

# **DOCTOR OF NURSING PRACTICE**

EVIDENCE BASED PROJECTS SPRING 2020



#### FSU College of Nursing DNP Project Presentation Spring 2020

DNP Project Presentation......Tess Dailey Enhanced Recovery After Surgery: Adherence Affects Outcomes of Colorectal Surgical Patients



DNP Project Presentation .......Daniel Glaze Education of the Congestive Heart Failure Patient in the Home Environment after Discharge



DNP Project Presentation.....Sara Poslaiko Emerging Adults Living with Diabetes: The Transition Process



#### College of Nursing Mission Statement

Florida State University, College of Nursing educates clinicians, leaders, scholars, and advanced practitioners who can enhance the quality of life for people of all cultures, economic levels, and geographic locations. The CON integrates the liberal arts and sciences with the knowledge, skills, and attitudes essential for lifelong learning, personal responsibility, and sustained achievement in the nursing profession and the communities in which our graduates reside.



The FSU College of Nursing is proud to features the Doctor of Nursing Practice projects of 22 graduating Doctor of Nursing Practice students. These students have completed a rigorous program of study designed to prepare them for the highest level of nursing practice. As reflected in their capstone projects these nurses are prepared to generate and use evidence to strengthen nursing practice and improve patient outcomes. I am so proud of these students and their accomplishments and I am excited by the difference they will make in healthcare.

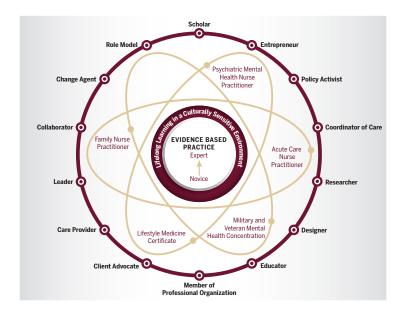
Laurie Grubbs, PhD, APRN

Laure Arubs

Interim Dean

Florida State University College of Nursing

#### **About the DNP Program**



The conceptual model of the graduate program consists of three major parts: the core circle, elliptical inner orbits, and the outer orbits. The graduate program is built upon core professional nursing values and life-long learning. An undergraduate baccalaureate degree in nursing is a mandatory criterion for entering the graduate program. The center of the model depicts the lifelong learning in a culturally sensitive environment encircling Benner's Model of Novice to Expert, depicting students' progression through the program and beyond graduation. Additionally, the core is based on evidence-based practice representing the knowledge content required for mastering, applying, and fine-tuning the concepts and processes students master as they move through the curriculum.

The orbits on the second layer indicate the three majors or roles students may choose as a focus of their studies: family nurse practitioner, psychiatric mental health nurse practitioner, and acute care nurse practitioner which include the various healthcare providers certificate programs. The outer orbit depicts the major expected roles students will evidence as they move from novice to expert. These roles are expected of students in all of the curriculum tracks in the graduate program.

#### **Our 2020 Doctor of Nursing Practice Graduates**

Taylor Cooke Tess Dailey Sandy Davis Bliss Drinkwater Ruben Deleon Daniel Glaze Brittany Hall Carson Hausmann Kayla Juszcyk Tracy Kay Leilani Morgan-Lopez Nwando Okaro Amber Patel Sara Poslaiko Jennifer Poston Cierra Relyea Marta Salter Amanda Simpson Casmere Thomas Kathleen Trocki Megan Turnage Jessica Wyckoff



#### **Taylor Cooke** BSN, RN

# Assessing Culturally Sensitive Obstetrical Care and African American Infant Mortality

**Purpose:** The purpose of the study was to assess obstetrical health providers (OHP) knowledge on providing care that is culturally sensitive and congruent. Identifying gaps in current obstetrical practice exist and create a toolkit for OHP utilization based upon study findings.

**Methods:** A cross sectional survey design was used, and participants were recruited through Florida licensing databases. Participants were OHPs that met inclusion and exclusion criteria. A Likert-type Qualtrics survey was e-mailed to qualifying OHPs to gauge attitudes, opinions, and knowledge concerning culturally sensitive care. A Pearson's correlation coefficient was conducted to determine if correlations existed between participant characteristics and their knowledge, use, and opinions on cultural sensitivity. Moreover, a one-way analysis of variance was conducted to explore between group differences.

**Results:** Study findings indicated differences between current research and study results. Participants indicated that they were knowledgeable on the importance in providing culturally congruent care and the impact on birth outcomes; but, indicated that they did not always provide care that was culturally centered. Significant differences existed between gender, age, type of practitioner, and race with the implementation of culturally congruent prenatal care. Women, midwives, and African American (AA) providers were more likely to implement culturally congruent care.

**Discussion:** Study findings indicated differences between current research and study results. Participants indicated that they were knowledgeable on the importance in providing culturally congruent care and the impact on birth outcomes; but, indicated that they did not always provide care that was culturally centered. Significant differences existed between gender, age, type of practitioner, and race with the implementation of culturally congruent prenatal care. Women, midwives, and African American (AA) providers were more likely to implement culturally congruent care.

**Conclusion:** In summary, study findings and resulting provider toolkit will aid providers and future researchers to focus on the value of OHPs who are not only knowledgeable in culturally congruent obstetrical care, but who also provide that care to AA women.



**MAJOR PROFESSOR** Mandy Bamber, PhD, RN



# **Tess Dailey** BSN, RN-BC

# **Enhanced Recovery After Surgery: Adherence Affects Outcomes of Colorectal Surgical Patients**

**Purpose:** This project evaluates the outcomes of colorectal surgical patients following the implementation of the ERAS program at a community hospital to determine the effects of adherence on LOS and opioid use. The investigator hopes to demonstrate a reduction in opioid use for acute surgical pain when utilizing the ERAS pathway.

**Methods:** A retrospective chart review was performed on patients who underwent standard and enhanced recovery colorectal surgeries at a community hospital in 2018. Data on LOS and opioid use (MEQ/D), were extracted from a corporate and hospital database. Independent sample t-tests and descriptive statistics were used to examine correlations among the surgical pathways, LOS, and opioid use.

**Results:** A total of 82 colorectal surgical patients were examined: 42 ERAS patients and 40 standard colorectal surgery patients. ERAS patients had a shorter LOS (M =  $3.24 \pm 1.45$  vs M =  $5.80 \pm 3.09$ ; p< .001) and utilized less MEQ/D (M =  $7.62 \pm 10.45$  vs M =  $41.25 \pm 38.07$ ; p < .001). Adherence with the pathway items was associated with shorter LOS; the impact on MEQ/D was mixed.

**Discussion:** The impact of individual pathway items on LOS and opioid use requires further investigation. Surgical prescribing culture influences the use of opioids for pain management. A reduction of opioid use should translate to fewer opioid prescriptions at discharge.

**Conclusion:** The ERAS pathway reduces LOS and MEQ/D compared with the standard surgical pathway. Compliance with the ERAS pathway items were correlated with shorter LOS, however the impact of compliance on MEQ/D was mixed. Preoperative carbohydrate drink administration and postoperative ambulation are areas of improvement opportunity. More research is needed to determine whether opioid use decreases upon discharge and which pathway items most significantly impact outcomes.



# MAJOR PROFESSOR Theresa Winton, DNP, APRN-C, FNP-BC, PMHNP-BC



#### **Sandy Davis** BSN, RN

# An Evaluation of a Prevention Protocol of Hospital Acquired Pressure Injuries

**Purpose:** To evaluate the effectiveness of a nurse-driven prevention protocol to decrease the number of hospital-acquired pressure injuries in hospitalized patients who participated in a hospital-wide prevalence study.

**Methods:** This project was a program evaluation and reviewed results from prevalence studies conducted at a large community hospital on the west coast of Florida. Four time points during 2018 and 2019 were used to determine the incidence of pressure injury development. Two of the time points were conducted prior to implementation of a skin prevention protocol and the other two time points were conducted post implementation.

**Results:** Prevalence data was collected over a thirteen-month period and included timepoints prior to and after the implementation of the pressure injury prevention protocol. A total of 1,812 patients were assessed during the pre and post intervention period. Twenty-three pressure injuries were identified on hospitalized patients during the prevalence studies conducted prior to implementation of the skin prevention protocol, and seven pressure injuries were found during prevalence after the protocol was implemented. Pressure injury incidence per 100 patients was 2.59 prior to the intervention, and 0.76 per 100 patients post-intervention.

**Discussion:** Results demonstrated that implementation of a skin prevention protocol did decrease the number of pressure injuries developed during hospitalization.

**Conclusion:** The results demonstrated that the implementation of a skin prevention protocol to assess hospitalized patients at risk did decrease the number of pressure injuries developed during hospitalization.



**MAJOR PROFESSOR** Alicia Craig-Rodriguez, DNP, MBA, APRN, FNP-BC



#### Bliss Drinkwater BSN, RN

#### Zero Harm During Transition in Care: Post-Implementation Evaluation

**Purpose:** To evaluate the effectiveness of and adherence to the Zero Harm During Transitions in Care process for a full year post implementation.

**Methods:** This project was a continued evaluation of the Zero Harm During Transition in Care process at Parrish Medical Center, a community hospital located in Titusville, Fl. Aggregate data about patient encounters from May 2018 to May 2019 collected by honest brokers were used to evaluate the process. Effectiveness was measured by incidence of harm or near harm events, transition times, and patient satisfaction. Descriptive statistics were used to analyze data and compare pre- and post-implementation measures.

**Results:** 8,577 cases/transitions in care were reviewed. Harm or near harm events were decreased from 48 events in a 15-month pre-implementation phase to 18 events in the 12-months post- implementation. There was a 42-minute reduction in time admitted patients were held in the Emergency Department.

**Discussion:** Zero Harm was determined to be effective in the year following implementation with an improvement in incidences of harm, hold times and patient satisfaction. Adherence to the process was unable to be determined due to missing data points. The organization had a setback initially in the second 6 months of the post implementation evaluation, after a recommitment by the organization, times and incidences of harm ultimately improved.

**Conclusion:** The results show that the initial project, Zero Harm During Transitions in Care is sustainable and can be adapted by other facilities to improve patient safety during times of transition in care. Continued education at the organization is recommended for further compliance and to maintain culture of safety.



**MAJOR PROFESSOR** Susan Liipfert Shelton, PhD, APRN, CNM



#### Ruben Deleon BSN, RN

# African American Men's Knowledge Regarding Contraception – An Intervention Study

**Purpose:** The purpose of this project was to determine the effect of an educational intervention designed to improve African American men's knowledge of common contraception methods.

**Methods:** The study used a Pre-test/Post-test design with a convenience sample of African American men aged 18-30. Baseline knowledge was tested followed by an educational intervention and post-test. The study was conducted in a local fitness studio. The educational intervention consisted of a graphic presentation embedded in Qualtrics. Topics include intrauterine devices (IUDs), oral contraceptives, injectables, vaginal ring, condoms and common misconceptions.

**Results:** The results indicated statistically significant differences on 5 out of the 20 items (p<0.001), involving advanced methods of female contraception. The results indicated moderately strong correlations between 'confidence on topic' and 'notion of control in contraception' (r=0.554). Additionally, 'previous education on topic' and 'confidence on topic' also produced a moderate strength correlation (r=0.534). Overall, 96% of participants stated varying degrees of improvement in notions of confidence and control on the topic after the activity. 100% of participants reported increased likelihood of taking the initiative regarding contraceptive matters in their relationships and 93% wished educational tools such as this activity were more readily available in this area.

**Discussion:** The study indicated knowledge deficits that were subsequently addressed through a brief intervention. It further emphasized the role of individual factors such as knowledge and confidence in improving male participation in contraceptive decision-making.

**Conclusion:** This study was important because it served to fill a void in the dearth of research focusing on African American men and their role in unwanted pregnancies. Educational interventions are typically focused on women; however, men play a critical role in unwanted pregnancies.



**MAJOR PROFESSOR**James Whyte, ND, PhD, FNAP, FAAN



### **Daniel Glaze** BSN, RN

#### **Education of the Congestive Heart Failure Patient in the Home Environment After Discharge**

**Purpose:** The purpose of this project was to investigate whether an educational intervention would improve knowledge about CHF among CHF patients and decrease hospital readmission rates related to CHF after discharge.

Methods: This project had a quasi-experimental design with one group that received the same treatment and completed the same measures. An in-home educational intervention was implemented among participants with CHF who had recently been discharged from the hospital. Data were collected at baseline and after the educational intervention at the posttest and 30-day follow-up points. The data were analyzed using the two-tailed T test. At the 30day follow-up session, participants were also asked whether they had been readmitted to the hospital related to CHF.

Results: There were statistically significant findings in participant knowledge from baseline to post-intervention (p < .001) and from baseline to the 30-day follow-up (p < .001). There were no significant (p = 0.171) score increases from posttest to the 30-day follow up period. Readmission rates were compared using the chi-square test, and the results showed no significant (p = 0.10) differences between groups.

**Discussion:** The study findings indicated that the in-home educational intervention improved the participants' knowledge concerning CHF, but it did not have an impact on the hospital readmission rates. The overall scores increased after the educational session at postintervention, and the higher scores were sustained at the follow-up time point.

**Conclusion:** The results of the study suggest that an in-home educational intervention can improve knowledge about disease management among people living with heart failure. Specifically, there were statistically significant differences in scores on the knowledge tests at the post-intervention and one-month follow-up time points compared with the baseline scores. These results are encouraging because they promote inter-disciplinary collaboration in efforts toward developing standardized educational interventions for people self-managing heart failure after hospital discharge.



MAJOR PROFESSOR Laurie Abbott PhD, RN, PHNA-BC



## **Brittany Hall** BSN, RN

# Handling Emotions After Patient Death: Helping Students Experience Death of a Patient Through Simulation

**Purpose:** To determine if an educational intervention using simulation of a death event with debriefing could increase the confidence and preparedness of senior nursing students in coping with patient death.

**Methods:** This study took place at a major university in the southeastern US with a convenience sample of 15 senior nursing students. A survey exploring student preparedness with emotional coping, expectations, attitudes and levels of confidence in handling death was completed before and after a death simulation, debriefing, and education were provided.

**Results:** Descriptive statistics were utilized to analyze the findings. After completing the activities, 81% of participants said they felt prepared to handle patient death. The ways in which students would handle patient death, such as discussion with peers and seeking assistance, increased after the simulation and education as well.

**Discussion:** Although the sample size limits the generalizability of the study results, the findings support the need for nursing students to be prepared to handle their emotions concerning patient deaths prior to entering practice. With simulation, education, and debriefing, the student can better prepare for ways of dealing and coping with frequent death.

**Conclusion:** Although patient deaths occur frequently, nursing education is primarily focused on maintaining life, not on death. Incorporating simulation and debriefing into the nursing realm relating to death and dying has been proven to better prepare students to handle their emotions when dealing with patient death. Confidence and preparedness in coping with patient deaths should occur in the learning phase, so when death occurs in practice, the new graduate nurse will be better able to cope with death.





#### MAJOR PROFESSOR Denise Tucker, PhD, RN, CCRN Lauren Campbell, DNP, MSN



## Carson Hausmann BSN, RN

#### **Common Themes in Emergency Department Super-Utilization:** A Retrospective Chart Review

**Purpose:** As emergency department (ED) use continues to rise locally and nationally, it is imperative that super-utilization be understood so that interventions can be tailored to conserve hospital resources. Using retrospective chart review, common themes in ED superutilization were identified as a basis for planning interventions by nursing management at a local hospital.

Methods: This DNP Project examined demographics and common trends among ED superutilizers using retrospective chart review. Characteristics of patients with two visits over a 6-month period (n=1367) were extracted and compared to the total population that utilized the ED during the same period (n= 41869). Odds ratios were computed to determine relative risk factors for ER super- utilization.

**Results:** The average super-utilizer was approximately 52 years of age, 2.3 times as likely to be classified as a behavioral health patient (P < 0.0001) and presented most often with chief complaints of abdominal pain/GI related, musculoskeletal/extremity pain, fever/flulike symptoms, non-urgent, and GU/vaginal bleeding, with the notable difference being the increased incidence of fever and flu like symptoms when compared to the total ED population. These patients are generally classified as lower acuity than the average ED patient (3.06 and 2.97, respectively), 10 times as likely to be admitted to the hospital (P < 0.0001) and 3.4 times as likely to leave against medical advice (P < 0.0001).

**Discussion:** There were several parallels between the findings of previous research on super- utilization/recidivism and this DNP project, including the coexistence of behavioral health comorbidities, average age of super-utilizers and chief complaint frequency. However, differences were noted in average acuity level, admission rates and most common presenting complaints, with super-utilizers reporting select complaints at a higher frequency.

**Conclusion:** Utilizing the findings of this retrospective chart review, practice can be augmented to better care forecast those patients at higher risk for super-utilization. When a patient presents meeting several of these criteria, a query can be made to identify number of recent visits. This query could confirm the pattern of super-utilization and extra effort could be employed to arrange follow-up with an outpatient provider using case-management services and/or instruction on appropriate reasons for return to the ED.



MAJOR PROFESSOR Eileen Cormier, PhD



#### Kayla Juszcyk BSN, RN

## Risk of Developing Dementia/Alzheimer's in Patients with Atrial Fibrillation

**Purpose:** The purpose of this project was to evaluate current nursing knowledge on the associated increased risk of dementia/Alzheimer's in patients with atrial fibrillation and to provide education to RN's and APRN's in the form of an evidence-based educational PowerPoint presentation. The presentation was developed following an integrative review of the literature and was distributed to members of the Preventative Cardiovascular Nurses Association.

**Methods:** An evidence-based educational PowerPoint providing information on the increased risk of dementia/Alzheimer's in patients with AF was provided to the Preventative Cardiology Nurses Association via a post in the online monthly newsletter. Twenty-five participants (7 APRNs and 18 RNs) completed the entire survey which included: a demographic questionnaire; a pretest; the educational PowerPoint; and a post-test. Descriptive statistics were run in SPSS and the mean pre-test and post-test scores were compared using a paired samples t-test with significance set at p > 0.05.

**Results:** Participants in the study had a significant improvement (p = 0.011) in test scores from the pre-intervention (mean score of 71%) when compared to the post-intervention test (mean score of 83%).

**Discussion:** The current project demonstrated the effectiveness of an educational PowerPoint in improving the knowledge of cardiovascular nurses on the association between AF and dementia. Using this information, nurses' can improve their care of AF patients, and the patient education provided to this population for reducing their risk of dementia/Alzheimer's Disease.

**Conclusion:** Recent research has described an increased incidence of cognitive decline in patients diagnosed with AF. However, after a thorough review of nursing education literature, no studies could be found to demonstrate nurses' knowledge of this association. The evidence-based PowerPoint provided education to cardiovascular nurses on this important relationship. Nurses will subsequently use this information to educate patients and caregivers on the need to monitor cognitive function in those diagnosed with AF.



**MAJOR PROFESSOR** Mia Newlin, PhD



## Tracy Kay BSN, RN

#### **Bridging the Gap Between Medical Care and Social Needs**

**Purpose:** This quality improvement (QI) project sought to evaluate the effectiveness of a screening tool for social determinates as well as the implementation of a referral process at Turning Point Medical Clinic (TPMC) for services offered.

Methods: The Social Screening Assessment and Referral (SScAR) project was a four-step process: (a) social needs screening, (b) clinician assessment, (c) referral, and (d) verifying follow-through. Retrospective chart review was conducted to collect baseline information on social screening prior to the implementation of the SScAR intervention. The clinic integrated the new assessment process during new patient intake interviews for patients ages 18 to 64 that fit the inclusion criteria. Data analysis compared the pre and post-intervention groups on the categorical outcomes using Chi-square analysis.

**Results:** The study involved a total of 116 patients with 60 patients in the pre-intervention and 56 in the post-intervention. There were no significant differences between the groups for demographic variables. Participants in the post-intervention cohort were 12 times more likely to have an assessment and 6.6% higher rate of referral in comparison to the retrospective cohort. There were no differences between the two cohorts for the follow-up outcome or the time in days to follow-up.

**Discussion:** The results indicate that adoption of systematic process to evaluate, assess and refer participants in the pilot project were effective and beneficial to the study population. This quality improvement project demonstrated that having a system in place using staff to help in the screening and referral process improved patient outcomes. Unfortunately, there were no differences between the two cohorts for the follow-up outcome.

**Conclusion:** Using social screening tool for assessing a patient social need does assist in better patient outcomes. The SScAR project brought awareness to the providers of what social deterrents a patient may be facing and to introduces resources that could help address the needs. More research is need to investigate varied approaches in improving adherence to suggestion follow-up referrals.



MAJOR PROFESSOR Susan Porterfield, PhD, FNP-C



## **Leilani Morgan-Lopez** BSN, RN

#### Older Adults Perception of Levels of Services Provided by Emergency Rooms

**Purpose:** The purpose of this project is to increase knowledge in the older adult population of Okaloosa and Walton counties in Florida, of the differences between Emergency Rooms (ER's) and Urgent Care Facilities (UCF's) so that they are able to make informed decisions regarding which facility is best suited for their healthcare needs.

**Methods:** This is a quality improvement research project comprised of a pre and post questionnaire with an educational intervention to identify and address knowledge gaps regarding the appropriateness of ER visits as opposed to a facility better suited to address non-emergency visits. Convenience sampling was used with a sample size of (n=34) participants.

**Results:** Frequency and percentage statistics were used to describe the sample's characteristics and subsequent survey items that had categorical response sets. The repeated-measures t-test analysis found that there was not a significant increase in survey scores across time, t(29) = -1.46, p = 0.15. However, when the participants were asked if they felt more confident in deciding upon ER or UCF,

87.9 percent answered yes. When asked if they felt better informed about the difference between an ER and UCF, 90.9 percent answered yes. This reflects an increase in confidence reported by the majority of study participants.

**Discussion:** While post test scores improved following the educational intervention, the results were not statistically significant (p = 0.15). However, the high confidence percentages illustrate a positive response to the educational intervention and presumably, a need for further education.

**Conclusion:** This research study illustrates that there are health literacy knowledge gaps in the older adult population of Walton and Okaloosa counties of Florida as it pertains to what constitutes an emergency room visit or urgent care visit.



MAJOR PROFESSOR Susan Porterfield, PhD, FNP-C



#### Nwando Okaro BSN, RN

# Using Education and Simulation to Improve Communication Skills, Teamwork, and Collaboration in Nursing Practice

**Purpose:** To determine if confidence levels and communication skills of final semester undergraduate nursing students could be increased using education and simulation.

**Methods:** This study took place at a southeastern university in the US with a convenience sample of ten participants from final semester Baccalaureate Student Nurses and Accelerated Baccalaureate Student Nurses. An educational intervention utilizing the Situation, Background, Assessment and Recommendations (SBAR) tool describing effective and ineffective communication was followed by a simulation. Data collection was completed online utilizing Qualtrics.

**Results:** Descriptive statistics were used to analyze the demographics, confidence levels and the importance of teamwork perception. Team member communication was analyzed using the t-test for paired sample using the Statistical Package for Social Sciences version 25. Eighty percent (n=8) of participants showed improvement in their post intervention scores with significant results at p < .05. The results of the study showed a statistically significant improvement using the SBAR method of communication.

**Discussion:** Although the sample size limits the generalizability of the study results, the findings support the need for education and practice as a means to improve clinical competencies in communication, teamwork, and self-efficacy in final semester nursing students.

**Conclusion:** This study should be replicated with larger samples and in diverse locations. Education in conjunction with simulation is becoming more integrated into undergraduate nursing curriculum and has been deemed an effective way to improve clinical skills, confidence levels, reduce anxiety and promote teamwork before the start of clinical practice (Aebersold, 2018). Education backed up with practice is an effective way to improve clinical skills in undergraduate nurses and new graduate nurses.



MAJOR PROFESSOR Denise Tucker, PhD, RN, CCRN Lauren Campbell, DNP, MSN



## **Amber Patel** BSN, RN

# Physical Activity and the Enhanced Recovery After Surgery Program in Cystectomy Patients

**Purpose:** The Enhanced Recovery After Surgery (ERAS) program is a multimodality concept aimed at improving surgical outcomes. The ERAS program currently lacks structured guidelines for preoperative exercise. The purpose of this project is to determine the relationship between self- reported level of physical activity and surgical outcomes in patients who have undergone cystectomy with and without ERAS.

**Methods:** A de-identified data set of patients who underwent radical cystectomy was compiled (N=124). The sample included patients from before and after the initiation of a the ERAS program. Demographics, self-reported physical activity, and surgical outcomes were collected. Levels of physical activity were categorized as low, moderate, or high based on the International Physical Activity Questionnaire (IPAQ) scoring.

**Results:** Demographic characteristics, similar between ERAS and no ERAS groups. For ERAS length of stay (LOS) was significantly shorter for patients reporting moderate physical activity levels versus low activity levels (6.2 compared to 8.1 days, p=.009). LOS was also shorter in the moderate activity group versus the low activity group in the no ERAS cohort (7.2 vs. 10.9 days, p=.036). Complications in 30 days were lower in the ERAS cohort for the moderate activity versus the low activity group (20.5 vs. 45%, p=.041). There was no difference between moderate and low activity groups in the no ERAS cohort (33 vs. 52%, p=.153).

**Discussion:** These results indicate that higher levels of physical activity may influence surgical outcomes after radical cystectomy to a greater extent when the ERAS is used.

**Conclusion:** Incorporating a structured preoperative exercise protocol into the ERAS program may improve surgical outcomes in patients undergoing radical cystectomy.



**MAJOR PROFESSOR**James Whyte, ND, PhD, FNAP, FAAN



## Sara Poslaiko BSN, RN

#### **Emerging Adults Living with Diabetes: The Transition Process**

Purpose: Behavioral and psychosocial factors increase the risk of adverse health outcomes as emerging adults living with diabetes progress into independent life. This project examined psychosocial factors associated with young adult diabetics' transition from family-centered pediatric care into adult healthcare services as a basis for recommendations to improve transition frameworks.

Methods: A mixed methods design was used. A community-based sample of 85 young adults with diabetes, aged 18 to 30 years, was recruited through social media (College of Diabetes Network, Facebook: "Young Adults Living with Diabetes"). Diabetes-related distress, selfefficacy and empowerment in self-care behaviors were measured and correlated with last reported HgbA1C. Two open-ended questions identified unmet needs during the transition into adult healthcare.

Results: Participants' perceptions of self-efficacy and empowerment in relation to management of their diabetes were rated as high but diabetes-related burdens and challenges created a level of distress worthy of clinical attention. 'Emotional burden', 'physician related stress', 'regimen related stress' and 'self-care' demonstrated a strong relationship with HgbA1c. Unmet needs during the transition to adult healthcare were emotional support and validation, education and guidance, and healthcare provider sensitivity to developmental challenges specific to diabetes..

**Discussion:** Participants viewed themselves as competent in managing their diabetes but indicated emotional distress commanded considerable mental and emotional energy to meet the demands of diabetes care. The relationship between diabetes related distress and HgbA1C was the most significant correlated psychosocial variable which was validated in the qualitative data regarding distress associated with unmet needs during the transitional period.

Conclusion: The findings of this project highlight the need for emotionally supportive and developmentally sensitive healthcare with focused interventions to enhance self-care skills and self- efficacy of young adults transitioning from pediatric to adult health care.



**MAJOR PROFESSOR** Eileen Cormier, PhD



## **Jennifer Poston** BSN, RN

# Improving Heart Failure Readmission Rates, Patient Education, and Nurse Confidence in the Hospital Setting

**Purpose:** The purpose of this project was to evaluate the effectiveness of a heart failure nutrition education workshop for cardiac nurses that was implemented in 2018 by a previous nurse practitioner student.

**Methods:** The project used a quality improvement design on the cardiac floor and cardiac intensive care unit (ICU) in a hospital in northwest Florida. Participants were registered nurses who were working on these floors. A survey was emailed to participants which gathered demographic data and also tested their knowledge of heart failure. Readmission rates for 2018 and 2019 were also obtained and analyzed.

**Results:** It was found that there was not a statistically significant decrease in readmission rates between 2018 and 2019; however, the readmission rates were decreased. It was also found that nearly half of participants incorrectly answered questions about heart failure diet, fluid, and sodium intake. The majority of participants did answer that they provided heart failure discharge education with the hand-out supplementation toolkit every time.

**Discussion:** Because of hurricane damage at the hospital during this survey period, there was only one functioning medical-surgical floor and one ICU. For the first aim, there was no significant decrease in the heart failure readmission rates between 2018 and 2019. For the second aim, more nurses than expected incorrectly answered pertinent questions about fluid and sodium intake for CHF patients.

This indicates a lack of nursing confidence when educating patients at discharge and may be related to non-cardiac nurses working with cardiac patients. The expected outcome of the third aim was successfully met because most nurses used both verbal education and printed toolkit handouts during patient discharge education.

**Conclusion:** This study suggested that heart failure education workshops for nurses are beneficial and should be further studied to determine if they help reduce heart failure readmission rates.



MAJOR PROFESSOR Laurie Abbott PhD, RN, PHNA-BC



#### Cierra Relyea BSN, RN

#### Reduce Burnout in the Critical Care Setting

Purpose: The purpose of this study was to develop, implement, and evaluate the effectiveness of an educational program designed to help reduce burnout among critical care nurses.

Methods: The use of pre-intervention surveys, an educational toolkit, and post-intervention surveys were used to collect data for this study. The pre-survey included demographic information, the Maslach Burnout Inventory (MBI), and the Areas of Work-life survey (AWS). The MBI was used to identify burnout presence and severity among participants before and after the intervention. The AWS survey was utilized to search for a correlation between burnout and six key areas of the workplace (workload, control, reward, community, fairness and values). The educational tool created by the PI and a licensed mental health counselor was designed to teach nurses about burnout and provide effective coping mechanisms to help reduce or prevent burnout. Data was analyzed using SPS 25.0 to calculate descriptive statistics, a Wilcoxon signed-rank test, and a Pearson Correlation coefficient.

Results: A total of 42 registered nurses in the ICU at Gulf Coast Regional Medical Center participated in this study, with 34 nurses completing the post-intervention survey. Sixty-nine percent of participants (n=29) were experiencing burnout; 48.3 percent (n=14) of those were experiencing mild burnout, 34.5 percent (n=10) had moderate burnout, and 17.2 percent (n=5) were suffering from severe burnout. There was not a significant change in scores for Emotional Exhaustion (EE) (p=0.11), Depersonalization (DP) (p-0.695), or Personal Accomplishment (PA) (p=0.120) following the educational workshop. There was no decrease in the prevalence of burnout following the intervention but there was a reduction in burnout severity among some of the nurses (32%, n=8). The Pearson Correlation Coefficient analysis showed a significant inverse relationship between workload and emotional exhaustion (r=-.328, p<0.05); values and emotional exhaustion (r=-.367, p < 0.05); and between values and depersonalization (r= -.353, p < 0.05).

**Discussion:** The majority of nurses that participated in this study had burnout, which is consistent with the literature review with critical care nurses. The educational tool did not decrease prevalence of burnout among participants but was successful in reducing severity of burnout among some

Finding ways to help reduce the workload and improve the organizations values would also help to reduce burnout.

Conclusion: Burnout remains highly prevalent among critical care nurses. It's imperative that more research be done to find effective solutions for reducing and preventing BOS. Educating and reinforcing effective coping strategies coupled with improving certain workplace factors would likely be an effective solution.



MAJOR PROFESSOR Susan Porterfield, PhD, FNP-C



## **Marta Salter** BSN, RN

#### **Recognition of Compassion Fatigue in Healthcare Providers**

**Purpose:** The purpose of this project is to enable healthcare providers to recognize compassion fatigue and provide them with coping mechanisms to deal with the phenomenon.

**Methods:** This is a quality improvement project for the healthcare providers at the Panama City Surgery Center (PCSC). The structure of the project is a pre and post questionnaire with an educational intervention to identify gaps in the knowledge of compassion fatigue and treatment. Convenience sampling was utilized with a sample size of 40 participants.

**Results:** Repeated-measures t-tests were used for each of the three primary analyses. There was a significant increase in recognition of compassion fatigue over time, t(39) = -2.47, p = 0.018, and there was a statistically significant decrease in burnout from pre-intervention to post-intervention, t(29) = -2.47, t(29)

2.09, p = 0.023. There was not a significant change in STS across time, t(29) = 1.22, p = 0.23. As for demographics and compassion fatigue, there was a significant correlation between years of practice and compassion fatigue post educational intervention, r = 0.32, p = 0.048. It was found that there was not a significant correlation between other demographics, such as age and gender, and compassion fatigue.

**Discussion:** The implications from this study reiterate the importance of educating healthcare providers about compassion fatigue and ways to deal with the phenomenon. Research has proven that with yearly education on compassion fatigue, the incidence and severity of compassion fatigue decreases.

**Conclusion:** This research study provides insight into the detrimental effects of compassion fatigue on healthcare providers. Through education and awareness of compassion fatigue, there is a potential to reduce the negative outcomes that may affect healthcare providers.



**MAJOR PROFESSOR** Susan Porterfield, PhD, FNP-C



## **Amanda Simpson** BSN, RN

# Recognizing Perinatal Mood and Anxiety Disorders: What Every Nurse Needs to Know

**Purpose:** To determine the potential benefits of an educational training video on perinatal mood and anxiety disorders (PMADs), interventions, and community resources that was presented to undergraduate nursing students who had previously completed mental health and women's health courses in nursing school.

**Methods:** This study utilized a quasi-experimental pre/post-test design to assess nursing students' knowledge on recognizing signs and symptoms and identifying appropriate resources for women with PMADs. Students were recruited from two local colleges. After the training video, students completed the post-test to determine if knowledge had increased. The pre- and post-tests were completed via Qualtrics. Descriptive statistics and an independent t-test were used to determine effectiveness.

**Results:** There was a statistically significant increase in scored questions t(52) =-3.21,p =.002 post educational intervention. A Cohen's d was estimated to be .88, which is a large effect based on Cohen's (1992) guidelines. There was an increase in percentages for participants in comfort levels associated with talking to women about depression and locating community resources for these patients; however, there was a slight decrease in comfort levels reported when it comes to administering screening tools for this population.

**Discussion:** Perinatal mood and anxiety disorders (PMADS) have long-term effects on the mother and children involved. PMADs goes undiagnosed and untreated in 75% of those who suffer from these disorders. This educational video was 12-minutes long but had a significant impact on the knowledge of these students

**Conclusion:** Larger studies need to be conducted to determine the need for a stronger emphasis on these disorders while nurses are early in their didactic learning. It is imperative that nurses are educated on recognizing these disorders. Nurses are in a perfect place to educate, advocate, and guide these patients to the right resources.



**MAJOR PROFESSOR**Susan Liipfert Shelton, PhD, APRN, CNM



## Casmere Thomas BSN, RN, CNN

#### **Adolescent Mental Health Literacy: Be in the Know**

**Purpose:** The purpose of this study was to increase mental health literacy among adolescents from a socioeconomic disadvantaged community through an evidence-based educational intervention, in a community center setting.

**Methods:** A total of 38 students in Manatee County, Florida, participated in this quasi-experimental pre and post-test study, which utilized the Mental Health & High School Curriculum Guide. The culturally diverse, male, and female participants attended Title 1 middle and high schools within Manatee County which also utilized the community outreach centers known as; The 13th Ave Dream Center and Educational Consultants Consortium Incorporated. Pre and post-tests measured mental health knowledge related to topics such as stigma, depression, and anxiety. The results of the tests were analyzed using a paired-samples t-test, comparing the test scores of the students before and after the educational intervention.

**Results:** Thirty-eight students participated (24 females and 14 males) and completed the study. Students' mean test scores significantly improved between pre and post-tests (T(37)=5.342, p<.001, 95% CI [7.2409,16.0907]).

**Discussion:** Mental health education curriculums should be implemented in various settings. Introducing mental health curriculums in community centers has the potential to promote mental health literacy among populations in need. Community centers provide a plethora of resources for families. Supporting these centers with the resources and educational materials could promote an environment to increase mental health literacy and increase awareness of community resources available for mental health.

**Conclusion:** This study demonstrates the positive influence of utilizing evidenced-based mental health educational curriculums to increase mental health literacy. The findings support the implementation of the mental health education curriculum in community centers as a setting to increase awareness among socioeconomic disadvantaged adolescents.



**MAJOR PROFESSOR** Sabrina L. Dickey, Ph.D., MSN, RN



#### Kathleen Trocki BSN, RN

# An Evaluation of the Modified Early Warning Scoring System in an Acute Care Hospital

**Purpose:** The purpose of this project was to evaluate the effectiveness of the Modified Early Warning Scoring system (MEWS) on improving patient outcomes in an acute care hospital. The patient outcomes measured included mortality rates, rate of adverse events (AE), rate of patient transfers to a higher level of care and patient discharge dispositions.

**Methods:** This project was a retrospective study evaluating pre and post-implementation data specific to patient mortality rate, rate of patient transfers to a higher level of care, and rate of patients discharged alive post adverse event.

**Results:** Improvements in adverse event outcomes and patient discharge dispositions were seen after the MEWS system was implemented house wide. A decrease in mortality rate for patient's experiencing an AE was demonstrated as well as an increase in the rate of patients discharged alive.

**Discussion:** The results of this review were able to demonstrate improved patient outcomes with the implementation of the MEWS system in an acute care hospital. The increase in rapid response calls seen in this project suggests more patients were receiving clinical evaluations for physiological changes in condition, leading to earlier intervention. The reduction in cardiac arrests and mortality rates seen in the post-implementation period suggests the impact of the process change was able to demonstrate improvement in early clinical assessment, intervention and treatment.

**Conclusion:** The Modified Early Warning Scoring System demonstrated a reduction in adverse event mortality rates and improvement in patient discharge dispositions. The use of an early warning system in the acute care setting has the potential to decrease adverse events, improve patient outcomes and lower healthcare costs.



MAJOR PROFESSOR Alicia Craig-Rodriguez, DNP, MBA, APRN, FNP-BC



## Megan Turnage BSN, RN

#### Evaluating Barriers to Learning and Performing Cardiopulmonary Resuscitation in a Rural Community with a High Prevalence of Out of Hospital Cardiac Arrests

**Purpose:** Identify and reduce barriers to learning and performing bystander cardiopulmonary resuscitation (CPR) in Newberry, Florida to improve bystander CPR initiation and performance and decrease mortality related to out of hospital cardiac arrests (OHCA).

**Methods:** This quality improvement project took place from October 2019 to January 2020. A CPR education course was provided to a convenience sample within Newberry. Three surveys (pre-, immediate post-, and three-months post-education) collected data on participant demographics, perceived barriers to CPR education, bystander CPR initiation, and bystander CPR performance.

**Results:** There were twenty-eight participants initially enrolled in the study with twenty-six completed pre-survey and immediate post-survey participants for a completion rate of 92.8%. The initial survey revealed the greatest learning barrier of bystander CPR was lack of information, while the greatest bystander CPR performance barrier was lack of confidence. The two post-education survey results indicated the threat of contracting a disease was the greatest concern in performing bystander CPR.

**Discussion:** Ultimately, barriers to learning, initiating and performing CPR should be evaluated in regard to a variety of regions in the United States. Low annual rates of CPR education are recognized in the South, particularly in rural, low median household income communities. Through this investigation, it becomes requisite to delineate regions of disparity so targeted training strategies can be implemented to meet needs and eliminate specific barriers and further CPR education implementation should be conducted with a concentration in those areas.

**Conclusion:** Results from this intervention support the need for timely and consistent CPR training in remote, rural, areas of the United States. This quality improvement project identified and reduced perceived bystander CPR learning and performing barriers when comparing median scores before, immediately after, and three months after the CPR education intervention.



MAJOR PROFESSOR
Mai Kung,
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## **Jessica Wyckoff** BSN, RN

#### Practice Norms and Perceived Benefits of Dermoscopy Among Dermatology Health Care Providers in the Clinical Setting

**Purpose:** Dermoscopy is a method of differentiating a lesion as either potentially benign or malignant by examining the morphologic features using a handheld device. This project seeks to investigate the practice norms and perceived benefits among dermatology healthcare providers (DHP) working in the clinical setting.

**Methods:** This project is a cross-sectional study utilizing an anonymous investigator developed survey to collect data from DHP's throughout the United States. A total of 333 survey invitations were sent out. Data on provider demographics, practice norms and perceived benefits and barriers were presented in table format and evaluated using descriptive statistics. Statistical significance to determine if academic credentials correlate with dermoscopy use was determined with Chi Square test.

**Results:** A total of 106 survey responses were collected and included for analysis. Physician assistants held the highest response rate. Dermoscopy use among DHPs in clinical practice was 88%. A Pearson's Chi Square test of association shows there is no significant association between the educational degree a provider holds and dermoscopy utilization (Chi Square Value = 3.421, df= 4, and p-value of 0.490).

**Discussion:** Results indicate that academic qualifications do not determine whether a dermatologic healthcare provider is more or less likely to utilize dermoscopy. Providers who more recently graduated were more likely to utilize dermoscopy. Dermatology healthcare providers also tend to perceive dermoscopy with a positive view.

**Conclusion:** Dermoscopy is utilized in clinical practice within the United States less than those in other countries, but has increased over the years when compared to previous literature. Further research needs to be performed regarding the education that physician assistants and nurse practitioners receive during schooling or post-graduation regarding dermoscopy.



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