



Undergraduate Research Symposium May 17, 2019 Mary Gates Hall

Online Proceedings

POSTER SESSION 1

Commons West, Easel 10

11:00 AM to 1:00 PM

Perception of Nursing Students on Caring for Mothers of Infants with Neonatal Abstinence Syndrome

Janice Lin, Fifth Year, Nursing

UW Honors Program

Alisa S. Monda, Senior, Nursing

UW Honors Program

Mentor: Ira Kantrowitz-Gordon, Child, Family, and Population Health Nursing

The growing opioid use epidemic in the United States affects all aspects of the population, including pregnant women. The fetus may have chronic exposure to opioids from the pregnant woman's substance use or from addiction treatment with legally prescribed opioids such as methadone or buprenorphine. These fetuses are likely to go through withdrawal after birth when the supply of opioids from placental transfer is removed. This withdrawal is called neonatal abstinence syndrome (NAS) and often leads to prolonged hospitalization to treat the symptoms of withdrawal, including irritability, feeding intolerance and poor sleep. Studies have found that the mothers of these infants often feel judged by the nurses caring for their infants and they are unable to build a trusting therapeutic relationship due to stigma. Nursing curricula have limited content on substance use disorder; this leaves nursing students and future nurses unprepared to care for childbearing families affected by opioid use disorder. The purpose of the study is to explore the knowledge, attitudes, and beliefs of undergraduate nursing students about opioid use disorder in pregnancy and NAS. We will conduct an anonymous online survey to explore students' perceptions of caring for mothers and infants affected by NAS. We will also examine student characteristics (demographics, personal or professional exposure to substance use) that may predict stigmatizing attitudes. Findings will inform development of educational materials and programs that can better prepare future nurses to care for this population. These educational tools may address stigma towards opioid use disorder, best practices in caring for infants with NAS, and promoting mothers' engagement in the care for their infants while hospitalized.

POSTER SESSION 1

Commons West, Easel 34

11:00 AM to 1:00 PM

Childhood Asthma Quality of Life, Family Functioning and Asthma Control

Elizabeth Anne Shipley, Senior, Early Childhood and Family Studies, Nursing

UW Honors Program

Mentor: Jennifer Sonney, Child, Family, and Population Health Nursing, UW School of Nursing

Asthma is the most common chronic disease among children, affecting almost 10% of children in the US. Standard treatment for persistent asthma is inhaled daily corticosteroids to reduce airway inflammation. Adherence to these controller medications is poor, with less than 50% of children consistently using them. Poor adherence leads to worsened asthma control, causing increased symptoms, exacerbations, school absences, and decreased quality of life. Poor asthma control has also been associated with impaired family functioning. The purpose of this study was to analyze the relationships between quality of life, family functioning and asthma control among school-age children with asthma and their parents. Thirty-three child-parent dyads (children ages 6-11 years) were enrolled in this study. Parents and children independently reported on asthma quality of life and the child's asthma control. Additionally, parents reported on family functioning using the McMaster Family Assessment Device, which assesses numerous family functioning domains. Our hypothesis is that poor asthma control will be associated with impaired family function and decreased asthma quality of life and that parent and child reports of asthma quality of life will differ significantly. Results from this study will provide insight into new potential opportunities for nursing interventions for children with asthma and their families.

POSTER SESSION 1

Commons West, Easel 35

11:00 AM to 1:00 PM

The Relationship between Asthma and Executive Functioning in School Aged Children

Alexis Dittoe, Senior, Nursing, Oceanography

UW Honors Program

Mentor: Jennifer Sonney, Child, Family, and Population Health Nursing, UW School of Nursing

Asthma affects over 6 million children in the United States. Asthma management requires a high level of executive functioning and self-regulation, including attention, planning, problem solving, and self-control. Executive functioning deficits, therefore, may impair asthma management capacity. Therefore, the purpose of this study is to describe the executive functioning of school aged children with asthma. The executive functioning of 33 children ages 6 to 11 years with asthma was tested using the National Institute of Health Toolbox Cognition Battery. The battery assessed numerous executive functioning processes, including attention, inhibition, shifting, episodic memory, working memory, processing speed, receptive vocabulary, and language. Compared to the reference sample, children in this study exhibited significantly lower age-adjusted scores in attention and inhibition $t(33) = 93.06, p = 0.001$, shifting $t(33) = 92.64, p = 0.003$, and processing speed $t(30) = 82.37, p = 0.001$. They scored significantly higher in receptive vocabulary $t(33) = 113.76, p = 0.000$, and language $t(30) = 119.80, p = 0.000$. This study revealed significant differences in the executive functioning of school aged children with asthma, specifically deficits in attention, inhibition, and shifting. These functions can be instrumental in the consistent use of controller medications and as a result impact the effectiveness of asthma management. Implications of these findings may include developing asthma management strategies within the capacity of the child. Future studies should explore the possible causes for executive functioning deficits as well as interventions that align with the executive functioning capacity of school aged children with asthma.

POSTER SESSION 1

Commons East, Easel 51

11:00 AM to 1:00 PM

Enhancing Care Coordination for All Students with Type 1 Diabetes in Washington State Schools

Abigail Nichole (Abbie) Corlett, Senior, Nursing

UW Honors Program

Cara Ann Gray Helmer, Fifth Year, Nursing

UW Honors Program

Mentor: Mayumi Willgerodt, Child, Family, and Population Health Nursing

One out of every two-hundred schoolchildren lives with type 1 diabetes. Type 1 diabetes is a chronic illness that requires monitoring blood glucose, calculating insulin needs, meal planning, and monitoring for and treating hypoglycemia

and hyperglycemia. Effective coordination of care between school nurses, health care providers, parents, children, and school staff is critical to promote diabetes control and prevent adverse health outcomes. The purpose of our project is to describe parent and school nurse perceptions of care coordination in the care of children with type 1 diabetes. Our project is part of a larger project that aims to identify facilitators and barriers to effective care coordination in Washington state schools. Focus groups were conducted with parents of type 1 diabetics in urban and rural settings throughout the state that represent the diversity of resources and school nurses across the region. We recorded, transcribed, categorized, and analyzed verbal and written responses to identify themes. Our preliminary findings suggest that parents and nurses identify inadequate communication between school nurses, parents, and providers, and difficulties organizing care as a significant barrier to effective care coordination. Strong communication and involvement between all parties contributes to successful care coordination. Results from the larger project will be used to develop a care coordination model to inform interventions to improve the care of children with type 1 diabetes in schools.

POSTER SESSION 1

Commons West, Easel 36

11:00 AM to 1:00 PM

Sleep Hygiene Protocol in the Pediatric Psychiatric Setting for Children Ages 5-9

Makenna Marie Berg, Senior, Nursing

UW Honors Program

Mentor: Jennifer Sonney, Child, Family, and Population Health Nursing, UW School of Nursing

Sleep in hospitalized children is disrupted by numerous factors including loud noises, light, assessments, medication administrations, and being away from their usual sleep routine and setting. Inadequate sleep can increase behavioral problems, increase stress, and increase length of stay. The goal of this project is to evaluate if an evidence-based sleep hygiene protocol in the Psychiatric and Behavioral Mental Health Unit at Seattle Children's Hospital promotes better sleep for the patients. The sleep hygiene protocol, a guided routine done prior to bedtime, is derived from a literature review on sleep routines in school aged children. A retrospective chart review will be conducted of seven patients from the unit ages 5-9 who use the sleep hygiene protocol. Data will include usage of sleep medication, hours asleep, and nighttime behavioral problems from before and after implementation of the sleep hygiene protocol. I am focusing on the effectiveness of the newly edited sleep hygiene protocol. Results from this study will be used to refine the sleep hygiene protocol so that it can be widely implemented in the PBMU and other units of the hospital.

POSTER SESSION 1

Commons West, Easel 7

11:00 AM to 1:00 PM

Assessing Current Practices and Acceptability of Screening for Commercially and Sexually Exploited Individuals in Emergency Rooms in Western Washington Hospitals

Abby Mihaiuc, Senior, Nursing

UW Honors Program

Lauren Keanna Jensen, Senior, Nursing

UW Honors Program

Ruth Shin, Senior, Nursing

UW Honors Program

Mentor: Sarah Gimbel, Family and Child Nursing

Mentor: Johanna Hulick, Child, Family, and Population Health, UW School of Nursing

Throughout the United States, children and adults are forced to engage in sexual acts and use illicit drugs against their will, in what many would call modern day slavery, commercial sexual exploitation, or sex trafficking. Victims are controlled through coercion, force, fraud, physical and sexual violence and they endure many emotional and physical consequences. Approximately 80% of victims access healthcare during their time of exploitation for health reasons such as acute injuries, sexually transmitted infections, and mental illnesses, such as depression, anxiety, trauma, and suicidal ideation. The emergency department (ED) is the frontline to these patients. To date, little is known about nurses' confidence or competence in identifying or caring for this vulnerable population in Seattle, WA. The aim of this study is to examine what current practices exist at emergency departments in three, large referral hospitals in Seattle to identify victims, and to assess facility and nurse readiness for improved identification. Nine ED nurses in Seattle were interviewed to gain insight into how they currently identify trafficking victims, their opinion of the acceptability of existing screening questions (compiled from nationwide piloted studies) in their ED setting, and whether they felt such a standardized screening tool may be effective in identifying victims and improving subsequent care. Through transcription of audio interviews, nurses' responses were analyzed and coded for common themes. Improved identification of trafficking victims by nurses and other frontline health workers in emergency settings may lead to more efficient and effective linking with vital support services and resources to assist them in safely exiting the sex trafficking industry. Results from this study will be shared with the participating hospitals, as well as public health officials and stakeholder organizations in order to improve awareness of sex trafficking, victims, and provision of necessary care and resources to support this vulnerable population.

POSTER SESSION 1

Commons West, Easel 11

11:00 AM to 1:00 PM

Sleep Experiences during Pregnancy in Women of Color

Jessica Ordaz, Senior, Nursing

UW Honors Program

Fanus A. Aregay, Senior, Nursing

UW Honors Program

Mentor: Ira Kantrowitz-Gordon, Child, Family, and Population Health Nursing

About 75% of women experience sleep disturbances during pregnancy. Sleep problems during pregnancy are associated with prolonged labor, preterm birth, an increased risk for cesarean delivery, gestational hypertension, glucose intolerance, and depression. To our knowledge, no research has explored the experience of sleep difficulties in pregnant women of color, despite the evidence that racial and ethnic minorities have an increased risk for poor sleep quality. The purpose of this study is to describe the sleep experiences in pregnant women of color during the second half of their pregnancy and to examine the personal and systemic contexts for their sleep. We conducted qualitative semi-structured interviews with 10 women recruited from a local prenatal clinics. Questions explored the internal physical and emotional challenges as well as the external challenges to getting sufficient quality and quantity of sleep during pregnancy. We audio recorded interviews, transcribed verbatim, and analyzed data using qualitative description methodology. We expect that health disparities faced by women of color will be manifested as personal, environmental, and systemic factors that contribute to their difficulty sleeping during pregnancy. Findings from this study will have implications for the design of culturally appropriate prenatal interventions to facilitate improved sleep for minority women.