SIGMA THETA TAU INTERNATIONAL HONOR SOCIETY OF NURSING
BETA OMEGA CHAPTER NEWSLETTER

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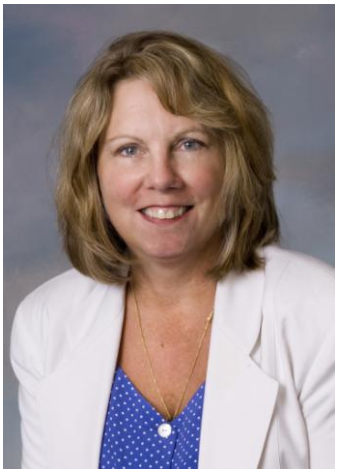


Greetings from the President

Karen Baldwin, PhD, RN

Greetings!

I am honored to have been elected as President of Beta Omega Chapter of Sigma Theta Tau. Your new Board of Directors is committed to meeting your needs as members of Beta Omega. In November, the Board will establish strategic goals for the term.

I welcome your ideas for creation of a vibrant, active organization that is responsive to your needs. What programs would you like offered? What is the best way for us to contact you with current information about nursing practice? Where is the best place to hold meetings? Are there initiatives at your workplace that would benefit from a partnership with Beta Omega? Let us know your thoughts (kbaldwin@niu.edu) - your Board is excited to begin a new year, and we want you to be an active part of our chapter!
Respectfully,
Karen Baldwin, PhD, RN
President, Beta Omega, 2008-2010

STTI Beta Omega Chapter Grant Award

The Effects of Exercise on the Quality of Life and Fatigue in Breast Cancer Survivors

Donna Plonczynski, PhD, RN, APN

The research team is grateful for the grant received from Beta Omega chapter in Spring, 2008. Here is a brief summary of our purpose and an update on our progress in the past six months.

The research is a pilot study of 20 women that is designed to determine the impact of an exercise intervention on quality of life (QOL) and fatigue in women newly diagnosed with breast cancer.
The exercise will be guided by a home-based DVD program with initial instructions given one-on-one. We will instruct these women to progress at their own rate at both aerobic and resistance-training (weights). We hope to advance nursing science by addressing the most frequently cited distressing symptoms of this population, who are the largest group of cancer survivors.

Previous research has demonstrated the positive impact of physical activity on the health status, QOL, and fatigue for breast cancer survivors. This pilot study incorporates what is established in the literature and extends the science by incorporating a non-metropolitan setting, a home-based program for the convenience of the subjects, a multidimensional definition of health status, QOL, and fatigue, and a biopsychosocial model of the individual. This study is a feasibility pilot study and will be the basis for future funding applications to, for example, the Oncology Nursing Society and/or the National Institutes of Health.

The team of researchers includes a certified oncology nurse (myself) and an exercise physiologist (Dr. Amanda Salacinski), both of whom hold advanced degrees in research. We have received an advanced statistical plan from a Professor of Statistics (Dr. Sanjib Basu) and have community support from the DeKalb County Health Department, a local physician, and two oncologists. We plan to address national health priorities as outlined in the proposal and hope to change practice for the improvement in quality of life and fatigue levels within the 2.4 million women currently diagnosed with breast cancer.

We have worked closely with the University, including the Office of Sponsored Projects for grant review, Legal Affairs office for a loan agreement for our equipment, Media Services department for DVD development, and Printing Services department for our exercise logs. Right now, we are awaiting the feedback from clarifications we submitted to the Institutional Review Board (IRB) – our ethics board for research. We have also gratefully received a discount for purchasing the hand weights from the *Sports Authority* in Geneva.

The generous funding has been applied toward heart rate monitors, hand weight sets, backpack bags for holding water and the exercise logs, and logo pens. We plan to conduct an inservice for the oncology staff about the study and process at least one 'pilot subject' through the procedure by the end of October, 2008. We remain optimistic to begin recruitment of subjects in late 2008.

Thank you for your support,

Evidence-Based Practice

Did You Know?

New Technology Predicts and Prevents Heart Failure Admissions

Cynthia R. Moller, RN, BSN, CCRN

Heart failure (HF) is the most common admitting diagnosis in the U.S. for clients over 65 years old. There are more than one million hospitalizations per year with a primary diagnosis of HF at an estimated direct and indirect cost of more than $34.8 billion. A reported 5.3 million men and women have HF. The only major cardiovascular disorder that is increasing in incidence and prevalence is HF. About 550,000 new cases occur each year (American Heart Association, 2008). As the population ages, the financial clout of this one diagnosis on our health care budget will be devastating.

Heart failure technology has matured through research. In 1958, the first pacemaker was implanted in Sweden and became standard management for heart block. This technology evolved and in 1980 the first human received an implantable cardioverter defibrillator (ICD) which monitors heart rate and rhythm and corrects malignant dysrhythmias. The first biventricular or cardiac resynchronization devices were approved by the FDA in 2001 to restore ventricular synchrony, thereby improving cardiac output, HF symptoms, and quality of life to qualifying patients with class III or IV New York Heart Association (NYHA) classification (Aranda, Schofield, Handberg, Curtis, Goff, & Conti, 2005). In 2007, the HeartNet ventricular Support System wrap was designed to wrap around the heart and stop or slow the heart's destructive ventricular remodeling in HF. The nickel titanium mesh encircles the lower portion of the heart and improves heart function and exercise ability (Wood, 2006).

HF, also known as pump failure, refers to the basic inadequacy of the heart to propel blood throughout the body, causing body tissues to be insufficiently perfused with essential nutrients and oxygen. HF is preceded by hypertension in three out of four cases, and about one out of three patients with myocardial infarction will develop HF. HF episodes begin by increasing left ventricular diastolic pressure in response to fluid volume. This pressure backs up into the left atrial pressure, and then into the lungs where pulmonary capillary pressures increase. This pressure forces fluid into lung tissue. (Ignatavicius & Workman, 2006). Serum testing of BNP (B type natriuretic peptide), has been approved by the Food & Drug Administration since 2001. BNP is an amino acid polypeptide secreted by the ventricles of the heart in response to excessive stretching of cardiomyocytes (Kreiger, 2007). But it is impractical to utilize BNP assessment frequent enough to impact prevention of HF episodes.

The newest HF device technology involves measuring thoracic impedance to predict HF exacerbations and prevent hospital admissions. Pulmonary congestion is the basis for the technology. The left subclavicular area ICD device sends very low electrical pulses traveling across the left lung to the ventricular lead. The level of resistance to these pulses is the thoracic impedance. Dry lungs offer little resistance, but pulmonary congestion lowers the impedance. The Medtronic Impedance Diagnostics in Heart Failure Patients Trial (MIDHeFT Study) was a blinded clinical trial of patients with predominantly Class III

NYHA HF which retrospectively developed a detection algorithm to discover the relationship between ICD device thoracic impedance reductions and traditional HF symptoms. The study found that while symptom onset occurred 3.0 ± 2.5 days prior to hospital HF admission, impedance decrease preceded symptoms by 15.3 ± 10.6 days. This "early warning system" enables the electrophysiologist to collaborate with the heart failure cardiologist to proactively treat the patient and prevent costly hospital admissions.

The FDA also recently approved the Medtronic CareLink Network. Patients can transmit data from their ICD using a portable monitor connected to a standard telephone line located anywhere in the continental U.S., Alaska, and Hawaii. In minutes, the physician can view the device's data on a secure Internet Web site. If necessary, the physician can have the patient adjust their medication, prescribe additional therapy, or go to a nearby clinic.

Historically, health professionals have educated HF clients about the importance of medication compliance; dietary salt reduction; appropriate daily exercise; reporting symptoms of frequent dry cough, dyspnea, and fluid retention; and recording and responding to increases in daily weight. While these modalities are still valuable to HF patients without an ICD, those patients who qualify for this exciting new impedance device can take advantage of the newest research to improve their quality of life and mortality.

Cynthia R. Moller, RN, BSN, CCRN
Graduate Student, Northern Illinois University
Chair, Leadership Succession, Beta Omega STTI

American Heart Association. (2008). *Heart Disease and Stroke Statistics. – 2008 Update*. Dallas, Texas: Author.

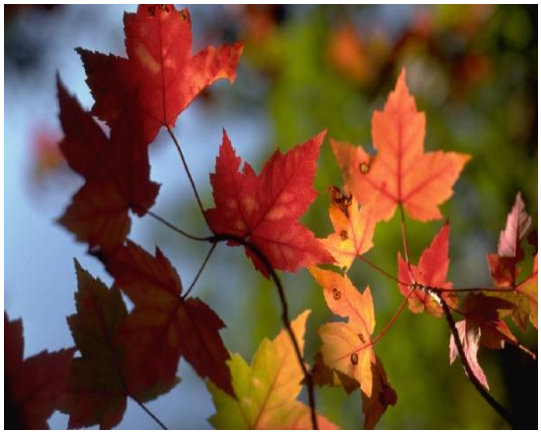
Aranda, J., Schofield, R., Handberg, E., Curtis, A., Goff, J., & Conti, J. (2005) Management of heart failure after cardiac resynchronization therapy: Integrating advanced heart failure treatment with optimal device function. *Journal of American College of Cardiology. 46.* 2193-2198.

Ignatavicius, D., & Workman, M. (2006). *Medical-surgical nursing: Critical thinking for collaborative care.* St. Louis, MO: Elsevier Saunders.

Kreiger, G. (2007). A basic guide to understanding plasma B-type natriuretic peptide in the diagnosis of congestive heart failure. *MEDSURG Nursing. 16*(2). P. 75-79.

Wang, L. (2007). Fundamentals of intrathoracic impedance monitoring in heart failure. *The American Journal of Cardiology. 99*(10). 3-10.

Wood, S. (2006). New nitinol-based ventricular wrap improves function and exercise capacity and decreases LV dyssynchrony. Retrieved September 10, 2008 from http://www.theheart.org/article/741341.do



Dr. Karen Morin

STTI Beta Omega Fall Event

Mary Elaine Koren, PhD, RN

On Monday, September 22, 2008, we were honored by our guest speaker, Dr. Karen Morin, president-elect of Sigma Theta Tau International. Her speech, entitled "Leadership in the New Millennium- from the Trenches to the Board Room," was truly inspiring. Her presentation was sprinkled with references to many current research studies and resources as well as personal experiences in various leadership positions throughout her career. Dr. Morin was very candid in sharing her professional successes and challenges.

All the participants left her presentation with a new sense of leadership and the motivation to change. Her presentation was followed by light refreshments in the Barsema Alumni and Visitors Center where participants socialized with Dr. Morin on a more personal level.

Saying Farewell, but not Goodbye

Ayhan Aytekin Lash, PhD, RN, FAAN

Serving as the president of Sigma Theta Tau Beta Omega Chapter for the last two years was a privilege and an honor that I will always cherish. In addition, it was also a highly enjoyable two years. Working with a Board who took responsibilities seriously and accomplished the work of Beta Omega competently was a real pleasure. I take this opportunity to thank Drs. Sharon Coyer and Mary Elaine Koren for serving a Vice Presidents, Drs. Stacie Elder and Donna Munroe for serving as Secretary, Dr. Judi Hertz and Ms. Mary Shaw for serving as Treasurer, and Ms. Connie Uhlken, Dr. Judy Popovich and Ms. Sandra Nicolosi for serving as Counselors. In any organization, the whole is much greater than the sum of its parts.

Through the individual efforts of each of these Board members, Beta Omega organized presentations by such scholars as the highly recognized historian Philip A. Kalisch, nurse-journalist Janet Bovin, and President-elect of Sigma Theta Tau International, Karen Morin. These distinguished speakers enriched our knowledge of where nursing has been (Kalish), how far nurses travel to give nursing care (Bovin), and how an American honor society inspired nurses around the world to join together seeking excellence in what they do (Morin).

However, the most favorite times for me were the induction ceremonies. The induction of students and community leaders into the honor society in recognition of their accomplishments was an all-encompassing delight. In spite of the icy weather outside, the induction rooms were always warmly

ignited by the pride and joy of the inductees and their families and professors. It cannot get any better than that.

As I complete my term, I promise to stay close and remain involved in the Chapter and the activities of Sigma Theta Tau International. I wish the new Board and the new President, Dr. Karen Baldwin, continued success in carrying out the work of the Chapter and the vision of the society – to create a global community of nurses who lead in using knowledge, scholarship, service and learning to improve the health of the world's people. Thank you, again, for electing me as your President. It was both a true honor and delight.

Changes to Fall Induction

Due to past experiences with inclement weather, the traditional timing of the Beta Omega Induction of new members was changed to the close of Spring semester. It will be held at the NIU Holmes Student Center on May 3, 2009.

We will invite eligible students in our December 2008 graduating class in Fall, 2008. They will be officially inducted in May, 2008.

Induction to Sigma Theta Tau, Beta Omega chapter, is a beautiful ceremony at which the inductees receive their purple honor cords as they are welcomed into nursing's international honor society.

20th International Research Congress

Cancun, Mexico, July 13 – 17, 2009

The focus of the International Research Congress is on Evidence-Based Practice. Abstracts are currently being accepted. Submisssion deadline is **December 10, 2008**.

For more information, go to http://www.nursingsociety.org/STTIEVENTS/RESEARCHCONGRESS/Pages/congress.aspx . Please contact Dr. Ayhan Lash (alash@niu.edu) if you would like to attend, and would like to know who else is attending. We will keep an ongoing list.

STTI 2008-09 Beta Omega Board of Directors

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