience.

Evidence-Based Practice

- Four online continuing education courses that focused on both the pediatric and adult populations were successfully completed. Correspondence with two presenters from the courses provided additional insight into this emerging area of practice. An in-depth reflection paper was written and shared with the site mentors.
- A brochure was created using evidence-based literature to serve as a guide for parents of children with cancer. The brochure informs parents of the important role of OT in pediatric oncology care, providing insight regarding OT intervention sessions and examples of activities in which parents can be involved in their child's therapy process.
- An American Occupational Therapy Association (AOTA) Fact Sheet regarding OT's role in pediatric oncology was developed and is currently a draft to be submitted for publication.

The Oncology Guidebook for the Occupational Therapy Practitioner

- The main outcome of the Capstone experience was to create the *Oncology Guidebook for the Occupational Therapy Practitioner*. The accessible guidebook includes various components of information essential to inform and assist OTs and OT students in providing holistic evaluation, assessment, and treatment for pediatric and adult patients with cancer. The site mentors determined that the guidebook is a valuable and comprehensive tool, not only for student use but also for professional use.

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REFLECTION & REVISION OF THEORY

- The PEO model and the biomechanical and rehabilitative frames of reference are all effective and valuable theoretical constructs that should be used to guide practice when working with the pediatric and adult oncology populations.
- Although the use of the PEO model and the biomechanical and rehabilitative frames of references translated within and throughout the Capstone experience, further reflection led to a proposed revision, the addition of the Ecology of Human Performance (EHP) framework.
- The EHP framework focuses on the impact that the environment has on occupational engagement. Supportive environments for treatment sessions promote occupational engagement.
 - In making environmental modifications for pediatric and adult patients and in providing a different place for therapy outside of their hospital rooms, the patients would be able to use their skills and abilities to engage in OT activities, thus enhancing their occupational performance (Dunn, Brown, & McGuigan, 1994).

IMPLICATIONS / RECOMMENDATIONS

- It would be beneficial for OT graduate school programs to include information relevant to pediatric and adult oncology within the curriculums to increase knowledge and awareness to students about OT's integral role within the oncology care team.
- Additional education, training, and mentorship is essential to provide best practice and client-centered care.
- Further evidence-based research is necessary to advocate for this practice area and to promote growth within the profession.

FINDINGS / CONCLUSION

- Occupational therapy practitioners possess the knowledge and expertise to evaluate, assess, and provide meaningful interventions to pediatric and adult oncology patients.
- Occupational therapy services provide support, help restore function, and reduce the physical, cognitive, and psychological stressors that coincide with a cancer diagnosis.
- The *Oncology Guidebook for the Occupational Therapy Practitioner* serves as an appropriate resource for OT practitioners and students.
- Overall, the Capstone student gained the necessary clinical practice skills to be competent in OT assessments and interventions in this unique area of practice. By utilizing the knowledge acquired from didactic learning and the skills gained through this experience, the Capstone student is fully equipped to play an integral role in providing holistic care for patients undergoing cancer treatment.