**2021 Research and Scholarship Month**

Poster Session & Abstracts

**Preparing Nurse Scholars to Address Problems**

**of the Present and Future**

**Each Friday, April 2021**

**10:00 – 11:00 am ~ Virtually**

Schedule of Events

* Keynote Address (Mary Ann Parsons Lectureship) ~ Friday, April 2nd, 10-11am
* Student Poster Sessions & Oral Presentations
  + Undergraduate Students, Friday, April 9th, 10-11am
  + Graduate Students, Friday, April 16th, 10-11am
  + Poster Session, Friday, April 23rd, 10-11am
  + Award Presentations ~ Friday, April 30th, 10-11am

Mary Ann Parsons Lecture



**Dr. Rita Pickler**The FloAnn Sours Easton Endowed Professor of Child and Adolescent Health

Director, PhD and MS in Nursing Science Programs

The Ohio State University  
College of Nursing

Dr. Rita Pickler is the FloAnn Sours Easton Professor of Child and Adolescent Health and Director of the PhD Program at The Ohio State University College of Nursing. She received her BS and MS in Nursing from the University of North Carolina at Greensboro and her PhD from the University of Virginia. Dr. Pickler has been studying the care of preterm infants since 1980. She has been funded by the NIH for her research for over 20 years including a recently funded study of early biologic aging in adolescents in response to childhood adversity. She has served on numerous research review committees at NIH and recently completed a term on the National Advisory Council for Nursing Research of Health at NINR. She has been honored for her research in many ways, including induction into the American Academy of Nursing and the Sigma Theta Tau International Researcher Hall of Fame and selection for the 2020 Lifetime Achievement Award from MNRS. She is the editor of *Nursing Research*. Dr. Pickler is passionate about good science and dedicated to the development of nursing scholars.

**Undergraduate Student Oral Presentations**

**Title: Parent and Adolescent Communication via Texting-messaging**

**Presenter: Julia Bartels  
Mentor(s): Dr. Robin Dawson**

**Background/significance**Adolescence can be a tumultuous time, often straining parent-child communication. Texting, or short written messages sent via a mobile device, is an increasingly used method of communicating between parent-adolescent dyads, yet little is known about the practice.

**Purpose**The aim of this qualitative descriptive study was to explore experiences and perceptions of texting as a means of communication between parents and adolescents.

**Design and Methods**IRB approval was secured prior to the onset of study activities. Parent-adolescent dyads were recruited from the South Carolina midlands region by convenience and snowball sampling. Inclusion criteria included 1) parent with an adolescent between the ages of 13 and 18; 2) English-speaking; and 3) both had cell phones capable of sending and receiving text messages. Data included semi-structured, audio-recorded dyadic interviews lasting for 30 minutes to 2 hours. Data were then analyzed using a thematic analysis approach.

**Results**Eight parent-adolescent dyads participated (n=16). Emergent themes included: 1) texting is an efficient, convenient form of communication for objective purposes, such as making plans; 2) texting can help diffuse emotions and serve as a way to broach difficult conversations about sensitive topics; and 3) texting can potentially lead to misunderstandings. While some parents viewed texting positively, others tried to implement strict boundaries on the practice and the role it played in the relationship with their adolescent.

**Discussion/Conclusions**Texting can be a useful tool parents and adolescents can use to facilitate communication, as it can reduce the impact of emotional or heated responses when discussing sensitive issues such as mental or sexual health. However, this same decontextualization can result in misunderstanding. Pediatric healthcare providers should be aware that the practice of texting occurs in parent-adolescent dyads and be prepared to address the benefits and challenges associated with the practice.

**Title: Older Adults’ Use and Perceptions of Smart Lighting**

**Presenter: Thien Phu Nhuyen  
Mentor(s): Dr. Cindy Corbett, Elizabeth Combs (Co-Mentor), Pam Wright (Co-Mentor)**

**Background**According to the United States (US) Census (2018), adults aged 65 or older comprise 16% of the US population, and this number is growing. Adults’ abilities to live in their chosen residence as they age has become an important focus in improving older adults’ health and age-associated societal costs.   
  
**Purpose**  
To evaluate older adults’ use of smart lightbulbs that are voice-activated through virtual home assistants (VHAs; i.e., Amazon Echo devices), and their perceptions of the usefulness and usability of smart lightbulbs.  
  
**Methods**A descriptive, mixed method study with a convenience sample of older adults (n=5) recruited from a parent study of participants familiar with using VHAs was completed. Participants received ≤ eight smart lightbulbs that were installed in their homes with instructions from the research team. Data was collected weekly from the VHA’s mobile app. After eight weeks, the researchers interviewed the participants about their experiences and perceptions of using the smart lightbulbs.  
  
**Results**Smart lightbulb use varied depending on the week and time of day (range 37-104 times/week). Most participants used the smart lightbulbs in the early morning/dawn. Most participants rated the usefulness of the smart lightbulbs 8-10 on a 10-point scale (10 = most useful). Reported benefits included: improved safety at night, reduced caregiver burden, more confidence living home alone, and decreased fear of falling. Participants reported some difficulty with the connection between the VHA and the smart lightbulbs.  
  
**Discussion/Conclusion**Most participants were able to effectively use the smart lightbulbs with the VHA and had positive perceptions of use, usability, and usefulness. Older adults want to explore technology; however, they need more resources for learning the technology and troubleshooting any issues. Preliminary evidence from this feasibility study suggests that smart lightbulbs and VHAs offer potential to improve older adults’ abilities to age in place.

**Title: “Just be safe and be aware”: UofSC undergraduate student experiences during the COVID-19 pandemic**

**Presenters: Smart Start Nursing Program 2020 Cohort**

Rose Ferguson, Bailey Goldschmidt, Khushi Patel, Sydney Reichardt, Natalie Trimble

**Mentor(s): Sr. Robin Dawson and Dr. Sue Heiney**

**Background/Significance**

The COVID-19 global pandemic has taken thousands of lives, sickened even more, and changed the daily routines of many. It has also resulted in significant challenges for universities, including the need for rapid development of COVID-19 guidelines to mitigate community spread (e.g., mask use, social distancing) and alternative educational delivery strategies (e.g., virtual, and asynchronous). Students have also had unique experiences adapting to this “new normal”.  
  
**Purpose**

The purpose of this qualitative descriptive study was to explore the experiences of UofSC undergraduate (UG) students living on campus during the 2020 fall semester.  
  
**Methods**

This study was guided by the Transitions Theory Framework. Participants were recruited via convenience and snowball sampling. Data included audio-recorded, semi-structured phone interviews lasting from 10 to 45 minutes. After transcription, data were analyzed using a thematic analysis approach, including open/axial coding and identification and naming of emergent themes.   
  
**Results**

Participants included thirty-four UG students. The majority were female and white. Seven over-arching themes captured the UG student experience during the COVID-19 pandemic: COVID-19 knowledge and personal safety behaviors; Making the decision to be on campus; Sources of COVID-19 information; Online classes, isolation, and quarantine; Perceptions of the university response to the pandemic; Perceptions of others’ pandemic-related behaviors; and Suggestions and recommendations as the pandemic continues.   
  
**Conclusion/implications**

Overall, the University implemented successful policies that, although at times met with student confusion, resistance, and noncompliance, were viewed positively by the participants. Student suggestions to enhance the university response included: 1) eliciting student input on the UofSC COVID-19 policies, similar to a course evaluation; 2) the development of a COVID-19 policies module to be completed by students prior to return to campus, similar to the mandatory AlcoholEdu course; and 3) faculty should demonstrate more empathy regarding the unique pressures the COVID-19 pandemic has placed on students.

**Graduate Student Oral Presentations**

**Title: Early Sepsis Identification in the Emergency Department**

**Presenter: Melissa Felder**

**Mentor(s): Dr. De Anna Cox and Dr. Alicia Ribar**

**Background**

Sepsis is associated with over 250,000 deaths annually in the U.S.1 Failure to initiate appropriate therapy is associated with increased morbidity/mortality.2 Septic shock survival decreases 7.6% every hour antibiotics are delayed; in-hospital mortality for severe sepsis is 20-50%.3,4 At the Columbia VA Healthcare System Emergency Department (CVAHCS ED), 27% of septic patients received antibiotic therapy within three hours of triage from May 2016-2018.

**Purpose**

Determine effectiveness of a sepsis trigger tool for early identification and timely antibiotic administration

**Methods**

Utilizing the PICOT approach, a retrospective chart review of ED patients diagnosed with sepsis was performed from 10/1/2019-3/31/2019 after tool implementation. Sepsis trigger criteria included variables from Systemic Inflammatory Response Syndrome (SIRS) and quick Sequential Organ Failure Assessment (qSOFA). If the patient had two or more criteria and known/suspected infection, an ED provider was notified immediately and the CVAHCS ED Sepsis Protocol was initiated. Time to antibiotics (in hours) was calculated from documented triage time to medication administration.

**Results**

The analysis included 93 patients. Through 1/31/19, 29% (9 of 31 veterans) received empiric antibiotics within three hours of triage. In February 2019, a more effective reporting method was discovered using Structured Query Language (SQL). In February and March 2019, 45% (5 of 11 patients) and 86% (6 of 7 patients), respectively, received antibiotics within the three-hour timeframe.

**Conclusion/Implications**

The CVAHCS ED has shown continued improvement in early sepsis identification and more timely antibiotic administration upon sepsis trigger tool implementation. Early identification is essential for intervention. However, staff buy-in is necessary and tools should be customized to the department/facility. The CVAHCS ED will continue monthly data review, monitor for missed opportunities, and provide ongoing staff education. Future goals are antibiotic administration within one hour of triage and to disseminate early sepsis identification practices to our inpatient units.

**Title: Associations between consumer behavior habits and dietary inflammatory potential using data from the National Health and Nutrition Examination Survey (2005-2016)**

**Presenter: Ubong James**

**Mentor(s): Dr. Michael Wirth and Dr. James Hébert**

**Background/significance**

Chronic inflammation is a significant risk factor for chronic diseases such as heart disease, cancer, and diabetes. One of the most vital regulators of chronic inflammation is diet quality, mostly determined by consumer behaviors related to purchasing foods/meals. Despite this knowledge, studies on the associations between consumer behaviors related to purchasing food/meals and the diet's inflammatory quality are limited.  
  
**Purpose**

The purpose of this study was to investigate the association between consumer behaviors related to purchasing of food/meals and Dietary Inflammatory Index (DII®) scores.   
  
**Methods**

Cross-sectional data from adults over 12 years (N = 27,438) from the 2005 through 2016 National Health and Nutrition Examination Survey (NHANES) were used. DII scores were assessed according to 24-hour dietary recalls, while consumer behaviors were evaluated according to participants responses to NHANES items related to food shopping and food expenditures. Regression analyses were conducted to examine the association between consumer behaviors and DII scores   
  
**Results**

While controlling for covariates, those in quartile 1 for spending money on groceries in a month (i.e., lowest amount) compared to quartile 4 for money spent on groceries has statistically significant higher DII scores (0.40 vs. 0.20, p < 0.01). The converse was true for money spent dining out. Also, statistically significant higher DII scores were associated with having no fruits at home compared to always having fruits at home, as well as always having soda at home versus never having soda at home. Eating at restaurants, not using myPyramid, not using nutrition facts labels and not buying organic foods also were significantly associated with higher DII scores.   
  
**Conclusions**

These findings suggest that consumers who spend less on grocery food, spend more money dining out, or do not use food nutrition information/education are more likely to consume more pro-inflammatory diets.

**Title: Racial differences in Cardiovascular Disease Risk Perception among Young Adults in College**

**Presenter: Shannon Smith**

**Mentor(s): Dr. Demetrius Abshire and Dr. Coretta Jenerette**

**Background**

**For African Americans, cardiovascular disease (CVD) is the primary reason for a 3.4-year shorter life expectancy than whites** and CVD has been estimated to explain about 30-40% of racial differences in mortality. More than 50% of young adults aged 18-24 have at least one heart disease risk factor, but do not perceive their risk serious enough for interventions.

African Americans tend to develop CVD at an earlier age compared to white Americans. Moreover, African American college-aged students are at particularly high risk of developing CVD. The college environment increases the risk for CVD in young adults due to the frequency of consuming fast food, increased levels of stress, poor sleep habits, alcohol consumption, and lack of physical activity. There is little published research on college-aged students’ perceived risk for developing CVD, strategies to minimize risk, or tailored interventions to reduce disparate CVD and associated complications.

**Purpose**

The purpose of this study is to compare racial differences in perceived CVD risk and current CVD risk factors among college-age students.

**Methods**

From a cross-sectional study of N=118 college-aged students focused on cardiovascular risk perception, we plan a secondary analysis to examine perceived CVD risk factors and current CVD risk by race. Perceived CVD risk for high blood pressure, diabetes, high cholesterol, heart disease, stroke, and excess weight were assessed on a 5-point scale ranging from very low to very high. Current CVD risk will be measured using health-risk behaviors and anthropometric data. In

**Results**

Data analysis is in progress.

**Conclusions/Implications**

It is anticipated that analyzed data will aid researchers in better understanding racial differences in perceived risks for CVD between African American and Caucasian college-aged adults to inform the development of interventions to decrease CVD.

**Title: A qualitative exploration of beliefs about the use of face coverings among adult South Carolinians**

**Presenter(s): Fattona Umari and Farsheed Umari**

**Mentor(s): Dr. Robin Dawson**

**Background/Significance**

The rapid spread of the novel coronavirus (COVID-19) across the globe has resulted in a devastating impact on economies, healthcare systems, and societies. The United States leads the world in the number of total confirmed cases and deaths. To mitigate the spread of COVID-19, traditional personal protective public health measures (e.g., physical distancing, proper hand hygiene) has been strongly encouraged and during certain periods, even mandated. Community use of face coverings plays an important role in helping curb the spread of COVID-19. Despite current efforts by health protection agencies in promoting the use of face masks/coverings and the implementation of mask mandates, some are still reluctant to wear them.   
  
**Purpose**

To explore beliefs that drive face coverings behaviors in South Carolina.  
  
**Methods**

This qualitative descriptive study was guided by the Theory of Planned Behavior and Reasoned Action. Adult residents (≥ 18 years) living in South Carolina were recruited via purposive and snowball sampling on social media sites (i.e., Facebook, Instagram). Data included audio-recorded, semi-structured remote interviews that were then transcribed and analyzed using a thematic analysis.  
  
**Results**

Seventeen participants, ranging in age from 18 to 68 years, completed interviews. The majority were white and female. Five emergent themes were identified: 1) Lack of trust in traditional sources of health information; 2) Entrenched beliefs and disinterest lead to erroneous COVID-19 knowledge; 3) Wearing a mask symbolizes weakness; 4) Individual rights conflict with community responsibility; and 5) Mask mandates do not affect private behaviors.   
  
**Conclusions/Implications**

Healthcare professionals, including nurses, should understand the most common reasons why individuals are resistant to disease-mitigating public health strategies, and be available to have conversations that recognize why erroneous beliefs occur. There is a need for consistent, continuous messaging on the individual and community benefits to appropriate use of face masks/coverings.

**Student Poster Presentations**

**Via YouTube**

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| --- | --- | --- | --- |
| **Student Presenter** | **Title** | **YouTube Link** | **Project Mentor(s)** |
| Epperly, Emma | Effects of Strength Training on Self-Perception and Mood in Female College Students | [Epperly Poster](https://youtu.be/qJ4cKjFvlg0) | Sue Heiney |
| Everhart, Kayla | A National Survey to examine blood transfusion practices in early preterm infants | [Everhart Poster](https://www.youtube.com/watch?v=FP-SkkbmmqM) | Sara Donevant, Victor Iskersky, Michael Wirth, Robin Dail |
| Fendley, Camille | Rural-Urban Differences in Depressive Symptoms Among College Students | [Fendley Poster](https://youtu.be/j6OqGB3MCNQ) | Demetrius Abshire, Robin Dawson |
| Kreag, Brendan | Examination of Variations in Body Temperature Around Packed Red Blood Cell Transfusions in One Preterm Infant: A Case Study | [Kreag Poster](https://youtu.be/WqWxFEbb8d0) | Kayla Everhart, Robin Dail |
| Laurendeau, Megan | Research Apprenticeship on the PATH Study: Examining the relationship between body temperature and blood transfusions in preterm infants | [Laurendeau Poster](https://www.youtube.com/watch?v=KoJILDLVCMY) | Kayla Everhart, Robin Dail |
| McClure, Kinsey | Adjuvant Hormonal Therapy Adherence Behaviors Among Disadvantaged Breast Cancer Survivors | [McClure Poster](https://www.youtube.com/watch?v=dOLNR3fopxk) | Tisha Felder |
| McKenna, Mae | Development and Evaluation of Resource Center for Nurse Family Partnership | [McKenna Poster](https://www.youtube.com/watch?v=T9ApPLJQhGw) | Robin Dawson |
| Moy, Victoria | Young Adult Electronic Cigarette Use: Misperceptions of Addiction and Disconnected Behavior Choices | [Moy Poster](https://www.youtube.com/watch?v=vcOzfqTjeU4) | Sue Heiney, Robin Dawson |
| Nelson, Kathy | What is the Relationship Between Shift Work and Women's Neurological Health? | [Nelson Poster](https://www.youtube.com/watch?v=jkckdM_2_H0) | Karen Wickersham |
| Patel, Khushi | Perceptions of COVID-19 and the Use of Health Information Technology among People who are Uninsured | [Patel Poster](https://youtu.be/bwLA9aAKsNg) | Cindy Corbett, Elizabeth Combs (Co-Mentor) |
| Rivers, Genna | The Experience of Adolescent Mothers in Kangaroo Care | [Rivers Poster](https://www.youtube.com/watch?v=r8pH_dnVZJk) | Sue Heiney |
| Schultz, Beth | Does Instrumental Support Impact Hospitalization Rates After Discharge? | [Schultz Poster](https://youtu.be/3_vEsWns0o0) | Cindy Corbett |
| Sheng, Jingxi | Acculturation, physical activity, and metabolic syndrome in Asian-American adults: Findings from NHANES 2011-2016 | [Sheng Poster](https://www.youtube.com/watch?v=Uzwiyom2hZE) | Mike Wirth, Sue Heiney, Demetrius Abshire, Swann Adams |
| Smith, Emily | University Ambassadors and the Impact on Nursing Students | [Smith Poster](https://youtu.be/GVSdRVlpRHo) | Robin Dawson |
| Strothers, Leah | A Scoping Review of the Impact of Hurricanes on Disease in the United States | [Stothers Poster](https://www.youtube.com/watch?v=2WVuUAdkZ-U) | Robin Dawson, Mike Wirth |
| Tucker, Curisa | Teach the Mothers, Save the Babies: A Community Baby Shower in South Carolina | [Tucker Poster](https://www.youtube.com/watch?v=OBE8GbIz9nY) | Tisha Felder |
| Vodola, Veronica | How Providing Care for Individuals with Dementia Affects How a Caregiver Changes Their Lifestyle: A Focus on the Positives | [Vodola Poster](https://youtu.be/0vdIECHqKGo) | Sue Heiney |
| Wright, Pam  Odhiambo, Chrisogonas | MedSensor: Medication Adherence Monitoring Using Neural Networks on Smartwatch Accelerometer Sensor Data | [Wright Poster – Medsensor](https://www.youtube.com/watch?v=fhjFbHGzrVE) | Cindy Corbett, Homayoun Valafar |
| Wright, Pam | hs-CRP as a Predictor of Depressive Symptoms in African Americans | [Wright - CRP](https://youtu.be/qy7oV1vBWCo) | Mike Wirth, James Hébert, Swann Adams |