Oncology Nursing Society's Connections: Advancing Care Through Science Poster Abstracts

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1396602

HOT FLASH SYMPTOM MANAGEMENT STRATEGIES AMONG BREAST CANCER SURVIVORS AND HEALTHY MENOPAUSAL WOMEN.

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Underwriting/Funding Source: R01CA132927

Objective: To explore differences between breast cancer survivors and healthy menopausal women in their use of current hot flash symptom management treatments and treatments tried in the past.

A majority of menopausal women experience hot flashes. It has been discovered that breast cancer survivors have hot flashes more often and with greater severity than women without cancer. Differences in the number and types of treatments being used or used in the past by breast cancer survivors compared to healthy women have not been widely studied. Our study purpose was to compare treatments (currently used and past) between these groups. The University of California San Francisco Model of Symptom Management was used. Symptom experience and symptom management domains were studied. Ninety-nine breast cancer survivors and 138 healthy menopausal women completed a hot flash diary and questionnaires about hot flash treatments and demographics. Data were analyzed using t-tests, chi-square, and regression. Survivors were more likely to be Caucasian, married, report having no difficulty paying for basics, and were more likely to have never smoked ($p < 0.05$). There were no group differences in hot flash frequency or severity. After controlling for demographic differences, more survivors were using prescription antidepressants ($p < 0.05$) and more healthy women were using prescription antihypertensives ($p < 0.05$) for hot flashes. In addition, more survivors reported having tried prescription antidepressants, antiseizure medications and bellargal in the past to control hot flashes; whereas healthy women were more likely to have tried over the counter treatments such as soy and other supplements ($p < 0.05$). Both groups tried various treatments for hot flash symptom management. Breast cancer survivors use of prescription medications may reflect more regular interactions with health care providers. Current and past use of antidepressants may reflect their positive effects on hot flashes. Recommendations are for clinicians to talk regularly with patients to assess use of treatments and whether those treatments are continuing to be effective.

1397890

DESIGNING MATERIALS TO RECRUIT HISPANIC CANCER CAREGIVERS.

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Underwriting/Funding Source: Shiver's Foundation

Objective: Evaluate materials to recruit caregivers to a behavioral health intervention study.

Cancer caregivers have daily stress that can result in, insomnia, depression, and anxiety. An intervention will only work if the caregiver receives it. In 2010 there were 104,141 persons newly diagnosed with cancer in Texas. In Central Texas, the population is approximately 37.6% Hispanic, providing a unique opportunity to access Hispanic caregivers and to learn how to help them to provide care, while reducing their own suffering. However, first we must design marketing campaigns that appeal to these caregivers. Several national intervention studies were effective with Caucasian caregivers. However, few have effectively addressed problems with recruiting Hispanic caregivers. Further study is necessary understand Hispanic caregiver preferences. The purpose of this study is to invite Hispanic cancer caregivers to offer their opinions on recruitment materials for a future health promotion intervention. User-satisfaction construct as it is captured in the theory of reasoned action (TRA) guides this study. Adult Hispanic cancer caregivers are invited to participate in a onetime face-to-face interview as the patient received treatment. They are asked to review and provide feedback on recruitment materials. Participants also provided demographic information and answered the NewVitalSign health literacy survey. The interviewer is bilingual and all materials are offered in English and Spanish. 21 caregivers have participated, recruitment is ongoing. Caregivers' mean age is 39 years, female, 51% selected Spanish materials. Caregivers who chose the English materials scored higher on NewVitalSign. Qualitative data is also collected. While this study is still in progress, caregivers have provided information about: preference for color, images, and wording on recruitment materials. Ask the population you want to reach to help you design your materials. Their ideas may surprise you.

1398309

ONCOLOGY NURSES' NARRATIVES ABOUT ETHICAL DILEMMAS AND PROGNOSIS RELATED COMMUNICATION IN ADVANCED CANCER PATIENTS. Susan McLennon, PhD, RN, Indiana University, Indianapolis, IN; Sue Lasiter, PhD, RN, Indiana University, Indianapolis, IN; Margaret Uhrich, RN, OCN®, Indiana University Health, Indianapolis, IN; Amy Chamness, BA, Indiana University Health, Indianapolis, IN; Paul Helft, MD, Indiana University Health, Indianapolis, IN

Underwriting/Funding Source: Walther Cancer Foundation

Objective: Identify common types of the ethical dilemmas encountered by oncology nurses when engaging in prognosis related discussions.

Oncology nurses routinely encounter ethical dilemmas when caring for advanced cancer patients, particularly about prognosis related communications. They also experience uncertainty and barriers to providing quality end-of-life care, including a lack of clarity about their role in managing these challenging situations. The purposes were to 1) describe the frequency and types of ethical dilemmas experienced by oncology nurses caring for advanced cancer patients and 2) to summarize their written comments about prognosis related communications. Principles of bioethics and clinical ethical dilemmas formed the underlying framework that guided this study. Content analysis of narrative comments provided by 137 oncology nurses who completed a national survey of members of the Oncology Nursing Society. Phrases and sentences were grouped into concepts, which were clustered into distinct sub-categories, and finally into higher order categories. Of the respondents, there were 134 females with a mean age of 49.9 years. The majority were white/Caucasian (88%) with an average of 14.7 years of oncology experience. The most frequently reported ethical dilemmas were uncertainties and barriers to truth-telling, familial and cultural conflict, and futility. Physician-nurse teams were considered optimal for delivering prognosis related information. Some nurse's offered strategies for facilitating these types of communications, others were unclear about their role. They also expressed the need for education, for methods of relaying this information among team members to avoid "working in the dark", and reminders about the importance of patient-centered care. Oncology nurses routinely experience ethical dilemmas in practice, validating the need for more research in this area. Nurses and other health care providers would benefit from interdisciplinary education about prognosis related communication. Strategies for managing familial conflict and cultural variations are also needed. These findings reveal new information about ethical dilemmas encountered by nurses and suggestions for improving end-of-life communications.

1398412

ADVANCED PRACTICE NURSING ORIENTATION: TAILORING ORIENTATION TO MEET THE NEEDS OF ADVANCED PRACTICE NURSES AT AN ACADEMIC MEDICAL CENTER. Joan M. Armstrong, MSN, APRN-BC, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI; Gloria L. Smith, RN, MS, ACNP, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI; Laurie Hartman, DNP, RN, ACNP-BC, University of Michigan Health System, Ann Arbor, MI

Objective: To implement a centralized APRN (Advanced Practice Registered Nurse) specific orientation across an academic health system.

Orientation historically was provided through centralized nursing education and was not specific to the APRN role within the Health System. There are 46 ARPN's currently employed in the Cancer Center across solid and hematologic malignancies, this constitutes the largest group of NP's in a single department within the health system. The NP supervisor in the cancer center and a senior NP within the cancer center identified a gap in APRN orientation. All RN's and APRN's have attended Central Nursing Orientation (CNO), which is intended to review UMHS standards and resources; however, many topics did not apply to APRN work. The CNO, which generally took several weeks to complete, caused a significant delay in the introduction of APRN's to their clinical setting with patient care. Feedback from APRN's, some of whom were employed in the cancer center who had attended CNO, was unfavorable due to the lack of APRN specific content, thus prompting the impetus for programmatic change. A gap analysis was performed to evaluate the current CNO content identified those topics and speakers which were applicable to APRNs and then outline vital APRN content that was currently not included, yet necessary. To optimize UMHS resources, the APRN orientation was restructured into a single 8 hour day format. An orientation checklist which is both generalizable for UMHS as well as a checklist specific for Cancer Center Orientation was created. The senior NP worked on this project as part of the ONS LDI fellowship program, which she participated in during the fall of 2010. Starting in October, 2012, four successful APRN orientation sessions, have been held bi-monthly. The average attendance has been between 5-10 APRN's. Qualitative feedback was collected from 100% of participants and overall, has been extremely positive; the single day focused on APRN specific issues was felt to be more productive for the APRN and more efficient. This allowed for the APRN's to have orientation in the clinical setting with patient care sooner. We have identified learning needs for the CRNA group which we did not initially include. We will continue with APRN orientation day on a bi-monthly schedule. We will continue to modify the orientation content based upon feedback from participants. We are next planning to implement a 'mentorship' program for the NP's within the health system, to pair novice/new NP's with a mentor for ongoing education and support.

1400631

EVIDENCE-BASED DIABETES PATIENT EDUCATION IN ONCOLOGY: CARING FOR THE HYPERGLYCEMIC PATIENT, NOT JUST THE BLOOD GLUCOSE. Ellen D. Davis, RN, MS, CDE, FAADE, Duke University Health System, Durham, NC; Ashley Leak, PhD, RN-BC, OCN®, University of North Carolina at Chapel Hill, Chapel Hill, NC

Objective: To inform oncology nurses about evidence-based communication and behavior modification in care of patients with diabetes and cancer.

Diabetes is a public health epidemic and is a frequent comorbid illness encountered in persons with cancer. Health providers [HCPs] face many issues with blood glucose control. Since over 99% of outcomes result from people's behaviors, effective education is needed. Given evolving research, diabetes educators can share information in both content and delivery processes across clinical settings. The purpose of this abstract is to present the American Association of Diabetes Educators seven self-care skills [AADE7™] and how these can be tailored for patients with cancer. Benefits of glycemic management have been recognized as leading to better individual quality of life [QOL] and a reduction in morbidity and mortality. In the arc of patient education, the mid 20th century promoted knowledge acquisition. Into the 21st century, behavior change through adaptations in beliefs and attitudes demonstrate better outcomes. Strategies like motivational interviewing as part of education are well described.

AADE's self-care behaviors include healthy eating, being active, monitoring, taking medication, problem solving, reducing risks and healthy coping. In one behavior, for example, testing blood glucose can be a collaboration among patients and HCPs about potential regimen changes. Among other standards of care, the American Diabetes Association recently published guidelines for individualized care in type 2 diabetes. These promote glycemic goals based on patients' current health status, complications, motivational level and resources. Effective communication among HCPs is essential in a changing healthcare environment. Clinical partnerships help HCPs not focus just on the blood glucose number, but on the whole person. Oncology nurses can insure that evidence-based guidelines are implemented through assisting patients and caregivers to modify behaviors to improve QOL and reduce complications associated with diabetes and cancer.

1403724

MINDFULNESS-BASED STRESS REDUCTION IN ONCOLOGY PATIENTS: DEVELOPMENT OF A TOOL FOR SELF-DIRECTED PATIENT CARE DECISIONS. Lorie Davis, RN, BSN, OCN®, Indiana University Simon Cancer Center, Indianapolis, IN; Janet S. Carpenter, PhD, RN, FAAN, Indiana University School of Nursing, Indianapolis, IN

Objective: To disseminate evidence-based information to cancer patients and survivors regarding available interventions to improve quality of life (QOL).

More than 1.7 million Americans are diagnosed with cancer each year. There are an estimated 11.4 million American cancer survivors. As the number of patients and survivors increases, so does the need to address their QOL. QOL is subjective and includes physical, functional, social and emotional well-being. According to the 2008 Oncology Nursing Society (ONS) Research Priorities Survey, QOL was ranked the top research priority among ONS members. Clear communication is essential when discussing available interventions to improve QOL. One such intervention is mindfulness-based stress reduction (MBSR). The purpose was to develop a communication tool to effectively convey the research evidence regarding the practice of MBSR in order to enhance self-directed care to improve QOL in cancer patients. Theories used to support development of the communication tool were the Health Belief Model, the Ottawa Decision Support Framework, and the theory of visual information processing. The communication tool was developed as a tri-fold, multi-color, theory-based, and evidence-based brochure. Outcomes will be measured in accordance with cognitive and affective domains of learning. Cognitive domain outcomes include: (1) the patient's ability to develop an increased knowledge of the practice of MBSR by reporting one way in which MBSR might help in coping with the adverse QOL symptoms associated with a cancer diagnosis and (2) the patient will be able to extrapolate, apply and analyze the use of MBSR by reporting one consequence and one benefit that would result in their personal life as a result of participation in MBSR. Affective domain outcomes are that the patient will: (1) gain an awareness of personal values, beliefs and feelings by reporting one personal value that the patient finds important and which relates to QOL and (2) the patient will be able to report a self-directed decision to utilize or not utilize the practice of MBSR. The effectiveness of the MBSR tool will be evaluated in relation to the achievement of the aforementioned patient outcomes.

1404083

ACADEMIC-CLINICAL COLLABORATION ON A RANDOMIZED CONTROLLED TRIAL OF CANCER NURSE NAVIGATION. Catherine Cherwin, MS, RN, University of Wisconsin–Madison, Madison, WI; Chen X. Chen, MS, University of Wisconsin–Madison, Madison, WI; Kristine L. Kwekkeboom, PhD, RN, University of Wisconsin–Madison, Madison, WI; Sandra Ward, RN, PhD, FAAN, University of Wisconsin–Madison, Madison, WI; Carrie Bilicki, MSN, RN, OCN®, Aurora Health Care, Milwaukee, WI; Jean McDonald, MS, RN, Aurora Health Care, Milwaukee, WI

Underwriting/Funding Source: American Cancer Society and Vince Lombardi Charitable Funds–Aurora Cancer Care Services

Objective: Attendees will gain an understanding of the supports and obstacles that exist when an academic and a clinical setting collaborate to conduct research.

To discuss supports and obstacles encountered during a collaborative randomized controlled trial conducted by a private multisite health care network and academic researchers. Representatives from a large Midwestern Health Care Network contracted with academic researchers to evaluate the efficacy of their cancer nurse navigator (CNN) program. Researchers and clinicians collaborated in developing a study protocol, obtaining IRB approval, and initiating recruitment and data collection efforts. Despite the best intentions from both institutions, several obstacles were encountered and the study was terminated. Review of research notes kept during planning and conduct of the RCT. Academic and clinical collaboration combines the expertise and unique resources of different professionals and organizations. However, obstacles may arise when knowledge and expectations differ among team members. Despite careful planning, enthusiasm of team leaders, and efforts to keep co-investigators connected and motivated, this clinical trial had to be stopped early. Lessons learned in this process can inform and improve future collaborative research efforts. Supports that lent strength to the collaboration included: 1) enthusiastic CNNs, 2) recognized value of clinical research, 3) trust and support in working with experienced researchers, 4) frequent communication between researchers and clinical co-investigators, and 5) a clinician with time dedicated to facilitate recruitment and data collection. Obstacles included: 1) garnering appropriate administrative support and navigating an unfamiliar IRB, 2) insufficient understanding of the complexity and variation in practice across clinical settings, 3) changing practices associated with an established clinical service, 4) inadequate communication with direct care staff responsible for subject recruitment, 5) protocol deviations, 6) language barriers related to research terms, 7) inaccurate projected recruitment numbers, 8) funding ambiguity, and 9) the loss of project champions. Future research collaborations would benefit by: 1) budgeting time for research staff to be present and gain an in-depth understanding of the clinical settings and usual practices, 2) extending training and preparation of co-investigators and clinical staff, 3) including direct care providers in regular study communication and making routine site visits, 4) utilizing an established clinical research coordinator, and 5) ensuring project timelines account for potential delays.

1407539

A STUDY OF MEDICATION-TAKING FOR PATIENTS WITH NON-SMALL CELL LUNG CANCER RECEIVING ORAL TARGETED THERAPY: PRELIMINARY RESULTS. Karen Wickersham, PhD, RN, University of Pittsburgh, Pittsburgh, PA; Mary Beth Happ, RN, PhD, University of Pittsburgh, Pittsburgh, PA; Catherine M. Bender, PhD, RN, FAAN, University of Pittsburgh, Pittsburgh, PA; Sandra J. Engberg, PhD, RN, CRNP, FAAN, University of Pittsburgh, Pittsburgh, PA; Ahmad Tarhini, MD, University of Pittsburgh, Pittsburgh, PA; Judith A. Erlen, PhD, RN, FAAN, University of Pittsburgh, Pittsburgh, PA

Underwriting/Funding Source: National Institute of Nursing Research, National Research Service Award

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Objective: To understand the process of medication-taking for patients with non-small cell lung cancer receiving oral targeted therapy.

Epidermal growth factor receptor (EGFR) tyrosine kinase inhibitors (TKIs) increase survival and improve quality of life for non-small cell lung cancer (NSCLC) patients. Because EGFR TKIs are a new technology, little research has addressed implications for medication-taking. This study explored the process of medication-taking for patients with NSCLC receiving EGFR TKI therapy. We aimed to: 1) describe the medication-taking process, and, 2) identify factors influencing medication taking. This grounded theory study enrolled men and women from the University of Pittsburgh Cancer Institute aged 18 years or older with NSCLC receiving EGFR TKI therapy who were able to speak, read, and understand English. Exclusion criteria included central nervous system metastases and evidence of cognitive impairment as assessed by the Mini-Mental Status Exam. Thirteen participants were purposively selected for variation in gender (5 men/8 women), race/ethnicity (2 non-whites), age (52-83 years), time in therapy (1 week to 6+ years), EGFR TKI dose reductions (n = 5), and therapy discontinuation (n = 2). One participant was theoretically sampled for health insurance carrier. Data were collected through single and multiple interviews concerning one's medication-taking behaviors related to EGFR TKI therapy. Analysis of transcribed interviews followed the guiding principles of grounded theory of simultaneous data collection, dimensional and constant comparative analysis, verification, and development of a substantive theory. Rigor was accomplished through vigilant documentation, member checking, dual coder review and discussion of all transcripts, and audit trails. Analysis is ongoing (October 2012). The basic psychosocial process derived from the data is Surviving Lung Cancer, which participants framed within the recognition of NSCLC as a life-limiting illness without cure, included three themes: 1) Deciding to take EGFR TKI therapy; 2) Preparing for EGFR TKIs, and, 3) Treating a chronic condition. Participants described thresholds that may result in stopping EGFR TKI therapy, including side effects, cost, and pain related to cancer. Men described taking EGFR TKI therapy in partnership with their spouse; most women managed EGFR TKI therapy alone. These findings may provide the theoretical basis for developing patient-centered interventions to improve medication-taking, including peer support groups or group interventions.

1408332

STEM CELL TRANSPLANT. Sandra M. Henrie, RN, Geisinger Medical Center, Danville, PA

Objective: 1) Describe a review of the cells 2) State the sources of stem cells 3) Describe the types of hematopoietic stem cell transplants.

Stem cell transplant has been a procedure since its concept in 1949 with Leon Jacobson's research with mice and radiation. Then in 1959 Nobel Prize winner Dr. Thomas performed the first synergenic transplant with high dose chemotherapy for leukemia. 1960 was the first successful allogenic transplant. Diseases treated with stem cell transplant are germ cell tumors, neuroblastoma, sarcoma, non-Hodgkin lymphoma, multiple myeloma, AML, and plasma cell dyscrasia. In order to harvest bone marrow a surgical procedure is done to harvest from the iliac crest or a peripheral harvest is completed where cells are collected and aphoresised from mobilized cells in the bone marrow by using chemotherapy and growth factor. Donor criteria for autologous and allogeneic transplants include: less than 60 years old, no medical condition the would cause undo risk to donor, no HIV risk behavior, no active auto immune disease, no active ischemic heart disease and no alcohol abuse. Evaluation and preparation of the patient consists of eligibility and diseases treated. Patient/family education is individualized and engaging. Post transplant follow up and evaluation is very important. CDC recommends revaccinations should occur, patients' rehab to regain optimal function, RBC transfusions, and review medication and watch for toxicities.

1408571

FLY FISHING RETREATS FOR BREAST CANCER SURVIVORS: DISTRESS OUTCOMES. Barbara J. Henry, MSN, APRN-BC, Melvin S. Gale MD and Associates, Cincinnati, OH, and Northern Kentucky University, Highland Heights, KY

Underwriting/Funding Source: Casting for Recovery

Objective: Casting for Recovery (CFR) retreats were developed for breast cancer survivors and held in many states over the past 14 years. Data will be presented to show the effects of CFR retreats on emotional distress.

The NCCN Distress tool may not accurately measure emotional distress, though it can raise awareness of emotional distress in cancer survivors and professionals. Raising awareness can lead to effective interventions to reduce emotional distress. CFR is a valuable program to reduce and/or identify emotional distress in breast in cancer survivors. A study of therapeutic fly fishing retreats intervention in 5 states was conducted to evaluate the effects on emotional distress in breast cancer survivors. Pre and post-retreat data measured the effects of a therapeutic fly fishing retreat lasting 45 hours at a nature lodge in a rural location. Women engaged in expressive group activities and practiced fly fishing techniques followed by fishing with a guide. Study methodology will be described followed by description of therapeutic activities of the CFR program and outcomes. Emotional distress was measured by the National Comprehensive Cancer Network Distress Tool. The mean age of the sample (N = 42) was 55.21 yrs. The mean number of years since breast cancer diagnosis was 5.02 years. The mean emotional distress score measured on the NCCN distress thermometer was 4.02 prior to the retreat and 2.97, reflecting a significant decrease in emotional distress after the CFR retreat. When asked to mark problems experienced in the last week, the most frequently reported emotional problems were: Worry (26); Fatigue (25); Memory/Concentration (24); Sleep (22); Appearance (19); Financial/Insurance (17); Sadness (14); Work/School, Fears, Pain (13); Sexual (12); Loss of Interest in Usual Activities (11); Nervousness; Dealing with Partner (9); Depression; Treatment Decisions; Dealing with Children, and Spiritual/Religious Concerns Therapeutic fly fishing retreat programs significantly reduce emotional distress in breast cancer survivors. Future replication of this study will utilize the NCCN revised distress tool and/or a more specific quality of life tool to measure outcomes and long term effects.

1408824

METHODOLOGICAL ISSUES IN TRIALS OF COMPLEMENTARY AND ALTERNATIVE MEDICINE INTERVENTIONS. Gwen K. Wyatt, RN, PhD, Michigan State University, East Lansing, MI; Alla Sikorskii, PhD, MS, Michigan State University, East Lansing, MI; David Victorson, PhD, Northwestern University, Chicago, IL; Gwen Faulkner, BA, Northshore

University Health System, Chicago, IL; Mohammad H. Rahbar, PhD, University of Texas at Houston, Houston, TX

Underwriting/Funding Source: National Institutes of Health, National Cancer Institute

Objective: At the conclusion of this session, participant will be able to describe components of methodological rigor among complementary therapy trials with cancer patients including the purposeful selection of a target population, endpoints and outcome measures, dose, timing of assessments, study design safeguards, and analytic approaches.

To date, many CAM therapy research findings have been inconsistent due to a lack of standardization in the design and scientific methodology of trials. While there is debate on how best to evaluate the effect of Complementary and Alternative Medicine (CAM) therapies, randomized clinical trials (RCTs) can provide valid and reliable evidence that informs clinical research and practice. However, evaluation of CAM interventions using traditional clinical trials requires standardization of method. The purpose of this work was to review important issues that affect the design of RCT's for CAM interventions. Many patients are turning to CAM interventions to supplement their cancer care. Designing and conducting CAM interventions can be challenging and requires a great deal of forethought and planning to account for the myriad threats to internal and external validity often inherent to many of these therapies. Although a certain degree of study design flexibility can be necessary to maintain the integrity of a CAM intervention in a RCT, such adaptation in methodological approaches can be incorporated with little to no effect on the overall authenticity of the CAM therapy. Using the methods component of the Consolidated Standards for Reporting Trials (CONSORT) as a guiding framework, and a National Cancer Institute-funded reflexology study as an exemplar, this work reviews methodological issues related to participants, interventions, objectives, outcomes, sample size, randomization, blinding, and statistical methods. Evaluation of CAM interventions designed and implemented according to appropriate methodological standards can provide the needed scientific rigor in CAM research. Following these methodological guidelines will contribute to the growing evidence base of potential CAM interventions available to nurses in clinical practice. Given the increasing use of CAM to support conventional medicine, it is critical that exploratory and efficacy trials adhere to certain common practices to ensure the highest degree of standardization possible. This includes the purposeful selection of the target population, endpoints and outcome measures, dose, timing of assessments, study design safeguards, and analytic approaches.

1408869

CARDIOVASCULAR RISK AND BREAST CANCER OUTCOMES: A PILOT STUDY.

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Underwriting/Funding Source: ONS Foundation through and unrestricted grant from the Oncology Nursing Society and the Sigma Theta Tau International Foundation for Nursing

Objective: Our objective is to better understand breast cancer risk and improve outcomes from the disease.

There is emerging evidence that breast cancer and cardiovascular disease (CVD) share common risk factors, yet no comprehensive study exists on shared CVD risk factors and potential relationships to breast cancer outcomes. To begin exploring multiple CVD risk factors and breast cancer outcomes, our aims were: 1. To assess feasibility of using health records for profiling prevalence of multiple CVD risk factors in women with breast cancer at time of diagnosis and 5 years post-treatment 2. To explore relationships among multiple CVD risk factors and breast cancer outcomes. Our conceptual framework relates CVD risk factors to poor breast cancer outcomes (metastasis and/or death). In this descriptive study, data on multiple CVD risk factors were collected at breast cancer diagnosis and 5 years later, along with outcomes, from records of 200 women with Stages I through III breast cancer at a large cancer center. A data collection instrument was developed by the investigators. Content validity and reliability of the instrument were established. Descriptive and correlational statistics were used to summarize prevalence of CVD risk factors and to explore relationships with breast cancer outcomes. Most data relevant to CVD risk factors were undocumented. For example, the important inflammatory CVD marker, C-reactive protein (CRP), was only measured in 3 subjects (1.5%). We found trends in poor glucose control related to poor breast cancer outcomes. Women with poor outcomes had higher fasting blood glucose (111.25 +/- 15.65 mg/dL) and high HbA1C (7.3 +/- 1.0%) than women with good outcomes (89.33 +/- 14.67 mg/dL, p = 0.054 and 6.25 +/- 0.7%, p = 0.074, respectively). We did not detect significant differences between BMI in women with good and poor outcomes (p= 0.764); however, both groups had higher than normal BMIs (26.80 +/- 7.07 kg/m2; 27.39 +/- 5.10 kg/m^2, respectively). In sum, we have evidence for the need of a prospective study on CVD risk factors in women with breast cancer, as this retrospective study failed to comprehensively capture CVD risk profiles in women with breast cancer due to missing data. Despite the limitations of this study, we have obtained evidence suggesting some CVD risk factors, such as fasting blood glucose and HbA1C, may contribute to breast cancer outcomes.

1410562

POTENTIAL PREDICTORS OF PERCEIVED COGNITIVE IMPAIRMENT FOR BREAST CANCER SURVIVORS.

Jamie S. Myers, PhD, RN, AOCN®, University of Kansas School of Nursing, Edwardsville, KS

Objective: The primary learning objective is to inform oncology nurses about the research in progress to identify potential predictors of perceived cognitive impairment in breast cancer survivors.

Cognitive impairment (CI) is recognized as a serious potential sequela to treatment for cancer and is a common complaint for women with breast cancer. Up to 83% of breast cancer survivors report some degree of cognitive dysfunction. A subset of cancer survivors who receive chemotherapy appear to suffer from long-term cognitive impairment. Identification of risk factors and predictors of perceived cognitive impairment (PCI) is important to appropriate assessment, patient/family education, and the design of effective interventions. Gaining information about perceived severity of CI at different points in the survivorship continuum is needed to add to the understanding of the phenomenon and the potential for impact on quality of life. The purpose of this cross sectional, descriptive study is to explore potential predictors of PCI and attentional fatigue for breast cancer survivors and gain insight into perceived levels of severity of PCI and attentional fatigue at different time points related to the initiation and completion of chemotherapy. The blended model of chemotherapy-related cognitive impairment provides the scientific framework for this study. Adult females (315) are being recruited to complete the MD Anderson Symptom Inventory (fatigue, sleep disturbance, distress, neuropathy, PCI, depression), the

Functional Assessment of Cancer Therapy- Cognition (PCI), and the Attentional Fatigue Index (attentional fatigue). Cronbach alpha reliability values for the instruments are 0.73 or higher. Data are being collected on: age, education level, work status, time since chemotherapy/radiation/general anesthesia, hormonal therapy, body mass index, and exercise history. Eligible participants include breast cancer survivors (prior to, during, and following chemotherapy) and healthy controls. Post chemotherapy survivors will be stratified by time since chemotherapy. Data analyses will include descriptive statistics, Pearson's correlations, and regression analysis. Study results have the potential to enhance knowledge about predictors for PCI and attentional fatigue. These findings may be useful to identify women with breast cancer at risk for PCI and may provide further information about the PCI trajectory.

1411358

HELPING STAFF NURSES USE RESEARCH TO IMPROVE QUALITY OF SLEEP IN AN INPATIENT ONCOLOGY UNIT.

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Objective: To describe the development of an advanced practice nurse (APN)/staff nurse team to improve sleep quality for oncology patients.

The need for quality nursing research to promote optimal patient care is well recognized. Despite this recognition, there is a gap between research and clinical practice. As part of the APN role, successful mentoring of staff nurses to the research process can be an avenue to support professional growth and bridge the gap between research and practice. The purpose of this project was to support staff nurses to identify barriers to sleep for oncology patients in the inpatient setting and to begin to develop interventions to improve sleep quality. As part of the hospital's evidence based practice mentorship program, several staff nurses participated in an APN led team to design a research project on an in-patient oncology unit. The staff nurses and APN developed a research question based on our experiences on the unit. The nurses wanted to compare a patient's sleep quality at home to their sleep in the hospital. The goal of the study was to look at obstacles to a quality sleep in the inpatient setting and methods to improve sleep while in the hospital. The nurses learned step by step how to do a thorough review of the literature and to critique research articles. Upon review of the literature, there wasn't an existing questionnaire to evaluate patient's needs related to sleep quality. Following instrument development procedures, the team developed a questionnaire. The questionnaire was reviewed by patients and research experts for validity testing. Once finalized, the questionnaire was approved by our hospital's institutional review board. Data collection was initiated. Following data analyses, findings will be disseminated. This project is still in progress. The nurses remain encouraged and supported. Advanced practice nurses are in an unique position to assist nurses with the research process. Information for successful mentoring relies on keeping your team engaged. Mentoring inspires clinical nurses to have an increase in confidence, knowledge and understanding of the research process while promoting the future of nurse researchers.

1411879

TO HONOR, LOVE, AND CHERISH: A PHENOMENOLOGICAL STUDY OF BEREAVED CAREGIVERS OF A SPOUSE WITH GLIOBLASTOMA.

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Underwriting/Funding Source: Oncology Nursing Society/Genentech Doctoral Scholarship and partially funded by NCI Training Grant R25 CA 093831 (Kathi Mooney, PI)

Objective: Discuss possible issues caregivers face along their spouse's/partner's disease trajectory.

A malignant brain tumor can leave one with physical, neurological or cognitive deficits and a poor prognosis for survival. The tremendous caregiving burden of such an illness often falls to the spouse/partner to provide emotional support and caregiving activities while also needing physical and emotional support in their own roles. This study explored the lived experience from diagnosis through bereavement of caregivers whose spouse/partner had a brain tumor. Analysis of the reflective lived experience of three bereaved caregivers whose spouse/partner died from a glioblastoma was guided by Heideggerian hermeneutic phenomenology. This work adds to the Theories of Caregiver Role Acquisition and Caregiver Transitions. Face-to-face audio-recorded interviews with each participant in their home began by asking, "What was it like for you as you lived with your spouse/partner who had lived and died with a glioblastoma?" Each participant controlled the content of the interview where the process was fluid as each told his or her story. Interview transcripts were read by researcher and participants; re-read and thematically analyzed by researcher while collaborating with participants to clarify descriptions and meanings which portrayed the essence of their lived experience as spouse/partnered caregiver. Each phase for the caregiver, from diagnosis through bereavement, was punctuated with universal themes of communication with healthcare providers, knowledge and lessons learned, defending spouse/partner dignity, demands and outcomes of the caregiver role, and mourning, anticipation, and coping. Defending spouse/partner dignity was the overarching theme of purpose in these caregivers' experiences as they honored, loved and cherished their spouse/partner. Implications for nursing include active listening to caregivers for clues to patient behavior and symptoms needing attention and thoughtful communication about symptom management. Provider education should include assessment of caregivers for health outcomes and burden as well as what interventions can ameliorate. Research should be aimed at investigating spouse/partner caregiver health and self-care; design and test interventions to reduce caregiver burden in this population.

1411895

TRAJECTORY OF CAREGIVING AND SELF-CARE IN SPOUSES OF INDIVIDUALS WITH A PRIMARY GLIOMA.

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Underwriting/Funding Source: Oncology Nursing Society/Genentech Doctoral Scholarship, 2004; Partially funded by NCI Training Grant R25 CA 093831 (Kathi Mooney, PI)

Objective: Identify how self-care is usually undertaken by spouse caregivers in each phase along the caregiver trajectory to self-care.

A caregiver's low priority for attention to self-care can lead to adverse health outcomes. This is particularly problematic when caring for an ill spouse with a brain tumor who may rely heavily on the caregiver to manage and cope with their disease and treatment effects. This study aimed to demonstrate the process of how self-care is undertaken within the context of caregiving for a spouse/partner with a primary brain tumor (PBT) leading to the development of a theoretical model. Self-Care Theory. Using Constructivist Grounded Theory design and theoretical sampling, caregivers (n=19), care receivers (n=15), and healthcare providers (n=3) contributed data through medical records,

questionnaires, interviews and/or focus group discussion. Attention was given to finding steps caregivers took in response to changes they encountered that demonstrated a process over time. The trajectory of self-care reflects three phases a PBT caregiver transitions through, where initially, time stops before taking steps, and eventually a new normal is created. Caregivers were able to describe and attach meaning to 'taking care of me'. That is, how they viewed their health and self-care within each phase. The trajectory allows insight into how these caregivers come to recognize their own health needs and eventually undertake self-care. Nurses and other providers should use the trajectory to self-care to assess caregivers and provide timely interventions such as coaching. Research opportunities also exist at each phase which may lead to improving health outcomes for caregivers.

1412397

A PAP TEST DOES NOT SCREEN FOR EVERYTHING: NURSE PRACTITIONER STUDENTS' KNOWLEDGE OF OVARIAN CANCER.

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Underwriting/Funding Source: Ovarian Cancer Alliance of Florida

Objective: Conference participants will recognize the need for more education about ovarian cancer in nurse practitioner students.

This topic is relevant to oncology nurses because they often act as agents of information to the public and other healthcare professionals about early detection, screening, risk factors and diagnostic procedures for a variety of cancers. This research demonstrates the need to continue to talk about ovarian cancer with peers and lay people. Early symptoms of ovarian cancer which may lead to early detection and increased survival are recognized however, few healthcare professionals and lay people are aware of these symptoms. The purpose of this research was to evaluate the effectiveness of an educational program about ovarian cancer on nurse practitioner student knowledge and retention of knowledge over time. Use of knowledge will also be examined. Logic Modeling, to evaluate and facilitate program planning, implementation and evaluation was used. Descriptive, pre- and post- test design. 104 nurse practitioner students (NP) participated in the Nurses Educational Intervention (NEI) designed to increase knowledge regarding ovarian cancer. Data was collected at 3 time points using the 16 item NEI survey. Scores were computed by adding the total number of correct answers and creating a score for Total knowledge and knowledge related to risk, screening and symptoms. Paired t-tests using Bonferroni's corrections ($p < 0.017$) were used to examine this data over time. Knowledge related to the inability of a Pap test to detect ovarian cancer and use of knowledge were examined separately. Knowledge increased in all categories from time 1 to time 2 ($p < 0.001$). The initial increase in knowledge decreased over time at time 3 ($p < 0.016$). At time 1, 65.4% of students erroneously believed a Pap test was useful in detecting ovarian cancer; this decreased to 12.5% at time 2, but increased to 33.7% at time 3. Students (74.3%) reported sharing their knowledge about ovarian cancer with others, but only 32.7% reported sharing that knowledge with clients.

1413040

DEVELOPING AN INFORMATIONAL APPLICATION (APP) FOR CANCER RESOURCES IN LOCAL COMMUNITIES.

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Underwriting/Funding Source: Women's Breast Health Fund Community Foundation of Greater Birmingham

Objective: Design a comprehensive cancer resource APP for oncology nurses.

Design and develop an APP for a smart phone or similar device that provides nurses with better access to community cancer resources for their patients. There is a great need to identify local community resources for cancer patients. The 2011 Komen Community Assessment identified the need for community resources to be available for cancer patients throughout the region. These resources need to be easily accessible for healthcare providers. Currently, there is not an APP available that provides this type of comprehensive resource information. Breast cancer survivors are more likely to seek information from friends and other breast cancer survivors for their breast health information before they ask their nurse. Oncology nurses have an opportunity to provide patients with more than just an infusion. Nurses should be at the top of the list when it comes to providing information for patients. By providing an easily accessible resource tool (APP) to the nurse, there is an opportunity to change patients' perceptions and rely on the nurse as a key resource person. This innovative method of delivery will allow oncology nurses to provide health information to patients without leaving the chair side. Cancer resources will be identified through collaboration. Content will be reviewed and categorized. The APP will be evaluated using a modified Questionnaire for User Interaction Satisfaction 7.0. It will be implemented into practice using a group of chemotherapy infusion nurses. Nurses will be asked to use an ipad or itouch when searching for local resources. A list will be generated based on the selections. The use of the APP by the nurse will occur over the course of three months. The outcome of this project would provide the oncology nurse with quick and easy access to patient resources at the chair side. This would allow for more time with the patient and family. This interaction with the patient will also provide an opportunity to change the patients' perception and see the nurse as a key resource person in their care. This project can be a time saving method of providing resources for patients. Dissemination of the process from development to implementation and how resources were gathered is key to helping oncology nurses be more efficient.

1413634

THE SYMPTOM EXPERIENCE IN PATIENTS HOSPITALIZED FOR THE TREATMENT OF ACUTE LEUKEMIA.

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Underwriting/Funding Source: National Institute of Nursing Research 9T32NR011972-020; Sigma Theta Tau International Small Grant

Objective: To examine the symptoms experienced by patients diagnosed with acute leukemia (AL) across the disease trajectory.

The presence of unrelieved symptoms including distress impacts a variety of aspects within healthcare including: hospitalizations, treatment, disease burden, and overall healthcare costs. As many as 45.5% of patients with AL have been found to suffer from distress while high levels of symptom burden have been found in those hospitalized and/or receiving treatment. Yet, the physical and psychosocial issues patients with AL face are relatively understudied, especially when compared to patients with other solid tumors. Advancements in the treatment of AL has improved and prolonged survival for these patients. However, these treatments are typically long, aggressive and often accompanied by significant treatment-associated toxicity/symptoms and are thought to negatively impact the patients' health-related quality of life (HQoL). Yet, not only has there been limited longitudinal research but limited research in general on the symptoms and symptom trajectory for patients with AML. The purpose of this study is to examine the symptoms experienced and supportive care needs of patients diagnosed with AL across the disease trajectory. The specific aim of this study is to describe

the frequency, severity and distress of symptoms experienced across the disease trajectory for patients with AL. The conceptual model guiding this study is the UCSF Symptom Management Model. This is a longitudinal descriptive study design using a convenience sample of concurrent eligible AL patients. Enrolled participants complete well validated and reliable questionnaires to assess the frequency, severity and distress of physical symptoms, HQoL, anxiety, depression, and distress, every two weeks for 6 weeks. Descriptive statistics of symptom scores (frequency, severity and distress) will be calculated and the trend of change over time will be explored. The bivariate association between demographic, clinical factors related to severity of symptoms experienced by patients with AML will be examined. The findings from this study that is currently enrolling participants will be used to guide future intervention research based on patient characteristics, needs and temporal characteristics of symptoms. Improving the management of symptoms is critical to reducing the burden of the disease and improving health outcomes for patients with AL.

1414103

ONCOLOGY NURSE PRACTITIONER WEB EDUCATION RESOURCE.

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Underwriting/Funding Source: National Cancer Institute (1R25 CA148050-01A1)

Objective: To develop and evaluate an electronic oncology educational program (ON-PoWER: Oncology Nurse Practitioner Web Education Resource) for nurse practitioners (NPs) in their first year of oncology practice paired with an onsite mentor.

This project will seek to monitor the impact of the ON-PoWER curriculum on the knowledge, confidence, learning and supportive needs of NPs new to oncology and their mentors. The nation is facing a shortage of cancer care providers. NPs have established evidence of cost-effectiveness, patient satisfaction and quality care outcomes in multiple care settings, prompting their rapid growth in cancer care. NPs without previous cancer care experience are entering oncology NP positions without additional training, requiring stressful "on the job" learning with susceptibility for poor patient outcomes. The ON-PoWER program of education for new NP graduates was developed based on the Core Competencies for Oncology Nurse Practitioners developed by the ONS. This curriculum will consist of four online modules: 1) introductory cancer content; 2) issues in quality and safety in cancer care; 3) content regarding specific malignancies, and 4) role development for the oncology NP. A corresponding guide for the onsite mentor with suggestions for synthesis and clinical application of content will be developed. After development and pilot testing we will monitor the impact of the curriculum on NPs' self and mentors' assessment of cancer knowledge and confidence in delivering cancer care, monitor the impact of the curriculum on the NPs' attention to patient reported outcomes, monitor the learning and supportive needs of the NP and the mentor in the first months of oncology practice, evaluate the utilization of curricular materials by the oncology NP and mentor, and evaluate the ON-PoWER content's acceptability and delivery. In addition, we will evaluate long term advanced practice nursing activities from the ON-PoWER alumni. This curriculum of oncology information for the nurse practitioner should ease the stress of "on the job" learning for the NP new to oncology and for the on site mentor. The most important outcome should be the positive effect on patient reported outcomes.

1414105

CANCER NURSE NAVIGATOR KNOWLEDGE, ATTITUDES, AND BELIEFS: ASSESSMENT OF AND INTERVENTION FOR MANAGING DISTRESS.

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Objective: Objective aimed to examine cancer nurse navigators' knowledge, attitudes and beliefs of benefit in using the Distress Thermometer through the use of an ten item electronic survey.

A gap analysis was conducted to assess Cancer Nurse Navigators comfort level in using the tool, and if they believe they have the education and training needed to meet the NCCN guidelines for distress assessment and interventions. Compliance and comfort of cancer nurses in using the distress thermometer. As the incidence of cancer continues to rise and more cancer patients are surviving, treating emotional distress must be an integral piece of quality patient care. Emotional distress has been reported as high as 45% in cancer patients, and up to 58% in patients during end of life care. Yet, less than 15% of professionals are regularly screening for distress. A gap analysis was conducted to assess the difference between Cancer Nurse Navigators' (CNNs) comfort level in using the tool and their belief about education and training needed to meet NCCN guidelines for proper distress assessment and interventions. Based on the written in comments, some respondents may be expressing what has previously been themes in the literature that nurses devalued their importance of listening, acknowledging, and being emotionally present for parents. Opportunities were identified to strengthen knowledge and increase the use of the DT. Providing a tool such as the DT allows for a systematic way to fully assess patients coping or resources needed. More training is needed about the use of the tool, importance of conversation with patients about the tool, and available resources. A 65.2% (n=15) response rate was achieved. Most respondents believed that they understood distress and could use the DT tool appropriately. CNNs were committed to assessing and treating patient distress, yet they identified barriers The results do not necessarily reflect actual clinical behaviors, only self reported actions; further study should explore the congruence between nurses' self reports and the actual use of the DT and interventions provided to manage distress. A study with a larger sample size is advised. Evidence supporting the clinical benefits to patients, providers, and the health care system through routine, comprehensive screening is evident. Nursing is at the forefront of assessing for distress, working alongside most patients through the trajectory of their care. The ability of nursing to use the Distress Thermometer as an evidence-based screening tool in practice is crucial for quality patient outcomes, barriers in assessing distress and difficulty of referrals was found through this gap analysis.

1414565

IMPLEMENTATION OF A CONSENT TRAINING PROGRAM FOR NURSES: ENSURING CONSISTENT INFORMED CONSENT PROCEDURES IN PALLIATIVE CARE RESEARCH.

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Underwriting/Funding Source: Missouri Baptist Medical Center Faculty- Staff Collaborative Grant Program, St. Louis, Missouri

Objective: The learner will be able to identify appropriate methodologies for ensuring consistent and ethical informed consent in a team research study.

To describe training and documentation procedures used in a pilot study to prepare PC nurses to conduct informed consent procedures when enrolling eligible adult patients. The eligible patients were invited to participate in a semi-structured interview with trained nurses after receiving a referral for PC support. Research studies have provided evidence that the quality of informed consent in clinical research is often sub-optimal. A major tenet of human subject protection guidelines related to research study participation is that informed consent procedures for clinical research should be an on-going process, which begins, rather than ends, with the participants' initial consent. Also, informed consent is an integral part of clinical research and it is viewed as an ethical concern in vulnerable populations, such as adult patients who have received a referral for palliative care (PC) support. To date, reports are lacking on the training procedures used to equip nurses to adhere to required informed consent procedures when screening adult patients receiving PC for research participation. Training of the PC nurses for this study was conducted during a 4-hour training meeting with the two co-investigators. The investigators reviewed the informed consent procedures and related documentation of consent procedures. The nurses participated in role-playing activities to increase their confidence and competency in conducting informed consent procedures. The nurses received a study manual that included an outline of the informed consent procedures, the consent tracking form, and a sample consent form. A pre-test, post-test and final binary evaluation form with narrative data was utilized to evaluate the usefulness of our training. The challenge of ensuring adherence to informed consent procedures requires a comprehensive training program that includes didactic review of the procedures, role-playing activities, debriefing feedback, and documentation of all consent procedures. Key documentation included, the: (a) dates and initials of team members who introduced the study and reviewed the consent forms; (b) time allowed to review the consent forms; and (c) reasons why eligible patients may have declined participation and consented participants may have withdrawn from the study. An educational program for nurses to consistently implement consent procedures may help to reduce ethical concerns related to research participation by improving communication between nurses and screened participants.

1415102

QUALITY OF JOURNAL ABSTRACTS OF RANDOMIZED CONTROLLED TRIALS IN ONCOLOGY NURSING RESEARCH.

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Objective: The objective of this study was to assess the quality of abstracts of randomized controlled trial (RCT) in oncology nursing research journals.

Oncology nurses can improve their clinical practice and cancer patient outcomes by implementing evidence-based practice (EBP), an approach to utilizing reliable knowledge and integrating it into clinical practice. Published journal articles are a major source of evidence, and RCTs are likely to provide more reliable evidence due to the methodology design. Hence, presenting essential information in RCTs allows nurses to decide how to apply research findings to their practice based on the knowledge of the study's quality and possible bias. Readers often rely on journal abstracts to decide whether to access full-length articles. But little is known about the quality of journal abstracts in oncology nursing RCTs and its relationship with the quality of reporting on methodology, one internal validity indicator for RCTs. The purpose of this study was to examine the quality of reporting abstracts and methodology in oncology nursing RCTs. According to Ackoff's Data Information Knowledge Wisdom hierarchy, good quality data plays a vital role in leading to a better use of information and knowledge. Having good quality of reporting journal abstracts provides good quality of data and information, allowing nurses to build a better EBP. This descriptive study analyzed journal articles retrieved from MEDLINE and CINAHL in September 2010. Inclusion criteria were: oncology nursing RCTs published in English and full-text article available online. Secondary analysis articles were excluded. The Consolidated Standards of Reporting Trials (CONSORT) checklist for reporting RCTs in journal and conference abstracts was used to assess the quality of the abstracts. The 5-point Jadad scale was used to assess the quality of reporting methodological aspects of research. Descriptive statistics was used to describe samples of the study. Correlational analyses were used to explore relationships between the CONSORT and the Jadad. Cohen's κ was used for interrater reliability. 223 articles were analyzed and totally 67 journals were included. Cohen's κ was 0.95. Out of 17 items on the CONSORT abstract checklist, 7 items were found in > 80% of abstracts, and 9 were found in < 30%. The mean Jadad score was 1.96 (SD: 1.01, 95% CI: 1.83-2.09). The CONSORT had a positive but weak correlation with the Jadad (Pearson $r = 0.28$, $p < 0.001$, Spearman's rho = 0.26, $p < 0.001$). The quality of reporting journal abstracts in oncology nursing RCTs can be improved. It is recommended that oncology nurse researchers adopt the CONSORT guideline when writing articles related to nursing RCTs.

1415531

A SYSTEMATIC REVIEW OF FACTORS RELATED TO NON-ADHERENCE TO AROMATASE INHIBITORS AND TAMOXIFEN AMONG BREAST CANCER PATIENTS.

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Objective: To systematically review the literature.

To determine potential factors associated with tamoxifen (TAM) and aromatase inhibitors (AIs) adherence among patients with breast cancer. While cancer is among the leading diagnoses of complex, life-threatening diseases, breast cancer is the most prevalent type. Despite improved survival with the use of TAM and AIs as adjuvant chemotherapies, patients continue to be persistently at risk for cancer recurrence and mortality due to nonadherence to these regimens. A literature search was conducted using CINAHL, PsychINFO, and PubMed electronic databases. The search was limited to English-language studies published between January 1990 and October 2011. Keywords and medical subject headings (MESH) were used to identify relevant studies. Also searched were reference lists from all included studies and relevant reviews. Potentially relevant studies were retrieved and assessed for eligibility based on the inclusion criteria: (1) the study described specific reasons for medication nonadherence; (2) medication adherence outcomes were specifically reported; (3) participants received TAM and/or AIs, and (4) participants had a diagnosis of breast cancer and no other cancers. The following information was extracted from each study: author(s) names, article title, year the study was conducted, country of publication, study design, study duration, age of participants, sample size, stage of cancer, adjuvant drugs used, gender, adherence measures, adherence outcomes, and reasons for nonadherence. Only 26 studies met the inclusion criteria and were included. Potential factors associated with nonadherence were identified: (1) patient-related factors (46.67%) such as patients' beliefs, knowledge, fear of adverse effects, forgetfulness, smoking, age, and race; (2) therapy-related factors (26.67%) such as duration, side effects, additional prescribed medications, and concerns treatment would interfere with life style; (3) socioeconomic factors (10%) such as medication costs, burden, scheduling issues, religion, and marital status; (4) healthcare system

factors (10%) such as patient provider relationship; and (5) disease related factors (6.67%) like co-morbid illnesses and stage of breast cancer. TAM and AI non-adherence is a multi-faceted problem. Interventions may need multiple components to be effective in improving adherence. Future studies should be carried out to evaluate the necessary steps and measures that can be taken to address these factors associated with non-adherence.

1415733

HEALTH RELATED QUALITY OF LIFE AFTER SURGICAL TREATMENT OF PATIENTS WITH NON-SMALL CELL LUNG CANCER: AN INTEGRATIVE REVIEW. Hermine Poghosyan, PhD, MPH, BSN, University of Massachusetts–Boston, Boston, MA; Lisa Kennedy Sheldon, PhD, APRN-BC, AOCNP®, University of Massachusetts–Boston, Boston, MA; Suzanne G. Leveille, PhD, MSN, University of Massachusetts–Boston, Boston, MA; Mary E. Cooley, PhD, RN, University of Massachusetts–Boston, Boston, MA, and Dana Farber Cancer Institute, Boston, MA

Objective: To synthesize available evidence regarding health-related quality of life (HR-QOL) after surgical treatment for non-small cell lung cancer (NSCLC).

Surgical resection of NSCLC is the only option for curative treatment that improves survival for early stages of disease. Since there will potentially be a growing number of NSCLC survivors diagnosed through computed tomography screening, HR-QOL as an endpoint of treatment becomes increasingly important. To conduct an integrative review of literature regarding changes in HR-QOL after surgical treatment for NSCLC and suggest areas for future research. Ganong's framework guided this review. Computerized databases were used to identify relevant articles. Inclusion criteria for studies were: empirical studies using the Short Form-36 or European Organization for Research and Treatment of Cancer Quality of Life (Lung Cancer) questionnaires, English language, HR-QOL changes after surgical treatment for stage I, II, or III NSCLC, and published before January 2012. The operational definition of HR-QOL comprised physical HRQOL, mental HR-QOL, and symptoms. Data were extracted from the studies and then content analysis was used to synthesis the findings. Nineteen studies were reviewed. The pattern of findings suggested that mental HR-QOL improves over time such that the majority of participants (67%) have stable or improved mental HR-QOL at 6-months after surgery. Compared with the general population, however, NSCLC survivors have poorer mental HR-QOL. Findings related to physical HR-QOL indicated that the majority (59%) of participants had worse physical function at 6- months after surgery and one study indicated that participants had decreased physical function up to 2-years after surgery. The most prevalent symptoms experienced after surgery were pain, fatigue, dyspnea and coughing. Increased levels of dyspnea and fatigue persisted for at least 2-years after surgery. Continued smoking, presence of comorbidities, extensive surgical resection, and receiving adjuvant therapy were associated with lower HR-QOL. Although mental HR-QOL improved within 6-months after surgery, physical HR-QOL remained decreased for 2-years after surgery. Dyspnea and fatigue were persistent problems. Future research testing interventions focused on improving symptom control and physical function are needed to enhance HR-QOL after lung cancer surgery.

1415790

CANCER TREATMENT AND GLYCEMIC CONTROL IN PATIENTS WITH DIABETES AND SOLID TUMOR CANCERS: A REVIEW OF THE LITERATURE. Ashley Leak, PhD, RN-BC, OCN®, University of North Carolina at Chapel Hill, Chapel Hill, NC; Denise Hershey, PhD, FNP-BC, Michigan State University, East Lansing, MI; Ellen D. Davis, RN, MS, CDE, FAADE, Duke University Health System, Durham, NC; Veronica Brady, RN, MSN, NPCF, University of Texas MD Anderson Cancer Center, Houston, TX; Marilyn Hammer, PhD, DC, RN, New York University, New York, NY; Jill Olausson, RN, MSN, CDE, City of Hope National Medical Center, Duarte, CA

Underwriting/Funding Source: Cancer Care Quality Training Post Doctoral Fellow, R25 CA11633901

Objective: To describe the current state of the science and the association between chemotherapy and other agents used in cancer treatment and glycemic control in patients with solid tumor cancers and diabetes.

Cancer and diabetes are both growing public health concerns worldwide. Solid tumor cancers such as breast, prostate, lung, and colorectal are the four most common cancers in the US, but few studies describe the impact of glycemic control or implication for practice of patients during cancer treatment. Often patients have hyperglycemic episodes leading to treatment related toxicities and poorer outcomes. Cancer incidence increases with age and so does comorbid diseases, such as diabetes. There are a variety of agents utilized in cancer treatment which are known to affect glucose metabolism. Understanding the glycemic sequelae to the agents administered is paramount for maintaining a therapeutic glycemic state. The purpose of this review is to discuss the treatment regimens which directly impact glycemic control in patients with cancer who are receiving cancer treatment. A framework was not used for this literature review. A systematic review of the literature was conducted using a search of PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Cochrane Reviews using the following keywords: diabetes, glycemic control, chemotherapy, glucocorticoids, androgen deprivation therapy, interferon-alpha (INF-alpha), immunosuppressants, cancer, neoplasms, and hyperglycemia. The review was conducted from 2000-2012. Out of an initial 14,493 abstracts, 66 met the full criteria including 11 chemotherapy, 39 glucocorticoid, 7 androgen-deprivation therapy, and 9 INF-alpha articles. Each of these studies demonstrated treatment-induced hyperglycemic events and subsequent adverse outcomes in patients treated for solid tumors. Knowledge about hyperglycemic-inducing agents along with safe, effective glycemic control glucose monitoring and management is essential for optimizing outcomes in patients undergoing treatment for malignancies.

1416069

"TOO MANY COOKS SPOIL THE BROTH": THE CONFUSION IN SEEKING INFORMATION AMONG ELDERLY CANCER SURVIVORS WITH GASTRIC CANCER. Mi Jeong Park, RN, Seoul National University Hospital, Seoul, Republic of Korea and Seoul National University, Seoul, Republic of Korea; Eunyoung E. Suh, PhD, FNP, RN, Seoul National University, Seoul, Republic of Korea and Seoul National University Research Institute of Nursing Science, Seoul, Republic of Korea

Underwriting/Funding Source: Korea Research Foundation grant funded by the Korea government (MEST) (No. 2009-0069945)

Objective: By the end of this presentation, the audience will be able to understand how hard it is for elderly cancer survivors for seeking useful information they need.

Korea is one of the top-ranked countries for an advanced treatment of gastric cancer. Given the fact that elderly survivors with gastric cancer increase in number, tailored survivorship care for elderly survivors is mandated in nursing practice. There is little research investigating the information needs and the ways

of seeking information among the elderly survivors especially with gastric cancer. In order to develop a contextually-specific and tailored survivorship care model for elderly gastric cancer survivors, this qualitative study was, as the first step, aimed to explore how the elderly survivors seek information and how much they satisfied with the information quality. Naturalistic and constructive perspectives philosophically guided this study. Fourteen elderly with gastric cancer (8 men and 6 women), who aged from 66 to 77, participated two individual interviews per person in a university cancer center in Korea. All participants underwent partial or total gastrectomy and one third of them received adjuvant chemotherapy. All interviews were recorded with a digital recorder, and transcribed into transcripts. Qualitative descriptive analysis was done for data analysis using the MAXQDA software program. Every participant addressed difficulties and confusions in seeking accountable information which met his/her needs. A proverb, "too many cooks spoil the broth," was emerged as the overarching theme, which depicted the participants' experiences of difficulties and confusions surrounded by too much unreliable sources of information. "Lack of strategies to seek accountable information," "holding the core of decision making on my own," and "a need for tailored and individualized care in seeking proper information for healthy survivorship" were elicited as sub-themes. Participants reported that all had episodes of being negatively impacted by over-decorated and unreliable information on web-sites. They said that health care professional provided too general information only, thus, they had to hold their mind hard in selecting information and making decisions from other sources. The study demonstrate that survivors with gastric cancer, especially who aged over 65, have apparent confusions and difficulties in seeking proper information they need. Evidence-based and tailored survivorship care is necessary for this population in nursing practice.

1416916

MORAL DISTRESS AND CANCER PAIN MANAGEMENT: A CRITICAL ETHNOGRAPHY OF ONCOLOGY NURSES IN INDIA.

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Underwriting/Funding Source: American Cancer Society; University of Utah Graduate School; Fulbright Grant

Objective: At the completion of this presentation, participants will be able to: 1) define moral distress, 2) list 2 potential reasons why opioid availability is problematic in low and middle income countries, 3) describe 2 challenges encountered by oncology nurses practicing in India.

The world's global cancer burden disproportionally affects low-and-middle-income countries (LMIC), where 80% of patients present with late-stage disease and inexpensive and effective medications for pain relief are often absent. The experience of feeling like one knows the right course of action, but is thwarted in this effort is known as 'moral distress,' (MD) and can lead to nurse 'burn-out,', compromised patient care, abandoning the profession, as well as personal and physical problems when caring for patients with advanced cancer. There is scant research exploring MD in LMIC, its relation to specific resources (such as opioids), or interventions to mitigate or prevent MD. This project explored the experience of MD with nurses caring for patients with advanced cancer in India and its potential relationship to pain management. Principles of critical ethnography and the Theory of Moral Distress served as the philosophic frame of reference for this study. This was a qualitative, critical ethnographic study. Data were collected at a 300-bed government cancer hospital in South India over 9 months. Purposive sampling was used to identify primary participants, practicing oncology nurses (n = 34), and secondary participants, those who interacted with nurses, such as physicians (n = 22). Key sources of data included semi-structured interviews, extensive observations in the field recorded as fieldnotes, and review of relevant artifacts, such as hospital documents. Data saturation was achieved and interviews were transcribed in full, with particular attention to nurse narratives suggesting elements of moral distress. AtlasTi supported analysis of fieldnotes and transcripts for emerging themes. Preliminary findings suggest that the role of the nurse, and expectations related to patient care, are conceptualized very differently in India than the U.S. Complex sociocultural factors influence the delivery of cancer care in an Indian Government hospital, and while some nurses describe distress by witnessing suffering, there is limited evidence of MD as it is understood in the West and perhaps little association between MD and opioid availability in this context. A greater understanding of the nurse's role in LMIC has implications for implementing meaningful education and practice initiatives in resource constrained settings.

1417574

IMPACT ANALYSIS OF A STRUCTURED EDUCATIONAL COUNSELING PROGRAM FOR PARENTS WITH CANCER: PARENTS' ATTRIBUTED CHANGES TO THEIR PARENTING BEHAVIOR.

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Underwriting/Funding Source: Lance Armstrong Foundation and the National Cancer Institute of the National Institutes of Health under Award Number R01CA 78424

Objective: The objective of the study is to analyze the self-reported parenting behavior parents attributed to the program.

An estimated 1.1 million parents of young school age children will be newly diagnosed with cancer in the U.S. in 2012. Both diagnosed parents and their children have elevated levels of affect and mood disturbance, and parents are known to struggle with what to say or do to support their child. Despite the magnitude of parents' and children's distress, few programs exist to assist them. A 5-session nurse-delivered educational counseling intervention, When Mommy or Daddy Get Cancer, was designed to assist parents minimize the emotional toll of their cancer on their child. The purpose of the current study was to describe the self-reported gains parents attributed to program participation. The content and structure of the intervention was derived from a contextual model of parenting that emphasizes that parenting behavior needs to be linked with the child's clarified concerns, questions, or fears about the cancer. Twenty-one diagnosed parents with melanoma, colorectal, or breast cancer participated in a single group, pre-posttest study that included exit interviews at 1-month follow-up. Interviews were content analyzed using inductive coding methods. Peer debriefing and an audit trail were used to protect the trustworthiness of study results. Parents were recently diagnosed (median 3 months), highly educated, and primarily Caucasian. The median age of the child was 10 years; 71.4% were girls. The core construct of Learning a Different Way to Interact with the Child and four domains organized parents' attributed gains from the program. Parents reported learning to approach their child in new ways; gaining skills to elicit and draw out their child's thoughts and feelings; discovering more about their child; and knowing themselves better. These parenting behaviors enabled the parent to assist their child to more fully elaborate the child's thoughts and feelings. Results demonstrate that parents were able to acquire new

parenting competencies consistent with the contextual model of parenting. Such gains also illustrate that a brief, nurse-delivered intervention has the potential to affect parenting practices, even during the highly charged time of medical treatment for parental cancer.

1417808

PROLONGED SYMPTOM EXPERIENCES OF ELDERLY COLORECTAL CANCER SURVIVORS: A QUALITATIVE STUDY.

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Underwriting/Funding Source: Korea Research Foundation grant funded by the Korea government (MEST) (No. 2009-0069945)

Objective: By the end of this presentation, the audience will address the symptom experiences of Korean elderly colorectal cancer survivors.

Elderly survivors with colorectal cancer increase in number in South Korea by virtue of advancement in cancer survivor rates and prolonged life expectancy. Active nursing involvement is often detached from survivors upon the completion of cancer treatment, which may leave the survivors' prolonged symptoms underrepresented and undertreated. Developing nursing strategies in practice to develop survivorship care for elderly could not be contextually sensitive enough unless understanding the survivors' in-vivo expressions on symptom experience. This qualitative study, thus, was aimed to explore and describe the prolonged symptoms experienced by elderly colorectal cancer survivors. Naturalistic and constructive perspectives undergirded this qualitative study. Thirteen elderly with colorectal cancers aged from 65 to 73 were recruited and individually interviewed twice per participant at a cancer center in South Korea. They had completed the series of cancer treatment at least 3 month ahead. The interviews were conducted in a meeting room and lasted for about 1 hour. All interviews were tape recorded digitally and transcribed. Qualitative data were analyzed using qualitative thematic analysis method. All participants reported that they were suffering from various stagnant symptoms. Three elicited themes included "having no every (Ki)," "having endless bowel problems," and "hard to live like a dead person." First theme was of culture-bound expression of Korean elderly representing integral experiences of physical fatigue and psychological distress. Second, the participants reported that cancer treatments such as surgery and chemotherapy resulted in permanent changes in their bowel habits. They expressed that the problems in bowel movement impeded their participations in work and socials. Lastly, they admitted that their lack of energy and physical hindrance had them get bound at home, which they felt their lives meaningless. The findings of the study illustrate that the elderly colorectal cancer survivors are suffering from multifaceted symptoms as apparent as ever even after completing treatment. Also, Korean elderly experienced physical and psychological symptoms in a quite culturally colored way and valued participating life-long socials and returning to the ways of life before the cancer diagnosis. Tailored survivorship care in nursing practice for this population is warranted.

1418267

ASSESSING THE PERFORMANCE OF ADVANCED PRACTICE PROFESSIONALS IN RESPONSE TO THE FAILING ONCOLOGY PATIENT.

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Objective: To assess the performance of Advanced Practice Professionals in response to the failing oncology patient.

The utilization of Advanced Practice Professionals (CNP's & PA's) has now been well established and valued in oncology care. Frequently, the APP is most readily accessible for care guidance when it becomes evident that an oncology patient is "failing". This paper is an important contribution to science in illuminating the use of clinical simulation for APP's. The purpose of this preliminary descriptive project was to determine a best method for assessing APP performance in oncology specific circumstances. The further goal was to determine if simulation would provide a robust assessment and educational intervention for this group. The theoretical framework was based on the Lasater Interactive Model of Clinical Judgement. This theory supports the use of clinical judgement through experiential learning, and explores the ways in which care providers understand patient issues, attend to salient information, and respond with the deliberate, conscious interventions of the proficient/expert performer. A test group of APP volunteers completed an online self-competency assessment and the BKAT Critical Care Assessment Test, and attended a 4 hour simulation/classroom experience. The simulations included two scenarios: a sepsis/respiratory failure oncology patient and a post-operative pneumonectomy/pain oncology patient. Approximately thirty priority interventions for each scenario had been anticipated by an expert panel. The test group of APP's (N=14) self pre-assessed their competency in the care of the failing oncology patient on a 5 point Likert-type scale as: 4.0 for knowledge base; 3.71 for critical thinking. One hundred percent of the APP participants scored at or above the level of a critical care nurse with 1 year of experience on the BKAT. Ninety percent of anticipated interventions were enacted by all practitioners. Five additional crucial interventions were ordered which had not been anticipated. There was no difference in performance between Family Nurse Practitioners versus Acute Care Nurse Practitioners, or between Certified Nurse Practitioners versus Physician Assistants. The success and evaluation of this educational strategy has stimulated the initiation of a full team oncology failure to rescue simulation, as well as other innovative simulation experiences at the James.

1418676

UTILIZATION OF SYMPTOM MANAGEMENT AND END OF LIFE QUALITY MEASURES BY NURSE PRACTITIONERS (NPs) IN THE AMBULATORY ONCOLOGY SETTING.

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Objective: Improve NP documentation of quality measures pertaining to symptom management and end-of-life care.

Nurse practitioners (NPs) play a significant role in symptom management; yet, the literature is lacking in relation to documentation of their role in implementation of quality measures regarding supportive care and symptom management. This project will add to the body of literature for NP practice. Evidence of ASCO's Quality Oncology Practice Initiative (QOPI) measures for symptom management and end-of-life care have not been well documented in patient medical records. Previous research has described the importance of oncology NPs in providing palliative care and symptom management. The research question is, "Do NPs caring for adult medical oncology patients in the ambulatory care setting demonstrate increased documentation

of symptom management quality measures following an educational intervention (EI) as compared to pre-intervention chart audits?" The purpose of this study is to improve NP documentation of QOPI symptom management and end-of-life care measures. Improved documentation of these measures can positively impact patient outcomes. This study uses Watson's Caring Theory based on its marriage of art and science which mirrors the focus of this project. Bandura's Social Cognitive Theory is the change theory utilized as NP self efficacy will be promoted by enhancing their use of evidenced based measures. This is a quantitative study utilizing pre- and post-educational intervention chart audits. The pre-intervention chart audit will evaluate 100 charts of oncology patients seen by medical oncology NPs in an academic cancer center for documentation of symptom management and end-of-life care QOPI measures. Pre-chart analysis will be used to develop the EI. Following the EI, a post- chart audit will be completed to evaluate improvement in NP documentation of these measures. SPSS software will assist researchers in developing the descriptive statistics, graphs and analyses to be used in interpretation of findings. Initial data analysis and the EI will have been completed by the time of the presentation and post-intervention analysis will be in progress. If this intervention proves to be successful, it has the potential to be incorporated by the hundreds of NPs in oncology settings across the country.

1418911

BARRIERS TO PAIN CONTROL IN THE HOME HOSPICE SETTING: A QUALITATIVE STUDY.

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Underwriting/Funding Source: Hospice pain control: Developing an opioid order sheet. Barbara Murphy, MD, principal investigator, Funded by NCI 9-05 (R21 CA 115388-01)

Objective: To identify barriers to poor pain outcomes in oncology patients enrolled in home hospice.

Approximately 80% of patients referred to hospice experience pain near the end of life with 25% experiencing moderate to severe pain. Adequate pain control is critical to minimize suffering at end-of-life. Pain control in the home hospice setting is suboptimal. Little is known about barriers to adequate pain control for these patients. The purpose of this study was to interview hospice staff to identify barriers to pain control in home hospice setting. Grounded theory was used to build new concepts into the existing Critical Steps for Adequate Pain Control theoretical framework. A cross-sectional, qualitative study was conducted using two focus group discussions with home hospice staff (nurses n=12, social workers n=4, chaplain n=1, nurse aids n=2, case manager n=1). Discussions were tape recorded and transcribed verbatim. Participants answered questions about pain assessment, pain management, and perceived barriers to pain control. De-identified transcripts were independently reviewed by four researchers. Themes were derived using an inductive approach to content analysis. Six major barriers were identified: 1) Opioid side effects—patients identified sedation and mental slowing as unacceptable adverse effects that impaired function, 2) Communication—delay in obtaining physician orders, filling prescriptions, and communicating changes to patients/caregivers resulted in delay in medication adjustments, 3) Caregivers—hindered pain control through lack of knowledge, fear of addiction/overdose, and absconding with medications, 4) Patients—difficulty describing pain intensity, may be unwilling to take pain medication that diminish function, and hold beliefs about pain that cause underreporting of pain and decrease medication compliance, 5) Physicians—lack knowledge regarding pain management and are too busy to address pain control in a timely manner, and 6) Spirituality—patients or caregivers felt the patient should suffer for spiritual reasons. Home hospice nurses should be aware of key stakeholder roles in managing pain and barriers to role fulfillment. Education interventions that target appropriate assessment of pain, appropriate prescribing, and administration practices are needed for nurses, physicians, and families. Nurses should education families on their specific role of pain medications in the home hospice setting. Finally, systems-based solutions must be investigated to decrease delays in changes in pain medications in this setting.

1419345

ACTIVATION FOR HEALTH MANAGEMENT IN PATIENTS AND CAREGIVERS DURING CANCER TREATMENT: PRELIMINARY FINDINGS.

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Objective: To describe activation for self-management in a sample of patients with colon cancer and their family caregivers.

Self-management skills are essential for patients, as well as families, to solve problems, make decisions about their health, utilize resources, actively participate in their care, and change health behaviors. The capacity to self-manage depends on the extent to which an individual has the skills, knowledge, and confidence to manage his/her healthcare, otherwise referred to as his/her activation level. Although patient activation has been found to play a key role in successful outcomes in chronic illness, little is known about its role along the cancer trajectory. Additionally, activation of informal or family caregivers for the self-management activities associated with cancer caregiving is virtually unstudied. The primary purpose of this pilot study is to: (1) describe activation for self-management in a sample of patients with colorectal cancer and their caregivers, (2) examine the relationship between patient activation and caregiver activation, and (3) determine the extent to which activation is related to symptom distress, depression, anxiety, fatigue, physical activity, and work productivity. Self determination theory and Hibbard's conceptualization of patient activation guided the study's design. Using a longitudinal, correlational design, 70 dyads of patients with stage I, II, or III colorectal cancer treated with surgery, with or without chemotherapy, and their adult family caregivers, will be interviewed at three time points: during the post-operative hospital stay, and at 6 weeks and 4 months post-op. Patients and caregivers will complete the Patient (or Caregiver) Activation Measure; Patient-Reported Outcomes Measurement Information System (PROMIS) measures for depression, anxiety, and fatigue; the International Physical Activity Questionnaire; and the Work Productivity and Activity Impairment Questionnaire (patient or caregiver version); and will record walking activity using a pedometer. Symptom distress in patients will be measured using the Memorial Symptom Assessment Scale. The analysis will consist of descriptive statistics, bivariate correlations, and Repeated- Measures ANOVA. Preliminary findings will be reported. Information about how activation levels change throughout cancer treatment and about correlates of activation is needed for design of evidence-based interventions to enhance self-management skills in both patients and caregivers.

1419908

ORAL CHEMOTHERAPY ADHERENCE IN RACIALLY AND ETHNICALLY DIVERSE PATIENTS WITH CANCER: A QUALITATIVE STUDY. Pamela K. Ginex, EDD, RN, OCN®, Memorial Sloan-Kettering Cancer Center, Syosset, NY

Underwriting/Funding Source: Geri and ME Nursing Fund

Objective: The objective of this study was to explore factors associated with adherence from the patient's perspective.

Adherence to oral cancer treatment has been identified as a nursing-sensitive patient outcome and research priority by the Oncology Nursing Society. To date, no study has analyzed facilitators toward, or barriers against, medication adherence faced by an ethnically diverse sample of patients taking oral chemotherapeutic or targeted agents. The purpose of this study was to identify new, previously unknown and unmeasured, facilitators of and barriers to adherence to oral cancer treatment in an ethnically and racially diverse sample of adults with cancer through the use of qualitative methods. The World Health Organization adherence model states that a variety of explanations exist as to why patients do not adhere to their prescribed medications, including those that are patient-, medication-, condition- and system-focused. This multidimensional problem is best addressed by including each of the four interacting elements into proposed research. Using qualitative methods, an ethnically and racially diverse sample of adults with cancer will be interviewed in depth to elicit their experiences, perspectives, and life contexts regarding knowledge, attitudes, beliefs, and experiences with oral chemotherapy adherence. A convenience sample will participate in the interviews which will be audio-taped and transcribed. Analyses will be informed by adapted aspects of grounded theory. Initial analyses will be conducted on the full interview. Transcripts will be reviewed to identify themes present. This process will be repeated until raters achieve concordance and saturation is reached for major and minor themes. Identified themes will be organized into formal coding grids and illustrative quotes relevant to these themes extracted from the original transcripts. Findings will be discussed in terms of themes identified and will contribute to our theoretical understanding of adherence in this underserved population. The findings will highlight specific factors that should be considered when trying to improve adherence and may be helpful in clinical decision-making.

1420029

DESCRIPTORS OF PATIENTS WITH AND WITHOUT POST THORACOTOMY PAIN SYNDROME. Kathleen G. Hopkins, MS, RN, University of Pittsburgh, Pittsburgh, PA; Leslie A. Hoffman, PhD, RN, FAAN, University of Pittsburgh, Pittsburgh, PA; Annette J. DeVito Dabbs, PhD, RN, FAAN, University of Pittsburgh, Pittsburgh, PA; Thomas Zullo, PhD, University of Pittsburgh, Pittsburgh, PA; Peter F. Ferson, MD, University of Pittsburgh School of Medicine, Pittsburgh, PA; Margaret Rosenzweig, PhD, APN-BC, AOCNP®, University of Pittsburgh, Pittsburgh, PA

Objective: The purpose of this study is to describe the influencing factors, symptoms and performance limitations experienced by patients who develop PTPS.

Surgery is the first option for patients with early stage lung cancer. Regardless of the surgical procedure, 5% to 65% patients experience post-thoracotomy pain syndrome (PTPS). The International Association for the Study of Pain has defined PTPS as pain that recurs or persists along a thoracotomy incision at least 2 months following the surgical procedure. This study compared the demographic (age, gender, race) and surgical profile (tumor type, location, stage, surgical approach) of patients with and without PTPS following thoracic surgery for lung cancer. Theory of Unpleasant Symptoms. We prospectively interviewed 32 patients and each patient completed instruments rating pain, symptom distress, comorbidities and multidimensional quality of life. PTPS was present in slightly over half (53%). Time since surgery was 6.1 ± 3.38 months (range 2-12 months). Scores were compared between patients with PTPS (n=17, 53%) and no PTPS (n=15, 47%). There were no differences in patients with and without PTPS related to age (p=.226), gender (p=.080), smoking history (p=.531), comorbidities (p=.555), cancer stage (p=.600), neoplasm lobe location (p=.237), surgical approach (p=1.00), cell type (p=.169) or time since surgery (p=.479). Despite advances in surgical technique, PTPS remains common and associated with substantial symptom distress. The study is ongoing with the goal of further defining the symptoms, influencing factors and performance limitations associated with PTPS.

1420104

FROM UNIT-BASED TO POPULATION-FOCUSED: TRANSFORMING THE ROLE OF ONCOLOGY CNSS. Kimberly Catania, MSN, RN, CNS, AOCN®, OSUWMC James Cancer Hospital, Columbus, OH

Objective: Describe the transition from unit based to population focused for Clinical Nurse Specialists in the oncology setting.

CNS practice in a Midwest comprehensive cancer center has been unit-based, focused primarily on nursing staff education, skills and competencies. Reporting structure and clinical practice varied from unit to unit. With the aging population, rapid growth in research accrual, increasing referrals and expansion of facilities and programs, a reexamination of CNS practice was undertaken to determine if restructuring this role could improve quality, safety, productivity and autonomy. The Clinical Nurse Specialist role can be positioned to proactively plan and facilitate evidenced-based best practices in collaboration with a transdisciplinary, population-focused team that manages the patient across the cancer care continuum. This model capitalizes on the spheres of CNS practice (patient, nurse and organization) through the functional roles of the CNS (clinical expert, researcher, educator and consultant) to maximize quality care. Nursing administration and CNSs' evaluated the efficacy of transitioning to a population-focused model. Some responsibilities transitioned to other roles, the reporting structure was changed and each CNS was realigned to a specific oncology population which utilized a trandisciplinary approach to care across the entire cancer continuum. Realigning the CNS role to a population focus across the care continuum enabled our institution to capitalize on the skills and knowledge of the CNS and improve communication across the care teams and ultimately outcomes. Following this transition, there was significant improvement in the areas of physician collaboration, autonomy, administrative support, teamwork and contribution to the to the mission of the Cancer Program. In this model, CNSs' proactively plan and facilitate evidenced-based best practices in collaboration with a transdisciplinary team that manages the patient from diagnosis through the cancer trajectory maximizing quality care and nursing sensitive patient outcomes.

1420113

FEASIBILITY TESTING OF THE ORAL MUCOSITIS ASSESSMENT GUIDE IN HEAD AND NECK CANCER PATIENTS RECEIVING TREATMENT. Jan Fulton, PhD, RN, Indiana University School of Nursing, Indianapolis, IN

Objective: Describe a process for developing and testing an oral mucositis screening assessment instrument for use by general practice and oncology nurses caring for patients receiving cancer treatment.

Head and neck cancer is fifth leading cause of cancer. Mucositis, a painful inflammatory, ulcerative process involving the oral cavity occurs 90 – 100% of patients treated with radiation and/or chemotherapy. Severe mucositis is a dose-limiting toxicity, a risk for infection and affects quality of life. Mucositis management is palliative; greater symptom relief is associated with early detection. Detection requires routine assessment; however, an easy to administer oral screening instrument for nursing practice is not available. Existing instruments, developed for research, precisely measure developing, peaking and resolving mucositis (OMAS; OMI; OMI-20), a level of precision not necessary for screening. Other instruments (e.g. OAG) are not specific for mucositis. The purpose of this study is to explore the feasibility of an innovative oral-mucositis screening/assessment instrument. The aims are to test 1) performance of the instrument in clinical setting for ability to capture physical changes, symptoms and functional problems, and 2) usability of the instrument in nursing practice. Cancer treatment side effects occur in three domains – physical, functional and symptom. Mucositis physical changes diminish over time while functional and symptom-related consequences linger affecting the quality of life of survivors. Improved mucositis screening/assessment during treatment will lead to earlier interventions, which can contribute to improved long term quality of life outcomes. The study used an instrument testing design in which items were generated based on literature critique and review of existing mucositis scales. Content validity was determined through examination and agreement among members of an interdisciplinary expert panel. Valid items were formatted into an instrument with 9 physical indicators, scaled present or absent, and 4 symptoms scaled 0 (no symptom) to 10 (worst possible). Feasibility testing was undertaken in a sample of 12 patients with head and neck cancer undergoing treatment. Feasibility outcome indicators are clarity (3 items), adherence (2 items), viability (2 items) and acceptance (2 items) rated 1 – 4 (4 = strongly agree) using an instrument feasibility questionnaire. Usability will be determined from qualitative reports by nurses. Aim 1 is accomplished; aim 2 is in progress. Clinically, this instrument will fill a gap for a brief oral-mucositis screening/assessment instrument.

1420375

HEALTH AND SOCIOCULTURAL FACTORS INFLUENCING AN INFORMED DECISION ABOUT COLORECTAL CANCER SCREENING AND SCREENING ADHERENCE.

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Underwriting/Funding Source: The National Institutes of Health/National Institute of Nursing Research through the Ruth L. Kirschstein National Research Service Awards (NRSA), grant number 1F31NR010421 and the Rackham Graduate School at the University of Michigan through the King Chavez Parks Future Faculty Fellowship to Kelly Brittain.

Objective: The objective of this study was to examine the cultural, social and health factors that influence an informed decision about CRC screening and CRC screening adherence among African Americans.

Nurses at all practice levels and oncology nurses have an excellent opportunity to influence colorectal cancer screening adherence among African Americans. Colorectal Cancer (CRC) incidence and mortality are highest among African Americans. Little is known about the cultural, social support and health factors that influence CRC screening adherence among African Americans. The specific aim of this study was to examine the relationships among cultural identity, family support and influence, health factors, an informed decision about CRC screening and CRC screening adherence among African Americans. The Preventive Health Model (PHM) guided the study as the PHM suggests health actions are influenced by internal and external factors of the self-system and effect health related decisions. This correlational study used a secondary data analysis design. The sample used for the present study was a community-based purposive sample of 129 African Americans 50 years and older recruited from an urban, Midwestern city and was the same sample as the parent study. Several instruments with established reliability and validity were used to measure the study variables. Pearson product moment correlations and multiple regression analysis were used to analyze the data. Religiosity and future time orientation were related to having a colonoscopy. Family support and family influence were related to having a colonoscopy. There was no relationship between an informed decision and having a colonoscopy. However, there was a relationship between FOBT and an informed decision. There was no relationship between having a primary care provider and an informed decision about colorectal cancer screening. Highest level of education was not related to an informed decision. Having diabetes was negatively related to having a colonoscopy. The results provide preliminary support for the sociocultural and health factors that influence an informed decision about CRC screening and CRC screening adherence among African Americans. The results suggest that nurses, at all practice levels, should assess the patient's perception of family support and influence and other cultural factors as a strategy to increase CRC screening adherence. Additional research is warranted as there is a need for new strategies and interventions to decrease African American CRC disparities.

1420399

DEVELOPMENT OF EVIDENCE-BASED FOLLOW-UP GUIDELINES TO STANDARDIZE POST-STEM CELL TRANSPLANT CARE.

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Objective: To standardize long-term follow-up care after undergoing stem cell transplant at our institution.

This study was undertaken to determine if our current practice required updates to be consistent with the latest evidence-based information. Additionally, a needs-assessment was performed to determine the feasibility of developing long-term follow-up guidelines for all hematopoietic stem cell transplant (HSCT) recipients and supportive care guidelines for chronic graft versus host disease (GVHD) survivors. Evidence-based care has been shown to improve quality-of-life and long-term outcomes of cancer survivors. According to the Center for Disease Control, there were more than one-million living cancer survivors who were diagnosed with cancer at least 25 years earlier. This number is expected to increase over time. Cancer and transplant survivors have specific long-term health concerns. Principles of Ancillary and Supportive Care studies indicated that early identification and intervention in chronic health problems such as GVHD, result in less need for systemic therapy, improved outcomes and quality of survivorship. This signaled a need to provide appropriate and timely screening and preventive services. A literature review was conducted to identify current recommendations for follow-up of HSCT recipients. We focused on; infection prevention, immunization replacement, interim evaluations and chronic GVHD management. The compiled information was examined by our multidisciplinary Bone Marrow Transplant (BMT) Quality Team. The team consisted of; transplant physicians, advanced practice nurses, clinical nursing coordinators, pharmacists, nursing educators, medical technologists and data managers. A comparison was performed

with the current standards of practice (SOP) in our center. This exercise identified opportunities for improvement and led to changes in our SOP for prevention of infectious complications. Additionally, guidelines for antimicrobial prevention, chronic GVHD supportive care guidelines and interval evaluations post-HSCT for all transplant recipients were developed. There was substantial high-quality evidence to guide infectious prophylaxis practice for transplant recipients and guideline suggestions for chronic GVHD. There was limited evidence-based data regarding optimal long-term follow-up of HSCT recipients without GVHD. Thus, evidence-based guidelines could not be developed. Alternately, we developed protocols to standardize follow-up care. This provides the opportunity for ongoing evaluation of our practice and effects of nursing interventions to allow periodic changes to be made based on our experience and new documented evidence.

1420442

A "BATHING BUNDLE" REGIMEN TO REDUCE THE RISK OF GYNECOLOGICAL SURGICAL SITE INFECTION.

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Objective: The goal is to evaluate the effectiveness of the Bathing Bundle.

Surgical site infection (SSI) significantly impacts the quality of life for gynecology patients. Oncology patients may be at greater risk to develop an SSI following gynecological (GYN) surgery due to existing health behaviors, cancer diagnosis, treatment, and available resources for preoperative care. This proposal addresses the concern for patient's endogenous skin flora by exploring the preoperative strategies for skin preparation prior to the patient's scheduled GYN surgery. The purpose is to determine if gynecology surgical patients using a Bathing Bundle with Chlorhexidine (CHG) 4% skin prep solution have a lower incidence of SSI than patients treated with the standard of care (patient's choice of antibacterial soap). The Dynamic Nursing Care Model (DNCM) utilized at our organization is patient and family centered care employing nursing expertise and evidence-based practice. The DNCM together with Orem's Theory of Self-Care supports actions initiated by the nurse and patient to reduce the risk for SSI. GYN surgical patients' scheduled for an abdominal surgery receive one "Bathing Bundle" including: 1) CHG 4% solution/disposable wash cloths, 2) bathing instructions and 3) preoperative teaching by the nurse. Patient compliance is monitored by nursing staff in the ambulatory surgery center. Data collection will be up to 2 years on 400 patients. Historical SSI rates among GYN surgery patients treated with standard of care skin preparation are compared to similar patients treated with the Bathing Bundle regimen. The impact of the intervention will be assessed using Fisher's Exact test. This primary analysis will be supplemented by Logistic Regression modeling for the probability of an SSI given the bathing regimen used, controlling for compliance and other patients characteristics of interest. The pre- and post-intervention will be compared on various demographic, health behavior and disease characteristics. Descriptive statistics and various graphical displays will be provided as appropriate. This study is accruing patients. Preliminary infection control surveillance data indicate a reduction in GYN SSI. The bathing bundle intervention may decrease adverse events by reducing the risk of SSI, improve quality of life, and reduce health care related costs for gynecology cancer patients.

1420524

A SYSTEMATIC REVIEW OF METHODOLOGIES FOR SLEEP RESEARCH IN CANCER.

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Underwriting/Funding Source: R01CA132927 from the National Cancer Institute and PHS (NCCR) KL2RR025760

Objective: To determine if a paradigm shift was needed in relation to the study of sleep in cancer.

To conduct a systematic review of the methodologies used to study sleep in cancer. Basic gaps in our understanding of the prevalence of sleep disorders in cancer survivors interfere with development, selection, and testing of interventions designed to prevent or alleviate the prevalent, severe, and persistent symptoms of poor sleep. The distinction between sleep disorders and symptoms of poor sleep is often not addressed in research. Although symptoms of poor sleep are particularly prevalent, severe and persistent for millions of cancer survivors, the specific sleep disorder or disorders that underlie such symptoms remain understudied and unknown. A literature search was conducted using CINAHL, PsychINFO, and PubMed electronic databases. The search was limited to English-language studies published through March, 2012. Keywords, medical subject headings (MESH), and references lists were used to identify relevant studies. Relevant studies were retrieved and assessed for eligibility based on the inclusion criteria: (1) sleep was a primary or co-primary variable of interest; (2) original research articles; and (3) adult oncology populations. Excluded were case studies, letters to the editor, and studies pertaining to children and adolescents. The following was extracted: author(s) names, article title, year the study was conducted, country of origin, disciplines of all authors, study design, sample details (size, cancer population, treatments timepoints, menopausal status, gender, exclusion criteria), terms and definitions used to describe sleep, measures, use of biomarkers, and methods. The results of this review suggest a shift in the understanding of sleep problems is needed that focuses on describing specific sleep disorders using improved methods and available classification systems to better develop effective interventions. A total of 2,500 article titles were reviewed, of which only 215 met the inclusion criterion. The majority of studies were descriptive of symptoms of poor sleep (75%; n=161) and included sleep as a concurrent or clustered variable with either fatigue or other symptoms (56%) within mixed samples of cancer patients. Of the 215 articles, most targeted symptoms related to general insomnia syndrome without identifying the specific insomnia subtype or listing other possible sleep disorders. Various methods to measure sleep were used with little consistency across studies. The result is a lack of understanding of possible concurrent sleep disorders and effective tailored interventions for cancer patients.

1420630

STRENGTHENING CHEMOTHERAPY SAFEGUARDS BASED ON QUALITY ANALYSIS OF CURRENT PRACTICE.

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Objective: To discuss a nurse-driven process for reduction of chemotherapy errors.

Chemotherapy consists of multiple high-risk, high-alert medications given throughout a continuum of care spanning inpatient,

outpatient, and multiple ambulatory settings. Any mistakes may have devastating effects on patients and their disease outcomes. This project demonstrates a nurse-driven initiative to design and implement a chemotherapy policy that incorporates stringent guidelines to address these safety issues. Review of data at the Seidman Cancer Center demonstrated patterns of errors and near misses and identified pivotal points in the chemotherapy process as opportunities for errors. A hybrid documentation system between paper/pencil and electronic records further contributed to safety challenges because it was not always feasible to obtain documentation on previously administered chemotherapy cycles, depending on where in the system it was administered. The first step was to develop a mechanism to verify all previously administered cycles of chemotherapy. In collaboration with the electronic medical record team, the Oncology Medication Report by Date was created and was made accessible from any location in the system, regardless of the method of documentation used. Policy now mandates review of this report by the physician, pharmacist, and nurse prior to prescribing, preparing and administering all chemotherapy. The previous cycles are compared to the current cycle for dosing, sequencing, and timing. Next, chemotherapy checklists were developed to highlight critical policy changes and serve as a documentation tool noting that all steps were followed. They indicate the more stringent verification process for nurses administering chemotherapy encompassing review of previous cycles, parameters, indications, calculations, patient identification, comparison of medication against physician order and pump programming. Implementation of the policy is underway. Roll out has included developing tools and various educational presentations, weekly meetings, and careful monitoring. Input from all oncology nurses was sought and their attitudes towards the new policy were surveyed. Evaluation of the safety impact will be performed 6 months post implementation and then ongoing. This policy represents a paradigm shift from providing safe care to creating a culture of safety, in which chemotherapy administration is a core domain. Success of this initiative is dependent on the expertise and guidance of experienced oncology nurse leaders.

1420654

MANAGEMENT AND MEASUREMENT OF PRURITUS IN SICKLE CELL DISEASE PATIENTS. Deborah Hanes, RN, CNS, CNP, CRNP, OCN®, The Ohio State University Comprehensive Cancer Center–The James Cancer Hospital, Columbus, OH; Massa Nnadi, RN-BC, The Ohio State University Comprehensive Cancer Center–The James Cancer Hospital, Columbus, OH; Stefani J. O'Connor, MS, RN, CCM, IQCI, The Ohio State University Comprehensive Cancer Center–The James Cancer Hospital, Columbus, OH; Janine Overcash, PhD, GNP-BC, The Ohio State University Comprehensive Cancer Center–The James Cancer Hospital, Columbus, OH; Lorie Petty, The Ohio State University Comprehensive Cancer Center–The James Cancer Hospital, Columbus, OH; Mary Weiss, BS, RN, CCRC, OCN®, The Ohio State University Comprehensive Cancer Center–The James Cancer Hospital, Columbus, OH

Objective: To provide an understanding of the prevalence, severity and assessment of pruritus in patients with Sickle Cell Disease (SCD).

Sickle Cell Disease affects 70,000 – 100,000 people in the United States. Many patients report pruritus, yet the prevalence is unknown and no instruments for measurement have been recommended for clinical use. To provide an understanding of the prevalence, severity and assessment of pruritus in patients with SCD using the Visual Analog Scale (VAS) and the National Cancer Institute Common Toxicity Criteria (CTC) Scale. The aims of this study are to describe the incidence and severity of pruritus in a sample of SCD patients, compare the sensitivity and specificity between the VAS and the CTC Scale to measure pruritus, and identify which complications of SCD predict pruritus. Symptom measurement and management. This prospective, cross sectional study sampled patients diagnosed with SCD who presented for care at a Midwestern comprehensive cancer center. Patient characteristics such as age, gender and clinical complications were recorded. The CTC and VAS instruments were used to assess pruritus. The CTC is a 3 point scale with 3 being "intense or widespread" and the VAS is a 10 point scale with 10 being "worst." Analysis consisted of descriptive statistics, correlation, ROC curves and logistic regression models. Total number of subjects was 56. The number of inpatients was 23 and ambulatory was 33. . Thirty-four, or 60%, of subjects reported pruritus. Twenty one, or 91%, of inpatients reported pruritus. The mean VAS score for the total population was 3.75 and the mean CTC score was 1.5. For inpatients, the mean VAS was 5.1 and the mean CTC was 1.5. Seventy percent of subjects reported requiring chronic pain medications. The use of chronic pain medications was predictive of pruritus (p=.01). Common complications of SCD were not predictive of pruritus. Areas under the curve for the VAS and CTC were.82 and .57, respectively. These findings suggest that pruritus is common in hospitalized patients with SCD. Further, the VAS is a more sensitive and specific instrument for measuring pruritus compared to the CTC scale.

1420720

QUALITY OF LIFE AND PERCEIVED HEALTH RELATED NEEDS FOR SURVIVORSHIP IN PATIENTS RECEIVING RADIATION TREATMENT FOR HEAD AND NECK CANCER. S. Kate Sandstrom, RN, MSN, APRN-BC, AOCN®, University Hospitals Case Medical Center, Cleveland, OH; Nancy Tamburro, LISW-S, University Hospitals Case Medical Center, Cleveland, OH; Susan Mazanec, PhD, RN, AOCN®, Case Western Reserve University, Cleveland, OH, and University Hospitals Case Medical Center, Cleveland, OH; Barbara Daly, PhD, RN, FAAN, Case Western Reserve University, Cleveland, OH, and University Hospitals Case Medical Center, Cleveland, OH

Objective: Survivors of head and neck cancers have unique and often debilitating consequences of cancer treatment, significantly impacting quality of life. They are an important and vulnerable population for whom to implement a survivorship program.

Because of the complicated and often time-consuming care these patients require, an advanced practiced nurse (APN) clinic for this patient population would be of tremendous benefit. With more advanced treatment modalities extending survival, there is a growing body of evidence of the impact of late effects and treatment-related sequelae on health-related quality of life (HRQOL), creating the need for such a service. The primary aim of this study is to describe the symptom experience, symptom distress, HRQOL, perceived health needs, and demographic characteristics of patients receiving radiation therapy for head and neck cancer. These data will provide the foundation for the development of a head and neck cancer survivorship program. The quality of life (QOL) model for cancer survivors described by Dow and colleagues, with emphasis on health and optimal QOL during and beyond diagnosis and treatment, guided the design of this prospective descriptive, correlational study of HRQOL. The sample will consist of 60 patients with a new diagnosis of head/neck cancer (Stage II – IVA) undergoing curative radiation therapy. Patients will be interviewed using the Profile of Mood Survey (POMS)-brief, the University of Washington Quality of Life (UW-QOL) questionnaire, symptom distress scale, and a question of perceived health needs at six time points from beginning of treat-

ment through survivorship at 12 months. Descriptive statistics and bivariate correlations will be used to examine relationships between variables. Preliminary results support the development of an APN survivorship clinic for this vulnerable population. In this role the APN would provide symptom management, health behavior changes essential to optimize health, routine health maintenance and prevention, address gaps in health care and make referrals to appropriate resources and providers.

1420799

UNDERSTANDING THE NEEDS AND CHALLENGES OF CENTRAL APPALACHIAN CANCER SURVIVORS.

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Objective: At the conclusion of this poster presentation, the viewer will be able to verbalize the three highest rated causes of distress in Central Appalachian cancer survivors.

As a result of improved treatment and screening, the number of cancer survivors continues to increase. By 2020, there will be an estimated 15 million cancer survivors in the U.S., warranting the development of evidence based interventions to address the specific needs identified as a consequences of cancer. Cancer, and the treatment of cancer, results in long-term and late effects, creating distress for survivors long after treatment ends. The purpose of this research was to identify self-reported needs, levels of distress, and quality of life in cancer survivors. The Illness Trajectory Theory provided the framework for this study. A descriptive, cross-sectional study was conducted at a community cancer center, with survivors completing an anonymous survey identifying their levels of distress in five domains. Additional information, self reported quality of life, distance traveled, information needs, and learning preferences were also solicited. The survey, revised from the Pearlman-Mayo Survey of Needs, was mailed to 950 cancer survivors with a 24% return. Of the surveys received, 49% were males, 51% were females, with 69% being post treatment. The majority of those returning surveys were prostate cancer survivors (34%), followed by breast cancer survivors (26%), with gyn, colon, and hematological cancers comprising another 22%. Analysis was conducted, including a linear regression model, using SPSS. Fatigue, sexual intimacy, and fear of recurrence were each rated as creating the highest levels of distress by more than 40% of those surveyed. High levels of distress were noted in issues of sleep disturbances, weight changes, managing difficult emotions, and body image in more than one third of those surveyed. High levels of distress in the domains of physical effects, social issues, emotional aspects and spiritual issues were significant predictors of quality of life ($p<0.01$). Survivors named written materials as the preferred source for information. Recognizing the needs of unique populations can assist in providing supportive care for cancer survivors in a manner consistent with their identified needs and learning preferences.

1421048

INCREASING AWARENESS ON THE MANAGEMENT OF HERPES SIMPLEX VIRUS (HSV) RELATED ORAL MUCOSITIS IN LYMPHOMA PATIENTS RECEIVING CHEMOTHERAPY.

Maria D. Guerrero, RN, ANP-C, AOCNP®, MD Anderson Cancer Center, Houston, TX

Objective: To create a poster that provides evidence based information on the management of HSV related oral mucositis, in order to increase awareness in lymphoma patients receiving chemotherapy.

Oncology nurses play a critical role in assessment, diagnosis and management of oral mucositis, there is a need for them to be aware of HSV related mucositis in order to provide evidence based care. Lymphoma is one of many hematological malignancies that originate in the lymphatic system. Patient with lymphoma are often with several different treatment modalities, including chemotherapy, radiation, and stem cell transplant. Oral mucositis is a common side effect of these treatments and occurs as erythematous and ulcerative lesions of the oral mucosa. During treatment these patients are at higher risk for infection due to immunocompromising effects of chemotherapy and oral mucositis can also develop from bacterial, fungal, or viral causes HSV related oral mucositis occurs in 40 % of patients undergoing chemotherapy. Oral mucositis can cause severe pain, which can significantly affect nutritional status, oral care, and quality of life. Oral mucositis that is moderate to severe and related to infection can cause life threatening systemic sepsis, which has also been associated with transplant related mortality. Although management of treatment related oral mucositis is well documented, there is little data on the management of HSV-related oral mucositis. The goal is to develop a poster that will increase awareness of HSV related oral mucositis and discuss evidence-based management of HSV related oral mucositis. This poster will provide evidenced based data about HSV related mucositis, and increase awareness. This poster will stimulate nurses to develop standards of care for patients presenting with HSV-related oral mucositis in the future. The development of these standards will lead to improved quality of care and outcomes.

1421107

APOLIPOPROTEIN E GENOTYPE AND COGNITIVE FUNCTION IN POSTMENOPAUSAL WOMEN WITH EARLY STAGE BREAST CANCER RECEIVING ADJUVANT CHEMOTHERAPY AND/OR HORMONAL THERAPY.

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Underwriting/Funding Source: ONS Foundation through an unrestricted grant from Genentech, Inc.; NCI R01CA107408

Objective: To describe the role Apolipoprotein E (ApoE) potentially plays in cognitive function in women receiving adjuvant therapy for breast cancer.

Deterioration in cognitive function has been documented in women receiving chemotherapy and/or hormonal therapy for breast cancer. The ApoE4 allele has been implicated in increased susceptibility to adjuvant therapy-induced cognitive decline; however, previous research is limited by lack of pretreatment data, longitudinal assessments, and a healthy comparison group. To examine the role of the ApoE gene in cognitive function in women with breast cancer receiving adjuvant therapy. The ApoE4 allele is associated with increased levels of oxidative stress markers. Because the brain is vulnerable to oxidative damage, the genetic variability of ApoE may inform and partially account for differences in cognitive decline noted in women receiving treatment for breast cancer. The sample (n=128) included three cohorts of postmenopausal women: women with breast cancer receiving chemotherapy plus anastrozole (n=37) or anastrozole (n=40) and healthy, age- and education matched controls (n=51). Cognitive function was evaluated with a battery of neuropsychological measures; domains evaluated included attention, executive function, psychomotor speed, visuospatial ability, visual learning/memory, and verbal learning/memory.

Women receiving chemotherapy plus anastrozole were assessed before initiation of chemotherapy, before initiation of anastrozole, and six months after anastrozole initiation. Women receiving anastrozole alone were assessed before initiation of anastrozole and six and 12 months after anastrozole initiation. Healthy controls were assessed at comparable time points. Blood or saliva samples were collected from all subjects and DNA was extracted. Subjects were genotyped and classified based on the presence or absence of at least one ApoE4 allele. Descriptive statistics and analysis of change scores were carried out using SPSS Statistics 19.0. In women receiving chemotherapy plus anastrozole, the interaction for ApoE4 revealed a strong trending decline in psychomotor efficiency from pretreatment to six months post-therapy initiation (p=0.06). These results suggest that the ApoE4 allele may contribute to cognitive function in postmenopausal women with early stage breast cancer receiving adjuvant therapy. Additional longitudinal analyses are pending to examine the impact of the ApoE4 allele on cognitive function over the 12 month post-therapy initiation period.

1421112

A PILOT STUDY ON THE EFFECTS OF ACUITY TOOL IMPLEMENTATION IN AN ONCOLOGY CLINICAL RESEARCH CENTER.

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Underwriting/Funding Source: Roswell Park Cancer Institute

Objective: The objective of this pilot study was to assess clinical research nurses' perception of job satisfaction following the creation and implementation of an acuity-based staffing tool in an oncology clinical research center.

The significance of this study was to qualitatively analyze the job satisfaction of the clinical research nurse following a team approach to creating an acuity tool. The study may encourage nurse leaders to include nurses in problem solving issues that can arise in any given healthcare setting. It increases the awareness and importance of distributing patient workload equitably among nurses in an ambulatory oncology setting. The need for a more effective process to patient assigning was identified by the nursing staff of the clinical research center. The purpose of implementing an acuity tool was to accomplish a system for assigning patients to nurses based on the complexity of the research center's staff mix and its oncology patients receiving investigational chemotherapy/biotherapy treatments in this unique setting. The tool was designed with the assistance of the clinical research nurses in the center and was based on the number of tasks each patient would require per visit. The goal was to give an accurate daily measure of the "workload" in the center, divide the workload equitably, and determine if it affected the nurses' perception of job satisfaction. The theoretical framework used to guide this study was Transformational Leadership Theory. This study used a quantitative research method. Data collection was obtained through the use of a paper survey both pre and post implementation of the acuity tool. The analysis of data was performed using descriptive statistics. The conclusion of this pilot study indicates that the implementation of an acuity-based staffing tool in an oncology clinical research center had an (77%) increased effect on nursing satisfaction. The transformational leadership application that encourages nurses to participate in creating change in their unit based on their own perceptions and experience has allowed the clinical research center to develop a unique acuity tool based on the particular needs of the patients to improve the system of workload distribution.

1421542

SOLVING PRACTICAL PROBLEMS WITH INNOVATIVE METHODS: PREDICTING CANCER INCIDENCE BY REVEALING SPATIOTEMPORAL PATTERNS.

Ari Voutilainen, PhD, University of Eastern Finland, Joensuu, Finland; Paula R. Sherwood, RN, PhD, CNRN, FAAN, University of Pittsburgh, Pittsburgh, PA; Katri Vehviläinen-Julkunen, PhD, University of Eastern Finland, Kuopio, Finland

Underwriting/Funding Source: University of Eastern Finland

Objective: The learner will identify a new way to examine relationships between causes of cancer and its incidence.

Reducing the incidence rates of cancer is important to oncology nurses, who are vital in initiating screening practices and treating persons with cancer. The purpose of this presentation is to introduce an analytic technique from the field of ecology which has the potential to identify associations between population-level cancer-causing agents and cancer incidence. This technique can help oncology nurses target interventions more precisely at specific populations. It is known that cancer incidence vary by individual factors. Population-level reasons for the variation are not as well established. Identifying these reasons is vital in making decisions regarding allocation of screening and nursing resources. The method presented is principal coordinates of neighbor matrices (PCNM). It enables evaluation of spatiotemporal distribution of cancer and causative agents. An example of using PCNM will be presented by investigating infectious diseases and female cancer incidence in Finland, 2010. Finland is distributed into 20 hospital districts. Latitudes and longitudes of these districts were used as initial values in the PCNM. The PCNM vectors resulted were used as explaining variables together with the incidence of infectious diseases in a linear regression model. The model explained 77% of the original variation in cancer incidence. Results indicate strong spatial structuring of cancer incidence in Finland and the validity of PCNM to studying cancer incidence. The advantage of PCNM over current analytic approaches is that it can be: a) applied to any set of sites providing a good coverage of a geographical sampling area and b) performed without presuming associations a priori. The present approach to the analysis of cancer-causative agent relationships has great potential to reveal new associations. Moreover, there is no need for pre-analyzing correlations between independent and dependent variables. This transfers resources, such as time, from preparing actions to interpreting results. As a result, it may be possible to reliably forecast cancer incidence without carrying out expensive, time-consuming, and laborious surveys. This is potentially clinically highly relevant in terms of preventive actions.

1421706

PONATINIB IN THE TREATMENT OF CHRONIC MYELOID LEUKEMIA AND PHILADELPHIA CHROMOSOME-POSITIVE ACUTE LYMPHOBLASTIC LEUKEMIA: REVIEW OF EFFICACY AND MANAGEMENT OF SIDE EFFECTS.

Mary Joy Liboon, BSN, RN, OCN®, University of Texas MD Anderson Cancer Center, Houston, TX; Alexandra K. Probst, PA, University of Texas MD Anderson Cancer Center, Houston, TX; Stephanie Lustgarten, ARIAD Pharmaceuticals, Inc., Cambridge, MA; Maureen Curran, ARIAD Pharmaceuticals, Inc., Cambridge, MA; Frank Haluska, MD, PhD, ARIAD Pharmaceuticals, Inc., Cambridge, MA; Jorge Cortes, MD, University of Texas MD Anderson Cancer Center, Houston, TX

Underwriting/Funding Source: ARIAD Pharmaceuticals, Inc.

Objective: The objectives of this presentation are to review the efficacy and safety of ponatinib, a pan-BCR-ABL inhibitor, in

patients with chronic myeloid leukemia (CML) or Philadelphia chromosome-positive acute lymphoblastic leukemia (Ph+ ALL) participating in a pivotal phase 2 clinical trial.

Side effects associated with ponatinib (e.g., rash and dry skin) will be discussed, with a focus on nursing practices for managing these adverse events. Patients with CML or Ph+ ALL who are resistant/intolerant to dasatinib or nilotinib or who have the T315I BCR-ABL mutation have very few treatment options. The objectives of this phase 2 study were to evaluate the efficacy and safety of ponatinib in these patients. This is an ongoing phase 2 registrational clinical trial with 449 enrolled and treated patients. ClinicalTrials.gov: NCT01207440. The primary efficacy endpoint is major cytogenetic response (MCyR, chronic phase [CP] CML) or major hematologic response (MaHR, advanced phase [AP] or blast phase [BP] CML and Ph+ALL). Safety monitoring includes collection of adverse events, including timing, duration, and management of these adverse events. In the overall study, median follow-up at the time of analysis (27 April 2012) was 10 months. Ponatinib demonstrated significant clinical activity in this patient population. Of 267 patients with CP-CML, 54% achieved MCyR. Among 83 patients with AP-CML, 58% achieved MaHR. Of 94 patients with BP-CML/Ph+ ALL, 34% achieved MaHR. The most common treatment-related adverse events (all patients) were thrombocytopenia (35%), rash (32%), and dry skin (30%). Rash and dry skin were mostly grade 1 or 2 in severity. One CP-CML patient discontinued due to grade 2 exfoliative rash.

1421770

AN INNOVATIVE REPRODUCTIVE HEALTH TRAINING PROGRAM FOR ONCOLOGY NURSES.

Susan Vadaparampil, PhD, Moffitt Cancer Center, Tampa, FL, and University of South Florida, Tampa, FL; Nicole Hutchins, Moffitt Cancer Center, Tampa, FL; Gwendolyn Quinn, PhD, Moffitt Cancer Center, Tampa, FL, and University of South Florida, Tampa, FL; Alice R. Boyington, RN, PhD, Moffitt Cancer Center, Tampa, FL

Underwriting/Funding Source: National Cancer Institute

Objective: To increase critical quality of life discussions on reproductive health and fertility between oncology nurses and AYA cancer patients.

Reproductive health and fertility preservation discussions with newly diagnosed AYA cancer patients. Recent improvements in cancer treatments have led to increases in cancer survivors from ~ 9.8 million in 2001 to ~10.9 million in 2006. This number has increased three-fold among Adolescent and Young Adult (AYA) populations. This growing cohort requires a more critical examination of quality of life issues in survivorship, including reproductive health and fertility. It is no longer enough to have merely survival – quality survival is required, and that initiative begins at the time of a patient's diagnosis. Despite evidence that patients want information about future fertility and reproductive health, our research has found large gaps between recommended and actual clinical practice related to the discussion of reproductive health and fertility preservation options with AYA cancer patients. The Fertility Reproduction and Cancer Training Institute for Oncology Nurses is a Moffitt Cancer Center initiative, funded by the National Cancer Institute dedicated to educating nurses in the oncology care setting on reproductive health issues in AYA for patients. This web-based training program for oncology nurses includes a national team dedicating to providing state of the art, evidence-based reproductive health and fertility information and skills to oncology nurses. The program topics include: physiological aspects of fertility/sterility and cancer treatment, psychological significance of becoming a parent, and communication issues surrounding reproductive technology and other family building options. Our recent studies of oncology care providers demonstrate physicians are not referring AYA patients for reproductive health related consults. Additional studies show nurses play a key role in the care of AYA cancer patients and compared to other health care providers, are more likely to have multiple interactions with patients prior to the initiation of cancer treatment. As such, oncology nurses are in an ideal position to discuss quality of life issues such as fertility and reproductive health with patients. This initiative provides an example of the partnership needed between researchers and clinicians to enhance educational opportunities for oncology nurses that help promote improvements in the quality of life of patients diagnosed with cancer.

1421806

ASSESSMENT OF ONCOLOGY ADVANCED PRACTICE PROVIDERS' CRITERIA FOR INCLUSION IN A CLINICAL LADDER PROGRAM TO PROMOTE PROFESSIONAL DEVELOPMENT IN TWO ACADEMIC MEDICAL CENTERS.

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Objective: This research will serve as the initial step in the creation of a clearly defined career development pathway for oncology Advanced Practice Providers (APP's).

Ongoing professional development and recognition of clinical expertise are critical to the advancement and retention of APP's. APP's have identified barriers to professional development as a source of job dissatisfaction. Professional clinical ladders help motivate professionals to advance skill acquisition and participate in evidenced based research initiatives. Initial focus groups of APP's within the cancer centers of two large medical centers in the Northeast, indicated that APP's supported the creation of a clinical ladder program to promote professional development. The purpose of this study is to identify the criteria that Oncology APP's view as essential in the development of a clinical recognition program within two academic medical cancer centers. The Dryfus' skill acquisition model and Benner's Novice to Expert model will be used as the theoretical frameworks for the development of a clinical ladders program for APP's. A survey will be undertaken to assess the criteria that APP's view as valuable and critical for inclusion in this clinical recognition program. A web-based survey will be distributed to all APP's (approximately 80) practicing in the Cancer Centers' inpatient and outpatient facilities. Descriptive data solicited will include: years of experience, years within the institution, level of education, prior participation in clinical ladder programs, interest in clinical ladder participation, level of satisfaction with professional development opportunities within the institution and perceived barriers to professional development. APP's will be asked to indicate current involvement in continuing education, research initiatives, presentations, publishing and committees. APP's will be asked to rank several professional activity criteria for inclusion in clinical ladder. We anticipate a fifty-percent participation rate from each institution, based on focus group participation. The data obtained will be analyzed both collectively and by institution. An Oncology APP professional development committee will be established with representatives from each sub-specialty area. The committee will utilize the findings from this survey as the foundation for the development of a clinical ladder framework. A process for implementation and evaluation will be developed.

1421967

A QUALITATIVE STUDY OF CANCER PATIENTS' AND CAREGIVERS' PERCEPTIONS OF A WEB-BASED INTERVENTION.

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MSc, PhD, University of Michigan, Ann Arbor, MI; Lawrence C. An, MD, University of Michigan, Ann Arbor, MI

Underwriting/Funding Source: National Cancer Institute (#R21CA138725)

Objective: Objective is to gain more knowledge of cancer patients' and caregivers' perceptions of a web-based intervention.

There is growing interest in technology to deliver nursing interventions to more patients and caregivers at a lower cost. With the nursing shortage and increasing cost of health care, more innovative ways are need to deliver nursing care. There has been little in-depth, qualitative information on patients' and caregivers' experience with web-based interventions. The purpose of this study was to obtain in-depth information about cancer patients' and their caregivers' positive and negative perceptions of web-based programs. Family Systems Theory guided the study. A qualitative study, that was part of a larger web-based intervention study, was used to obtain data. The sample consisted of patients with lung, colorectal, breast, or prostate cancer (N=16) and the majority of their caregivers (N=12). A structured interview guide was used, and it asked participants to describe their perceptions of the web-based intervention; what they liked, disliked, or would change; and how the web-based intervention affected their dyadic communication. Participants were obtained from two cancer centers in the Midwest. A research nurse interviewed willing participants by telephone after they completed the web-based intervention. Data was entered into the NVivo9 software program and independently content analyzed by two researchers. Interview texts were coded and sorted by themes. Inter-rater reliability was obtained and consensus was used if differences emerged between raters. The majority of patients and caregivers were positive about participating in a web-based intervention. Positive aspects were: convenience and ability to complete at home, the dyadic nature of the program, that it fostered communication, and provided information. Only a few negative responses were given: program length and repetitive information. The only change recommended was to add information on symptom management. In regards to the program's effect on their communication, participants said it fostered openness, sharing, and deeper communication about difficult topics. Because dyads were positive about their web-based experience, implications for practice are that dyadic web-based interventions could be used to supplement to in-person care, and are an innovative way to provide information to both patients and caregivers, and to promote their dyadic communication.

1422023

RELATIONSHIPS AMONG SYMPTOMS, BRAIN-DERIVED NEUROTROPHIC FACTOR (BDNF), DAILY ACTIVITIES, SELF-CARE, AND QUALITY OF LIFE IN BREAST CANCER SURVIVORS.

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Underwriting/Funding Source: University of Kansas, PhD student: University of Delaware Neuroendocrine lab BDNF paid for supplies and completion of genotyping

Objective: Explore the use of the presence of the BDNF Val-66Met SNP as a genetic indicator of susceptibility of ongoing cancer symptoms.

Ongoing symptoms are a problem for breast cancer survivors and information is limited about possible objective physiological markers. The primary research question: Is there a significant relationship between symptom occurrence and severity in breast cancer survivors and the presence or absence of the BDNF Val-66Met SNP? Secondary research questions (RQs) are: (a) What are the occurrence and severity of symptoms among breast cancer survivors after the completion of their cancer therapy regimen? (b) Are there significant relationships among symptom occurrence and severity, daily activities scale ratings (DARS), and health-related quality of life (HRQOL) and other variables? (c) What self-care methods are used by survivors to alleviate symptoms, and what are the survivors' perceptions of the usefulness of these self-care methods? This study had two phases. Phase 1 (n = 214) allowed for a purposive sample for Phase 2. Phase 2 addressed the primary RQ using two groups (a low symptom group scoring less than or equal to 14 on the Therapy Related Symptom Checklist (TRSC), n = 25, and a high symptom group with TRSC scores of 23 and higher, n = 26). Secondary aims were investigated using two other self-reported measures: DARS and HRQOL. All tools had good internal consistency in this study usage (Cronbach's α DARS 0.70, HRQOL 0.90, and TRSC 0.93). Validity is supported through the literature, particularly the work of P.D. Williams and colleagues. Data analyses included cross-tabs, logistic regression as well as descriptive and content analyses. Significant findings included: 1) lower TRSC scores associated with BDNF Val66Met SNP; 2) subjects over 60 had more difficulty with daily activities ($p<0.01$); 3) higher levels of education were related to lower scores on the TRSC and DARS; 4) treatment type had no impact on DARS or HRQOL scores. Logistic regression odds rations, 24.95 for education and .022 for treatment type, suggest that the odds of having a low TRSC score are increasingly greater as education increases and are diminished if the type of treatment included chemotherapy.

1422083

A RETROSPECTIVE STUDY TO EXAMINE BIOMARKERS OF INFLAMMATION IN MAMMARY TISSUE IN WOMEN WITH BREAST CANCER AS COMPARED TO WOMEN AT INCREASED RISK OF BREAST CANCER.

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Objective: To compare markers of inflammation in mammary tissue from women with breast cancer to women at increased risk of breast cancer development.

Biomarkers of inflammation in mammary tissue may be consistent predictors of breast cancer development in women at increased risk. It is hypothesized that the inflammatory cellular environment drives the initiation and development of carcinogenesis. Random periareolar fine needle biopsy (RPFNA) provides a cellular snapshot of the breast microenvironment. RPFNA can be performed by a nurse practitioner and may be one of the most important tools in breast cancer early detection in the future. RPFNA has been prospectively validated to predict a 5.6 x fold increase in short-term breast cancer risk in high risk women. RPFNA cell counts increase in correlation to abnormal pathology as computed by the Masood cytology score. This score is based on six descriptors: cellular arrangement, pleomorphism, myoepithelial cell, anisonucleosis, nucleoli, and clumping. A total score correlates with these characteristics and the presence or absence of atypia. The purpose of this retrospective longitudinal study was to determine the predictive value of cytologic biomarkers of inflammation in mammary tissue. The clinical problem remains that women, especially those at high risk of breast cancer development do not have diagnostic aids beyond imaging and clinical examination, and would benefit from cytological biomarkers that inform their short-term risk of breast cancer. A schema exists that postulates a bidirectional interaction between tumor associated macrophages and inflammation from breast carcinomas and cells in their environment that implicate several signaling pathways and transcription

factors. A retrospective, longitudinal review was conducted of RPFNA samples obtained over time. Subjects were participants in an IRB-approved study that examined sequential cytologic samples from 2005 to present. Based on their Masood score , patients were voluntarily eligible to return for six- or twelve-month follow-up visits; some patients had undergone the procedure up to 8 times. A one-way ANOVA was used to test the presence or absence of inflammation in mammary tissue between women with and without breast cancer. A significant relationship was noted $F(2,466)=3.55$, $p=0.029$ in women with breast cancer. Findings were not significant when comparing the two breasts, $F(1,467)=1.03$, $p=0.311$ suggesting that an overall field effect exists that predicts breast cancer.

1422174

DEVELOPMENT OF A FAMILY-COMMUNICATION AND DECISION-SUPPORT INTERVENTION FOR WOMEN THAT CARRY A BRCA1 OR BRCA2 MUTATION AND THEIR HIGH-RISK RELATIVES.

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Underwriting/Funding Source: Robert Wood Johnson Foundation–Nurse Faculty Scholars Program

Objective: To conduct formative testing and refine the content of a family-communication and decision-support intervention for mutation carriers and high-risk relatives using focus groups and content expert feedback.

Genetic predisposition accounts for 5-10% of breast cancer cases. Genetic testing enables mutation carriers to make decisions about managing their cancer risk (e.g., risk-reducing surgery) and significantly contributes to effective cancer management and control. Use of genetic testing among cancer-free mutation carriers is <50%, indicating that high-risk families do not receive adequate support for communicating test results, coping with cancer risk, and deciding about use of genetic testing. The purpose of this study is to develop a family-based communication and decision-support intervention for mutation carriers and high-risk relatives. The intervention aims to: (a) increase knowledge of breast cancer genetics; (b) decrease decisional conflict about genetic testing; (c) increase problem-based coping related to hereditary cancer risk; and d) increase family communication about genetic testing. The intervention is based on the integration of the family adaptation in genetic illness model, genetic testing from a stress and coping perspective, and decision-making for hereditary susceptibility to breast cancer. Focus groups will consist of N=24 participants (either dyads of one mutation carrier and one female relative, or mutation carriers whose relatives decline participation). Eligible women: 1) used genetic testing and receive positive test results (mutation carriers); 2) are older than 18 years; 3) speak English; 4) have at least one female relative who has ≥10% of carrying the same mutation, determined by pedigree analysis. Female relatives may or may not have had genetic testing. Qualitative data obtained from content experts and focus groups are transcribed verbatim and analyzed for content. The intervention has been developed as four power point presentations and was presented to content experts and one focus group with mutation carriers. Additional recruitment efforts are underway from a high-risk genetics clinic affiliated with a Comprehensive Cancer Center. At the end of the presentation participants were interviewed according to an IRB-approved Focus Group Interview Guide and completed a demographics survey. Intervention efficacy will be tested with a new sample of mutation carriers and high-risk relatives.

1422181

USE OF EVIDENCE-BASED PRACTICE MENTORS AS A TOOL FOR CLINICAL NURSE SPECIALISTS TO PROMOTE EXCEPTIONAL CLINICAL PRACTICE.

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Objective: To describe the use of evidence-based practice mentors to bridge the gap between research and clinical practice.

Nurse researchers spend countless hours discovering interventions that lead to improved outcomes. If clinicians cannot put these into practice, evidence-based practice (EBP) becomes a mere catch phrase. The use of trained EBP mentors can encourage clinicians to question current practice and teach them how to find, critically appraise and use the best evidence. EBP has shown to improve health while decreasing morbidity and mortality. The goal of the Institute of Medicine's (IOM) Roundtable on Evidence Based Medicine is to have 90% of clinical decisions supported by accurate, timely and up-to-date information based on the best available evidence by the year 2020. Facilities across the nation struggle with how to implement EBP. Designing a program that incorporates the use of EBP mentors is an effective means of creating a culture where EBP is optimized. The Oncology Clinical Nurse Specialists (CNSs) attended an intensive immersion program on EBP. They were educated in depth on the EBP process as well as ways to incorporate EBP into their institution. Each CNS had practice with developing a project from beginning to end with the mentorship of national leaders in EBP. Following the immersion, each participant was deemed an EBP mentor. The EBP mentors were then challenged to take their knowledge back to the institution and develop an EBP program, incorporating EBP into all areas of practice from policy and procedure development to task force projects to professional development programs. The CNSs meet regularly to discuss how we can measure the impact of EBP mentors. Determining the number of EBP projects in which nurses are involved will be one measure. Assuring that all clinical decisions are based on evidence and not past practice will be crucial. When this is accomplished more discreet measurements such as length of stay, patient satisfaction and staff satisfaction can be measured. Practice related to nurse sensitive outcomes will not be judged based on tradition, but on evidence. Researchers and practitioners must come together to produce and implement evidence regarding best practice. The use of EBP mentors fills the gap that stands between the evidence and the practice.

1422276

FEASIBILITY OF A SYMPTOM MANAGEMENT INTERVENTION FOR ADOLESCENT STEM CELL TRANSPLANT PATIENTS.

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Underwriting/Funding Source: Dan L. Duncan Cancer Center Pilot Project Grant (P30CA125123)

Objective: To describe the feasibility and fidelity of the EAT! intervention among adolescent HSCT patients during the first 60 days post hospital discharge.

Patients undergoing hematopoietic stem cell transplantation (HSCT) can experience multiple, severe, and prolonged gastrointestinal side effects that can lead to poor oral intake. Once discharged from the hospital, HSCT patients are required to manage their ongoing gastrointestinal symptoms and eating issues. Eating After Transplant (EAT!) is an innovative intervention delivered via a cell phone to educate patients upon HSCT hospital discharge on self-initiated interventions to manage gastrointestinal symptoms and promote eating. The primary aim is to examine the feasibility (acceptability) and fidelity (usability and competence) of the EAT! intervention during the first 60 days post HSCT hospital discharge. The Symptom Management Theory (SMT) states that symptom experiences, symptom management strategies, and outcomes are interrelated and a full understanding of each component is essential to minimize symptom distress. This study focuses on the evaluation of a symptom management strategy. Ten of sixteen adolescents who have engrafted from a first time allogeneic HSCT have been recruited to the study and recruitment will be completed this summer. This pilot study is using a repeated measures design to collect data at baseline (hospital discharge) then 20, 40, and 60 days post HSCT hospital discharge. Feasibility (acceptability) is being evaluated by the EAT! Feasibility Scale, which is based on six questions rated on a 5-point Likert scale. Fidelity (usability) is being measured by the EAT! Fidelity Scale, which includes three questions rated on a 5-point Likert scale. Fidelity (usability) is also be monitored by a tracking device recording the type and time of information reviewed by participants. Fidelity (competence) is being measured by the time of orientation and independent demonstration of locating specific information within the EAT! intervention. Descriptive statistics will be used to describe the feasibility and fidelity information, while repeated measures analysis of variance will be used to examine the differences of scores across time. Preliminary findings show high acceptability, moderate usability, and excellent competence. Evaluating interventions will identify effective resources to promote symptom management. The EAT! intervention can empower patients and ultimately enhance self-care. This intervention has the potential to expand to additional symptoms and other patient groups.

1422335

END OF LIFE CANCER CARE: NURSE CHARACTERISTICS AND COMMUNICATION CONFIDENCE.

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Underwriting/Funding Source: National Cancer Institute 5P01CA138317

Objective: Viewer will list one way confidence can be enhanced when caring for cancer patients.

Cancer communication has been identified as a priority by the NCI in a recent monograph emphasizing the contextual complexities of cancer care. The purpose of this research was to identify nurse characteristics that influenced self-reported communication confidence/effectiveness and comfort with communication topics when caring for cancer patients at end-of-life. The National Consensus Project for Quality Palliative Care served as the conceptual framework for this study, suggesting factors that might influence optimal end-of-life communication. 57 nurses caring for cancer patients at end-of-life were recruited as part of the Partners in Hospice Care project (51 Female; age 24-71; 2 Hispanic, 2 Native-American, 3 Asian, 2 Black, 48 White). Self reported data included professional qualifications, communication effectiveness/confidence (Parle; Roberts), stress levels (Nursing Stress Scale), burnout (Maslach Burnout Inventory), spirituality (Parsian Spirituality questionnaire), mindfulness (Mindful Attention Awareness Scale), and open-ended questions about uncomfortable/comfortable communication topics. Education and experience varied (3 diploma, 35 associate, 15 bachelors, 2 masters; years as a nurse 1-46). Ten nurses held advanced certification (7 CHPN, 2 OCN, 1 ACRN). Overall nurses rated themselves as generally effective (Mean 65.46 out of 90) and confident communicators (Mean 31.86 out of 45). However, 68% wanted more communication skills education. Nurses considered themselves highly spiritual (Mean 94.92 out of 116), moderately mindful (Mean 40.16 out of 90, higher=less mindfulness), experiencing moderate stress (Mean 63.19 out of 136) with low burnout levels (Mean 13.62 out of 42). Using a significance level of .10 due to the exploratory nature of these data, self-rated communication confidence ($F(6,29)=2.60, p=.03$) was predicted by professional certification ($<\beta>=.35, t=1.99, p=.05$) and total years as a nurse ($<\beta>=.34, t=1.89, p=.06$), whereas self-rated effectiveness ($F(6,30)=2.68, p=.03$) was only predicted by spirituality ($<\beta>=.38, t=2.14, p=.04$). Open-ended questions demonstrated that nurses were uncomfortable discussing patient/caregiver anger and denial of imminent death/worsening prognosis; nurses felt most comfortable discussing physical symptoms and the process of somatic death. These findings suggest emotionally laden discussions present greater communication challenges than discussions about physical care and symptoms. Additional cancer communication education, requested by the majority of nurses, and obtaining advanced certification may help less experienced nurses feel more adept when addressing difficult end-of-life cancer communication issues.

1422409

NATURALISTIC SYMPTOM REPORTING BY TELEPHONE: DESCRIPTIVE EXAMINATION IN ADULT ONCOLOGY.

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Underwriting/Funding Source: Faculty Research Support Grant University of Rochester

Objective: Describe 3 prevalent symptoms reported by telephone.

Symptom management is an essential component of oncology nursing practice. Despite an increasing awareness of symptom reporting by telephone and the development of symptom management protocols to be administered by telephone, there is minimal descriptive data based information on symptom prevalence as reported by telephone in adult ambulatory oncology. There has been extensive research on the prevalence of symptoms in oncology using a comprehensive checklist measurement. In contrast, patient initiated telephone calls reflect spontaneous unstructured reports. The specific aims were to describe the symptoms that are reported by telephone and to examine symptoms reported by specific cancer diagnostic group. The organizing framework was based on measurement theory, examining unstructured open-ended patient symptom reports. A retrospective descriptive design was used. Data were obtained by collecting all documented telephone calls placed over a 4-month interval. An investigator developed instrument

was designed based on the literature. The content coding was developed from the symptoms listed in the ONS Telephone Triage Manual. Extensive training was done for all coders and coding for symptoms was double checked by the investigator. Descriptive statistics were generated to examine frequency distribution, means and range. A total of 2,378 symptoms were reported by 563 individuals. The individuals were 56% female, M=60 years old, and had a wide range of cancer diagnoses. There were 62 different symptoms reported. Pain was reported by 214 different individuals, more than twice the number who reported any other symptom. Symptoms reported by at least 10% of the sample included pain (38%), nausea (16%), fatigue (16%), swelling (12%), diarrhea (12%), weakness (12%), vomiting (10%), and dyspnea (10%). Results will also be presented for cancer diagnostic group. The collection of data in this naturalistic framework provides insight on the symptoms that prompt individuals to the self care action of symptom reporting, although the underlying reasons remain unknown. Empirical information on symptom prevalence by telephone report can be used by clinicians to prioritize evidenced based telephone protocols. Pain emerged clearly as the symptom most often reported by telephone.

1422493

RECRUITING YOUNG BREAST CANCER SURVIVORS AND HIGH-RISK RELATIVES TO A RANDOMIZED TRIAL USING A STATE CANCER REGISTRY.

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Underwriting/Funding Source: Centers for Disease Control and Prevention

Objective: The University of Michigan School of Nursing (UM) and the Michigan Department of Community Heath (MDCH) received funding from the Centers for Disease Control and Prevention to utilize the Michigan Cancer Surveillance Program registry in order to identify young breast cancer survivors (YBCS) and their high-risk relatives.

Few studies utilized a state-wide cancer registry to reach YBCS and their high-risk relatives. The present report focuses on sample recruitment. Breast cancer survivors have a 2-fold higher risk of developing a second breast cancer, while unaffected first- and second-degree relatives of YBCS have respectively a 2.3 and 1.5 increased relative risk for breast cancer. This randomized trial will test the efficacy of two versions (targeted vs. enhanced tailored) of an intervention that aims to increase breast cancer screening among YBCS and their high-risk female relatives. The intervention is based on the theory of planned behavior. Evidence-based components were added to address specific needs of YBCS and high-risk relatives. The study will recruit a random sample of 3,000 YBCS from cancer registry data, stratifying for black and medically underserved women. Eligible YBCS were diagnosed with unilateral or bilateral invasive breast cancer or DCIS between 20-45 years old, were Michigan residents at the time of diagnosis, can read English, and can provide informed consent. Each YBCS receives an invitation letter and a baseline survey that have been approved by the UM and MDCH IRBs, and the Scientific Review Board of the cancer registry. No identifiable information is released to the research team until a signed consent from the YBCS is received. Based on information obtained from baseline surveys, MDCH identifies up to two eligible first- and/or second- degree female relatives per YBCS. MDCH will ask the YBCS to contact the high-risk relatives, and disseminate informed consent forms and the baseline survey. Relatives' returned signed consents and baseline surveys will be the first time their identifiable information will be available to UM and MDCH. By September 2012, it is anticipated that all baseline YBCS surveys will be returned and up to two high-risk relatives per YBCS will be identified. Response rates for YBCS, demographic information for YBCS, and recruitment lessons learned will be presented.

1422512

THE ROLE OF SPIRITUALITY IN NEURO-ONCOLOGY FAMILY CAREGIVERS.

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Underwriting/Funding Source: National Institute of Health

Objective: The learner will examine whether caregivers' spirituality changes over the year following care recipients' diagnosis of a primary malignant brain tumor (PMBT) and examine the impact of spirituality on caregiver depressive symptoms and anxiety.

This study supports the ONS research agenda of improving outcomes for cancer caregivers by providing a better understanding of caregiver spirituality and associated levels of depression and anxiety. Spirituality levels could be used as a predictive factor to identify caregivers at risk for negative outcomes. Family caregivers of PMBT patients face a dire diagnosis with significant morbidity and mortality. Spirituality has been shown to be an important coping mechanism for people in crisis, yet little is known regarding how an individual's spirituality changes when caring for a person diagnosed with cancer and whether spirituality influences emotional distress. The aims of this analysis in family caregivers of persons with PMBT were to 1) determine if caregivers' spirituality changes over the course of the disease trajectory and 2) examine the impact of spirituality on caregiver depressive symptoms and anxiety eight months after diagnosis. The adapted Pittsburgh mind body center model provided the theoretical framework for this study. Family caregiver-care recipient dyads (n=50) were recruited within a month of the care recipient's diagnosis. Data from telephone interviews at baseline, 4 and 8 months using the FACIT-Sp, CES-D, and sociodemographic-treatment questionnaires were included in analyses. ANOVA was used to evaluate change over time and linear regression to examine the role of spirituality in depressive symptoms and anxiety. The FACIT-Sp score (baseline mean=35.1; SD= 8.3; scale 0-48) did not change significantly across the disease trajectory. Regression analyses revealed higher spirituality was significantly associated with both lower depressive symptoms ($p<.01$) and lower levels of anxiety ($p<.01$) in caregivers at 8 months following diagnosis. Spirituality appears to be a stable characteristic during the care recipient's disease trajectory and may play an important role in caregivers' emotional health. Clinicians can use this information to identify caregivers at risk for negative outcomes and to develop targeted supportive interventions.

1422565

A RANDOMIZED PLACEBO-CONTROLLED STUDY TO MEASURE THE EFFECTS OF OMEGA 3 FATTY ACIDS ON ATROPHIC VAGINITIS IN BREAST CANCER SURVIVORS.

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Objective: To measure whether oral omega 3 could improve atrophic vaginitis in postmenopausal breast cancer survivors.

Symptoms of atrophic vaginitis are common, but more prevalent and severe in women treated for breast cancer. Atrophic vaginitis is an inflammatory condition that involves the lower genitalia and produces vaginal discomfort and pain. The purpose of this study was to examine a non-hormonal intervention for atrophic vaginitis in postmenopausal breast cancer survivors. Theory of unpleasant symptoms was used to explain the potential mediating effect of omega 3 on symptoms and performance outcomes. A randomized, double blind Phase II screening trial was conducted; this IRB-approved protocol accrued 52 breast cancer survivors with one or more complaints of vaginal atrophy. Participants underwent a vaginal exam at 0, 3, and 6 months, self-report questionnaires included Urogenital Atrophy Questionnaire, Female Sexual Function Index, Menopause Rating Scale, Center for Epidemiologic Studies in Depression Scale, and Brief Pain Inventory. These questionnaires were completed monthly. Biologic vaginal measures included parabasal level, bacterial flora, and pH. Preliminary data analyses (n=40) indicated that women on omega 3 had a significant change in presence of rugae at 6 months (p=0.063) and presence/type of bacteria (p=0.021) indicating positive effects in the vaginal environment; 'thought of pain with sexual activity' was statistically significant in the omega arm at 3 and 6 months (p=0.015 & p=0.016 respectively). Final analyses will be available in August 2012.

1422700

REASONS FOR UTILIZATION OF THE EMERGENCY DEPARTMENT (ED) AMONG WOMEN WITH METASTATIC BREAST CANCER (MBC) AT THE END OF LIFE.

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Objective: Reducing emergency department visits is a benchmark of quality palliative and end of life care. Despite evidence of its value, women with MBC often remain in active treatment until close to death, without integrated palliative care. Active treatment in this vulnerable population often creates side effects and/or medical emergencies requiring ED visits.

ED visits among women with MBC in the last six months of life places additional burden and stress on the patient and family and is a marker of poor quality palliative and end of life care. Assess the patient characteristics of, reasons for, timing in relation to treatment and outcomes of ED visits among women with MBC during the last 6 months of life. Donabedian's Quality of Care framework provides two basic methods for monitoring performance and quality in health care: 1) identifying when quality of care falls below that which is expected or desired or 2) finding issues that require further confirmation and documentation. We will attempt to better characterize emergency department visits in order to determine targets for quality improvement. A retrospective chart review of 100 consecutive patients, from 2009 through 2012, deceased from MBC who sought ED treatment in the last 6 months of life will be performed. Demographics, patient and disease characteristics, reasons for ED visits, proximity to treatment, outcomes and preventability will be tracked. To date, chart review of 37 patients has been completed. Data analysis will utilize descriptive and comparative analysis. Providing quality care should be a priority of all healthcare professionals. Particular attention to quality of care is especially important in a population of patients with cancer nearing the end of life because of the potential for misuse, overuse or neglect of available services. A byproduct of aggressive MBC treatment until death without integrated palliative care results in the need for ED visits, causing additional burden and stress at the end of life. In order to improve quality of care, we should better understand the pattern, frequency and outcome of ED use. These factors can be instrumental in providing guidance for breast cancer clinicians for more tailored patient and family counseling in order to prevent or limit ED visits.

1422752

DEVELOPMENT OF AN EVIDENCE-BASED BEST-PRACTICE GUIDELINE FOR THE CARE OF BREAST CANCER PATIENTS RECEIVING HORMONAL THERAPY.

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Objective: To establish a standardized best-practice Guideline for the Care of Breast Cancer Patients Receiving Hormonal Therapy.

Standardized evidenced-based practice guidelines establish thresholds for quality care to address symptom management and treatment sequelea in cancer patients. Establishing a Guideline for the Care of Breast Cancer Patients Receiving Hormonal Therapy addresses the many issues associated with that therapy--management of menopausal symptoms including vaginal dryness and hot flashes; bone health; diet and healthy weight; psychological adjustment; lymphedema management; screening for late side effects of treatment; safety bloodwork. Our Moores UCSD Breast Medical Oncology Division includes four physician-led practice teams (including oncology nurse practitioners) with various approaches to breast cancer care. Toward standardizing practice, a Guideline was drafted for the care of breast cancer patients receiving hormonal therapy. Based a comprehensive literature review grading available evidence, The Guideline matches treatment algorithms coupled to standards of care, professional practice guidelines and accepted symptom management strategies. The strongest-graded evidence provides the foundation for the Guideline. Members of the UCSD Breast Medical Oncology Division compiled and established the Guideline, then applied the Guideline to their practices. Using a best practice Guideline for the Care of Breast Cancer Patients Receiving Hormonal Therapy ensures measureable outcomes to evaluate consistency of interventions, patient teaching and associated metrics representing quality care delivery. To measure these outcomes, a chart audit schedule was established (6 charts/6 months). Members of the Breast Medical Oncology Division will review the Guideline yearly. As the Moores UCSD Breast Medical Oncology Division expands, increasing its patient census and adding new providers (physician and mid-level providers), practice guidelines will help ensure consistent quality care. The Guideline for the Care of Breast Cancer Patients Receiving Hormonal Therapy is the latest guideline added to the Division's policies and procedures. The Guideline also can be adopted by other breast oncology practices to ensure quality patient care.

1422801

CONTENT VALIDITY OF THE SEXUAL CONCERNS QUESTIONNAIRE–GYNECOLOGICAL CANCER.

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Underwriting/Funding Source: American Cancer Society

Objective: To evaluate the content validity of the newly developed Sexual Concerns Questionnaire-Gynecological Cancer (SCQ-GC).

Women with gynecological cancer experience a myriad of sexual problems as a result of the disease and treatment that may negatively affect their self-esteem, intimate relationships, and overall quality of life. Most measures of sexual concerns focus largely on physical dysfunction and do not contain the full range of sexual concerns that survivors may have. The 48-item Sexual Concerns Questionnaire-Gynecological Cancer (SCQ-GC) was developed to incorporate physical, psychological, and social sexual concerns reported in the literature. The purpose of this study was to evaluate the content validity of the new SCQ-GC. Sexuality is conceptualized as a multidimensional construct inclusive of physical, psychological, and social dimensions. The SCQ-GC includes items in each of these dimensions of sexuality, as well as communication with the health care provider. A descriptive design was used. A purposive sample of 20 gynecological cancer survivor experts and a panel of 9 health care and research experts experienced in gynecological oncology were recruited from a Cancer Center at a Midwest University Hospital. Panelists completed a content validity index survey, rating the relevance and clarity of each SCQ-GC item, and suggested item revisions and additions, as needed. Descriptive statistics were used to summarize participant characteristics. Item content validity indices (CVI) were calculated by computing the proportion of panel members who agreed on the item's relevance. Scale CVI was calculated as the mean across item CVIs. Similar item and scale indices were computed for clarity. One survivor expert was dropped due to large amounts of missing data. Item relevance CVIs ranged from .63-1.00, and for clarity, from .67-1.00. Scale CVIs were .91 for relevance, and .965 for clarity. Two items were revised to enhance clarity and 8 items were added based on panel suggestions. The SCQ-GC has acceptable content validity. Further psychometric testing (e.g., construct validity & test-retest reliability) will be carried out in a larger sample of gynecological cancer survivors. The SCQ-GC may aid in development of interventions addressing a broader range of sexual concerns compared to currently available sexuality measures.

1422804

RETURNING TO INTIMACY: LIFE AFTER BREAST CANCER. Judith A. Schreiber, PhD, RN, University of Louisville, Louisville, KY; Karen D. Turner, DNP, RN, University of Louisville, Louisville, KY; Anthony E. Dragun, MD, University of Louisville, Louisville, KY

Objective: Participants will be able to discover an educational intervention designed to address difficulties faced by breast cancer survivors in the areas of intimacy and sexual functioning.

Life following treatment for breast cancer frequently requires women to transition to a new "normal" in relation to their physical and emotional well-being. Intimacy and sexual dysfunction following treatment affects 30% to 50% of breast cancer survivors. Given the highly personal nature of intimate relations it is apparent that personal contact and teaching might better resolve these concerns rather than the often unsuccessful use of written information or telephone consultation. The purpose of this study is to examine the effects of a psycho-educational intervention on psychological well-being, distress, sexual adjustment and body image among survivors of breast cancer following treatment. Knowles adult learning principles form the guiding theoretical framework for this study. This framework suggests that adults learn best when information is provided on topics that are relevant, personal interaction is included and strategies for change are provided. The intervention is based on these concepts. The design is quasi-experimental. Thirty-six women who have completed initial treatment for breast cancer: surgery, chemotherapy, and/or radiation therapy will be asked to participate. A power analysis determined at n = 34, 80% power with a significance of .05 and a critical t of 2.03. The psycho-educational intervention will be delivered in two one-hour sessions: physical issues and emotional/psychological issues. The questionnaires will be administered prior to the beginning of the first session (T1). Repeated measures will be at one month post-intervention (T2) and 3months post-intervention (T3). Along with demographics of disease stage, treatment and use of support services, psychometrically sound instruments will be used to measure sexual adjustment, body image, psychological well-being, and distress. Repeated measures ANOVA and Pearson's correlations will be used to analyze data. Implications will include recommendations regarding the effectiveness of the intervention, proposed modifications and relationships among variables measured.

1422823

ONE PROJECT, MULTIPLE SCIENTIFIC REVIEWS: NAVIGATING THE JOURNEY. Judith A. Schreiber, PhD, RN, University of Louisville, Louisville, KY

Objective: Participants will be able to identify and utilize methods for successfully navigating through multiple scientific reviews associated with one research project.

The purpose of this presentation is to propose effective strategies for successfully navigating the journey through multiple committees in order to conduct one research project. Within health care there is increasing stringency related to those processes that are concerned with the protection of human subjects. Principal investigators are frequently required to apply to more than one review board for permission to access research participants. Academic institutions have their own institutional review boards and hospitals are increasingly developing similar boards and processes. Differing regulations regarding consent forms, views of scientific rigor, timeframe for approval, as well as required reporting relationships pose challenges for new and experienced researchers. An approach that can enable a problem free and timely process for gaining approval requires the early identification of potential data collection sites and scientific review policies. Details on each site that include information regarding levels of application (exempt, expedited, full), application forms, meeting days/times, submission deadlines, names of contact persons at each site and application submission process (electronic/ hard copy) can be outlined on the Schreiber Grid. A systematic approach to gaining approval through multiple institutional reviews for one project can enable researchers to initiate their research in a timely and efficient manner. The Schreiber grid provides the motivation and necessary information to plan for a process that is often considered secondary when designing projects. Early planning for multiple scientific reviews can decrease stress and streamline the approval process resulting in decreased time from study development to implementation. Use of the Schreiber Grid can identify potential conflicts between Scientific Review Committees and Institutional Review Boards early in the process, enabling the researcher to formulate acceptable solutions.

1422827

DEVELOPMENT OF A PILOT STUDY USING MOLECULAR PROFILING OF PATIENTS' TUMORS TO FIND POTENTIAL TARGETS AND SELECT TREATMENTS FOR THEIR REFRACTORY BREAST CANCERS. Gayle S. Jameson, RN, MSN, ACNP-BC, AOCN®, Virginia G. Piper Cancer Center, Scottsdale Healthcare, Scottsdale, AZ

Underwriting/Funding Source: Side Out Foundation

Objective: Primary objective is to compare progression-free survival (PFS) using a treatment regimen selected by molecular profiling (MP) of a patient's tumor with the PFS for the most recent regimen on which the patient experienced progression.

Although progress has been made in overall survival of patients with breast cancer, many continue to die of complications related

to metastatic disease. Clearly a new approach in treating advanced breast cancer is needed. Breast cancer is a complex family of diseases with individual molecular features and corresponding behaviors. Little is known regarding the unique molecular characteristics and patterns of each individual's breast cancer tumor cells. This study will prospectively identify potential molecular and proteomic targets within the tumors of 25 individuals with refractory, metastatic breast cancer, evaluate the Growth Modulation Index (GMI), and determine response rate and overall survival in patients whose therapy is selected by molecular profiling and functional protein pathway analysis. Design is based on the first ever prospective pilot study utilizing molecular profiling of patients' tumors to find potential targets and select treatments accordingly, in which this author was an investigator, and 8 of 18 patients (44%) with metastatic breast cancer demonstrated positive outcomes. This is an open-label, multicenter pilot study in patients with metastatic breast cancer. Eligible patients undergo a biopsy for tumor molecular profiling with IHC/FISH, DNA microarray and Reverse Phase Protein Microarray (RPMA) based protein pathway activation analysis. Treatment recommendations are made based on these results. Patients who have a GMI of > 1.3 are considered to have a positive response to the selected treatment. (GMI is calculated as the ratio of PFS on the selected treatment to the PFS of the patient's most recent prior treatment.) Study is nearing accrual completion. Data review and statistical analysis are pending. Results if positive will support additional studies using MP driven cancer treatment strategies. The history, design and implementation of this innovative study demonstrate that an advanced practice nurse in collaboration with oncologists and bench scientists can function as a principal investigator in molecular based treatment studies designed to improve patient outcomes.

1422907

A RANDOMIZED STUDY TO COMPARE THE EFFECT OF SHORT- AND LONG-TERM SCHEDULES OF CRYOTHERAPY ON THE INCIDENCE AND SEVERITY OF MUCOSITIS WITH HIGH DOSE MELPHALAN.

Misty Lamprecht, MS, RN, CNS, AOCN®, OSUCCC–The James, Columbus, OH; Karen Tackett, RN, BSN, OCN®, OSUCCC–The James, Columbus, OH; Joanne Lester, PhD, RN, CNP, AOCN®, OSUCCC–The James, Columbus, OH

Underwriting/Funding Source: The DAISY Foundation

Objective: The objective is to measure and compare the maximum mucositis grade after short- and long- term cryotherapy in patients receiving high-dose Melphalan.

High dose Melphalan, a chemotherapy known to cause mucositis, is used as preparative regimen for patients with multiple myeloma receiving stem cell transplants. The ONS Putting Evidence into Practice resource categorizes use of cryotherapy for patients receiving bolus dose Melphalan as likely to be effective in reducing mucositis. Evidence supporting this included a randomized clinical trial comparing no cryotherapy to 7 hours. Additional prospective studies showed shorter durations to also be effective. We developed a randomized clinical trial to compare the incidence and severity of mucositis between the current practice of 6 hours of cryotherapy to 2 hours based on previously cited evidence and the half-life of Melphalan. The theory of unpleasant symptoms was used as the conceptual framework for this study. Pain, changes in taste and difficulty with maintaining oral intake are associated with mucositis. Nausea, headache, toothache and chilling have been associated with prolonged cryotherapy. After enrollment, patients are computer randomized to treatment with either 2 or 6 hours of cryotherapy. Cryotherapy is standardized as the use of shaved ice - 1 ounce placed in the mouth, allowed to melt and then replaced. Compliance is monitored by the nursing staff. The patient completes an evaluation of the cryotherapy experience, as well as the Patient-Reported Oral Mucositis Symptom Scale daily, noting subjective symptoms. Mucositis is graded daily by the CNP's using the WHO Oral Toxicity Scale. Pain medication and nausea/vomiting are obtained from the medical record. All measurements are completed until Day +21 or discharge. A Cochran-Mantel- Haenszel chi-square test will be used to compare the proportion of patients who develop severe mucositis (Grade 3-4) between the treatment arms. 13 patients have signed consent for this study which is supported by a grant from The DAISY Foundation. Planned enrollment is 142. Current rate of enrollment is 2 per week. The results of this study have implications to change practice with this regimen as well as other regimens combining Melphalan with additional agents.

1422953

MALGLYCEMIA AND CLINICAL OUTCOMES IN THE HOSPITALIZED LEUKEMIA PATIENT.

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Objective: The goal of this study is to gain understanding of the role of malglycemia on clinical outcomes for hospitalized leukemia patients.

Malglycemia in hospitalized patients is a concern for individuals with and without diabetes. Malglycemia is defined as hypoglycemia (blood glucose <70 mg/dL), hyperglycemia (blood glucose ≥ 126 mg/dL), or glycemic variability (standard deviation of two or more blood glucose measurements ≥ 29 mg/dL).The etiology of abnormal glycemic variations can be multifactorial, related to disease processes, treatment regimens, and/or physiological and psychological response to stressors. The frequent utilization of steroids and total parenteral nutrition for treatment and symptom management places oncology patients at higher risk for hyperglycemia and subsequent adverse outcomes. The link between malglycemia and poor clinical outcomes has been well documented in the critically ill patient population. To date, few studies have examined the role of malglycemia in hospitalized oncology patient populations including leukemia patients. Oncology patients admitted to the hospital are at risk for malglycemia as a result of diabetes, prediabetes, cancer treatments, physiological, and psychological stress. Therefore, the purpose of this study is to compare clinical outcomes in the hospitalized leukemia patient with malglycemia to those with normoglycemia. The malglycemia orbital model will guide this study. A retrospective cohort design will be used. A total of 100 consecutive medical charts of oncology patients admitted for chemotherapy at a 750-bed hospital will be analyzed. We will identify leukemia patients with malglycemia based on above criteria. Primary outcomes will include number of neutropenic days, length of stay and documented infection/sepsis. Descriptive statistics and t-tests will be used to analyze the data. To date we have reviewed 50 medical records and are currently in the process of analyzing the data. Findings from this study will facilitate our understanding of the role of malglycemia on clinical outcomes in leukemia patients. Oncology nurses would be in a primary role to assess, monitor, and integrate evidence based interventions to manage malglycemia which ultimately improves quality of life for leukemia patients. Results of this pilot work will be used to inform future studies.

1423002

A CONCEPTUAL MODEL OF BIOBEHAVIORAL RESPONSE TO SYMPTOM MEANING IN PATIENTS WITH ADVANCED CANCER.

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Underwriting/Funding Source: National Institute of Nursing Research

Objective: The objective of this presentation is to present a conceptual model of biobehavioral responses to the meaning of symptoms in patients with advanced cancer.

The purpose of this project is to develop a conceptual model of biobehavioral responses to symptom meanings in patients with advanced cancer. For patients living with advanced cancer, managing multiple, concurrent symptoms is particularly challenging and associated with negative psychological responses, poor health, and increased health care utilization. Evidence suggests that possessing a negative/threatening meaning of one's cancer diagnosis is associated with poorer psychological and behavioral responses. However, no theoretical or conceptual models have been published that provide a framework to evaluate the extent to which symptom meaning influences psycho-behavioral responses. A biobehavioral approach is vital to explore the complex inter-relationships of psychological, behavioral, and biological responses to symptoms and to ultimately identify patients at risk for poor outcomes. Literature search of clinical, research, and theoretical manuscripts describing symptoms, cognitive representations, and stress and coping processes was performed. Three key theories (Stress, Coping, and Appraisal, Biobehavioral Pathways, and Illness Representations) were identified. A new conceptual framework integrating these theories with identified gaps in knowledge was developed. Various interventions have been developed to improve symptoms, psychological health, and quality of life. A hallmark of this literature is significant variability in response to these interventions. Identifying factors that influence whether or not patients engage in and respond to symptom management interventions has been identified as a high priority by the NCI and ONS. This conceptual model endeavors to describe those factors which include: "Antecedents", such as disease/treatment characteristics, internal factors (i.e., age, gender, personality), and external factors (i.e., education, support system); "Symptom Cognitions" including symptom representations and threat/challenge appraisals, "Psycho-Behavioral Responses" (i.e., distress, depression, anxiety, and coping behaviors); "Biological Responses" (e.g. immune dysregulations); and "Distal Outcomes" such as health status and health care utilization. This conceptual model provides a cogent framework for understanding meanings ascribed to symptoms and the contribution that meaning makes to psycho-behavioral and biological responses. Future research and clinical evaluation is needed to determine if understanding symptom meaning sheds light on coping processes in patients resistant to current interventions.

1423076

INDIVIDUALIZED STRATEGIES FOR THE MANAGEMENT OF CANCER-RELATED FATIGUE OF WOMEN WITH RECURRENT OVARIAN CANCER.

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Underwriting/Funding Source: R01 NR010735

Objective: By the end of this presentation, attendees will be able to describe the fatigue management recommendations most frequently adopted by women with recurrent ovarian cancer.

Cancer-related fatigue (CRF) is the most common symptom experienced by women with recurrent ovarian cancer and affects quality of life and function. There is evidence that self-care interventions such as exercise and nutrition can reduce fatigue severity. However, little has been documented about how these recommendations for CRF, which require much effort, are accepted by patients with recurrent disease. The purpose of this analysis is to: 1) identify the types of fatigue management recommendations adopted by women with recurrent ovarian cancer, and 2) describe how women adapt general recommendations into individualized goals and strategies for fatigue management. The Representational Approach to patient education provides guidance in how to help patients create individualized plans for better managing symptoms such as fatigue. Participants included in this ancillary analysis of data from an ongoing web-based ovarian cancer symptom management RCT (WRITE Symptoms) will have: 1) been randomized to the nurse-delivered intervention arm of the trial; and 2) selected fatigue as one of 3 target symptoms. The goal of the nurse-delivered intervention is to guide patients to complete a symptom care plan (SCP) for fatigue which includes individualized goals and fatigue management strategies. To date, 70 women randomized to the nurse-delivered intervention have selected fatigue as one of their target symptoms. Currently 54% of women (n=38) have completed care plans for fatigue. Descriptive analyses will be used to identify the fatigue management recommendations most frequently adopted by women with recurrent ovarian cancer. Content analysis of the SCPs will be used to generate common themes describing how the most frequently adopted recommendations are adapted into individualized plans. Categories of fatigue management recommendations and corresponding themes describing the individualization of CRF strategies will be presented. Even during good health, it is difficult to make lifestyle changes such as those often recommended for the management of CRF (e.g. exercise/diet). This study will provide insights on the challenges faced by women with recurrent ovarian cancer experiencing fatigue and how women personalize general CRF recommendations to fit their own goals and lifestyle in the context of recurrent disease and high symptom burden.

1423122

MANAGEMENT OF EVEROLIMUS-RELATED ADVERSE EFFECTS IN PATIENTS WITH ADVANCED PANCREATIC NEUROENDOCRINE TUMORS.

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Underwriting/Funding Source: Novartis Pharmaceuticals Corporation

Objective: To educate nurses with strategies to manage everolimus-associated adverse events (AEs) in patients with advanced pancreatic neuroendocrine tumors (pNET).

Management of everolimus-related adverse effects in patients with advanced pancreatic neuroendocrine tumors. Nearly 65% of pNET patients have metastatic disease at diagnosis. Due to the limited number of effective agents for controlling disease progression, the treatment of pNET represents a challenge. Everolimus, an oral inhibitor of mTOR, represents an effective treatment option. Everolimus-associated AEs reported in the RADIANT-3 trial in advanced pNET are described and the management strategies employed at our institution discussed. In the RADIANT-3 trial, everolimus (10 mg/day) demonstrated an increase in progression-free survival vs. placebo in patients

with progressing low- to intermediate-grade advanced pNET (11.0 vs. 4.6 months; P<0.001). The most common drug-related AEs included stomatitis (any stomatitis/oral mucositis/ulcers; 64% in the everolimus group vs. 17% in the placebo group), rash (49% vs. 10%), diarrhea (34% vs. 10%), fatigue (31% vs. 14%), and infections (primarily upper respiratory, 23% vs. 6%). Everolimus-associated stomatitis is distinct from that observed with chemotherapy and clinically resembles the more benign aphthous stomatitis. It occurs early in treatment and typically resolves spontaneously without intervention. Analgesia with various topical preparations can be used, although alcohol- or peroxide-containing mouthwashes should be avoided as they may exacerbate the lesions. Pneumonitis, characterized by non-infectious, nonmalignant infiltration of the lungs, is a class effect associated with mTOR inhibitors (12% in the everolimus group and 0% in the placebo group in RADIANT-3). Although it is reversible in some cases, respiratory AEs remain a concern in everolimus-treated patients. We typically withhold everolimus until respiratory symptoms (e.g., coughing) are resolved. Diarrhea and fatigue are typically treated symptomatically. Everolimus is withheld for thrombocytopenia below 75000/mm3 until recovery, and rechallenge is typically initiated with 5 mg/day with subsequent reescalation to 10 mg if tolerated. Hyperlipidemia and hyperglycemia, reflecting inhibition of mTOR-regulated glucose and lipid metabolism, are monitored and treated medically with standard therapy. Most everolimus-related AEs are manageable and reversible with planning, monitoring, treatment, and, when necessary, dose reduction. Management of everolimus-related AEs may improve treatment compliance, decrease treatment interruptions and discontinuations, and thereby improve everolimus therapeutic efficacy.

1423186

DISTRESS IN PATIENTS WITH ACUTE MYELOID LEUKEMIA: DEVELOPMENT OF A CONCEPT.

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Underwriting/Funding Source: National Institute of Nursing Research (T32NR011972-02)

Objective: To identify the unique aspects of distress in patients receiving treatment for acute leukemia (AL).

To examine the current state of the science surrounding the concept of distress and propose a conceptual model of distress in patients with AL. While distress is a regularly reported outcome measure in clinical research, currently there is a lack of a clear consistent and universal definition of this concept. The concept of distress is often confused with similar concepts, such as health-related quality of life. In patients with of AL added to the complexities of a cancer diagnosis is the need for immediate and aggressive in-patient treatment that results in many weeks to months of hospitalization. These patients not only spend many extended periods away from family, but they also must face a 5-year survival rate of 21%. Thus, it is not surprising that distress is has been found in as many as 45.5% of patients. A systematic review and analysis of published literature was conducted. PubMed, Ovid, and PsychINFO databases were searched using keywords of: "distress", "hematologic malignancy", and/or "acute leukemia". Distress is an outcome measure that is frequently assessed and reported within the literature. Yet the operationalization of distress as it applies to patients with AL varies by investigator. Distress in AL is generally accepted as a multi-dimensional, quantifiable, subjective and temporal experience. Antecedents to distress are such factors as demographics including (e.g. education, gender, and age); personal intrinsic factors (e.g. fighting spirit, self-esteem, hopelessness); social support; disease progression; treatment; as well as communication with the healthcare team. Consequences to distress include: negative impact on quality of life; patient outcomes; as well as the severity of physical and psychological symptoms. The proposed conceptual model may be used to guide further research on distress in patients with AL at high risk for negative outcomes. Improved understanding of patient distress has the potential to guide interventions aimed at managing the psychosocial needs for patients receiving treatment for AL.

1423271

LEVEL OF FEAR OF RECURRENCE IN SURVIVORS WHO USE INTERNET BREAST CANCER DISCUSSION BOARDS.

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Underwriting/Funding Source: University of Michigan, Rackham School of Graduate Studies, American Academy of Nurse Practitioners, and Sigma Theta International (Tau Upsilon)

Objective: To discuss the research finding from an Internet based study on breast cancer survivors.

Breast cancer survivors (BCS) are a large and growing cohort of women in need of ongoing evaluation/treatment of psychological needs. Fear of cancer recurrence (FCR) after treatment may be causing significant distress in BCS. Recruitment into health related research studies has become more challenging and costly. One potentially rich site for recruitment of BCS may be from the Internet. Oncology nurses need to know the characteristics of internet frequenters and if they are in need of interventions to assist them in the transition from patient to cancer survivor. The purposes of this study were to: 1) explore the characteristics of frequent users of Internet communities of BCS, 2) assess the level of FCR, and 3) assess the viability of using the internet for recruitment into health related studies, The Breast Cancer Survivorship Model of Predictors of Fear of Cancer Recurrence deduced from Leventhal, Brissette and Leventhal's (2003) Common Sense Model of Illness Representations guided this study. A cross-sectional descriptive correlational design with data obtained from a web-based survey was used. Women (N=107) were recruited from three internet breast cancer specific discussion boards. Two standardized instruments (The State Trait Anxiety Inventory-Trait (STAI-T) [α=.92], & Fear of Recurrence Questionnaire [α=.90]), were used along with a demographics and Internet usage section. Statistical analysis of collected data was done using PASW 19. The majority of women were between 46-55 years of age, Caucasian (95.3%), partnered (74.8%), highly educated with a bachelors or higher degree (55.1%), and middle to upper class (49.5% > $80.000/annual income). Most women had invasive cancer (75.7%), were diagnosed at stage II or lower (61.7%), and under-went mastectomies (68.2%). The majority (68.2%) reported ongoing participation in online support groups. These women were also found to have higher levels of FCR than were previously found in other studies (μ=83.7). This research suggests that the internet is a cost effective, efficient way to recruit breast cancer survivors into research; however, you will acquire a homogenous sample. Internet frequenters are experiencing ongoing post treatment distress and interventions are needed to assist them in the transition from patient to survivor.

1423317

NURSING MANAGEMENT OF EVEROLIMUS-RELATED STOMATITIS PATIENTS WITH NEUROENDOCRINE TU-

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Underwriting/Funding Source: Novartis Pharmaceuticals Corporation

Objective: To discuss nursing strategies for the management of everolimus-associated stomatitis in patients with advanced neuroendocrine tumors (NET).

Nursing management of everolimus-related stomatitis patients with neuroendocrine tumors. The oral mTOR inhibitor everolimus has been evaluated in two placebo-controlled phase III trials in patients with advanced pancreatic NET (RADIANT-3) and in combination with octreotide LAR in patients with advanced NET associated with carcinoid syndrome (RADIANT-2). Mucositis-related events (including stomatitis, aphthous stomatitis, mouth/tongue ulceration) represent the most frequently reported everolimus-related adverse events (AEs) and occurred in 64% of everolimus patients in RADIANT-3 (vs. 17% of placebo patients) and 62% of everolimus+octreotide LAR patients in RADIANT-2 (vs. 14% of placebo+octreotide LAR patients). A majority of cases were initially observed within the first few weeks on treatment. The management strategies employed at our institution for everolimus-associated stomatitis in patients with advanced NET are discussed. Everolimus-associated stomatitis is characterized by inflammation of the mucous membranes in the mouth, although it should be noted that it differs from mucositis associated with chemotherapy and more closely resembles aphthous stomatitis. Severe cases can be associated with erythema, edema, a burning sensation, and occasional bleeding, and can cause pain and infection. Management strategies focus on patient awareness and early intervention, including education about foods to avoid, the need for good oral hygiene, and the role of prompt reporting of signs and symptoms. At our site, the use of a non-alcohol mouthwash has also proved effective, with grade ¾ mucositis managed with dose interruption and Magic Mouthwash, a formulation of diphenhydramine, glucocorticoids, lidocaine, Maalox, Nystatin, and sucralfate, for painful stomatitis. Patients are checked for secondary infection if symptoms do not resolve within 48 hours. Once resolved, everolimus is re-initiated at a lower dose and eventually increased if tolerated. Two active patients at our site managed in this way have currently received everolimus for over a year with no stomatitis reported. Everolimus-associated stomatitis is manageable and reversible with proper planning, monitoring, treatment, and, when necessary, dose reduction. Management of everolimus-related stomatitis may improve treatment compliance, decrease treatment interruptions and discontinuations, and thereby improve everolimus therapeutic efficacy.

1423449

QUALITY OF LIFE TRAJECTORIES OF BREAST CANCER AND LYMPHOMA SURVIVORS ENROLLED IN A SURVIVORSHIP PROGRAM.

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Underwriting/Funding Source: National Comprehensive Community Cancer Centers Program

Objective: Describe quality of life trajectories in patients with breast cancer or lymphoma who are enrolled in a survivorship program.

Cancer treatment significantly affects quality of life (QOL) in cancer survivors. Survivorship plans are an integral component of comprehensive cancer care and may provide survivors with better ability to manage symptoms and improve QOL. The purpose of this study was to examine quality of life trajectories in patients with breast cancer and lymphoma survivors who have received a survivorship plan to determine predictors of QOL and whether symptoms were related to survivorship plan satisfaction. The Revised Symptoms Experience Model posits that physical, psychological, and situational factors and healthcare interventions contribute to the symptom and QOL experience over time. Individualized survivorship plans were provided to 67 patients by a survivorship navigator following initial cancer treatment. Patients rated satisfaction with the survivorship plan on a scale from "1" (strongly disagree) to "6" (strongly agree-SA) scale at 1 month following discussion of the plan. Patients completed the FACT-G quality of life (QOL) measurement comprised of physical, social, emotional, and functional scales (score range 0-108) at 1, 3, and 6 months following treatment. Data were analyzed with descriptive statistics, correlations, and generalized linear modeling. Symptom and QOL trajectories improved significantly from 1 month (89.8) to 3 months (92.7) (p=.03). Having lymphoma (p=.027), being married (p=.037) and having fewer comorbidities (p=.021) predicted better quality of life trajectories. Patients who reported that having the survivorship plan made them feel less anxious correlated to the FACT-G score at 1 month (r=.298, p=.029) and the emotion scale at 3 months (r=.430, p=.002). Patients who agreed that the survivorship plan would improve care from their primary care provider correlated with the emotion scale at 3 (r=.363, p=.013) and 6 months (r=.577, p<.0001) and the FACT-G at 6 months (r=.412, p=.009). Data suggest a significant improvement in symptoms and QOL by 3 months post treatment. A positive relationship between a survivorship plan and QOL, especially the emotional component may exist for some patients.

1423605

DNA ACTIVITY IN PERIPHERAL WHITE BLOOD CELLS FROM WOMEN AT HIGH RISK TO DEVELOP BREAST CANCER.

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Objective: Determine DNA activity in peripheral white blood cells from women at high risk for breast cancer.

Changes of DNA activity in white blood cells (WBC) prior to diagnoses could prevent breast cancer and deaths. Role of oncology nurses would change from treatment to early detection. Medical, psychosocial and economic aspects for high-risk patients modified. Can WBCs with altered DNA activity be identified from peripheral blood of women at high risk for breast cancer? 1.Identify altered DNA activity in WBCs. 2.Determine if specific WBCs are found in women at high risk 3.Describe the difference in altered DNA activity in specific WBCs of women in rsvh tidk vsyrhoty 4.Identify PARP deficiency in specific WBCs with altered DNA activity. Chronic inflammation has a link to cancer. Some WBCs change via innate and adaptive immunity. BRCA genes are associated with homologous recombination (HR) DNA repair. A break in DNA causes poly(ADP) ribose polymerase [PARP], to bind to break causing DNA repair pathway signaling leading to repair. PARP-1 deficiency not problem for normal cells. Single strand break (SSB) is repaired via base excision repair pathway, an alternate DNA repair path so the unrepaired SSB becomes double strand break requiring HR, error-free DNA repair. With loss of BRCA function an alternative error-prone DNA repair occurs with genomic instability and cell death. PARP-1 or PARP-2 deficiency causes decrease cell survival. Lack of BRCA protein causes decreased cell survival. Pilot study of 60 women. Risk models identify women . 20 women placed in 3 risk categories. Buffy coat collected from peripheral blood. 1.CD markers and nucleotide markers added to cells for labeling. Cell flow cytometry identify WBCs with altered DNA activity. 2.Results determined for women in each risk category. PARP assays completed. Appropriate tests for reliability,

validity and rigor of the data analysis completed. Available findings and conclusions with implication for research, education or practice will be discussed during the presentation. Future research questions would address: Is there a correlation of altered DNA activity with BrCa I and 2 genes or CHEK2? Is there a correlation of altered DNA activity with epigenetic changes due to methylation, acetylation or histone modification?

1423648

END-OF-TREATMENT TRANSITION FOR ADOLESCENT CANCER SURVIVORS AND THEIR PARENTS.

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Underwriting/Funding Source: Research and Intramural Funding Program, Office of Nursing Research, University of Washington

Objective: Illustrate how Transitions Theory can be used to explore the end-of-treatment transition for adolescent cancer survivors and their parents.

Adolescent cancer survivors are at high-risk for adverse health and psychosocial outcomes. End of treatment is a critical transition that is largely unexplored in adolescent cancer survivors and their parents. Oncology nurses and scientists are well positioned to facilitate healthy end-of-treatment transitions and improve health and quality of life outcomes for adolescent cancer survivors and their parents. Currently they are constrained from developing evidence-based programs and services by a lack of data. This study will begin to fill this gap in knowledge. This cross-sectional, mixed-methods descriptive study will explore the: 1) end-of-treatment transition from the perspectives of adolescent cancer survivors and their parents, and 2) social competencies, adaptive functioning, adjustment, impact of cancer and informational needs of adolescent cancer survivors at the end of treatment. The theoretical framework for this study is Transitions Theory. Transitions are "critical periods of heightened vulnerability" when interventions are indicated to prevent potential risks, and promote physical and psychosocial health. This study will focus on three major categories of transitions that are of particular concern for adolescent cancer survivors and their parents: developmental, health-illness, and situational. Fifty participants (25 adolescents—15 to 19 years, 25 parents) will be recruited from Seattle Children's Hospital. Semi-structured interviews and questionnaires will be completed at the end-of-treatment visit, which occurs one month after the last chemotherapy treatment. Questionnaires will include the Youth Self-Report, Child Behavioral Checklist, and the Cancer Impact and Information Needs Questionnaire. Each interview will be transcribed verbatim and verified. The ATLAS.ti Qualitative Data Analysis Program will be used to analyze the interview data for each of the samples (AYA, parents) separately. SPSS will be used to analyze the demographic and clinical characteristics, and data from the questionnaires. Findings from this study will be used to guide interventions to: 1) facilitate healthy end-of treatment transitions and promote physical and psychosocial health for adolescent cancer survivors, and 2) support parents at the end of treatment so they can better assist their children.

1423723

DESCRIPTION OF PAIN CHARACTERISTICS IN THE ADULT ONCOLOGY POPULATION.

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Objective: The objective of this project was to describe the characteristics of pain in the adult oncology population at a Midwestern NCI-designated Comprehensive Cancer Center.

Pain is a highly prevalent and distressing problem for patients with cancer due to the cancer itself, the treatment and/or side effects of the treatment. Unrelieved pain can lead to other physical and or emotional problems which can interfere with quality of life. Nurses, the front-line caregivers, play an essential role in managing pain in collaboration with a multidisciplinary team. The problem, cancer pain, has been studied for the past twenty years and yet, patients continue to report pain as uncontrolled. The purpose of this study, to describe pain characteristics in the oncology population, seeks to give the healthcare provider an insight to what the patient is experiencing. It is keeping with the ONS research agenda by exploring symptom management, nurse-sensitive outcomes and translational research. The framework is Relationship-Based Care, a model of nursing care which places patient involvement at the core of the relationship with health care providers in managing care. This was a prospective, descriptive study. Oncology patients who had been hospitalized at least 24-hours, were 18 years or older, spoke English and had received pain medication in the previous 24-hours were eligible. On the designated study day all patients who met eligibility criteria and gave informed consent were interviewed. In all 104 patients (61% male) met eligibility criteria and were consented. Ten questions related to causes of pain and pain management were asked. The responses were recorded using Likert and numerical scales. Data was analyzed using descriptive statistics. Seven patients experienced constant pain. Eighty-five patients reported moderate or strong agreement that pain medications controlled their pain. Eighty-one patients felt strongly that the nurse believed their pain rating. Fifty-nine patients felt they had pain medications available when needed. Thirty-four stated that their nurse suggested alternative ways to manage pain. Despite the research and attention to pain, the mean average pain score during the previous 24-hours was a 5. This demonstrates a need to continue to focus efforts to better manage oncology patients' pain.

1423752

A MINDFULNESS INTERVENTION FOR SYMPTOM MANAGEMENT IN LUNG CANCER.

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Underwriting/Funding Source: Michigan State University Clinical Translational Science Institute Grant

Objective: The study objective is to test the acceptability, feasibility, and early efficacy of a home-based mindfulness intervention on symptom and health-related quality of life (HRQOL) outcomes for patients in treatment for lung cancer.

Patients with lung cancer are known to carry a large symptom burden and reduced HRQOL as compared to other cancer groups. Mindfulness-based therapies, a form of supportive complementary and alternative medicine, are showing promise in modifying psychological distress and improving quality of life in some cancer groups. Mindfulness-based interventions use meditation including breathing exercises, and gentle yoga to enhance patients' ability to manage symptoms and adapt to serious medical concerns. There is a gap in the science pertaining to use of mindfulness-based therapies as a supportive intervention for patients with lung cancer. The aims of the two-group design longitudinal pilot study support efforts to a build a rigorous scientific foundation behind supportive therapies that complement conventional treatment. Ferrans; Wilson and Cleary's adapted HRQOL conceptual framework was used. Acceptability and feasibility are measured via patient consent and retention rates, therapy expectancy, study adherence, attrition reasons, and quality assurance indicators. Efficacy will be examined with HRQOL parameters: symptoms (symptom inven-

tories; function (physical, social parameters); and general health perceptions. Thirty-six individuals undergoing treatment of non-small cell lung cancer will be randomly assigned to receive six weekly mindfulness sessions (N=18) or an attention control condition (N=18). Symptom data will be collected weekly to document the process of change in symptoms in both groups. HRQOL data will be obtained at baseline (Time-1), following the intervention (Time-2), and four weeks after completion for sustained effects (Time-3). Statistics will include descriptives, group comparisons, regression models, time-to-response analysis, and multivariate mixed effects models. Data collection is in progress. The study will provide feasibility, acceptability, and early efficacy data that will be used in development of a larger scale randomized control trial. If long run benefits are demonstrated, this cancer population with high symptom burden will potentially have access to a scientifically sound intervention for supportive symptom management.

1423759

ACUPUNCTURE AS A NOVEL INTERVENTION TO IMPROVE APPETITE IN PATIENTS WITH CANCERS OF THE GASTROINTESTINAL TRACT.

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Underwriting/Funding Source: University of Florida Research Professorship

Objective: To investigate utility of acupuncture for appetite improvement in patients with GI tract cancer.

Cancer patients often experience severe weight loss. Many of them face significant adverse effects from chemotherapy treatments and develop loss of appetite followed by malnutrition, depressive and anxiety disorders during and after therapy. Thus, patients experience significantly worse therapeutic outcomes and prolonged hospitalization. Currently available pharmacological treatment modalities are often complicated by chemotherapy interventions and significantly increased somatic stress levels in patients. Nutritional interventions are not well accepted by certain patients due to swallowing problems, taste alterations, and/or nausea/vomiting. Although the precise mechanisms for acupuncture remain elusive, studies in non-cancer patients indicate that acupuncture can increase gastrointestinal motility, reduce nausea and vomiting, decrease circulating cortisol levels as well as prevent loss of appetite. To 1) investigate efficacy of acupuncture as an adjunct and complementary therapy for improvement of nutritional status in patients with colorectal and other intestinal cancers who are undergoing chemotherapy and 2) examine the feasibility of implementation of acupuncture in patients with cancers of the GI tract. Acupuncture can provide benefits by reducing stress levels and pro-inflammatory cytokines, increasing appetite and white blood cell counts that may lead to normalized gastrointestinal and nutritional status of the patient. Reduction of developing cancer cachexia secondary to chemotherapy and normalization of blood parameters can assist in the chemotherapy protocol. Sample of 10 subjects with GI tract cancer will be followed using a pre- and post-intervention study design. Weekly acupuncture is provided for 8 weeks. Appetite is measured with Visual Analogue Scale and Amended Symptoms and Concerns Checklist. Karnofsky Performance Scale is used to measure functional ability. Bioelectrical Impedance Analysis is used to measure body mass index, fat mass, and lean body mass. A simple linear regression and paired student t-test will be utilized to compare the pre- and post-intervention changes. Currently, 2 subjects completed the study and recruitment is being continued. Preliminary results will be available for presentation. Appetite and malnutrition are major challenges for cancer patients and can often lead to significant delays in treatment and reduced outcome. Thus, it is a crucial area to investigate using nonpharmacological and complementary therapies.

1423772

PREDICTORS OF CANCER-RELATED FATIGUE IN PHASE I AND II CLINICAL TRIAL PATIENTS: A PATIENT-REPORTED OUTCOME STUDY.

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Underwriting/Funding Source: Scottsdale Healthcare

Objective: To identify characteristics of patient reported cancer-related fatigue (CRF) in early clinical trial patients.

Limited patient-reported outcome data exist describing cancer-related fatigue (CRF) in Phase I and II clinical trial patients. Typically, there is reliance on provider-reported outcomes using the NCI Common Toxicity Adverse Event scaling. Since CRF is one of the most common and distressing symptoms in cancer patients, it is critical to identify baseline CRF characteristics in these early phase trial patients before designing targeted intervention studies. Study aims were to identify CRF incidence, severity, correlates and predictors in patients on early phase trials. Piper's Integrated Fatigue Model. Exploratory, descriptive cross-sectional study. Outpatients (n=30) were predominantly Caucasian, married, college-educated and 61 years old (range=41-80). Patients were screened by Advance Practice Registered Nurses to determine eligibility). Consenting patients self-completed a packet containing a demographic form and selected validated scales: the Adapted Symptom Experience Scale (ASES), the National Comprehensive Cancer Network (NCCN) Distress Scale, the Medical Outcome Study Short Form-36 Physical Functioning Subscale (MOS-SF-36-PF), the Karnofsky Performance Scale (KPS), the Piper Fatigue Scale-Revised (PFS-R), the Center for Epidemiological Survey of Depression (CES-D), and the Pittsburgh Sleep Quality Index (PSQI). Descriptive and inferential statistics were used to analyze the data. The average PFS-R score was 2.34 (SD: 2.84). Nine patients had no CRF (0; 30%); 8 mild CRF (1-3; 26.7%); 10 moderate CRF (4-6; 33.3%) and 3 severe CRF (7-10; 10%). Significant PFS-R correlations included: number of ASES symptoms present (r=0.65, p=0.01), ASES severity Index (r=0.75, p=0.01), ASES bothersome Index (r=0.76; p= 0.01), ASES interference index (r=0.069, p=0.01); CES-D total score (r=0.54; p=0.01); Global PSQI Score (r=0.43, p=0.05), KPS (r=-0.47, p=0.01), and MOS-SF-36 PF (r=-0.48, p=0.01). When these and other variables were entered into a forward stepwise regression analysis, 63% of the variance was explained by the ASES Bothersome Index and the PSQI (≥16). These findings suggest that targeting interventions to those most at risk such as those who have moderate to severe CRF (4-10) and who are experiencing other self-perceived bothersome symptoms might improve CRF patient outcomes.

1423779

HORMONAL SYMPTOM DISTRESS AND MANAGEMENT AMONG BREAST CANCER SURVIVORS.

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Underwriting/Funding Source: LIVESTRONG Foundation

Objective: To examine hormonal symptom distress, communication, treatment patterns, and outcomes in a sample of post-treatment breast cancer survivors (BCS).

Symptom distress, communication, and management are oncology nurse-sensitive outcomes. Hormonal symptoms (fatigue, hot flashes, sexual difficulties, cognitive problems) are prevalent and distressing among BCS. Patient-provider communication is a first step in remediating these symptoms; however, since few studies have examined patient perceptions of communication or the outcomes achieved, this was our goal. This study was guided by the Theory of Symptom Management. Survey of non-metastatic BCS across 9 LIVESTRONG Survivorship Centers of Excellence prior to a 'survivorship' visit. Patients reported presence and distress from hormonal symptoms, perceived provider communication, provider intervention, and outcomes achieved over the past 6 months as part of an ongoing longitudinal study. 113 predominantly white (88%), married (84%), and college educated (69%) BCS participated. 68% were Stage I or II, 65% received chemotherapy; and 40% were receiving endocrine therapy. Mean time from diagnosis was 4.4 years. 99% reported at least one hormonal symptom, with 64% reporting 3 or more. Fatigue was most prevalent (88%), followed by cognitive problems (69%), hot flashes (69%), and sexual difficulties (63%). Non-discussion of symptoms with providers ranged from 65% of those reporting sexual difficulties and 63% of those reporting cognitive problems to 37% of those reporting fatigue, not discussing these symptoms. The most common interventions were provision of information (M = 53% across all symptoms) and medication (M = 24% across all symptoms). No intervention was provided 18% of the time on average, most commonly for hot flashes (32%) and cognitive difficulties (23%) not having intervention provided. Following intervention, mean perceived improvement was "moderate" for all symptoms. However, 33% of interventions for fatigue, 25% for cognitive difficulty, 39% for hot flashes, and 36% for sexual difficulties resulted in little to no improvement. Hormonal symptom distress is common among BCS, yet symptom discussions often do not occur, particularly for cognitive and sexual difficulties. When symptoms are discussed and action taken, a substantial minority of BCS report little to no improvement. Interventions are needed to improve communication and more effective management strategies among BCS. Oncology nurses should remain at the forefront in intervention development and testing.

1423803

UNPLANNED HOSPITALIZATIONS FOR ADVERSE EVENTS DURING OUTPATIENT CHEMOTHERAPY: CONCEPTUAL AND METHODOLOGICAL DELINEATION DURING ANALYSIS OF A LARGE, ONCOLOGY-FOCUSED ADMINISTRATIVE DATASET.

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Underwriting/Funding Source: Funded in part by the F.M. Kirby Foundation

Objective: To clarify the concept of unplanned hospitalization in patients designated to receive outpatient care from that of readmission, and operationalize within the Surveillance, Epidemiology and End Results (SEER) – Medicare database.

The concept of readmission, where a patient returns to the hospital after an "index" stay, is well documented, whereas little data exists on unplanned hospitalizations when care should occur exclusively in the outpatient setting, though both may be sensitive to nursing interventions. Study design to explore factors associated with cancer-related unplanned hospitalizations within the SEER-Medicare database requires conceptual clarity prior to operationalization. Hospital admissions may be a planned part of cancer care (e.g. surgical resection) or may provide intensive inpatient services for new or intractable problems, such as disease progression or symptom management. Study designs focused on readmission generally isolate cases based on an "index" admission and analyze associated antecedent and subsequent variables. Where there is no expected inpatient care component, such as ambulatory chemotherapy administration, rigorous design depends on a clear conceptual definition of an unplanned hospitalization. Though both seek to illustrate potentially avoidable risk factors, the method to identify target hospitalizations varies, especially when applied to large administrative datasets. Literature review and adaptation of the Walker and Avant method of concept analysis allow unplanned hospitalization to be defined as an unexpected admission for management of a severe disease or treatment-related event that cannot be controlled in the outpatient setting. Operationally, within the SEERMedicare environment this can be defined by cohort selection of patients with unresectable disease (e.g. stage IIIB or IV lung cancer), at least one billed claim for chemotherapy and subsequent hospitalizations, and presence of a cancer-related ICD-9-CM code in the first five diagnostic positions. Preliminary analysis indicates that 89% of Stage IIIB/IV patients in the lung cancer cohort had ≥ 1 unplanned hospitalization. Study design includes sensitivity/specificity analyses to examine alignment with intended definitions. Unplanned hospitalization in patients intended to receive outpatient treatment is a significant problem. Clear conceptual and operational definitions provide an appropriate foundation for identification of the event of interest, facilitating validity in subsequent analyses.

1423892

END-OF-LIFE DECISION-MAKING AMONG AFRICAN AMERICANS WITH ADVANCED CANCER.

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Underwriting/Funding Source: Indiana University School of Nursing and the Behavioral Cooperative Oncology Group of the Mary Margaret Walther Program of Cancer Care Research

Objective: Proficiency in scientific writing is essential to my success as researcher; therefore the primary objective of this abstract is to expand my scholarly writing skills by collaborating with my mentor on writing abstracts related to cancer care and end-of-life care.

African Americans (AA) are disproportionately affected by high morbidity and mortality rates from cancer, yet often choose life-prolonging treatments (LPT) despite a small chance of cure. Enhancing end-of-life (EOL) discussions and improving understanding of EOL decision-making among patients with advanced cancer and their families are important to foster patient and family-centered care at EOL. The goal of this pilot study is to explore patient and family perceptions related to the decision to continue or discontinue LPTs and to identify factors that contribute to differences in decision-making among AA family members. A conceptual framework was developed based on existing literature and the Ottawa Decision Support (ODS) Framework, an evidence-based theory for guiding patients making health decisions. Family members of deceased AA cancer patients were identified though an inpatient palliative care service at a safety net hospital. Telephone interviews were conducted with 10 bereaved AA family members who completed the ODS decision conflict and decision regret scales. Semi-structured follow-up interviews will be conducted with 5 participants to further explore AA family members' perceptions of the factors that influenced EOL decision-making for their family member. A majority of family members were female (70%) and the average age was 56.2 (SD

=13.3) years. Most family members had at least one year of college education (M=15.9 years) and an income of $30,000 or less. Half of the participants were the children of the decedent, while the remaining participants were the decedent's sister, mother, niece, or other relative. Decedents were mostly male (56%), average age 62.9 (SD=15.7) years, with a high school education or less, and an income of less than $30,000. Descriptive statistics will be run on all variables. Independent sample t tests or ANOVA tests will be conducted for interval data and chi-square tests will be conducted on categorical data. Interview data will be analyzed using qualitative descriptive methods. The findings from this pilot feasibility study will be used to refine study instruments and inform a larger prospective study to better understand factors that contribute to decisions to continue or discontinue LPT in AA cancer patients.

1423905

FACTORS ASSOCIATED WITH UNPLANNED HOSPITALIZATIONS AND ADVERSE EVENTS IN PATIENTS WITH LUNG AND COLORECTAL CANCER.

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Underwriting/Funding Source: Funded in part by the F.M. Kirby Foundation

Objective: Identify predictors of unplanned hospitalizations among patients receiving outpatient chemotherapy.

Unplanned hospitalizations during chemotherapy are a prevalent and significant problem in patients with lung and colorectal cancers, and result in disruptions to treatment intensity and quality of life. Preliminary data analysis suggests many patients experience unplanned hospitalizations, and a subset of patients are admitted multiple times over the disease trajectory. Chemotherapy administration and symptom management for solid tumors generally occurs in the outpatient setting, though unexpected crises requiring inpatient care arise. Published studies quantifying factors associated with oncology-related unplanned hospitalization are often limited to small datasets derived from cross-sectional single institution retrospective chart reviews. Utilizing the nationally representative Surveillance, Epidemiology and End Results (SEER) – Medicare database to study patients with lung and colorectal cancers receiving outpatient chemotherapy overcomes this limitation. Statistical models are used to identify predictive factors for one or more unplanned hospitalizations. Brant, Beck and Miaskowski's 2010 Symptom Management Model adds a temporal component to previous theoretical models, which focus on relationships among symptom antecedents, experiences, interventions and consequences. SEER-Medicare data from 2003-2009 are utilized to study patients with billed claims for chemotherapy and subsequent cancer-related hospitalizations. Etiology and temporal relationships to chemotherapy will be analyzed. Analysis is performed on parallel cohorts of patients diagnosed with all stage lung cancer (n=31,789), and all stage colorectal cancer (n=32,717). Regression models will be used to predict unplanned hospitalizations, evaluating demographic variables, clinical measures, and setting-of-care characteristics. Approximately 89% of patients in both cohorts had at least one hospitalization. Preliminary analyses limited to patients with unresectable lung cancers (n=12,461) show 18.9% of patients with one hospital admission, 52.9% with 2-4 admissions, 23.7% with 5-9 admissions, and 4.4% with ≥ 10 admissions. In unresectable colorectal cancer (n=7,164), 14% had one admission, 48.3% were admitted 2-4 times, 29.4% were admitted 5-9 times, and 8.2% were admitted ≥ 10 times. Considering this subset has no planned inpatient treatment component, this underscores the importance of identification of predictors for unplanned hospitalization, which will allow nurses to target education, monitoring and proactive symptom management efforts to those patients at highest risk.

1423955

PILOT STUDY OF A WEB-BASED WEIGHT-LOSS INTERVENTION FOR YOUNG ADULT (YA) CANCER SURVIVORS.

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Underwriting/Funding Source: American Cancer Society Institutional Research Grant

Objective: To obtain preliminary data on a web-based weight-loss intervention for YAs.

Oncology nurses care for overweight/obese YAs at increased risk for cardiovascular and metabolic syndromes. Testicular(TC) and breast cancer(BC) survivors comprise ~25% of YA cancers. Interactive technology solutions may help the nurse overcome self-care deficits contributing to negative health outcomes in overweight YAs. Weight-loss programs improve metabolic risks, yet trials in YAs are lacking. Given 90% of YAs have internet and studies show web-based interventions improve body composition, online programs deserve study in YAs. The primary aim is to examine feasibility and safety of a web-based weight-loss intervention designed to build self-care agency in YAs. The secondary aim is to explore intervention effects on objective/ self-report metabolic/anthropometric outcomes. Using Orem's self-care theory, weight-loss is conceptualized as a self-care behavior influenced by self-reliance & learned through human interaction. Single-group, quasi-experimental design. The 12-month intervention began January 2012 and includes: daily online exercises & nutrition lessons; weekly communication with coaches; discussion boards. A convenience sample enrolled in clinic or by phone. Inclusion criteria: >6-months post-diagnosis of non-metastatic BC or TC, ages 18-50, BMI >25, cancer-free, completed treatment, and access to internet & fitness equipment. Feasibility assessed with accrual, self-reported adherence, and dropout rates. Safety: bi-weekly adverse events (AEs) assessment. Metabolic/anthropometric outcomes include: objective/self-report changes in weight, waist-to-hip ratio, and body-fat percentage over 12-months. Analyses include descriptives and repeated measures ANOVA. Of 110 eligible survivors, 41% enrolled (n=45; 36% male). At 4-months, 39 participants(87%) remain; 51% are >80% adherent. Mean self-reported weight loss is 9lbs. 19 AEs have been reported. Study-related AEs include 13-reports of aches/pains and one lymphedema exacerbation. Non-study-related AEs include two hospitalizations, two cancer recurrences, and one lymphedema exacerbation. Changes from baseline to 6-month objective measures will be reported, and safety/feasibility data updated. Preliminary data suggest the program is feasible and associated with interim weight-loss, though limited by self-report, with limited safety concerns, and may help oncology nurses overcome self-care deficits contributing to negative health outcomes in overweight YAs.

1423976

LYNCH SYNDROME: DON'T LEAVE YOUR PATIENTS HANGING.

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Objective: The objective is to identify those with endometrial cancer and Lynch syndrome who may be at risk for other cancers.

Those with endometrial cancer associated with Lynch syndrome can have as much as a 60 - 80% chance of developing a

colon cancer and a 11 -19% chance of developing a stomach cancer as well as other cancers. Endometrial cancer is the most common gynecological cancer affecting greater than 42,000 women annually. Approximately 2 - 5% of endometrial cancers may be due to Lynch syndrome, an autosomal-dominant germline mutation. Predominantly mutations are in one of four of the DNA mismatch repair genes. Immunohistological (IHC) testing can be done on the endometrial cancer cells to determine if Lynch syndrome is present. IHC testing is used to detect four proteins MLH1, PMS2, MSH2, and MSH6. Loss of PMS2 alone, MSH2 or MSH6 may indicate Lynch syndrome and require more testing. Health histories including early age of onset of cancer or presence of multiple cancers or multiple family members affected by cancer can be risk factors for Lynch syndrome. If a patient has the gene mutation their biological family members have a 50% chance of having the same mutation. Referral to genetic counseling may be helpful. Nurses often do the initial intake and gather patient history information. Accurate recording of data regarding family cancer history and age at diagnosis as well as personal medical details can identify those at risk for Lynch syndrome. Identifying women with endometrial cancer and Lynch syndrome can impact patients and their family members. Knowledge of this syndrome may aid in prevention and screening to decrease the likelihood of developing additional cancers. For example, women with endometrial cancer associated with Lynch syndrome should undergo colorectal cancer screening and endoscopy.

1424034

THE DOCTOR OF NURSING PRACTICE IN ONCOLOGY NURSING: ANALYSIS OF CAPSTONE PROJECTS FOCUSED ON ONCOLOGY NURSING.

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Objective: To analyze the contribution of DNPs to practice in general and oncology practice in particular.

The scholarship of discovery easily outpaces the scholarship of application. The practice doctorate (DNP) is a new credential and approaches to education vary widely. Achieving rigor in DNP education demands strong scholarship and disciplined application of evidence in order to achieve the potential of this new credential. The purpose of this paper is to present an analysis of the scholarly work products produced by 4 classes of DNPs graduating from one program; and to analyze the contribution of DNP work to practice in general and to oncology nursing in particular. The Uncertainty, Pace Complexity Model (UPC) was used to evaluate the scholarly projects completed in partial fulfillment of graduation requirements for the DNP. 75 Capstone projects conducted between 2008 and 2012 were analyzed using the framework above. Translation frameworks, strategies, and outcome were analyzed and descriptive statistics used to summarize the most common and most effective strategies across all projects and within the subset of projects that relate specifically to oncology nursing. Mechanisms for translation included guidelines, pathways, order sets, staff development activities, patient education, support groups, audits, tool kits, algorithms, modifications to the practice environment, triage processes, phone follow up, dashboards and rapid cycle performance improvement activities. Designs varied according to the clinical problem and aims of each project. Pre-test post-test, cohort, causal comparative, descriptive and feasibility study designs were most common. Outcomes were evaluated using a variety of statistics including descriptive, t-tests, Chi Square, correlations, and regression. Two projects in oncology were particularly effective. The first improved patient education and self care following mastectomy and the second tested evidence based strategies for bowel prep prior to endoscopy.

1424190

SHARPS INJURY AND ORGANIZATIONAL CLIMATE AMONG ONCOLOGY NURSES.

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Underwriting/Funding Source: Pathway to Independence Award (R00 NR 010750) from the National Institute of Nursing Research, National Institutes of Health, and the University of Michigan Comprehensive Cancer Centre Support Grant (P30 CA46592)

Objective: To measure the number of sharps injuries and risk factors.

Healthcare workers are at risk for injuries from needle sticks or sharps on a daily basis. The highest proportion of occupational sharps injuries occur among nurses. Known risk factors include sharps handling events and collisions in the workplace. Less is known about the organizational or practice environment risk factors, especially in ambulatory settings. This study aims to examine nurse and organization characteristics related to occupational sharps injuries among oncology nurses. Donabedian's model of Structure, Process, Outcome guided the development of this survey. The Practice Environments of Oncology Nurses study was a cross-sectional survey of oncology registered nurses performed in one southeastern state in 2010. Secondary analyses were performed on a subset of data where nurses employed in ambulatory settings self-reported exposure to a needle stick or sharp in the past year. Three levels of investigation examined nurse characteristics (education, years of experience and hours worked), organizational characteristics (hospital staffing levels) and practice environment (favorable vs. unfavorable, structure and process measures) by performing logistic regression adjusted for nurse clustering. SAS 9.2 (Cary, NC) was used for all analyses. Of the 242 Oncology nurses in this study, 17 reported sharps injuries (7.02%). In bivariate analysis the likelihood of exposure to a sharp significantly decreased when nurses reported an education level of BSN or higher (OR 0.23, 95% CI 0.06-0.78; p = 0.019). In multivariate logistic regression models, adjusted for demographic characteristics and clustering of nurses by practice unit, the likelihood of exposure to a sharp increased by 54% for a one year increase in nursing experience (OR 1.46, 95% CI 0.99-2.15; p = 0.055). Nurses with higher education status may be at decreased risk for sharps injury, while nurses with greater years of experience may be at increased risk for sharps injury. Nurses with additional years of experience may be more likely to report injuries or be involved in more risky tasks. Increased education may confer benefit from occupational exposure and warrants confirmation. These results demonstrate nurses in ambulatory oncology settings remains vulnerable to occupational risk of sharps injury, and would benefit from continued improvements in worker safety.

1424265

EVIDENCE-BASED PRACTICE GAP IN KNOWLEDGE.

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Underwriting/Funding Source: Harrison Medical Center

Objective: Demonstrate an improvement in EBP beliefs and implementation skills through pre- and post- EBP educational intervention surveys of a sample of ADN nurses.

The rationale was if nurses are educated to use principles in EBP, they will choose to use these skills and see positive results in their patient's outcomes. Understanding the effect education has will add additional scientific knowledge to alleviate the lack of education as a barrier to implementation of EBP and subsequently increase the use of EBP. Health care facilities are adopting evidence-based practice (EBP) that has been shown to affect quality, safety, and decrease costs to organizations. Until recently, diploma and ADN curriculums have failed to include education on the principles of EBP. The purpose of this capstone project was to investigate a change in ADN nurses' knowledge, skills and attitudes after participation in an EBP educational intervention. The PICO was: In ADN graduates does education in EBP increase knowledge, skills (implementation), and attitudes (beliefs) regarding EBP? Rosswurm and Larrabee model for change to EBP was used to provide the theoretical groundwork for development of the study. Using a quasi-experimental design, 38 nurses participated in a four-hour educational intervention. A pre- post- and four weeks post interventional survey was administered using the EBP Beliefs and Implementation Scale. Survey data was analyzed using a dependent group t-test along with correlations to demographic data. Cronbach's alpha demonstrated instrument reliability for both the EBPB and EBPI scale. A statistically significant increase was found when analyzing participants' pre-EBPB aggregate scores to immediately post education ($p < 0.01$). This increase was maintained from their pre- scores to the four weeks post ($p < 0.01$ and $p = 0.02$ respectively). All participant EBPI aggregate scores demonstrated a statistically significant increase immediately post education ($p < 0.01$) but significant scores were not maintained when surveyed four weeks later ($p = 0.125$). EBP education may help prepare nurses to plan and provide care based on evidence.

1425176

EVALUATING DIABETES IN CANDIDATES FOR HEMATOPOIETIC CELL TRANSPLANT.

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Objective: To review current Hematopoietic Cell Transplant (HCT) evaluation criteria for inclusion of diabetes and determine how it impacts the decision to proceed to transplant.

HCT is a potentially lifesaving treatment for many patients diagnosed with hematological malignancies. Despite tremendous advances in transplant knowledge and technology, HCT continues to be associated with significant mortality and morbidity. A thorough evaluation of potential candidates is paramount to determine if transplant is an appropriate option. Recently, studies have shown significant associations between patients who experience hyperglycemia, hypoglycemia, and glucose variations (malglycemia) and worse post HCT outcomes. HCT patients with preexisting diabetes experience malglycemia significantly higher rates than patients with normoglycemia making them a vulnerable population in the transplant arena. Therefore, inclusion of diabetes as part of the pretransplant assessment is important to evaluate in order to optimize patient outcomes. Because the age of the United States population is increasing as well as the ability to transplant older adults, more patients will present for HCT with comorbid, age-related diseases such as diabetes. A wide variety of evaluation criteria exist among transplant centers. The purpose of this abstract is to review current evaluation methods to ascertain how diabetes is considered in the decision to proceed to transplant. A theoretical framework was not used for this review. A table was created to compare and contrast the Hematopoietic Cell Transplant-Comorbidity Index (HCT-CI), the Foundation for the Accreditation of Cellular Transplant (FACT) guidelines, a NCI-designated hospital's pre-transplant evaluation policy, and the European Group for Blood and Marrow Transplantation (EBMT) risk score. Findings showed all evaluation methods included past medical history for diabetes. However, the extent of diabetes (duration of disease, degree of insulin resistance, presence of complications) and patient's self efficacy were not given. Pre-transplant evaluations are important to determine risk, guide decision-making, optimize outcome, and allocate resources. Patients with diabetes present to transplant in various stages of the disease. Consideration of the extent and severity of diabetes pre-transplant could inform individualized patient care throughout the transplant process.

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