



# National Perinatal Association

## Student Society Newsletter

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## Improving Intrapartum Care

### Guiding Principles of WHO Recommendations

- Labor and childbirth should be individualized and woman-centered
- No intervention should be implemented without a clear medical indication
- Only interventions that serve an immediate purpose and has been proven to be beneficial should be promoted
- A clear objective that a positive childbirth experience for the woman, the newborn, and their family should be at the forefront of labor and childbirth care at all times

Currently, the control of the birthing process is mainly in the hands of the health providers. As a result, healthy pregnant women are more likely to receive unnecessary or potentially harmful labor interventions. Ineffective interventions including amniotomy, enema, IV fluids, and antibiotics are implemented even with uncomplicated vaginal births. This medicalization of childbirth can negatively impact the woman's childbirth experience as well as diminish her ability to give birth on her own without interventions (World Health Organization, 2018). According to the 2030 Agenda for Sustainable Development, global agendas are concerning themselves with mother and child's ability to thrive and achieve their health and well-being potential as opposed to only focusing on surviving labor complications.

### The Importance of Perinatal and Intrapartum Care

The time surrounding the birth of a child is a crucial time for mother and child. In fact, "improving the quality of care around the time of birth has been identified as the most impactful strategy to reduce stillbirths, maternal and newborn deaths, compared with antenatal or postpartum care strategies"(Childbirth and the 2030 Agenda for Sustainable Development, 2018).

### **WHO Recommendations**

Childbirth and the 2030 Agenda for Sustainable Development (2018) & World Health Organization (2018).

WHO recommendations: Intrapartum care for a positive childbirth experience. These recommendations are the first in a series of steps to better advocate for maternal care. The BOLD study is integrated in standards which were developed collaboratively in order to create tools relevant for local contexts. These tools are designed to be easy to use, closely linked to the view and perspectives of local stakeholders, and aim to improve communication among all involved in maternal care. Improving the quality of care during childbirth and providing women with a positive experience begins with establishing an objective and universal definition of the onset and duration of the phases of typical labor. Facilitating a universal understanding of typical labor and its' phases can improve safe monitoring and potentially decrease unnecessary medical interventions.

- Respectful maternity care
- Effective communication companionship during labor and childbirth
- Defining and explaining the variability of the stages of labor
- Routine assessment of fetal well-being
- Implement relaxation techniques & counsel women on potential opioid side-effects and alternative pain relief options
- Encourage utilization of the woman's preferred birth position
- Decrease liberal or routine use of episiotomy during spontaneous vaginal birth
- Encourage skin-to-skin contact during the first hour after birth



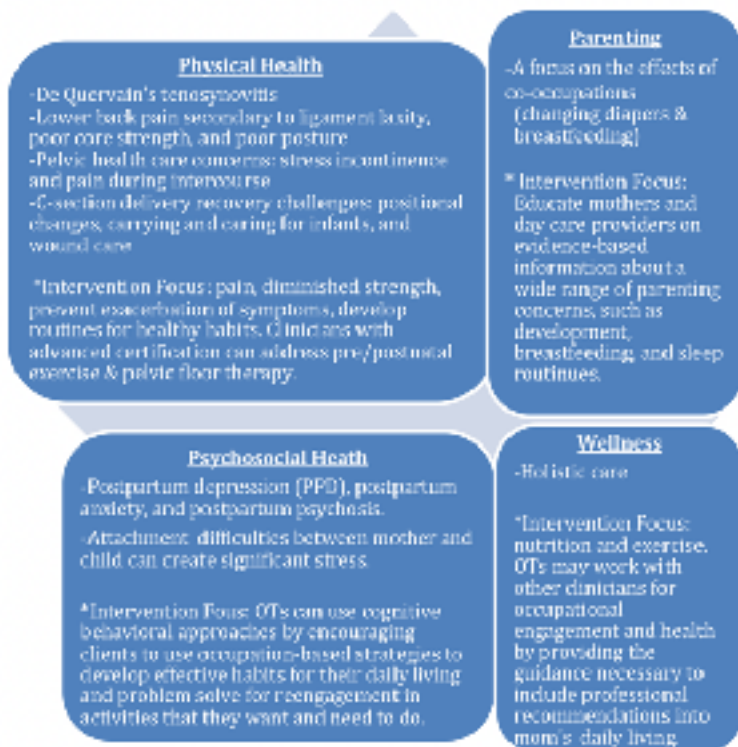
## AOTA CORNER

### Interprofessional Collaborations in Maternal Health

Mara Podvey PhD, OTR recently shared an article in AOTA's Special Interest Quarterly Practice Connections (2018), detailing the distinct role occupational therapists have on interprofessional teams to promote the best outcomes in maternal health.

Collaborative practice improves health outcomes across disciplines (WHO, 2010). Maternal and perinatal health requires the expertise of several practitioners to address emotional well being, psychosocial support, and coping strategies (WHO, 2010). Slootjes, McKinstry, and Kenny (2016) urge occupational therapists to join physicians, midwives, nurses, doulas, lactation consultants, pelvic health specialists, chiropractors, massage therapists, exercise specialists, and nutritionists for maternal health care. Occupational therapists have a wide scope of practice giving them the opportunity to address issues related to mother, father, child, non-birth parents, & grandparents.

### OT Contributions For Families



### Art-Based Occupation Group Reduces Parent Anxiety in the Neonatal Intensive Care Unit: A Mixed Methods Study

Mouradian, L.E., DeGrace, B. W., & Thompson, D.M. (2013) provided a brief art -based occupation group using scrapbooking to 40 parents from a Level 3 NICU to reduce anxiety, measured using the State- Trait Anxiety Inventory & interviews.

The power of occupation during stressful times has been described as a "bridge to health" (McColl, 2002) by diversion of negative aspects of the situation, reinforcement of normal daily habits, and a sense of mastery and "control over circumstances" (McColl, 2002).

Results: Parents who participated in the scrapbooking support group demonstrated a reduction in state anxiety (situationally induced feelings "in the moment") from a mean preactivity level of 40.4 to a mean postactivity level of 27.7. Trait anxiety (relatively stable and long term levels of anxiety) declined from 37.4 to 34.8. Decline in parents' mean state anxiety (12.7 points, SD=11.8; p<.0001) was clinically significant.

Decline in mean trait anxiety (2.6 points, SD= 5.2; p=.0036) was statistically significant, but not clinically meaningful.

Parents found participation in the group activity to be fun, a distraction from their worries, calming, and gave them hope for a future beyond the NICU. Researchers propose that theme based support groups are useful because members are working towards a common goal, such as making a scrapbook. This promotes an organic sharing of experiences.

▶ "I'm not the only one, and you know, it really does feel like you're the only one here."

▶ "It felt good to have people who are in my situation, you know, and , um, doing what I was doing."



## In the NICU: A Look at Neonatal Nutrition

Many of us have heard of the saying "breast is best" when it comes to meeting the nutritious needs of newborns, but in the NICU, a different type of diet is often needed for some of our most vulnerable patients. This most often includes Parenteral Nutrition.

### What is Parenteral Nutrition (PN)?

- PN is the delivery of nutrients into the blood rather than through the gastrointestinal tract.
- PN is typically infused through a central arterial line, but it can also be delivered through central or peripheral veins.
- It is important to begin TPN as soon as possible, particularly in extremely low birth weight (ELBW) infants because it has been shown that higher energy and protein intake during the first week of life are associated with improved neurodevelopment (Adamkin & Radmacher, 2014).

### Why is it Necessary?

- The nutritional needs of premature infants are often met by PN because medical problems associated with prematurity may require the neonate to be intubated and mechanically ventilated. This presents obvious challenges to normal enteral feeding.
- Enteral feeding can also be delayed in premature infants due to concern that it may lead to complications such as necrotizing enterocolitis.
- In premature infants, energy requirements can be broken down into two components: energy needed to maintain metabolism and normal physiological processes and energy needed for growth.
- In order to meet these needs, PN includes carbohydrates, protein, vitamins & minerals, and essential fatty acids

### What are Some Considerations?

*Premature infants can't tell us when they are hungry or full, so how do we know that the PN we're giving them is adequate?*

- A number of lab tests must be obtained frequently for an infant receiving PN. These include:
  - **Blood Glucose** to evaluate for hypo- or hyperglycemia

- **Serum Triglycerides** to adjust IV lipid dosing (maintain below 200 mg/dL)
- **Blood urea nitrogen (BUN)** a marker for amino acid levels
- **Electrolytes**
- **Calcium, phosphorus, and magnesium** – hypercalcemia may be indicative of inadequate phosphorous intake. To determine this, add phosphorous and see if the calcium levels normalize
- **Alkaline phosphatase** to assess bone mineralization or mobilization
- **Liver Function Tests (LFTs)** to assess for hepatic dysfunction that can be a complication of PN
- **Creatinine** to assess kidney function
- **Daily weight checks and urine outputs** to evaluate fluid levels so that infants do not become dehydrated
- The most common serious complication of parenteral nutrition is a line infection followed by sepsis.

### When Should PN Be Discontinued?

- An infant shows the he or she is ready for milk feedings when they have active bowel sounds, have had a bowel movement (meconium), show signs of sucking, and do not show signs of infection or abdominal distention
- This typically occurs after 28 weeks in otherwise healthy premature infants
- The first step up from PN is enteral feeding of breast milk through a nasogastric tube
- When an infant demonstrates that he or she can breath effectively while sucking, nasogastric feeding can be weaned and nipple feeding can be initiated.





# NPASS 2017- 2018 Achievements

## Sept 2017

NPASS participated in the Student Activities Fair on campus to educate others about our organization

## Nov 2017

For World Prematurity Day, each discipline created a handout advocating for their role in the NICU



## Feb 2018

NPASS founder, C. Cody Miller, visited Downstate and served as a guest speaker in a special interest talk about the benefits of student involvement in professional organizations



## April 2018

NPASS awareness and advocacy event for Kangaroo Care Day + March for Babies in NYC



## March of Dimes Walk

Team Captain and President, Jessica Restivo, proudly shared that NPASS had a registered team of over 20 students and faculty members who together raised \$270.



## May 2018

Eight new positions were appointed to motivated students in various programs such as Occupational Therapy, Physician Assistant, College of Medicine, Graduate Studies, & Women's Health Nurse Practitioner Program!