**BACKGROUND & PURPOSE**

- Neonatal Intensive Care Unit (NICU) requires specialized expertise and hands on training to ensure competence and safety (AOTA, 2018; NIDCAP, 2015).
- Infants begin engaging in occupations immediately after birth (Macho, 2017; Pascola et al., 2018).
- Infants must have a caregiver to ensure needs are met (Craig et al., 2017; Gibbs et al., 2015).
- Parental expectations and assumptions are interrupted with premature birth (Albalo et al., 2014; Hans et al., 2017).
- Fetal development is disrupted upon premature birth (Macho, 2017).
- NICU environment is not like the intrauterine environment (AOTA, 2018; Macho, 2017).
- Chaotic environment of NICU may alter sensory and neural system development (Eda et al., 2018; Mitchell et al., 2015).
- NICU creates a disconnect between infant and caregiver (Gibbs et al., 2015).
- Purpose of capstone is to gain an understanding of OT role and parent education in the NICU.
- Educate parents and aid them in becoming active participants in infant care.

**METHODS**

- Performed literature search to create learning objectives and activities.
- Eight objectives created to demonstrate mastery.
- Competence of techniques, advanced knowledge, and application of theoretical information.
- Learning objectives: Explore role of OT in the NICU, Demonstrate understanding of NAS and determine how this affects typical development, Determine common diagnoses seen in the NICU and develop advanced knowledge, Demonstrate competence with infant development, Research common intervention techniques, Plan and implement intervention sessions, Swaddle bathing protocol, Provide parent education to enhance involvement.

**IMPLICATIONS FOR OCCUPATIONAL THERAPY**

- Include addition of Universe of Developmental care model.
- Extension of synactive theory.
- Skin as interface between environment and neurologic development.
- Skin is shared surface that interacts with environment and caregivers.
- Bridges gap in original synactive theory to provide visualization of changes in underdeveloped central nervous system.
- Occupational therapists provide activity analysis to determine strengths and deficits (AOTA, 2018; Royal College of Occupational Therapists, 2017).
- Provide client centered approach to meet needs of infant by utilizing caregiver to complete aspects of infant care (AOTA, 2018).
- Finding a variety of ways to involve parents in infant care is critical.
- Parent education in the NICU improves carryover of skills upon discharge (Furber & Lee, 2018).
- Parent involvement is critical for best outcomes upon discharge from the NICU (Purdy et al., 2015; Umberger et al., 2018; Vos et al., 2015).
- Premature infants require an increased level of care than term infants (AOTA, 2018).
- Infants with this population must receive hands on training to achieve mastery necessary for high quality parent education (Als, 1992; Als, 1997).
- Finding methods to enhance parent involvement is important for the development of parenting skills (Gibbs et al., 2015; Umberger et al., 2018; Vos et al., 2015).
- Skills, tools, techniques, and knowledge gained during this experience cannot be taught in a classroom or read in a book.
- Experience is extremely beneficial for creating competent NICU OT service providers.

**THEORETICAL FOUNDATION**

**Person Environment Occupation (PEO) Model**

- Analyzes environmental barriers that may prevent individuals from engaging in occupations (Gibbs et al., 2009; Law et al., 1996).
- Occupational therapists can bridge the gap between infant and caregiver (AOTA, 2018).
- An occupational therapist in the NICU possesses the skills to create the best match between the person, the environment, and the occupation (AOTA, 2018; Gibbs et al., 2009; Royal College of Occupational Therapists, 2017).
- The occupational therapist creates opportunities for parent engagement to facilitate occupational participation (AOTA, 2018; Craig et al., 2015).

**Synactive Theory of Development**

- Various subsystems of an organism exist in an intricate web of continuous dynamics (Als, 1982; Als, 1986; Als, 1997).
- A dynamic system is formed via the interaction between the infant, the caregiver, and the environment (Als, 1982).
- All subsystems exist in a hierarchy with a foundation of physiologic stability (Als, 1982; Als, 1997).
- Caregivers must assist infant in reaching stability at all levels of the hierarchy for appropriate development to occur (Als, 1982; Als, 1986).

**RESULTS / CONCLUSIONS**

- Mastery achieved through.
- Weeks of observation.
- Supervised participation in intervention and assessment.
- Active participation in discharge planning.
- Attending committee meetings.
- Interaction with parents and other health professionals.
- Supervision from site mentor with 12 years of NICU experience.
- Honing education skills to cater to a variety of individuals from diverse backgrounds.
- Information to increase success of future students to bridge transition from entry level skills to advanced clinical practice in the NICU.
- Reached 85% independence with intervention and evaluation with infants of varying complexity diagnoses.

**REFERENCES**


Baby’s Journey Home
Understanding the Role of Occupational Therapy in the Neonatal Intensive Care Unit

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