### Oral Presentation

**Abstract Title:** Psychosocial Wellness in Women with Co-occurring Tobacco Use and Substance Use Disorder

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**Abstract:** Background: Smoking prevalence among women in substance use disorder (SUD) treatment is high, and many have coexisting mood (29.7%) and anxiety disorders (26.2%). Physical activity has been positively associated with smoking abstinence as well as lower depression and anxiety frequency in adults. Objective: The purpose of this project was to determine the effect of a tobacco cessation program, Get Fit and Quit (GFAQ), on psychosocial wellness in a sample of women with SUD. Method: GFAQ was a 6-month, group-centered, physical activity-focused tobacco cessation program developed for women living in a residential treatment facility who were interested in quitting or reducing smoking. Data was collected at four time points: enrollment, week 4, week 8, and 6 months. Tobacco use was validated by pre-set urine cotinine limits. Psychosocial wellness (anxiety and depression) was measured using the Generalized Anxiety Disorder 7 (GAD-7) tool and the Edinburgh Postnatal Depression Scale (EPDS). Data analysis was completed using SAS (version 9.4), with an alpha level of .05. Results: A secondary analysis of a prospective study was conducted on 23 women (age 18-45) who participated in GFAQ. The majority of participants were white (91%), single (87%), and unemployed (83%). Results showed a significant reduction in depression from baseline to 6 months (p = .03). There was not a significant change in anxiety from baseline to program completion. Discussion: A tobacco cessation program that includes physical activity may have promise in improving psychosocial wellness for women in recovery for SUD.

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**Mentor / e-mail:** Ashford, K. / kristin.ashford@uky.edu
Abstract Title: Examining the value of a quality management system for the provision of continuous renal replacement therapy (CRRT) in the ICU

Abstract: Background: We assembled an interdisciplinary quality improvement (QI) team including representation of all stakeholders involved in the provision of CRRT in the ICU. After initial examination, four objectives were outlined: 1) standardization of our CRRT protocol; 2) development of a new CRRT order set and electronic flowsheet; 3) development of systematic monitoring/reporting of quality metrics; and 4) innovation in CRRT education. Methods: We established bi-monthly QI meetings with average participation of 15 members per session. CVVHDF is now our modality of choice. A new CRRT protocol is now available online at UK CareWeb. We successfully upgraded our CRRT order set in SCM and developed a new electronic flowsheet with automated calculations to assist bedside nurses in hourly fluid removal. With the assistance of ShareSource Connect, we established systematic tracking of QI data such as prescribed vs. delivered dose, filter life, time on machine/treatment lost, and complications related to access, clotting, etc. Finally, we incorporated additional new and super user classes for nurses and fellows. Results: We provided CRRT to 480 patients in 2017 and 540 patients in 2018. As of January of 2019, our summary QI report pertains the following: 1) compliance with our protocol is consistently >90%; 2) prescribed dose is 25-30 ml/kg/h according to consensus; 3) the discrepancy between prescribed and delivered dose is consistently <10%; 4) the average fluid removal per patient is ~3 liters/day; and 5) the average filter life has improved from 20 hours/filter (2016) to 30 hours/filter. Extending filter life has decreased our filter utilization from 3.4 filters/patient (2016) to 2.9 filters/patient (2018). The latter translates in resource utilization savings (based on filters only) of approximately $60,626 per year. Conclusions: The development of an effective quality management system is of utmost importance to measure key CRRT deliverables and improve resource utilization and possibly patient-centered outcomes.

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Abstract Title: **Evaluation of an Online LGBTQ Patient Care Education Module for Primary Care Providers**

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**Abstract:** PURPOSE: The purpose of this study was to pilot the effectiveness and impact of an original online educational module about LGBTQ healthcare topics for primary care providers in Kentucky. METHODS: This study was a one-group pre- and post- intervention design to evaluate the knowledge, attitudes and self- efficacy of providers regarding providing primary care for the LGBTQ community before and after completing a training module on LGBTQ healthcare topics. Subjects were recruited via the KCNPNM Listserv over a 2-week period from 2/14/19 to 3/3/19. Variables will be measured using means with standard deviations for years of experience and age and using frequencies with percentages for gender assigned at birth, gender identity, type of provider, and rural/urban practice. Paired-sample t-tests will be used to examine pre-and post intervention differences on scores in the knowledge of LGBTQ patient care, attitudes about LGBTQ healthcare and patients, and provider self-efficacy. RESULTS: The results are currently in progress but will be completed by the conference presentation. Preliminary data (n=25) suggests improved cultural competency through significant improvements in knowledge gained, attitudes related to LGBTQ healthcare, and improvement in confidence related to skills in LGBTQ primary care. DISCUSSION: This project provides the opportunity for advancement in the cultural competency of primary care providers in Kentucky, which is desperately needed to improve the health outcomes of the selected vulnerable population. Future projects can focus on LGBTQ patient health outcomes and satisfaction of care following cultural competency implementation.

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Abstract Title: Evaluation of the Effect of Milner-Fenwick Video-Based Education and Teach-Back on Knowledge Acquisition in Atrial Fibrillation Patients

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Abstract: PURPOSE: The purpose of this study was to evaluate if video education impacts knowledge acquisition and health literacy atrial fibrillation patients. METHODS: This study employed a descriptive, pretest-posttest single site comparative design. Baseline health literacy was assessed before video education was completed using the Atrial Fibrillation Knowledge scale. Health literacy regarding atrial fibrillation was again assessed for the same participants immediately after video education was completed and again in 7 to 10 days through the use of the Atrial Fibrillation Knowledge scale and teach-back questions. RESULTS: No statistical significance was found comparing scores before and after video education intervention, although knowledge acquisition did increase at each point in time. However, important clinical pearls were discovered. The majority of the participants had undergone a pulmonary vein ablation, and despite this the baseline health literacy mean score was only 63% at immediate teach-back. CONCLUSION: While the video education intervention did not result in statistically significant differences in health knowledge in relation to atrial fibrillation patients, important clinical information was discovered in this study. Mean scores from teach-back show that patients are not as literate about their disease as health care providers may believe. This indicated that even patients who have had subspecialized cardiology care with an electrophysiologist and extensive patient teaching were not as literate about their condition as health care providers may believe. Other mediums may need to be combined with video education for better results. Patients should be given information on watching the videos at home for repeated.

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Mediation effect of the inflammatory properties of diet in the relationship between Depressive Symptoms and Cardiovascular Disease Risk in men and women: Results from National Health and Nutrition Examination Survey (NHANES; 2007-2014)

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Abstract: Depression is common in patients with cardiovascular disease (CVD) and associated with inflammation. Inflammation contributes to the development of CVD and can be modulated by diet. However, the role of the inflammatory properties of diet in the relationship between depressive symptoms and CVD risk is not well-known. The purposes of this study were to 1) examine whether the inflammatory properties of diet mediate the relationship between depressive symptoms and CVD risk; and 2) determine if there is a gender difference in the mediation effect. The National Health and Nutrition Examination Survey (2007-2014) data were used. Depressive symptom score, inflammatory properties of diet, and CVD risk were measured by the Patient Health Questionnaire-9 (PHQ-9), Dietary Inflammatory Index (DII), and Framingham risk score (FRS), respectively. R was used to analyze the samples collected with complex sampling design (stratification, clustering, and selection probabilities). Generalized linear model was used for the mediation analysis. There were significant differences in PHQ-9 (4.95±0.65 vs 8.45±0.76), DII (-.899±0.081 vs .255±.072) between men and women (p<.0001). The effects of DII between PHQ-9 and FRS were found in women and men. Partial and full mediation effects of DII were found in men (a=.823, b=0.083, c=.503, c´=.425, p=.032) and women (a=.906, b=0.128, c=.480, c´=.373, p=.058). The mediation effect of DII between depressive symptoms and CVD risk was greater in women when compared to men. Antiinflammatory diet interventions with consideration of gender may improve health outcomes in individuals with CVD risk, especially those who have high levels of depressive symptoms.

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Abstract Title: Systematic Review of the Validity and Reliability of Instruments Measuring Ethnic Discrimination in Hispanic Adults

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Abstract: Background: Racial and ethnic discrimination have adverse health consequences. Although widespread ethnic discrimination has been reported among U.S. Hispanics, most instruments have been developed to measure racial discrimination. The aim of this systematic review was to identify measures of ethnic discrimination in Hispanics and to synthesize their psychometric properties. Methods: An electronic search of PubMed, PsychInfo, and Sociological Abstracts was conducted. Keywords were “discrimination”, “Hispanic”, “Latino”, “measurement”, “racial discrimination”, and “ethnic discrimination.” Inclusion criteria were English language studies published between 1997 and 2018 in which ethnic discrimination in an adult Hispanic population was measured and psychometric properties of the instrument assessed. Results: Of 909 articles reviewed, 18 met inclusion criteria from which six measures of ethnic discrimination were identified. Instruments varied in number of items, constructs measured, and timing of discrimination experiences. For example, in contrast to the 9-item “Experiences of Discrimination” (EOD) scale that measures in how many situations and how often discrimination is experienced, the 70-item “Perceived Ethnic Discrimination Questionnaire” includes 5 subscales and assesses lifetime and past-week discrimination experiences. While evidence supports the reliability and validity of each instrument, only the EOD instrument has been shown to be valid and reliable in both Spanish and English. Conclusion: Accurate examination of the effect of discrimination on health outcomes requires psychometrically sound measures available in languages appropriate for use with the populations of interest. Of the instruments we identified, only the EOD met these criteria and may be the preferred measure of ethnic discrimination to use with Hispanics.

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Abstract Title: The Relationship between Traditional Use and Dual Use on Neonatal Respiratory Distress

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Abstract: Introduction: Tobacco use during pregnancy significantly increases the risk of preterm birth. Respiratory distress is a serious and life threatening newborn complication often resulting from preterm birth. The use of e-cigarettes (e-cig) is on the rise, and many pregnant women switch to e-cigs due to the perception of harm reduction. The purpose of this study was to compare traditional cigarette use versus dual use on birth outcomes, specifically respiratory distress, APGAR scores, and NICU admission. Method: This is a prospective, ongoing observational study conducted in an academic medical center. At enrollment, participants completed a survey that included information on their tobacco product use. Data collected from the medical record included patient demographics, respiratory distress, APGAR scores, and NICU admission. Respiratory distress was defined via the American Congress of Obstetrics and Gynecology criteria. Data analysis included descriptive statistics and regression analyses using SAS. Results: In this ongoing study, a total of 190 pregnant women have been enrolled and birth outcomes are available for the 129 women who have delivered. The prevalence of respiratory distress among conventional users was 14% and was 6.9% among dual users. There was not a significant association with dual-use compared to conventional use on respiratory distress, APGAR scores, or NICU admission in the adjusted or unadjusted analysis. Conclusions and Implications for Practice: The occurrence of respiratory distress among dual users is not statistically significant, however the sample size is small and recruitment for this study is ongoing. A larger sample size may show statistically significant data.

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Abstract Title: **Scrub for Patient Safety**

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**Abstract:** Purpose: Hand hygiene has been linked to prevention of infection since the time of Florence Nightingale (Nightingale, 1859, p. 52-54). The World Health Organization (WHO) developed a protocol “Your 5 Moments for Hand Hygiene for Healthcare Providers” (World Health Organization, 2009). Currently at Good Samaritan Hospital, hand hygiene observers from the department of Infection Prevention and Control (IPAC) monitor for hand hygiene before and after crossing the threshold of the patient room. IPAC staff do not observe hand hygiene in the patient rooms. Additionally, there is no research on the use of the 5 Moments at UK HealthCare. Therefore, there is a need to develop a standard of care, which promotes the 5 Moments recommended by the WHO. Method: Nurses on the 6th floor of Good Samaritan provided hand hygiene education to patients upon admission. Education focused on the 5 Moments of Hand Hygiene promoted by the WHO. IPAC staff continued to monitor compliance of nurses and nursing care technicians. Patients were asked to complete a survey upon discharge measuring the compliance of staff’s adherence to the 5 Moments of Hand Hygiene. Results/Implications: Assessment before intervention occurred February 18- March 3, 2019. Patient education was initiated on March 4 with “Your 5 Moments for Hand Hygiene.” Results will be available with the poster. We anticipate an increase in hand hygiene compliance by nurses and nursing care technicians as evidenced by both IPAC assessment and patient surveys on discharge.

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Abstract Title: Examining the Association between Prenatal Electronic Cigarette Use, Dual Use, and Preterm Birth

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Abstract: Introduction: Electronic cigarette (e-cig) usage among women of childbearing age is dramatically increasing. To date, there is very little known about the impact of traditional cigarette use and dual use (traditional and electronic cigarettes) on preterm birth or infant birth weight. Many mothers have switched from traditional cigarette use to e-cig and/or dual use with the intention of reducing fetal harm. The purpose of this project was to determine the relationship between traditional cigarette use versus dual use with preterm birth and low birth weight. Method: This is a prospective, ongoing observational study conducted in an academic medical center. At baseline, participants completed a survey that included questions about their tobacco use behaviors. Data was collected from the medical record included patient demographics, gestational age at birth, and infant weight at birth (grams). Preterm birth is defined as a gestational age of less than 37 weeks. Data analysis included descriptive statistics and regression analyses using SAS. Results: A total of 121 pregnant women were studied, including 94 traditional cigarette users and 27 dual users. 13 out of the 94 traditional users (13.8%) had preterm births, and 1 of the 27 dual users (3.7%) had a preterm birth. There was not an association between traditional nor dual use and preterm birth or low birth weight in the adjusted or unadjusted analysis. Conclusions and Implications for Practice: Although a common reason that many women switch from traditional cigarette use to dual use during pregnancy is to reduce fetal harm, there was no significant difference between the two tobacco uses and preterm birth or low birth weight. However, the sample size of dual users is small, but recruitment for this study is ongoing.

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### Abstract Title: Is it Really that Cool to JUUL: Cross-Sectional Study of Cotinine and Cytokine Levels and Nicotine Dependence in the Emerging Age Population

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**Abstract:**

Introduction: The purpose of this study is to compare the gender differences of cotinine levels and nicotine dependence between college age men and women who use electronic nicotine delivery systems (ENDS), like JUULs. ENDS are small battery operated devices that heat liquid containing nicotine to create an aerosol that can be inhaled and smoked (Martinasek, Bowersick & Wheldon, 2018). In the United States ENDS usage has drastically increased in the adolescent and emerging age population (18-25 years old) over the past several years (Ali, King, Vidourek, Merianos & Rao, 2018). In addition, many current ENDS users are first time nicotine users (Pechacek, Nayak, Gregory, Weaver & Eriksen, 2016). The long-term effects of these products have not been systematically investigated. (Vincent, Potts, Durbin, Moore & Eleys, 2018). Methods: This is a cross section study using a convenience sample to examine ENDS usage, nicotine dependency and oral saliva cotinine and cytokine levels in a sample of undergraduate students (30 males, 30 females) at the University of Kentucky. The participants will be current ENDS users. Oral salivary cotinine and cytokine levels will be measured through the use of NicAlert drool samples. Participants will also self-report on various ENDS behaviors and usage through the use of a survey. All participants will receive $10 cash as compensation for participating in this study. Results: Data collection is beginning at the end of February and data will be analyzed before the CCTS Conference. Discussion and Conclusion: We hope that our research will further define nicotine dependence, salivary cotinine level and ENDS use behaviors among our population of undergraduate men and women who use ENDS.

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Abstract Title: Kentucky-Community Cancer Awareness Research and Education (K-CARE): Focus Group Results

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Abstract: Introduction: Kentucky has the highest lung cancer mortality in the nation. Some western KY counties, such as Daviess experience lung cancer disparities among racial/ethnic minorities and the medically underserved. Kentucky-cancer community research and education (K-CARE) is a community engagement project to improve cancer health literacy and outcomes in disparate populations. The purpose of K-CARE is to increase community awareness of lung cancer risk factors and screening criteria, and to connect high-risk individuals to lung cancer screening and tobacco cessation services. Methods: Before K-CARE is implemented, we conducted three focus groups in western KY with racial/ethnic, minority and underserved populations to receive feedback on health literacy, culturally appropriateness and readability of the K-CARE educational handout. Investigators presented the handout by scrolling through the pages in color on a display. Afterward, the investigators solicited comments and questions about the handout and used open-ended prompts to generate discussion. Results: Twenty-five adults participated: Latinos (n=7); African Americans (n=9); Whites (n=9). Participants provided feedback on language used, clarity, flow, color, appearance, font style and size, images, graphics, social and cultural relevance, numbers and statistics. Recommendations included highlighting important cancer risk factors and the health consequences in a user friendly, culturally appropriate, effective and impactful way. Conclusions: The focus groups facilitated the refinement of the K-CARE handout and obtained buy-in for the project. Working with community partners facilitates understanding of the local community to deliver cancer awareness education to a hard-to-reach population, builds community capacity and ensures optimal delivery within the social context of the setting.

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Abstract Title: Parental Feeding Styles Affecting Childhood Obesity

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Abstract: Parental feeding behavior is a factor associated with increased or decreased probability of a child becoming obese. Studies using the PFSQ (Parental Feeding Style Questionnaire), a questionnaire that categorizes parental behavior into 4 subgroups to determine which children are most at risk for childhood obesity, are the focus of this review. The review criteria included the following: Participants must have children between the ages of 6-12, and include the PFSQ as a primary evaluation measure. Studies excluded were those which focus on exercise, media influence, and other external factors beyond family influence as principle variables. The studies were published in English. There are six studies included in the review, all of which were conducted in the United States within the past 5 years, and include the PFSQ as the primary assessment tool. Two additional reviews were examined that did not take place in the U.S., one was conducted in Turkey, and another in Hong Kong. The studies examined outside of the U.S. are included to explore cross-cultural applicability. Of the four domains identified by the PFSQ (emotional feeding, instrumental feeding, control over eating, and encouragement), three studies found parental emotional and instrumental feeding styles are most closely correlated with increased food intake in the child. Two studies found a correlation between encouragement feeding and decreased food intake. The scale has had limited use across cultures, yet the few studies outside the U.S. indicate the PFSQ may be a useful measure cross-culturally.

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Abstract Title: Risk Factor Screening in Hypertensive Patients

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Abstract: Background: Hypertension and elevated blood pressure raise the risk for serious health issues, including heart attack, stroke and heart failure. Hypertension accounts for more cardiovascular disease-related deaths than any other modifiable risk factor, second only to cigarette smoking. Hypertension is the number one reason that individuals seek primary care. Objective: Improvement of screening for modifiable risk factors was the goal of this quality improvement project. Method: A retrospective chart review was performed to obtain data that included number of patients with diagnosed hypertension or elevated blood pressure at their visit. Of those patients, data was collected regarding screening of risk factors for hypertension or elevated blood pressure, including alcohol/tobacco/drug use, diet, inactivity/activity level, obesity, stressors and sleep. Between March 27, 2018 and August 15, 2018, 61% of patients seen in the clinic received a comprehensive exam by the nurse practitioner. Of the 41 patients seen, 25 were diagnosed with hypertension or elevated blood pressure. Of those diagnosed with HTN or elevated blood pressure, 80% were screened for modifiable risk factors. A mnemonic checklist was developed to make the screening for risk factors easier. The mnemonic, ADIOS, refers to five risk factors: Addiction, Diet, Inactivity/Activity level, Obesity, and Stressors and Sleep. The provider was educated regarding use of this mnemonic. Post education, 100% of patients evaluated by the nurse practitioner were screened for risk factors using the ADIOS checklist. Conclusions and Implications for Practice: The screening mnemonic ADIOS is a valuable tool for screening of risk factors for hypertension and comorbidities.

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### Abstract Title:
Developing of informational pamphlets to enhance tobacco treatment among a psychiatric patient population

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### Abstract:
**Purpose:** People with mental illnesses (PMI) experience greater rates of tobacco-use and lower rates of tobacco cessation, which may be due to the lack of relevant health information that account for lower health literacy levels. Thus, the objective of this study was to develop tailored tobacco cessation resources for PMI and tobacco treatment (TT) brochures for mental health providers (MHP). **Method:** Templates for the pamphlets were selected based on an internet review of existing TT health information resources obtained from google images and selected internet search strategies. Pamphlets were subsequently developed using Piktochart with feedback from content experts. The pamphlets also listed relevant resources for PMI. **Results:** Pamphlets were developed with consideration of low literacy levels, gender-specific concerns, and the high tobacco use relapse rate among PMI, and provided both state and federal tobacco cessation resources. MHP pamphlets were developed incorporating brief evidence-based practices, including the use of medication and counseling for TT engagement. **Conclusions and Implications:** The next step of our project is to have the pamphlets further reviewed with key informants (consisting of both PMI and MHP) to examine their desirability, acceptability, and applicability. This examination will provide feedback on their appropriateness for the health literacy levels of PMI, ability to address the disparity of tobacco-use among PMI, and adequacy to address the unique challenges of tobacco cessation that PMIs face. Such tobacco cessation pamphlets may aid in reducing the current disproportionately elevated rate of tobacco use among PMI.

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Abstract Title: The Effect of Breastfeeding on Postpartum Depression

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Abstract: Background: Nearly one in five women experience postpartum depression (PPD) following childbirth. During pregnancy, hormones are at high levels and after birth, they drop quickly. These major drops can lead to chemical changes in the brain that can precipitate mood swings and other changes in behavior. These changes, in combination with environmental factors, can influence and contribute to PPD. PPD can have lasting effects on the mother and baby. Many studies have examined the benefits of breastfeeding; however, uncertainty remains regarding the outcome on the mother’s mental and emotional health. Purpose: The purpose of this integrative review of research literature is to examine PPD and determine the effect of breastfeeding on the prevalence and severity of depression following childbirth. Methods: CINAHL and PubMed were used with key words "postpartum depression" and "breastfeed*". Filters were applied to include articles from 2010 onward, full text, and English. From CINAHL this produced 64 articles. From PubMed—360. Articles included met the following criteria: key words; case studies, clinical trials, meta analyses, research, and systematic reviews in peer reviewed journals; relationship of breastfeeding and depression. Results: Data analysis is ongoing. Preliminary results have found that higher anxiety and depression symptoms correlate with lower levels of oxytocin. Oxytocin was found to be the primary hormone impacting the incidence and severity of PPD after childbirth. Final recommendations are pending. Nursing Implications:-Support of breastfeeding should be continued and promoted throughout pregnancy -Careful attention to screening of depression and history prenatally -Understand mother's intentions to breastfeed

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Abstract Title: Perceived Risk of Lung Cancer, Health Beliefs, Home Radon Testing, and Self-Efficacy to Mitigate among Homeowners in Appalachia

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Abstract: Background: Exposure to radon is the second leading cause of lung cancer. Exposure to radon ≥ 4.0 pCi/L accounts for 10-15% of all lung cancer cases and is associated with an estimated 21,000 preventable deaths in the U.S. annually. The risk of lung cancer is higher when exposed to both radon and tobacco smoke, creating synergistic risk. It is estimated that 20% of U.S. homes test high for radon. Aim 1 examined associations between risk perception of lung cancer and home radon testing and self-efficacy to mitigate. Aim 2 assessed the association between tobacco use, socio-demographics, and self-efficacy to mitigate. Aim 3 explored the perceived benefits and barriers of radon mitigation.

Methods: Our community-academic team of youth citizen scientists and nurse researchers conducted a mixed-methods study with Appalachian homeowners. Youth citizen scientists administered a 14-item survey to their parent to evaluate health beliefs related to radon prior to deploying free radon test kits. If radon levels tested high, the youth citizen scientist informed their parent of the option to mitigate using a voucher of $1,000. We conducted semi-structured interviews with participants using qualitative methods to assess motivation (i.e., perceived benefits, barriers) to mitigate. Results: Data collection is ongoing. Discussion: Appalachians are at an increased risk for lung cancer due to tobacco use, weak smoke-free laws, and radon exposure. Most are unaware of the synergistic risk between tobacco smoke and radon for developing lung cancer. Low risk perception, low self-efficacy, and financial barriers are potential barriers to radon testing and mitigation.

Supported by: NIEHS Administrative Supplement to Center for Appalachian Research in Environmental Sciences: 3P30ES026529-02S1

Primary Presenter / email: Mitchell, C. / cfge222@uky.edu University of Kentucky Research project in process BSN

Mentor / e-mail: Hahn, E. J. / ejhahn00@email.uky.edu
## Abstract Title:
The Effect of Acculturation and Length of Stay in the U.S on Life Simple 7 Score: Results from a Study of Cardiovascular Health in Hispanics

### Author(s):
Nguyen, Mai, College of Nursing, U of Kentucky  
Voigt, K, College of Nursing, U of Kentucky  
Mudd- Martin, G, College of Nursing, U of Kentucky

### Abstract:
**Background/ Objectives:** Lower U.S. acculturation and length of stay have been associated with health benefits in Hispanics. The purpose of this study was to examine whether these factors were associated with cardiovascular health (CVH) as measured by the American Heart Association’s Life’s Simple Seven (LS7).

**Methods:** Seven LS7 metrics (physical activity, healthy diet, smoking, weight, cholesterol, blood pressure and hemoglobin A1c) were assessed at baseline in 93 Hispanic adults participating in the Corazon de la Familia study (mean age 40.8±9.1 years, 85% female). Each metric was categorized as poor, intermediate or ideal and scored as 0, 1, and 2 respectively with a total possible score of 14. Length of stay was measured with a single question and acculturation with Marin’s Acculturation Scale. Controlling for age, gender, financial status, and educational level, we conducted a multiple linear regression to examine whether acculturation and length of stay predicted LS7 score.  

**Results:** Average score on Marin’s Acculturation Scale was low (1.8±0.53; range: 1.00-3.25). Mean length of stay in the U.S. was 15±7.5 years (range <1-47 years). The mean LS7 score was 9.1±2.1. The multiple regression model was significant (p < 0.018) and explained 16% of the variance. Independent predictors of LS7 were age and acculturation but not length of stay. Age was negatively associated whereas U.S. acculturation positively associated with LS7 score. Conclusion: Length of stay is often used as a proxy for U.S. acculturation. Our findings indicate these may be unrelated and acculturation may be a more important predictor of Hispanic CVH.

**Supported by:** Mentor: Gia Mudd- Martin  
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**Primary Presenter / email:** Nguyen, M. / mnng223@g.uky.edu  
University of Kentucky  
Research project in process  
BSN
Abstract Title: Evaluation of Equestrian Related Head Injuries in Kentucky Managed in the Emergency Department

Author(s): S. Post, College of Nursing, U of Kentucky   J. Higgins, UK HealthCare Nursing Research Fellow, U of Kentucky

Abstract: Introduction: The purpose of this study was to determine the incidence and relationships of equestrian related head injuries treated in the ED, using data from a level 1 trauma center over 2016-2017. Methods: We used a retrospective medical record review to identify patients with equestrian related head injuries treated within the ED that didn't require admission (N = 100). Patients were categorized by sociodemographic, economic and injury type. Results: The sample was primarily young (33+/- 19 years) females (55%) with private insurance (63%). The mean medical cost was $8,227 +/- 8914. Most injuries occurred in urban areas (52%) and 46% resulted in concussions from falling or being thrown (57%). Chi-square analyses showed that men had significantly more concussions with loss of consciousness (LOC) (11 (65%), p = 0.04) and women had significantly more concussions without LOC (21 (72%), p =0.04). Equestrians who fell had more concussions with LOC (14 (82%), p < 0.0001) and concussions without LOC (23 (83%), p < 0.0001). Being kicked resulted in more injuries such as fractures (35 (65%), p < 0.0001). There were no differences in mechanism of injury by age, locale, or gender. Discussion and Conclusions: These findings highlight a need for equestrian specific head injury education when being treated and discharged from the ED. Our interdisciplinary team developed literature on head injury evaluation and a Safe Return to Ride protocol (smartphone app). We plan to utilize this descriptive study to better target the needs and engage in community outreach in the equestrian circuit.


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Mentor / e-mail: Higgins, J. / Jake.Higgins@uky.edu
# Poster Presentation 13

<table>
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<tr>
<th>Abstract Title:</th>
<th>Examining Community Smoke-Free Policy Effects on Tobacco Use Among Psychiatric Inpatients</th>
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<tbody>
<tr>
<td>Author(s):</td>
<td>S. Seng, College of Nursing, University of Kentucky  C.T.C. Okoli, College of Nursing, University of Kentucky</td>
</tr>
</tbody>
</table>

**Abstract:** Introduction: Tobacco-related morbidity and mortality is excessive in people with psychiatric disorders (PD). Understanding tobacco-use predictors among inpatients is crucial to implementing tobacco cessation treatments. The Theory of Triadic Influence categorizes behavior predicting variables into ultimate, distal, and proximal levels. Hence, tobacco treatment efforts are more effective when all levels of influence are integrated into interventions. Methods: We conducted a correlational study using 2,060 inpatient records from a state psychiatric hospital in Kentucky. Demographic, urban/rural status, county smoke-free policy (SFP), history of substance use and treatment (SU/ST), and tobacco-use variables were examined. Multivariate logistic regression analyses stratified by PD categories (internalizing, externalizing, psychotic disorder, or other) assessed predictors of tobacco-use. Results: In the total sample, predictors of tobacco-use were: being male, white, lower education, history of SU/ST, having an externalizing, psychotic, or internalizing disorder (as compared to ‘other’ diagnoses), rural county, younger age, and shorter length of stay (LOS). Predictors among those with an internalizing disorder were: lower education, history of SU/ST, and rural county. Among those with an externalizing disorder the only predictor was history of SU/ST. Among those with a psychotic disorder predictors were: being male, lower education, history of SU, rural county, and shorter LOS. Among ‘Other’ PD predictors were: history of SU and county with a partial SFP. Conclusions: Psychiatric nurses should remain aware of factors that increase vulnerability to tobacco-use among inpatients. Future research may expand on the current findings to develop strategies, accounting for predictive variables, to enhance tobacco treatment among people with PD.

Supported by: None

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Mentor / e-mail: Okoli, C. T. C. / ctokol1@uky.edu
Abstract Title: Metabolic Syndrome: Dietary Intervention to Reduce Inflammation and Oxidative Stress

Author(s): K. D. Webb, Department of Nursing, U of Kentucky  J. Kang, Department of Nursing, U of Kentucky  M. J. Biddle, Department of Nursing, U of Kentucky

Abstract: Background: People with metabolic syndrome (MS) have a subset of metabolic conditions that increases likelihood of developing cardiovascular disease (CVD). Oxidative stress and inflammation both contribute to MS and CVD development. Carotenoids, antioxidants abundant in yellow, red, and orange fruits and vegetables, have been found effective in helping to reduce oxidative stress and inflammation. Healthy People 2020 calls for increases in fruits and vegetables intake. However, only 9-12 percent of adults meet recommended intake of fruits and vegetables. The purpose of this study is to evaluate the effect of a simple and inexpensive dietary antioxidant intervention (low-sodium V8 vegetable juice) on oxidative stress and inflammation in people with MS. Methods: This is a primary intervention study. Participants (N=100) are being randomized into control or intervention group. Intervention group is instructed to drink one can of V8 juice/day for 30 days. C-reactive protein and lipid panel will be used as biomarkers of inflammation. Total antioxidant capacity and malondialdehyde will be used as markers of oxidative stress. Blood samples to measure plasma markers of oxidative stress and inflammation are being collected, spun, aliquoted, and stored at -80°C till analysis at CCTS. Sociodemographic, behavioral, clinical, and food frequency questionnaire data are being collected at baseline. All biomarkers and clinical measurements will be repeated 1 month later. Twenty four-hour dietary recall data are also being collected three times during the study. Dermal concentration of carotenoids will be measured by reflective spectroscopy to evaluate adherence to intervention. Results and Conclusion: Research is ongoing.

Supported by: College of Nursing pilot funding (PI: Martha J. Biddle)

Primary Presenter / email: Webb, K. D. / KDWe225@uky.edu University of Kentucky Research project in process BSN

Mentor / e-mail: Biddle, M. J. / Martha.Biddle@uky.edu
Abstract Title: Comparison of Predictive Abilities of Pressure Injury Risk Tools in a Trauma-Surgical Intensive Care Population

Author(s): R. Wilson, Student Nurse  P. Halcomb, DNP, APRN, ACNS-BC  S. Casey, BSN, RN  E. Taylor, BSN, RN  J. Elder, MSN, RN, CWOCN  J. Higgins, PhDc, RN, CCRN-K

Abstract: In the United States, more than 2.5 million patients develop pressure injuries annually. The cost per incident can reach up to $50,000, and as of 2008, the Centers for Medicaid and Medicare Services no longer reimburses hospitals for care of hospital acquired pressure injuries (HAPI). While the prevalence and cost of pressure injuries remains vast, it is known that these types of injuries are very often preventable. In reference to critically ill patients the Braden Scale has been shown to be inaccurate with low specificity and low positive predictive value. The Jackson/Cubbin scale was developed specifically within a critically ill patient population and has been validated for use in the critical care population. The purpose of this study is to assess the reliability and predictive validity of the Jackson/Cubbin compared to the currently utilized Braden scale in the trauma-surgical intensive care unit at an academic, ACS verified Level 1 trauma center. We used a retrospective medical record review to compare two cohorts of trauma-surgical patients (N = 366), those with (n = 181) and without HAPI (n = 185). A retrospective review was used to examine 366 patients admitted to the trauma-surgical ICU, 18 years or older, and had stayed in ICU for 72 hours or longer were included. Sensitivity, specificity, positive predictive value, negative predictive value, and area under the curve (AUC) were calculated. In conclusion, the Jackson-Cubbin Scale is preferred to the Braden Scale to predict HAPI risk in a trauma-surgical intensive care population.

Supported by: A retrospective medical record review to compare two cohorts of trauma-surgical patients was used and sensitivity, specificity, positive predictive value, negative predictive value, and area under the curve (AUC) were calculated.

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Completed research project
BSN

Mentor / e-mail: Higgins, J. / jake.higgins@uky.edu
Abstract Title: Health-Related Quality of Life and PTSD in Survivors of Extra-Corporeal Membrane Oxygenation (ECMO) Support

Author(s): Jennifer Bauman RN, BSN, DNP-c, U of Kentucky  Sheila Melander PhD, ACNP-BC, FAANP, FCCM, U of Kentucky

Abstract: The purpose of this study is to assess whether impaired health related quality of life (HRQOL) and post-traumatic stress disorder (PTSD) symptoms in survivors of extracorporeal membrane oxygenation (ECMO) exist, and to determine how prevalent they are in pulmonary and/or cardiac illnesses. This will be carried out by utilizing the Short Form 8 Health Survey (SF-8) and the ICU Memory Tool (ICUMT). ECMO is one of the most complex and invasive rescue therapies for acute heart and/or lung failure (Tramm, Hodgson, Ilic, Sheldrake, & Pellegrino, 2014, p. 31). This mechanical system is used to temporarily rest the heart, lung, or both by providing full circulatory support and gas exchange (Tramm, Hodgson, Ilic, Sheldrake, & Pellegrino, 2014.). While physical aspects of HRQOL post ECMO have been reported, the psychological and emotional well-being of those who undergo ECMO for life-support have not been adequately studied. Current evidence suggests that ECMO survivors have a high incidence of adverse mental health outcomes, which contribute to poorer patient physical health, social functioning, and a decreased quality of life post critical illness (Tramm, Hodgson, Ilic, Sheldrake, & Pellegrino, 2014, p. 32). Despite this, psychological and emotional aspects of care in this patient population often go under-treated during and after their hospitalization, because the focus is on resolving the severe underlying condition that lead to cardiac and/or respiratory failure. Therefore, identifying and managing PTSD symptoms in patients who undergo ECMO for acute heart and/or lung failure can potentially improve overall physical and mental well-being.

Supported by: n/a

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Mentor / e-mail: Melander, S. / sheila.melander@uky.edu
Abstract Title: The Effect of a Provider-Based Educational Program on Knowledge, Attitudes, Self-Efficacy, and Order Rates of Cologuard in a Primary Care Clinic

Author(s): C. Besten, Department of Nursing, U of Kentucky

Abstract: BACKGROUND: Colorectal cancer is one of the most common and deadly cancers. Most colorectal malignancies are slow-growing, making regular screening increasingly important to decrease morbidity, mortality, and cost of treatment. Cologuard serves as an effective and non-invasive colorectal cancer screening modality for average-risk adults. PURPOSE: The purpose of this study was to evaluate the impact of a provider-based educational intervention on knowledge, attitudes, self-efficacy, and ordering rates of Cologuard among primary care providers. METHODS: This study was a single-center, pre/post implementation study of the effectiveness of a provider-based educational intervention using a validated resource tool. The first stage of the project featured an examination of knowledge, attitudes, and self-efficacy of 14 primary care providers related to Cologuard before and after the intervention. The second stage included a separate pre/post-test design to determine the effect of the intervention on provider order rates of Cologuard using 200 randomly selected charts prior to the intervention during the months of August through October 2018, and 200 randomly selected charts after the intervention during the months of December 2018 through February 2019. RESULTS: The results of this study are pending. Descriptive analysis will be used to determine means and standard deviations to describe interval/ratio demographic variables and frequencies with percentages to describe nominal demographic variables. Differences between variables will be assessed using independent sample t-tests and chi-square analysis. Differences in the proportion of patients screened before and after the intervention will be assessed using chi-square analyses. CONCLUSION: Implications for practice and research will be discussed.

Supported by: The project described was supported by the National Colorectal Cancer Roundtable (NCRRT) and the HRSA funded Family Medicine Interprofessional Training Grant IRB# 42943 Collaborative Training in Primary Care. The content is solely the responsibility of the investigators.

Primary Presenter / email: Besten, C. / cassily.besten@uky.edu University of Kentucky Research project in process DNP

Mentor / e-mail: Lock, S. / selock0@uky.edu
Abstract Title: The Effects of Screening Brief Intervention and Referral to Treatment on Screening Rates of Substance Misuse Among Patients Between the Ages of 12-21 in the Rural Community Hospital Emergency Department

Author(s): P. Blanton, Department of Nursing, U of Kentucky   E. Tovar, Department of Nursing, U of Kentucky   L. Jensen, Department of Nursing, U of Kentucky

Abstract: Background: In 2014 approximately 2.3 million individuals in the United States between 12-17 years of age admitted to using illicit drugs and 2.9 million adolescents were found to have used alcohol in the past month. Early intervention and screening of adolescents for substance misuse aids in decreasing the burden of addiction. Screening, brief intervention, and referral to treatment helps identify adolescents who misuse substances. The CRAFFT test is the recommended screening tool for adolescents. Purpose: The goal of this project was to improve screening and documentation for substance misuse in adolescents between the ages of 12-21 in a rural community hospital emergency department. The first objective was to evaluate provider's knowledge, self-efficacy, and self-confidence with screening utilizing the CRAFFT tool before/after an educational module. The second objective was to assess the frequency of documentation of substance misuse screening in adolescents before/after implementation of the CRAFFT tool. Methods: A pre/post-test design was used to examine changes in provider knowledge, self-confidence, and self-efficacy with screening for substance misuse in adolescents using the CRAFFT tool. A retrospective/prospective chart review was used to assess the frequency of documentation of substance misuse before/after the CRAFFT education. Results: Pre/post-test results showed an increase in provider knowledge, self-efficacy and self-confidence about screening using the CRAFFT tool. Results for the retrospective and prospective review will be reported. Conclusion: Providers felt more confident in screening for substance abuse in adolescents and had increased knowledge on how to properly screen for substance misuse in this age group.

Supported by: Not applicable

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Evidence-based practice project in process
DNP

Mentor / e-mail: Tovar, E. / elizabeth.gressle@uky.edu
**Poster Presentation 19**

<table>
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<tr>
<th>Abstract Title:</th>
<th>An Interprofessional Approach to Promote Resiliency Through Mindfulness and Self-Care Practices in A Nursing Acute Care Setting</th>
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<tr>
<td>Author(s):</td>
<td>K.R. Brouwer, DNP Student, U of Kentucky  M. G. Hardin-Pierce, Department of Nursing, U of Kentucky</td>
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</tbody>
</table>

**Abstract:** Background: Burnout is increasing at an alarming rate among healthcare professionals. Approximately 82% of all nurses in the U.S. report feeling overly stressed from work. By 2025, the U.S. will be short 90,000 physicians and 500,000 nurses. The rates of burnout and compassion fatigue demonstrate the ubiquitous nature and impact of this issue among healthcare workers. If one member of the team suffers, the entire team may struggle – including the patient. Interventions that reduce stress and burnout among healthcare professionals are needed. Objectives: The purpose of this study will be to determine if a brief mindfulness and meditation intervention can be utilized to decrease rates of burnout, stress and anxiety in an acute care nursing setting.

**Methods:** A sample of 50 bedside nurses who work full-time in a major academic medical center will be recruited for this study. A pre-post test design, with a control group, will be used to test the impact of an interprofessional approach integrating practices of mindfulness and techniques of self-care to reduce clinician burnout by increasing resiliency. The exercises and activities that will be implemented include meditation and mindfulness through a mobile device application: Headspace®. Practices will be incorporated into the workday and during days off, and will last three weeks. The impact of the intervention on burnout, stress and anxiety will be measured using the Maslach Burnout Inventory, the Perceived Stress Scale, and the Smith Anxiety Scale.

**Supported by:** N/A

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**Mentor / e-mail:** Hardin-Pierce, M. G. / melanie.hardin-pierce@uky.edu
### Abstract Title:
Don’t Just Check the Box, Check Your Athlete’s Heart: Adding a 12-Lead ECG to Pre-participation Screening to Decrease the Incidence of Sudden Cardiac Arrest in Male High School Athletes

### Author(s):
S. A. King, School of Nursing, U of Kentucky  M. A. Biddle, School of Nursing, U of Kentucky

### Abstract:
**Introduction:** Sudden cardiac arrest continues to be a leading cause of death in male high school athletes participating in competitive sports. There is a gap in the current preventative screening practice of history and physical alone. The purpose of this study is to evaluate adding a 12-lead ECG to pre-participation screening captures cardiac abnormalities that identify male athletes at higher risk for developing SCA.

**Method:** A prospective study of 206 males, ages 13-18 years old will be enrolled from a Fayette County high school in Kentucky. Participatory consent will be obtained via face-to-face meeting and interviews with student athletes and parents/legal guardians. The screening interview will include a detailed cardiac history, physical examination, and a 12-lead ECG. The current AHA recommendation of a 14-element cardiovascular screening checklist will be utilized. Abnormal findings on the physical exam or on the ECG will be referred to a pediatric cardiologist for further evaluation.

**Results:** The results of this study is to identify the feasibility of adding a screening 12-lead ECG to a pre-participatory sports physical for identification of high risk student athletes for SCA.

**Conclusion:** A new protocol to include a 12-lead ECG to pre-participation screening for male high school athletes is reasonable to screen for cardiac abnormalities that identify risk factors for SCA.

### Supported by:

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### Mentor / e-mail:
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**Abstract Title:** A Modified Screening Tool to Evaluate Risk of Unanticipated Return Visits to the Emergency Department.

**Author(s):** T.L. Riley, Doctorate of Nursing Student, University of Kentucky

**Abstract:**

**Background:** Seventy-two-hour unanticipated return visits (URVs) to the emergency department in the geriatric population have been associated with increased adverse events (AEs). Two of the commonly used screening tools for URVs lack reliable sensitivity and validity. Objective: The aim of this study is to determine if a modified, combined version of the Triage Risk Stratification Tool (TRST) and the Identification of Seniors at Risk (ISAR) tool provides a better predictive value for URVs in the geriatric emergency department patient. This process includes developing a scoring system that adequately identifies at-risk patients. Method: We will prospectively test the predictive value of a modified screening instrument in evaluating elderly patients identified as high risk for unanticipated return visits to the emergency department. A new screening tool was created by combining questions from the TRST and ISAR and adding new questions not addressed in the original tools. The modified instrument will be applied to 200 consecutive patients who visit the emergency department for non-traumatic events and meet eligibility requirements. Enrolled patients will have a 72-hour follow-up to identify the greatest predictive value of the instruments. Results: The results will determine if a modified screening instrument is sensitive and predictive of URVs in a geriatric population. Our long-term goal is to reduce adverse events associated with URVs. Conclusion: A modified screening tool that is more sensitive and valid in the geriatric population will be beneficial to improve healthcare delivery in the emergency department.

**Supported by:** 
No sources of support/funding

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Research project in process
DNP
University of Kentucky

**Mentor / e-mail:** Biddle, M / martha.biddle@uky.edu
Abstract Title: The effect of a specific school nurse intervention program on student absenteeism in Jefferson County Public Schools: A Pilot Study

Author(s): E. Stone, DNP Student, U of Kentucky

Abstract: School attendance has a significant impact on student achievement. In early grades students who miss ten percent or more of school are less likely to read at the expected level by the end of third grade and more likely to be retained. High school students with similar attendance patterns are less likely to enroll and stay in college after graduation. Although many factors impact school attendance, the presence of school nurses performing targeted activities can help decrease absenteeism. In 2016-17 over 17,000 children grades K-12 in Jefferson County Kentucky missed 10% or more of school thus increasing the risk of school failure or dropout. Evidence shows that the presence of school nurses leads to improved school attendance which can result in improved academic outcomes. This pilot project examines whether targeted school nurse interventions at an elementary, middle and high school in Jefferson County Kentucky impact chronic absenteeism. Assessment by a registered nurse for children who are sick or hurt prior to school dismissal, care coordination for children with chronic illnesses and collection of data regarding identified themes surrounding absenteeism are processes being implemented at participating schools. Although the study is ongoing, current findings support the influence of nursing interventions on student attendance and bullying, school drama and anxiety are commonly reported themes for missed school.

Supported by: NA

Primary Presenter / email: Stone, E. / eva.stone@uky.edu University of Kentucky Research project in process DNP

Mentor / e-mail: Hampton, D. / debra.hampton@uky.edu
### Abstract Title:
Psychological and Mental Illness Correlates of Nicotine Withdrawal: A Systematic Review

### Author(s):
Y. D. Al-Mrayat, College of Nursing, U of Kentucky  
C. T. Okoli, College of Nursing, U of Kentucky  
C. R. Studts, College of Public Health, U of Kentucky  
M. K. Rayens, College of Nursing, U of Kentucky  
E. J. Hahn, College of Nursing, U of Kentucky

### Abstract:
**Background:** Nicotine withdrawal (NW), a syndrome experienced by 21-50% of abstinent smokers, is considered a primary obstacle to quitting smoking and a significant predictor of smoking relapse. NW is characterized by the following symptoms: dysmorphic or depressed mood; insomnia; irritability; frustration or anger; anxiety; difficulty concentrating; restlessness or impatience; decreased heart rate; and increased appetite or weight gain. The purpose of this systematic review was to synthesize the NW literature over the past decade in terms of its psychological and mental illness (MI) correlates.

**Method:** The PsychINFO, MEDLINE, and CINAHL databases were searched for articles addressing the adult population, including patients with MI, and were published within the past 10 years. Studies addressing pharmacological interventions of NW were excluded. The final databases search yielded 19 articles. Results: NW was associated with declines in a number of cognitive functioning measures (i.e., attention, secondary memory, response inhibition, and performance improvement), anxiety, and depression. Among patients with MI, greater NW severity was associated with being African American, women, having greater psychiatric symptom severity, and the diagnosis of alcohol or other drug use disorder. Also, patients with anxiety disorders were generally associated with higher risk for relapse due to NW. Finally, having a history of life-time major depressive disorder was also associated with a 2.5-times increased risk of relapse due to NW.

**Conclusion:** NW is an essential factor contributing to relapse among quitting smokers. Further research is warranted to better understand this syndrome to enhance the provision of tobacco treatment services.

**Supported by:** Not applicable

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University of Kentucky  
Literature or evidence review  
PhD

**Mentor / e-mail:** Hahn, E. J. / ejhahn00@email.uky.edu
Abstract Title: Influences of Attitudes, Subjective Norms, and Perceived Behavioral Control of Nurses, Nursing Students and Lay people on Organ Donation Behavioral Intentions: A Systematic Review.

Author(s): S.M. Alreshidi, College of Nursing, U of Kentucky  C.T. Okoli, College of Nursing, U of Kentucky  M. Biddle, College of Nursing, U of Kentucky  W. Kurtz-Ogilvie, College of Nursing, U of Kentucky  G. Mudd-Martin, College of Nursing, U of Kentucky

Abstract: Background: There are more people on transplant waiting lists than donors. Understanding factors that influence donation decisions is needed to guide effective nursing intervention to increase organ donation. Objective: Conduct a systematic review of research in which the theory of planned behavior (TPB) guided evaluation of influences on nurses’ and laypeople’s intention to participate in organ donation. Methods: CINAHL, MEDLINE, and PubMed were searched using multiple terms for organ donation and TPB. Criteria included English language research articles published from 1998-2018, conducted with nurses, patients, or laypeople and guided by the TPB. Results: Of 114 studies identified, 5 met inclusion criteria, two conducted with laypersons, two with nursing students, and one with nurses. In a study conducted with U.S. nursing students and another with Taiwanese nurses, TBP-guided education increased students’ intention to advocate for or register as organ donors. In two cross-sectional studies, TBP-based questionnaires were administered. Results of the study with nursing students in Ireland demonstrated attitude was the strongest predictor of organ donation intention. In the second study with Australian university students, results indicated behavioral and normative beliefs were most influential in organ donation decisions. In one study a questionnaire was developed to examine correlations of TBP constructs with intention to be a bone marrow donor. Conclusion: Nurses have a vital role in advocating for and educating patients, family members, and the general population about organ donation. Using the TBP can support development of educational programs to more effectively inform potential donors about what organ donation entails.

Supported by: Not applicable.

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Mentor / e-mail: Mudd-Martin, G. / gia.mudd@uky.edu
Abstract Title: Preliminary Results of a Qualitative Study Examining the Barriers, Facilitators, Motivators, and Strategies to Dual Low Sodium-Diabetic Diet Adherence in Patient-Caregiver Dyads

Author(s): Koonmen, L.A., College of Nursing, U of Kentucky  Mudd-Martin, G., College of Nursing, U of Kentucky  Voigts, K., College of Nursing, U of Kentucky  Chung, M.L., College of Nursing, U of Kentucky

Abstract: Background: An estimated 35-45% of individuals with heart failure have a concurrent diagnosis of type 2 diabetes. Patients report dietary adherence as the most difficult lifestyle modification. Current research does not address the motivators and barriers of adhering to a dual low sodium-diabetic diet for the patient with these diagnoses and their family caregivers. Specific Aims: To determine barriers, facilitators, motivators, and strategies to dual diet adherence among patients with HF and type 2 diabetes and their family caregivers at the individual level and dyadic level. Method: Following a qualitative descriptive approach, twelve patient-caregiver dyads participated in semi-structured interviews. Interviews were conducted once, included both members of the dyad, and lasted approximately 30 minutes to one hour. Interviews were conducted using video chat programs. Data were coded using the constant comparative method and theme identification through content analysis. Results: Preliminary themes revealed patients and caregivers often work together to identify facilitators to adherence and create strategies for improvement. Motivators and barriers to diet adherence are experienced on an individual level and were specific to the individual's role in the dyad. Motivators were reported by patients at the individual level and by caregivers at the dyadic level. Facilitators and strategies for adherence were reported at the dyadic level. Family culture and formal education were also identified by dyads as major influences for adherence. Conclusions: These results can aid in the development of future interventions for patients with heart failure and type 2 diabetes to promote better dual diet adherence at both the individual and dyadic levels.

Supported by: AACN Jonas Nursing Scholars Funds

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Research project in process
PhD

Mentor / e-mail: Chung, M.L. / misook.chung@uky.edu
Abstract Title: Factors That Predict Linkage to Hepatitis C Care among People Who Inject Drugs Living in Rural Kentucky

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Abstract: Background: An estimated 3% of persons who inject drugs (PWID) with hepatitis C virus (HCV) will progress through the care cascade and be cured. This is in part due to difficulty being linked to HCV care. Numerous barriers to linkage to HCV care have been identified but there are limited studies in rural inhabitants. Purpose: To determine whether the factors associated with linkage to care in urban areas predict linkage to care among PWID with HCV in rural Kentucky. Methods: Data were collected through an online survey from 115 PWID between 18-35 years old living in one of five rural counties. Logistic regression was used to identify predictors of linkage to care. Results: Majority (83%) reported being screened for HCV and approximately 66% of those reported testing positive. Of those, 60% reported seeking treatment, 8% reported receiving treatment and 3% reported being cured. The analysis included 63 PWID with self-reported HCV. They were predominately Caucasian (98%) and male (62%). People who self-reported recent injection drug use were 88% less likely to have sought HCV care (OR 0.12, 95% CI 0.015-0.994). Recent opioid substitution therapy and transportation issues approached significance (OR 5.002, p = 0.097; OR 3.169, p = 0.089, respectively); recent criminal history, homelessness, and being a caregiver were not predictors. Conclusion: Progression through HCV care cascade was similar to other studies. Recent injection drug use placed people at high risk for not seeking HCV care. Additional research is needed to confirm these findings due to the small sample size.

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Abstract Title: Perception of Life Chaos and Time in Therapeutic Range of Warfarin

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Abstract: Background: In 2018, more than 18 million prescriptions of warfarin were filled for patients in the US. Non-adherence to warfarin is estimated to range from 20-50%. The risks of non-adherence to warfarin are thrombus, stroke, disability, and death. For patients on warfarin, adherence involves taking the medication routinely, maintaining a consistent diet, and getting routine International Normalized Ratio (INR) testing to maintain a therapeutic blood level to prevent adverse events. Life chaos is the day-to-day unpredictability, disorganization, and/or instability of someone’s life that has been shown to affect medication adherence in other populations. Purpose: The purpose of this study is to determine whether perceived life chaos predicts adherence while controlling for sociodemographic factors. Methods: Life chaos will be measured at baseline with the Confusion, Hubbub, and Order Scale (CHAOS); a 6-item, 5-point Likert scale. INRs values collected monthly for 6 months. The dependent variable is INR level in the therapeutic range. Projected enrollment is 100 participants recruited from the University of Kentucky Coumadin clinic. Statistical Analysis: Participants will be dichotomized into adherent (>80% of monthly INR in target range) and non-adherent (<80% of monthly INR in target range). Logistic regression will be run to determine whether life chaos predicts adherence controlling for sociodemographic variables. Results: We predict that higher life chaos scores will be independently associated with greater risk of non-adherence. These results of this study will identify a new factor affecting adherence that has not been previously addressed.

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Abstract Title: Psychometric Testing of a Breastfeeding Hospital Experience Survey

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Abstract: Background: The Ten Steps for Successful Breastfeeding is a list of policies and practices developed by the Baby Friendly Hospital Initiative to support new mothers and infants during the hospital stay to promote breastfeeding initiation and exclusivity. In 1992, the World Alliance for Breastfeeding Action developed a survey titled “Every Step Counts” for patients to evaluate hospital adherence to the Ten Steps. As hospital adherence to the Ten Steps should produce a hospital experience supportive of exclusive breastfeeding initiation, then the survey could also be used to evaluate a mother’s experience in the hospital regarding breastfeeding support. Therefore, the purpose of this study is to evaluate the “Every Step Counts” survey as a tool to measure quality of breastfeeding support during the hospital stay. Methods and Results: This is a secondary data analysis of a breastfeeding educational intervention study (N=63). Surveys were administered to participants 2-4 weeks after birth. Mean total score was 12.75 of possible 16, indicating mothers felt generally satisfied with their hospital experience. The sixteen-item, hospital experience instrument, derived from the “Every Step Counts” survey was evaluated for reliability using a test of internal consistency yielding Cronbach’s Alpha 0.682. Further analysis for validity of this instrument will be completed soon. Conclusion: Results suggest that the survey may need some revision to improve internal consistency. Further psychometric analysis will ascertain whether all items should be retained in future administrations of this survey. Survey revision could be further developed through qualitative study.

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Abstract Title: Analysis of the Pregnant Workers’ Rights Act Considered by the 2018 Kentucky General Assembly

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Abstract: The purpose was to analyze a bill proposed during the 2018 Kentucky General Assembly to minimize pregnancy discrimination in the workplace using Kingdon’s Multiple Streams Framework. The paper provides an overview of existing federal laws aimed at providing protection from pregnancy discrimination in the workplace, public health benefits for protecting pregnant women in the workplace and financial benefits to employers who provide temporary accommodations for pregnancy workers. While the Pregnancy Discrimination Act, Family Medical Leave Act and the Americans with Disabilities Act provide some freedom from discrimination due to pregnancy and breastfeeding-related conditions, many pregnant workers within the Commonwealth are not covered under these existing laws. The Kentucky Pregnant Workers’ Rights Act (PWRA), Senate Bill 38, was designed to provide clarity to employers about the protections afforded to pregnant workers by law as well as the need for employers to provide the same level of accommodations to pregnant workers that are available for disabled workers. Prior pregnancy discrimination legislative efforts in Kentucky in addition to information on existing pregnancy discrimination laws with reasonable accommodations provisions within other states in the nation are also covered. An overview of Kingdon’s Multiple Streams Framework is provided in addition to analysis of a state pregnancy discrimination policy using Kingdon’s model. Advocacy strategies that focus on the detrimental health effects of pregnant workers who fail to receive reasonable accommodations in the workplace and the costs of preterm births to employers are needed for future success of the KY PWRA.

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Abstract Title: Beautiful Chaos: Streamlining Patient Care and Provider Communication in the PATHways Clinic

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Abstract: Navigating the care of pregnant women with substance use disorders requires a strong multidisciplinary team possessing the tools to communicate instantaneously as patient needs rapidly evolve. The purpose of this project was to find a way to manage and share patient information with clinic providers and approved researchers in a simple secure format for the PATHways Clinic at the University of Kentucky. This clinic provides prenatal care/education, along with substance use treatment, and is a base for multiple active research trials. Microsoft Office 365 software is used to create a clinic-wide Sharepoint that approved individuals within the program are granted tiered levels of access. The PATHways Sharepoint becomes a provider’s hub for communication and a means of monitoring patients. The primary document is the “master census” which tracks active and past patients of the clinic, along with important patient demographics, prenatal information, and recovery phase data. Clinic providers can view and edit data in real time, while researchers can observe which patients may qualify for participation in studies. PATHways providers and researchers have reported positive experiences using Sharepoint; citing the ease of use, accessibility of information, and ability to edit in real time as important advantages over past methods. Patient care is dictated by both prenatal and recovery needs, therefore it is essential for providers to be able to quickly refer to the census to assess their stage in pregnancy and recovery. Microsoft Office 365 is a powerful tool for collating clinic data and disseminating it to clinicians and researchers.

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Abstract Title: Lung Cancer Prevention: Advocating for Radon Awareness and Disclosure During Real Estate Transactions in Kentucky

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Abstract: Background: Kentucky leads the nation in incidence and mortality from lung cancer. The U.S. Surgeon General issued a national health advisory encouraging all Americans to test for radon in their home and mitigate when levels are > 4.0 pCi/L. It is estimated that fewer than 1% of Kentucky homes test for radon annually. The Environmental Protection Agency recommends state policies which promote radon awareness and disclosure. A bill mandating radon awareness and disclosure during a real estate transaction was proposed during the 2018 Kentucky General Assembly, but was met with opposition and was not filed. Purpose: To analyze radon awareness and disclosure policy action during the 2018 Kentucky General Assembly using Kingdon’s Multiple Stream Framework. Intervention: Current radon awareness and disclosure during real estate transactions in Kentucky is compared to Environmental Protection Agency recommendations and other state’s radon policies. Radon awareness and disclosure policy action during the 2018 Kentucky General Assembly was analyzed through Kingdon’s three major process streams including 1) problem recognition, 2) the formation and refining of policy proposals, 3) politics involved in policy development. Evaluations: Kingdon’s three streams did not merge and the proposed radon awareness and disclosure bill was not filed during the 2018 Kentucky General. As a policy alternative, regulations to amend the Form for Seller’s Disclosure of Conditions are being discussed. Discussion: Administrative regulations set forth by government regulatory agencies are equally enforceable and may be a more politically feasible alternative to enacting a public policy.

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