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Evidence Based Practice (EBP) Council

The EBP Council provides leadership to advance standards for clinical practice in accordance with the best available evidence.

In the absence of evidence to guide practice, the Council aims to promote the generation, utilization and advancement of a scientific knowledge base for professional practice through the conduction of research. Thus, the Council provides a forum to educate and provide consultation to clinical staff in writing research and grant proposals.

In addition, the Council monitors the appropriateness and effectiveness of care and disseminates evidence-based information to assist clinicians in the delivery of care that results in optimal patient/family outcomes for the communities we serve.

In this issue, the Council shares abstracts of select formal research projects that have recently been completed or are currently underway within Salem Health.



More projects will be featured in future issues so stay tuned!

Supine Cycling in the ICU: Innovative Mobility Ann Alway, Robin Mack, Alyse Langbecker, Ivan Hammond, Julie Pflug & Margo Halm

Background: Critically ill patients suffer from muscle dysfunction following admission to Intensive Care Units (ICU). Skeletal muscle wasting and deconditioning follow periods of inactivity, inflammation, mechanical ventilation, use of pharmacologic agents such as muscle relaxants or neuromuscular blockers. Early mobility protocols while a patient is receiving mechanical ventilation make a difference in total duration of mechanical ventilation and persistent weakness. Cycle ergometry is a method whereby patients lying in bed can participate in passive exercises, active-assistive or active training. The purpose of this study is to measure the differences in muscle function and endurance between patients who use cycling in the first few days of their ICU stay and patients who do not.

Research Question: Will the daily use of a supine cycle along with usual care, within 48 hours of initiating mechanical ventilation improve functional outcomes in ICU patients, at the time of unit transfer and also at the time of hospital discharge when compared to patients who receive only usual care?

Methods: Ninety ICU patients will be enrolled in this randomized controlled experimental study. Forty-five patients will receive usual care which includes a progression of head of bed elevation, dangling, sitting in a chair and finally ambulating in the room. Another 45 patients will receive nurse provided supine cycling treatments every day for 20 minutes as well as usual care. Muscle function will be measured at the time ICU transfer and once again at the time of hospital discharge. Physical therapists will complete the 6 Minute Walk Test and the Physical Functional ICU Test to assess muscle function for both groups. Differences between groups will be evaluated using Student's *t* tests, Wilcoxon, Mann-Whitney *U* tests or Fisher's exact tests. Relationships between variables will be quantified using Spearman or Pearson *r* correlations coefficients (95% Confidence Interval).

Research involves the use of the scientific method to systematically investigate problems faced in practice.

The goal of research is to generalize findings to the broader target population to improve quality/safety, patient experience and cost outcomes.

Approval from the Institutional Review Board is required

The Impact of Low Dose Computed Tomography Screening on the Stress Response and Quality of Life of Individuals at High Risk For Lung Cancer Allison Eshleman, Margo Halm & John Strother, MD

Background: Lung cancer screening using low-dose computed tomography (LDCT) has become a common screening tool over the past five years. Little is known about the effect of early detection on the smoking behaviors for patients at risk for lung cancer. Lung cancer screening may be associated with psychological stress and anxiety, or even a belief that the urgency or need for smoking cessation is negated because of early detection of cancer. Further concern exists that increased smoking recidivism rates could potentially offset the benefits of performing a LDCT based on either positive or negative scan results.

Materials/Methods: A longitudinal descriptive design was used to study of patients (N=120) at risk for lung cancer in a large clinical cancer center in the Pacific Northwest. Group one included active smokers, while group two included individuals who were former smokers for greater than one month. Each group completed multiple questionnaires immediately prior to the LDCT, the day after the LDCT, as well as 7 and 30 days, and 1 year. These questionnaires measured stress/impact of the event, State Anxiety, mental health-related quality of life, current smoking behavior, benefit/harm perception and co-morbidities.

New Graduate Residency Program: A Program Evaluation

Sarah Wolfe, Amy Stokes, Amy Brase, Kelly Honyak,
Debbie Loymeyer, Michael Polacek, Jeanine Scott, & Margo Halm

New graduate RNs entering the profession are faced with many challenges. Studies show that it takes at least 12 months to gain comfort and confidence in their new role. (Hayes & Scott, 2007). Year long residency programs can help bridge the transition to practice gap. Salem Hospital's RN Residency Program was created to enhance the competency, engagement, and retention of new graduate nurses. This program is based on evidence that retention increases when new graduates feel supported throughout their first year of practice. New graduates meet monthly to learn about topics such as communication, time management, team building, evidence-based practice and quality improvement. Time is also built in to allow for reflective practice as learning and application in practice happens. This ongoing program evaluation analyzes the impact of our new graduate nurse residency program on nursing performance, feelings of support and belonging, program satisfaction, and retention. Since the first cohort in February 2012, new graduate nurses complete a variety of surveys at 6 weeks, as well as at the 3, 6 and 12 month mark of the program. Overall aggregate results to date show new graduate nurse's rate the mentoring ability of their preceptors moderately high; are highly satisfied with their preceptors; feel moderately supported by their leaders and coworkers; have moderate feelings of belonging on their unit; progressively advance their competencies and nursing performance; and have high 1 and 2 year retention rates.

CLINICAL RESEARCH COMPLETED IN LAST MAGNET DESIGNATION CYCLE

<i>Unit/Department</i>	<i>Title of Study</i>	<i>Investigators</i>
ED	<i>Influence of Gender on Symptom Characteristics in Acute Coronary Syndromes</i>	Drs. Holli DeVon, Anne Rosenfeld & Margo Halm, Heather Nelson & Becky Ramos
Nursing Administration	<i>Specific Needs and Concerns of Spouse Caregivers of CABG Patients</i>	Margo Halm
Labor/Delivery	<i>Coping Assessment Method in Laboring Moms</i>	Greta Horn
Nursing Administration	<i>Evidence-based Practice Readiness: An Interprofessional Perspective</i>	EBP Council Members
CVCU	<i>Planned Rest Periods & Patient Satisfaction in Cardiac Surgery Patients</i>	Heather Rideout, Audrey Nickodemus, Jordana McDonald, Kirk Hill, Ann Alway, Besty Alford, Kathy Mahosky, Kai Engstad & Andrea Ianus
ICU	<i>Pressure Ulcer Development in the ICU</i>	Ann Alway, Charlette Lumby, Lauris Currier, Amanda Mehlhoff, Marisha Steward, Kelsi Taylor & Megan McKinney
Pediatrics	<i>Effect of Saline Use in Nasal Suctioning of Infants</i>	Andrea Bell, Tara Edick, Fara Etzel, Linda Frey, June Handrich, Lisa Ketchum, Elizabeth Monson, Susan Ritenour, Janelle Williams & Jennifer Young
Geriatrics	<i>Results of the Geriatric Institutional Assessment Profile (GIAP) in a Community Hospital</i>	Jeanne St. Pierre
Oncology	<i>Caring for Patients at the End of Life: One Size Doesn't Fit all</i>	Rhonda Evans, Amie Wittenburg & Margo Halm