



**Hunter College
Hunter-Bellevue School of Nursing
School of Health Professions**

**10th Annual Spring Forum &
Evidence-Based Practice Poster Day
Wednesday, April 20, 2016**

Abstract Book

**Schools of the Health Professions
Hunter-Bellevue School of Nursing**

**Co-Sponsored by the
HBSOON Alumni Association
Alpha Phi Chapter - STTI**

**Spring Forum &
10th Annual Evidence-Based Practice Poster Day
Location: Auditorium and Lobby of the Brookdale Campus, Hunter
College**

- 4:30-5:30 – Spring Forum Presentation:
Nursing Scholarship: The Intersection of
Research and Evidenced-Based Practice
Margaret Barton-Burke, PhD, RN, FAAN
Director of Nursing Research at Memorial
Sloan Kettering Cancer Center, New York, NY**
- 5:30 – 5:45 – Move to auditorium Foyer for
refreshments**
- 6:00-6:30 – Poster display**
- 6:30 – 7:00 – Prizes awarded**

Margaret Barton-Burke Biographical Profile

Margaret Barton-Burke, PhD, RN, FAAN, is the president on the Oncology Nursing Society (ONS). She is the Director of Nursing Research at Memorial Sloan Kettering Cancer Center, New York, NY. She is an Emeritus Professor at the University of Missouri St. Louis. Formerly she held the inaugural Mary Ann Lee Endowed Professorship in Oncology Nursing at the College of Nursing, University of Missouri –St. Louis and was a research scientist at Siteman Cancer Center, St. Louis, Missouri. She earned her Bachelor of Science in Nursing (BSN) degree from William Paterson College in Wayne, NJ, her Master of Science (MS) degree in teaching specialty and oncology nursing from Boston University, and her Doctor of Philosophy (PhD) from the University of Rhode Island in Kingston. She retired with the rank of Colonel after 21 years of service in the Army Reserve and the Massachusetts Army National Guard, being the first female Colonel in the Massachusetts National Guard.

Dr. Barton-Burke has been a member of ONS for over 30 years and served as a Director-at-Large and President-Elect before assuming Presidency of the organization. She served on numerous committees within ONS including the research committee, finance sub-committee, Congress committee including chair of 1993 Congress, scholarship committee, and education committee. She served as president of the Boston and St. Louis Chapters, respectively.

Dr. Barton-Burke's cancer interest has been in survivorship. Her clinical expertise is in the area of fatigue, sexuality, pain management, and symptom management. Her research interests are an outgrowth of her clinical interests including long-term cancer survivorship, including the survivorship of black women with breast cancer. She is a co-author of award winning books including *Oncology Nursing Drug Handbook* and *Cancer Chemotherapy: A Nursing Process Approach*. Both books earned the *American Journal of Nursing* Book of the Year award.

Among her professional activities, Dr. Barton-Burke is a fellow of the American Academy of Nursing (FAAN). Among many recognitions and awards, Dr. Barton-Burke is an inaugural faculty and senior faculty member for the African Doctoral Dissertation Research Fellowships (ADDRF) Training Workshop sponsored by African Population and Health Research Center (APHRC) in Nairobi, Kenya. She is a founding member of the Massachusetts Pain Initiative, the Massachusetts Cancer Pain Initiative and several other cancer nursing initiatives. She has received numerous fellowships and most recently was named to the American Association of Colleges of Nursing (AACN) 2014-2015 Leadership for Academic Nursing Program (LANP) Fellowship. Dr. Barton-Burke is the immediate past chairperson of the AACN Research Leadership Network.

THE TENTH ANNUAL EVIDENCE-BASED PRACTICE POSTER DAY HUNTER-BELLEVUE SCHOOL OF NURSING AND HUNTER COLLEGE SCHOOLS OF THE HEALTH PROFESSIONS

Liz Capezuti, PhD, RN, FAAN: William Randolph Hearst Foundation Chair in Gerontology, Professor, Assistant Dean for Research, Director, Center for Nursing Research, Hunter-Bellevue School of Nursing

Director, Hunter College Health Professions Education Center (HPEC)
Martin Dornbaum, MS

Grants Assistant:

Malini Lall: Bellevue School of Nursing, Hunter College, CUNY

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Soorya Raj: Bellevue School of Nursing, Hunter College, CUNY

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We would like to thank the Hunter College School of Nursing Alumni Association and the Alpha Phi Chapter of Sigma Theta Tau International for providing funding.

Listing of Abstracts

Poster Number 1:

The Effects of A Hand-Cycle Training Program on Quality Of Life For Individuals With Spinal Cord Injury Living In The Community

Authors:

Bridgette McKay, Graduate Student (Hunter college DPT)

Paul Dong, Graduate Student (Hunter College DPT)

Susan French, Graduate Student (Hunter College DPT)

Ryan Linehan, Graduate Student (Hunter College DPT)

Alexandra Oudheusden, M.S., CTRS, RYT (Burke Rehabilitation Hospital)

Elizabeth Dominic, PT, DPT, NCS (Burke Rehabilitation Hospital)

Faculty Advisor: Suzanne Babyar, PT, PhD (Hunter College DPT, Burke Rehabilitation Hospital)

Background:

Past studies indicate a positive relationship between physical exercise or activity and quality of life (QOL) for patients with Spinal Cord Injury (SCI). However, the impact of participation in a community exercise program on QOL and the question of what are the lowest levels of exercise that can positively impact QOL have not been addressed.

Purpose:

The purpose of this study was to determine the effects of a recreational, community-based, hand-cycle program on QOL for community-dwelling individuals with SCI. A secondary purpose was to determine a minimum threshold of physical activity above which QOL benefits begin to show statistically significant improvement.

Methods:

Subjects completed 6 hand-cycling sessions as well as two World Health Organization Quality of Life short-form (WHOQOL-BREF) questionnaires. One questionnaire was completed prior to the first hand-cycling session and the other at the end of the sixth session.

Results:

Four out of a total of six subjects reported an improvement in their overall QOL. There was also an increase in the psychological and social domains but these scores were not statistically significant. Paired sample Wilcoxon signed rank tests confirmed that Physical Health was the only domain with statistical significance as all six subjects indicated improvement; ($z = -2.214$; $P = .027$).

Conclusions:

Our hypothesis that QOL improved due to participation in a hand-cycling program was supported in the physical domain of the WHOQOL-BREF. Our results may indicate that even a dosage of 6 sessions in a hand-cycle program can positively impact QOL for patients with SCI.

Acknowledgements:

This research was supported by Burke Rehabilitation Hospital and Hunter College.

Poster Number 2:

In adults being treated in acute care settings, how does the continuous use of alcohol soaked disinfection caps compare with traditional alcohol wipe scrubbing prior to using the port affect the incidence of central line associated infections?

Authors:

Jennifer Brown, RN, BSN

Devorah Goldberg, RN, BSN

Anna Kirichenko, RN, BSN

Frances Li, RN, BSN

Jessica Lovett, RN, BSN

Abstract:

Central line-associated bloodstream infections (CLABSIs) carry a high risk of mortality which is largely preventable when appropriate practices are followed consistently. With an intention to standardize interventions for the safest central line care, research was conducted to measure how the continuous use of alcohol soaked disinfection caps compares with traditional alcohol wipe scrubbing prior to each port use and its effect on the incidence of central line associated infections. Reputable research databases, such as CINAHL, Medline complete, Cochrane Library, and LWW Nursing & Health Prof. were used to conduct the literature search. Graphs were used to measure the studies commonalities of inpatient environment with results measured by mean infection rate. In every study, except for one, the effectiveness of implementing the antimicrobial cap on reducing the CLABSI mean infection rate reached statistical significance. The literature researched supports nearly a 50% incident reduction in CLABSIs in acute care settings, and similar results can be expected with proper and consistent use of the alcohol soaked disinfecting caps. Facilities and medical institutions can use posters, and daily rounding to reinforce and monitor the use of catheter protection caps to decrease CLABSI rates and maintain safe practice with invasive lines.

Key Terms:

Hub protection cap, catheter cap, catheter-related bloodstream infections, disinfection, bloodstream, infection prevention.

Poster Number 3:

In Women Undergoing Alopecia-Induced Chemotherapy, is Cryotherapy Safe and Effective, Compared to No Cooling, in the Reduction of Alopecia During Treatment and Active Follow up

Authors:

Ashley LeWinn BSN, RN

Mikel Ross BSN, RN, OCN

Tricia Sarov BSN, RN, OCN

Suzanne Tarplin BSN, RN

Denese Wilson BSN, RN

Abstract:

Chemotherapy-induced alopecia (CIA) is a negative side effect of chemotherapy that has a strong impact on the psychological and social wellbeing of cancer patients. The use of scalp cooling to prevent CIA is controversial in the United States because there is no clear consensus on its safety and efficacy. The purpose of this literature review is to examine the latest evidence of the efficacy and safety of scalp cooling. Of the ten articles reviewed, there were three observational studies, one narrative review, one systematic review, two prospective cohort studies, two retrospective cohort studies, and one quasi-experimental study. Safety was measured by the presence or absence of scalp metastasis. In looking at the efficacy of scalp cooling, different measurement tools were used to measure hair loss, including self-reports, the World Health Organization Alopecia Grading Scale, and use of a head covers or wigs. All studies reported a lesser degree of alopecia with use of scalp cooling with few reported side effects. The overall incidence of scalp metastasis was low with no difference in overall survival between those whom had scalp cooling and those who did not. The use of scalp cooling appears safe and effective and should be used in the United States to improve quality of life for cancer patients.

Poster Number 4:

How Does Dialectical Behavior Therapy Skills Affect Reactive Behaviors in Females Diagnosed with Borderline Personality Disorder?

Authors:

Samantha Iliano, RN
Janice Mordi, RN
Susan Murphy, RN
Detty Panicker, RN
Tessa Zompanis, RN

Aim:

The aim of the review was to identify the efficacy of dialectical behavioral therapy (DBT) interventions to reduce reactive behavior among females with borderline personality disorder (BPD).

Background:

Borderline personality disorder (BPD) is a mental health disorder that generates significant emotional instability. This can lead to a variety of stressful mental and behavioral problems. People with BPD can be challenging to treat, because of the nature of the disorder. They are difficult to be kept in therapy and often fail to respond to our therapeutic efforts. Individuals with BPD engage in reactive behaviors such as self-harm and suicidal tendencies. DBT is designed to identify, reduce, and replace reactive behaviors with emotion regulation and coping skills.

Data Sources:

Medline, EMBASE, PsychInfo, Cochrane Central Register of Controlled Trials databases, Google Scholar databases were searched for the terms borderline personality disorder, dialectical behavior therapy, inpatient hospitalization and short term treatment.

Review Methods:

Inclusion criteria: Studies that assessed depressive symptomatology with the use of published and validated depression rating scales and female patients 18 years of age or older who met the criteria for BPD. Exclusion criteria: studies that discussed patients with other major psychiatric disorders. Four randomized control trials (RCT), two systematic reviews, and two meta-analyses were reviewed.

Results:

Findings suggest that skills developed from DBT training were effective in reducing reactive behaviors in BPD females. Self-injurious behaviors did not always show a decrease when compared to treatment as usual. The systematic reviews revealed that DBT skills help stabilize and control self-destructive behavior, reduces negative symptoms of BPD, and improves global functioning.

Conclusion:

Based on the reviewed studies, BPD patients may benefit from DBT skills. Widely accepted questionnaires and scales can be used to assess the severity of reactive and self-injurious behavior so that DBT can be initiated promptly. Periodic re-screening throughout the course of treatment would assist in evaluating outcomes.

Poster Number 5:

A Literature Review of the Effects of Abdominal Massages on Immobile Patients Suffering from Chronic Constipation versus Abdominal Massage Intervention

Author:

Chyong-Yunn Chang (Hunter RN to BSN Undergraduate Program)

Issue:

Immobile patients often suffer from chronic constipation. Laxatives are usually the typical solution. However, chronic use of laxatives can make it less effective over time and as a result, higher doses would be required as treatment. As nurses, it is important for us to seek alternative non-invasive ways to reduce the use of laxatives and help patients with constipation as well as improve their quality of life.

Description:

This systematic search and limited review of the research literature was conducted using Cochrane Database, CINAHL, and Medline. Keywords used include: pediatric, children, constipation, immobility, cerebral palsy, movement, motion, central neurological diseases, disability, abdominal massages. Studies found comprised of a systematic review, four primary sources randomized controlled trials, and one qualitative study.

Results:

Key findings indicate that the frequency of bowel movements was higher in groups with abdominal massage intervention along with relief in symptoms of constipation and reduced use of laxative medication. Qualitative data also indicated positive experiences described by parents which included enhanced parent-child relationships.

Conclusion:

Abdominal massage can relieve constipation by stimulating peristalsis, and increase the frequency of bowel movements. It also reduces discomfort and pain, induces relaxation and improves patient's quality of life. No adverse effects have been reported so far and can easily be taught to patients and/or care-takers. Therefore, it should be considered when treating patients with constipation.

Poster Number 6:*Lowering the Risk of Heart Disease by Following the Mediterranean Diet: A Literature Review***Authors:**

Yulia Borisova (Undergraduate, Generic Program)

Alyssa Blick (RN to BSN)

Tidjeni Beloume (RN to BSN)

Issue:

According to the World Health Organization (WHO): “In 2008, [heart disease] accounted for 30% of total global deaths, including 6.2 million deaths due to stroke and 7.2 million due to coronary heart disease (CHD)” (WHO 2011). If nurses educate patients on the importance of following a healthy diet, such as the Mediterranean diet, in order to reduce the risk of cardiovascular disease, patients will have decreased incidence of complications and hospitalizations in the future. The question addressed in this review is the following: In adult patients, what is the effect of following the Mediterranean diet versus no dietary intervention on reducing the risk of cardiovascular disease?

Description:

We conducted a search on CINAHL, Pubmed, and EBSCO databases using the keywords *risk reduction*, *cardiovascular* and *heart disease*, *diet*, and *Mediterranean*. The research reports we used for our review were all quantitative studies.

Results:

The Mediterranean diet lowers the risk of heart disease.

Conclusion:

There is statistically significant evidence to support the hypothesis that the Mediterranean diet does reduce the risk of cardiovascular disease. Furthermore, the risk for cardiovascular disease and mortality was reduced even in participants with prior history of cardiovascular related diseases and events such as myocardial infarction. Since many Americans eat a diet high in fat, sugar, and processed foods, future research can focus on measuring the effect of the Mediterranean diet on preventing heart disease compared to this “American” diet.

Poster Number 7:

A Literature Review of the Effectiveness of Hand Washing Substance to Reduce nosocomial infections among nursing staff

Authors:

Yudith Katsenelson, RN

Diana Kirillova, RN

Helen Kourland-Piacere, RN

Sun Hwa Kim, RN

Issue:

No national standard for hand hygiene products exist. Antiseptic detergents are most commonly used in the health care practice.

Description:

This systematic search was conducted using CINAHL, Medline and the Cochrane Database. Keywords used included *hand washing, alcohol rub, nosocomial infections, nosocomial transmission and reduction of transmission*. Five primary research articles were identified that meet the search criteria.

Results:

Key findings indicate that nurses using 4% Chlorhexidine gluconate versus 60% isopropyl alcohol and non-medicated soap, the 4% Chlorhexidine gluconate was more effective in reducing the rates of nosocomial infections than 60% isopropyl hand rinsing agents and non-medicated soap but the staff washed their hands more often when alcohol and soap were used.

Conclusion:

No specific product was found to serve as the best to prevent nosocomial infection. Nurses who work in critical care units frequently wash their hands and change gloves leading to damaged skin. This has also been linked to a decrease in washing hands. Before making a change in hand hygiene products or protocols it is essential to conduct a systematic assessment of these products and their potential effects. Future research is needed to conduct a large study of washing substance effectiveness of eliminating/reducing pathogens on hands, most often used by staff, least harmful to skin and preferably most cost effective.

NO POSTER

Poster Number 8:

*The Nurse Practitioner as Diabetes Educator in an Endocrinology Specialty Practice Clinic:
Engaging the Patient in Self Care*

Author:

Marcella Pomeranz

Faculty Advisor: Elizabeth Capezuti, PhD, RN, FAAN

Project Purpose:

To evaluate the feasibility of a diabetes survival skill education for patients with diabetes in an Endocrinology Clinic for Medicaid patients.

Background & Significance:

Over 1 in 10 NYC residents have diabetes. Diabetes self-management education leads to many benefits, including: reduced hospital admissions, reduced lifetime complications associated with hyperglycemia, cost effectiveness, improved A1C levels, improved quality of life, and enhanced self-efficacy.

Community Assessment:

Patients with diabetes on Medicaid have significantly more acute complications compared to patients without diabetes. Less than 55% of patients nationally and 40% of patients in New York with diabetes ever receive formal diabetes education.

Agency Description:

New York Presbyterian Weill Cornell - Endocrinology clinic, which serves patients insured by Medicaid. Due to physician time constraints, it is difficult to offer individualized diabetes education to patients.

Intervention:

Individualized diabetes survival skill education has been shown to be superior and have better outcomes compared to traditional, didactic education. The *Diabetes to Go* tool will be used to provide focused education to patients with diabetes.

Evaluation Methods:

A one group, pre/post test pilot study to evaluate the effectiveness of the *Diabetes to Go* tool as well as skill demonstration on knowledge, glycemic control, and self-efficacy performing self-management skills.

Poster Number 9:

Being Dedicated in *The American Nurse*

Authors:

Steven L. Baumann, RN, PhD

Christine Anne Ganzer, RN, PhD

Background:

The focus of this study was being dedicated as portrayed in the documentary film *The American Nurse*, by Carolyn Jones. Three of the five nurses in the film work with dying patients; Tonia Faust who works in a hospice in Louisiana State Penitentiary, Sister Stephen Bloesl who cares for dying persons in Villa Loretto Nursing Home, Wisconsin and Jason Short, who does home visits for Appalachian Hospice Care, Kentucky. Purpose: The purpose of this study was to explore being dedication as depicted in the film, *The American Nurse*. Conceptual Framework: The researcher's stance was the humanbecoming school of thought (Parse, 2014); this framework holds that the ethos of nursing is dignity.

Methods:

The hermeneutic humanbecoming method (Parse, 2014) involves the following processes, discoursing with penetrating engaging, interpreting with quiescent beholding, and understanding with inspiring envisaging. The participants were 20 nurses who were graduate or doctoral nursing students and were willing to write reflective essays on the film.

Findings:

Five themes were uncovered from the essays written by the participants: Going the Extra Mile, Compassionate Commitment, Respect and Dignity No Matter What, A Noble Calling, Midwives of New Life, Joy, Peace and Justice. The two of the emergent meanings from this study were: Nursing, although arduous and unpredictable, is a noble profession when conducted with meaningful dedication.

Conclusions:

Respect and dignity is core to all ethical professional practice which should be universally applied.

Poster Number 10:

Exercise with Confidence & Kick Start Your Journey to Better Health

Author:

Dr. Samuel Grossman

Background:

Lifestyle modification has proven to improve glycemic control. Yet, 60% of adults that exercise do not comply with exercise routine in part due to exercise intolerance during exercise programs or experience of adverse events. Many patients with type 2 diabetes (T2D) are not aware of the warning signs or symptoms that may indicate an exercise related adverse event. Patients that experience adverse events abandon their exercise routine. The objective of the study was to educate patients with T2D or risk for T2D to recognize the risks and benefits of exercise and educate about the importance of monitoring clinical markers prior to exercise. In addition, provide individuals with tools to ensure safe exercise routine.

Methods:

A Diabetes Community Outreach Educational Program (D-COEP) was implemented at a fitness center. Participants in the study were individuals with T2D mean age 49 (range 25-72 years), hypertension (HTN) & risk for T2D attended a 5 monthly-1 hour session that involved discussion of different topics based on standards of care in diabetes & exercise and was coordinated by a healthcare professional who is a certified diabetes educator (CDE). The D-COEP program included risk/benefit of exercise, proper monitoring prior and post exercise, blood pressure (BP), Self-Blood Glucose Monitoring (SBGM), proper nutrition pre- & post-exercise, medication therapy effect on exercise tolerance, and overcoming barriers to exercise. Participants answered pre-and post-session questions to analyze learning experience and change in behavior. Every seminar included a questionnaire to evaluate self-reported knowledge & behavior pre- & post-seminar included: knowledge of medication effect on glycemic control & exercise tolerance, confidence in prevention of adverse effects, compliance with medications, reports of exercise tolerance, monitoring of SBGM & BP, and sick day management.

Results:

Based on self-reported answers, pre-program, 10% of attendees recognized medication induced exercise intolerance and had confidence in their ability to prevent medication adverse effects on exercise tolerance. Post –seminar, an increase in 70% of attendees adhered to their medication regimen. There was an 38% increase in the number of attendees monitoring BP & SBGM and 95% increase in awareness about sick day management. Furthermore, there was a 40% increase in the number of participants that could tolerate and complete exercise regimen. At the conclusion of the program, there was a 90% reduction in the cases of hypoglycemia and a 20% reduction in the cases of hypertension. In addition, 100% compliance was reported in adherence to monitoring parameters and medication regimen at the end of the program. 97% of the participants who completed the program reported confidence in completing exercise regimen and felt more knowledgeable to take better care of their health.

Conclusions:

The monthly D-COEP program, coordinated by a healthcare professional who is knowledgeable in diabetes, provides effective self-management model that provides education about the relationship between diabetes and exercise and facilitates lifestyle modifications.

Acknowledgement:

The author will like to thank Quest diagnostics for sponsoring the program through unrestricted grant.

The author gratefully acknowledges the assistance of Christine Ann Ganzer, PhD. Assistant Professor Hunter Bellevue School of Nursing Hunter College-CUNY for her assistance in the preparation of this poster

Poster Number 11:

Total Hip Replacement and the Role of Physical Therapy: a Systemic Literature Review

Authors:

Cristina Jesurun, SPT

Davida Krueger, SPT

Faculty Advisor: Milo Lipovac, MD, PhD

Issue:

Pain and functional limitations due to Osteoarthritis (OA) of the hip are the most common causes of Total Hip Replacement (THR). Although heralded as a safe surgery, there are many reasons to avoid or postpone a THR, including risk of revision surgery and failure of the prosthetic. Not all patients are good candidates for surgery and all surgery carries inherent risks. Physical therapy (PT) is often prescribed as a conservative treatment before surgery however there is not one conclusive study that shows PT can adequately treat the pain and functional limitations of OA in order to prevent or delay THR.

Description:

We searched CINAHL, Medline, General Science, Cochrane, Thomson Reuters Web of Science, and PEDro from January 2004 to February 2016 for keywords related to physical therapy and hip OA. Inclusion criteria were skilled PT, randomized controlled trial and diagnosis of OA. Articles were excluded using the Downs and Black assessment tool for quality and bias.

Results:

Fourteen articles based on eleven trials met our inclusion criteria. Three trials combined manual therapy with exercise therapy, two used only manual therapy, eight studied exercise and two used modalities. Statistically significant improvements were seen in at least one outcome measure in ten of the trials, across all interventions.

Conclusions and Limitations:

This review found beneficial effects of PT in the short-term, however, little long term data were available that demonstrated PT can delay THR. Studies that included booster sessions, long term supported home exercise programs and neuromuscular re-education showed the most promise.

Poster Number 12:

Healthy subsequent pregnancy spacing: developing an educational program for nurses at the New York City Nurse-Family Partnership (NYC NFP) program

Author:

Mitchell Solovay, MS, RN

Faculty Advisor: Caroline M. Hewitt, DNS, RN, WHNP-BC, ANP-BC

Project Purpose:

Increase Nurse's knowledge about Healthy Timing and Spacing of Pregnancies (HTSP), current contraception methods, and contraceptive counseling

Background & Significance:

Subsequent spacing is the amount of time between a live birth and the beginning of the next pregnancy, can impact the health of infant and mother. Infant problems for those less < 24 months spacing include: preterm birth, low birth weight, small size for gestational age, increased risk of death, and increased risk of health and developmental problems. Adverse maternal outcomes include uterine rupture, placental abruption, and placenta previa

Community Assessment:

Nurse Family Partnership (NFP) clients in NYS who had a subsequent pregnancy > 24 months was 21.8% compared to national average of 25.5%. There is room for improvement.

Agency Description:

The New York City NFP program serves low-income, first-time mothers who are pregnant with their first child.

Intervention:

1-2 one hour educational program (including information, video and demonstration) in Summer/Fall 2016 with 24 of the 84 Nurses at NFP

Evaluation Methods:

QI Project – one group with pre and post-test and follow-up 4 weeks post-test of knowledge and application to practice.

Poster Number 13:

Psychometric Properties of Assessment Tools for Balance Impairment in Concussion: A Systemic Review

Authors:

Kristin Barker, DPT Graduate Student
Michael Bonanni, DPT Graduate Student
Danny Heng, DPT Graduate Student
Melissa Lornager, DPT Graduate Student

Advisors: Dr. Gary Krasilovsky & Dr. Suzanne Babyar

Issue:

With increased incidence of sports-related concussion and possible long term neurological side effects, diagnostic testing has come to the forefront. Organized sports at all levels should have a protocol that includes a battery of multidisciplinary assessments, in order to accurately diagnose concussion and determine return to play criteria. After head trauma, balance impairment is a primary warning sign that an individual has suffered a concussion.

Description:

This systematic review compares diagnostic balance tests for concussion based on psychometric properties (reliability, validity, responsiveness, sensitivity, specificity) and appropriateness for different clinical environments.

Results:

Our search yielded 238 articles for consideration. 14 were appropriate for inclusion and 224 were excluded. Using Downs and Black Article Rating Tool, 13 scored fair, 1 rated poor.

Conclusions and recommendations:

There is “fair” evidence regarding psychometrics of balance measures for diagnosis of concussion. Clinicians should use a combination of assessment measures including a balance assessment. New assessment tools such as the oBESS, dual-task testing, virtual reality, and Nintendo Wii balance board show initial signs of being accurate, expedient and cost effective alternatives to the gold standard force platform. Future research should examine psychometric properties of balance assessments using a population of subjects who have recently sustained a concussion.

Poster Number 14:*Effects of 12 Hour Shifts on the Quality of Nursing Care***Authors:**

Angelica Regina A. Sliva

Jian Xin Bertolino

Shamsi Fani

Kris Hopkins

Faculty Advisor: Lorie Goshin, PhD, RN

Issue:

Although 12-hour shifts have become common in nursing practice, the effect of longer shifts on patient care continues to be overlooked. Longer shifts have increased the risk of errors and injuries to both the patient population and the nurses caring for them. This literature review addresses the following question: How do 12-hour shifts affect the quality of nursing care in acute care settings, compared with shorter shifts, such as an 8-hour shift?

Description:

This systematic search and limited review of the research literature was conducted using ProQuest Nursing and Allied Health Source. Keywords used included *shifts*, *nursing*, *errors*, and *12-hour and 8-hour*. Studies found comprised a systematic review, a descriptive study, a cross-sectional study, and 2 secondary analyses of cross-sectional survey data.

Results:

Key findings indicate that length of shift, 12-hour vs. 8-hour, affect patient outcomes. Evidence shows significant rates in error in both 12-hour and 8-hour shifts. Errors associated with 12-hour shifts included work left undone, frequent central line-associated bloodstream infections, and ineffective pain control.

Conclusions and recommendations:

Analysis of the evidence reveals a connection between patient outcomes and length of nursing shifts. With extended shifts being the standard, institutions must consider the implications of long work hours. While 12-hour work shifts may be more convenient for nursing staff, it may not be ideal for patient outcomes particularly with regards to patient safety. The evidence also supports that the overall health of nursing staff is crucial to patient care and the reduction of errors that result from exhaustion. While there is no clear answer in the debate of appropriate shift length, it has a clear impact to the delivery of healthcare.

Poster Number 15:

SLP Knowledge/Training and Factors Influencing Assessment of AAC Programs for Nonverbal Children with Autism

Authors:

Greta Lincoln

Faculty Advisor: Michelle MacRoy-Higgins, PhD CCC-SLP, TSHH

Background:

The purpose of this study was to investigate the following research questions: 1. What knowledge and experience/training do speech-language pathologists have with Augmentative and Alternative Communication (AAC), specifically for nonverbal children with autism spectrum disorder (ASD)? & 2. What factors influence recommendation of AAC modality, specifically, the Picture Exchange Communication System (PECS) and speech generating devices (SGDs) for nonverbal children with ASD?

Methods:

A survey was sent to alumni of Hunter College's graduate program in Speech-Language Pathology who are currently practicing speech-language pathologists, using the *Qualtrics Survey Software* program. This survey consisted of three sections that investigated knowledge and training in AAC, as well as factors that influence recommendation of an AAC modality, specifically, looking at PECS and SGDs.

Results:

Twenty-two participants completed the survey. Participants reported the highest amount of knowledge/experience gained from training on-the-job, and the lowest amount of knowledge/experience gained in graduate clinical experience. Overall knowledge and experience in AAC was rated 4.82 out of possible 7. Factors that most influenced recommendation of PECS for nonverbal children with ASD were child's receptive language abilities, evidence-based research on efficacy of PECS, and the child's ability to produce some vocalizations/verbalizations. For SGDs, the three factors that were rated highest were evidence-based research on efficacy of SGDs, child's ability to produce some vocalizations/verbalizations, and child's receptive language abilities.

Conclusions:

While participants reported an average rating of knowledge and preparedness in AAC for nonverbal children with ASD as a 4.82 out of possible 7, participants reported gaining "little" to "some" knowledge and experience in AAC from graduate level coursework and clinical experience. This indicates a need for graduate programs in Speech-Language Pathology to provide more coursework and direct training experience in use of AAC, specifically with nonverbal children with ASD. Similar factors were ranked highest for influencing recommendation of PECS and SGDs.

Acknowledgements:

This research was conducted as part of the Summative Project for the Master's of Science in Speech-Language Pathology program.

Poster Number 16:

Effect of Fatigue on Sensory Impairment in Multiple Sclerosis (MS)

Authors:

Julia Karsten, DPT student, Physical Therapy Department

Christina Bianchi, DPT student, Physical Therapy Department

Ashley McLoughlin, DPT student, Physical Therapy Department

Melanie Rocchio, DPT student, Physical Therapy Department

Faculty Advisor: Herb Karpatkin, PT, DSc

Background:

The role of fatigue on lower extremity sensory changes has not been defined for persons with multiple sclerosis (MS) despite studies indicating that fatigue and sensory loss independently have negative effects on gait. The purpose was to examine the effect of fatigue on sensory impairment in persons with MS.

Methods:

Consenting subjects with a diagnosis of MS were randomized into walking (W) and resting (R) groups. Subjects received sensory testing using a biothesiometer on six lower extremity landmarks. Subjects in the W group performed a 6-minute walk, while subjects in the R group lay supine for 6 minutes. Following either 6-minute condition, biothesiometer testing was repeated. Protocol was repeated for three trials over a 5-day period followed by a 2-week detraining period. Subjects then underwent the opposite condition than initially performed.

Results:

16 subjects completed the study. Paired sample t-test revealed a significant increase in mean pre to post scores in the W condition (mean difference = 46.33, $p < .001$); no significant pre-to post difference in sensation for the R condition ($p = .571$).

Conclusions:

Results indicate that increasing fatigue can result in worsening sensation. Sensory changes with fatigue may account for balance problems in persons with MS.

Poster Number 17:

Script Training for Individuals with Autism Spectrum Disorder and Intellectual Disability

Authors:

Lauren Shoenfeld, BS, Graduate Student, Speech-Language Pathology

Faculty Advisor: Michelle MacRoy-Higgins, PhD CCC-SLP, TSHH

Background:

The purpose of this study was to examine the efficacy of a script training protocol with picture stimuli for an individual with autism spectrum disorder (ASD) and intellectual disability (ID). There is evidence that script training with written scripts is effective in treating individuals with aphasia, apraxia of speech, and ASD. Currently, there is no research on script training using scripts composed of pictures.

Methods:

An adult female with ASD and ID was taught four picture scripts related to tasks she performed at her office job. Production of scripts was assessed over seven sessions. Generalization was assessed nine weeks after the final treatment session. The percent accuracy of each script was calculated.

Results:

All four scripts increased in accuracy of production from baseline to the final treatment session. In the generalization phase, two scripts increased in accuracy and two scripts decreased in accuracy.

Conclusions:

The participant improved in production of all presented scripts and was better able to complete her office tasks. A script training protocol using picture stimuli in place of written words may be an effective treatment strategy for individuals with ASD and ID.

Acknowledgements:

This research was conducted as part of the Summative Project for the Master's of Science in Speech-Language Pathology program.

Poster Number 18:*Perceived Genetic Knowledge Among Pre-licensure Undergraduate Nursing Students***Authors:**

Leighsa Sharoff, EdD, RN, NPP, AHN-BC

Athena Mitsios, Undergraduate Research Initiative Fellow

Background:

Assessed the perceived genetics knowledge retention for pre-licensure undergraduate nursing students.

Methods:

Convenience sample of undergraduate students in one urban school of nursing. Control group (n=74) did not take the genetics course, and was taught genetics throughout the curriculum while the education group (n=62) took the stand alone course. Data was collected at intervals for the education group to assess knowledge retention at the sophomore level (n=62; 2013), junior level (n= 60; 2014), and senior level (n=42; 2015). An analysis of variance (ANOVA) was preformed demonstrating a near normal distribution. P-value was less than or equal to alpha = 0.05, making the results statistically significant.

Results:

Education group was shown to have a statistically significantly higher overall scores than the control. The mean \pm standard deviation was 70.1 ± 13.8 [education] vs. 54.2 ± 19.6 [control]; the p-value < 0.001 . Scores initially were higher, but then decreased with time. The mean scores are as follows: 70.1 in 2013, 67.2 in 2014, and finally, 61.6 in 2015; p-value of 0.006.

Conclusions:

Students in the education group showed to have higher scores than their counterparts who did not take the genetics course. Some students given the stand-alone course were able to retain the information while others were not. Genetics/genomics is a new competency and instructors need to better reinforce and integrate the information for future nurses to be able to use this knowledge in practice.

Poster Number 19:*Effect of Fatigue on Spasticity in Multiple Sclerosis***Authors:**

M. McDarby, SPT (Graduate student PT Department)

M. Narovlianski, SPT (Graduate Student PT Department)

B. Perez, SPT (Graduate student PT Department)

I. Rimawi, SPT (Graduate student PT Department)

Faculty Advisor: H. Karpatkin, PT, DSc, NCS, MSCS (Staff, PT Department)

Background:

Fatigue is one of the most common findings in persons with Multiple Sclerosis (pwMS). Fatigue is known to worsen with exertion over time. Anecdotal reports that other MS symptoms such as spasticity also worsen as fatigue increases are common, but there are no studies to support these reports.

Objectives:

Examine the effects of fatigue on spasticity in MS. We hypothesize that as fatigue increases, spasticity will also increase in pwMS.

Methods:

A randomized controlled crossover design was used. Ambulatory subjects with a definitive diagnosis of MS were recruited from local MS practices. Following obtaining informed consent and subject characteristics, subjects were randomized into walking (W) and resting (R) groups. Spasticity was tested using the Modified Ashworth Scale (MAS) by a blinded examiner. After spasticity testing the (W) group performed a 6-minute walk (6MW) to induce fatigue while the (R) group lay supine for 6 minutes to minimize fatigue. Immediately following either 6 -minute condition the MAS was repeated. Three trials were performed in one week, followed by a 2-week detraining period. Subjects then crossed over, performing the other condition.

Results:

16 subjects have completed the study (EDSS=3.59). MAS scores decreased significantly Wilks' $\lambda = 0.46$, $F(3, 13) = 5.06$, $p = .015$ indicating that the subjects displayed less spasticity when fatigued. In the unfatigued condition, spasticity did not change significantly.

Conclusion:

Results prove our null-hypothesis and disprove our hypothesis. This is surprising given that other MS symptoms have been proven to increase with fatigue.

Poster Number 20:

Lexical Networks in Toddlers Who Are Late Talkers

Authors:

Kimberly Cuneo, BA (Graduate student, Communication Sciences and Disorders)

Faculty Advisor: Michelle MacRoy-Higgins, PhD CCC-SLP, TSHH

Background:

The nature of lexical acquisition in toddlers who are late talkers (LT) is not fully understood; there is evidence of both delayed and disordered vocabulary acquisition. The purpose of this study was to compare the vocabularies of toddlers identified as LT with those of their younger, vocabulary-matched peers to examine if similar phonological and semantic influences are present in their lexical networks.

Methods:

Twenty-eight toddlers participated in this study; fourteen were identified LT and fourteen were typically developing, vocabulary-matched (VM) controls. The *Words and Gestures* or *Words and Sentences* form of the *The MacArthur-Bates Communicative Development Inventories, Second Edition (CDI-2)* was completed by the caregivers of all participants to determine each toddler's lexicon. Semantic and phonological connections in the toddlers' lexicons were summed to examine whether the lexical networks of toddlers who were LT were organized in a similar manner as VM controls. In addition, *oddball words*, or words with no semantic or phonological connection to other lexical items were examined.

Results:

Toddlers who were LT had fewer semantic and phonological connections in their lexicons and had more *oddball words* as compared to VM controls.

Conclusion:

Results from this study suggest that toddlers who are LT build their lexicons in a different manner than younger, typically developing toddlers, indicating disordered, rather than delayed vocabulary development.

Poster Number 21:

The Effect of Femoral Rotation Corrective Surgery on Upper Limb Kinematics during Gait in Children with Cerebral Palsy: A Retrospective Cohort Study

Authors:

Aviva Wolff (OT)

Jessica Sigal (Graduate Student, DPT)

Joanna Nobbe (Graduate Student, DPT)

Kevin Lindsay (Graduate Student, DPT)

Jeremy Laverdure (Graduate Student, DPT)

Faculty Advisor: Dr. Elaine Rosen

Background:

Children with Cerebral Palsy (CP) commonly present with both lower extremity and upper extremity impairments which are addressed through surgical and rehabilitative interventions to optimize function. The purpose of this study was to analyze the effect of Varus Rotational Osteotomy (VRO), a lower extremity surgery, on upper extremity motion during gait in children with CP. Given the reciprocal upper extremity and lower extremity motion during gait, the hypothesis was that a post-surgical improvement of hip and pelvis mobility would lead to improved shoulder and elbow motions.

Methods:

This was a retrospective cohort study. Medical records for 19 children (mean age 8 yr \pm 2.5) with a diagnosis of hemiplegic or diplegic CP who had undergone VRO were retrospectively analyzed. Upper extremity kinematics from pre- and post-operative 3D motion analysis were compared.

Results:

Post-operatively, there was a significant average decrease in right elbow range of motion (“excursion”) and right shoulder abduction during gait.

Conclusion:

Right elbow excursion and right shoulder abduction were significantly decreased after VRO. These results represent an improvement in upper extremity motions, i.e. a change toward the gait kinematics of typically developing children as described in previous studies.

Poster Number 22:

Birth Outcomes of Arabic American Women in the United States: A Literature Review

Authors:

Fatima Zahra Boualaoui, (undergraduate, generic program HBSON)

Ihsane Boualaoui, (RN, BSN, Maimonides Medical Center)

Faculty Advisor: Jin Young Seo, PhD, RN (Assistant Professor)

Issue:

This literature review aims to explore the birth outcome of Arab American women (AAW) in the U.S. health care. According to Healthy People 2020, improving infants' well-being determines the health of the next generation, and remains one of the most significant USA public health goals. One of the measures to reach this objective is to reduce ethnic disparities. Yet, although Arabic population is significantly increasing, little is known about this ethnicity in terms of health care disparities and utilization of the health care.

Description:

Articles were retrieved from CINAHL, Google Scholar, and Hunter One Search. Empirical studies that directly examined the birth outcome of AAW were included.

Results:

Key findings suggest two contradictory birth outcomes. On one hand, AAW has a significant low birth weight comparing to other ethnicities due to multi-parity and discrimination. On the other hand, they have lower outcomes risk due to their cultural behaviors and social support.

Conclusions and recommendations:

Less acculturated (assimilated to the US culture) AAW have a better birth outcome. However, they encounter multiple barriers that put them at a risk. As a recommendation, health care providers need to be aware of the uniqueness and needs of this population in order to provide a cultural sensitive care. Also, future researchers and policy makers need to work toward a way to reduce barriers for a better birth outcome.

Poster Number 23:

A Literature Review of the Effect of Nurse-Led Educational Interventions on Cancer Pain Outcomes And Attitudes Towards Pain in Adult Oncology Outpatients

Authors:

Elana Greenberg (Accelerated 2nd Degree BSN)

Hafida Outlioua (RN-BSN)

Allen Alexander (RN-BSN)

Issue:

Alternative methods for handling pain are occurring more frequently among oncology population. Educational interventions are extremely important for cancer patient's because patient's are reluctant to report pain due to fear of addiction to painkillers, increased side effects, and inability to achieve appropriate pain control. Looking at cancer pain outcomes helps nurses provide adequate evidence- based care to a population of patients that experience chronic pain. This literature review addressed the following question: What is the effect of nurse- led educational interventions in comparison to standard care on cancer pain outcomes and attitudes towards pain in adult oncology outpatients?

Description:

This systematic search of the research literature was conducted using PubMed and the Cochrane Database. Keywords used included *cancer, oncology, patient, education, and pain management*. Studies found comprised of a systematic review, and five randomized control trials.

Results:

Key findings suggested positive results in patient knowledge, attitudinal response, and decrease in pain intensity. There were little effects on quality of life, as well as, anxiety, depression and satisfaction regarding cancer pain management.

Conclusions and recommendations:

Nurse- led educational interventions are successful in increasing patient knowledge and attitudinal response, and decreasing pain intensity. Future research can include studies to determine the most beneficial way in which educational interventions can be administered. Nurses can educate their patients about pain management to prevent barriers in providing care to patients with cancer. As a healthcare provider, it is important to not only treat a patient's ailment, but to educate the patient to take an active role in their health.

Poster Number 24:

Above and Beyond Standard Nursing Bedside Care

A Literature Review of the effects of Nurse Administered Music Therapy on Anxiety Levels in Ventilator Dependent Patients

Authors:

Shannon Burkett (Undergraduate, RN-BSN)

Kelly French (Undergraduate, A2D)

Min Kim (Undergraduate, A2D)

Tibo Kosov (Undergraduate, A2D)

Faculty Advisor: Eloise Monzillo, PhD, RN, AHN-BC, CPHQ

Issue:

During states of ventilator dependency, patients often report high levels of anxiety which may hinder the therapeutic course. Bedside nursing interventions are crucial in helping reduce anxiety and nurses are in a position to implement non-invasive, patient-centered measures. This review asks if music therapy is an effective nursing intervention in reducing the level of anxiety and the resulting responses compared with standard nursing care for the ventilated patient.

Description:

A Cochrane systematic review and further exploration of primary sources was conducted using Cochrane and PubMed. Key words were: nursing intervention, music therapy, anxiety, and ventilator. Primary sources consisted of two and three-arm parallel group designs, cross-over studies, and one randomized controlled trial.

Results:

Key findings indicate that periods of music intervention administered by nurses have a significant effect on anxiety on a variety of validated scales in the ventilated patient. Some studies also showed significant reductions in systolic BP, respiration rate, sedation time, and complications during weaning, suggesting the benefits of anxiety reduction.

Conclusions and recommendations:

The subject of music therapy as a nursing intervention for helping reduce anxiety in the stressful state of ventilator dependency should be of great interest because of the evidence presented in the literature, as well as its cost effectiveness and non-invasiveness. It has the potential to be a culturally competent, patient-centered therapy that increases the efficacy of standard care. With further study and refinement, music therapy could be implemented in other high stress conditions or environments, such as the ICU.

Poster Number 25:

The Effectiveness of Psychosocial Training in Improving Direct Care Workers' Competency to Provide Care for Mentally Ill Patients in Nursing Homes (Literature Review)

Authors:

Tatiana DeLouis, RN, Graduate Student (Adult NP)
Funmilola Odubiyi, RN, Graduate Student (PMHNP)
Lisa Persad, RN, Graduate Student (PMHNP)
Judith Wackman, RN, Graduate Student (PMHNP)

Faculty Advisor: Lorie Goshin, PhD, RN

Issue:

As a result of psychiatric deinstitutionalization in the 1960's and a movement towards community based mental health services, there is a high incidence of residents with severe mental illness living in nursing homes. Direct care workers are often inadequately trained and ill-equipped to meet the unique challenges and needs of residents with a mental illness. This literature review seeks to examine the following questions: Are psychosocial based education training modules effective in increasing the competency of direct care staff in providing care for residents with mental illness and related behavioral challenges in nursing homes? What are the critical elements of an effective training? What delivery format is most effective?

Description:

The following databases were used to conduct systematic literature search and limited review: CINAHL, Cochrane and Medline. Keywords included *long term care, nursing homes, mental illness, psychiatric disorders, staff training, staff development, education, nursing assistants* and *direct care workers*. Inclusion criteria included the following: peer reviewed, less than 10 years old, English only articles, full text. Studies found comprised of three random control trials, one qualitative study and one systematic review.

Results:

Key findings indicate that both in house and online training modules are effective in increasing the competency of direct care workers, specifically related to knowledge, ability, self-efficacy, behavioral interventions and attitudes towards residents. Critical elements of training include the mental health needs of residents, behavioral management skills, stigma, de-escalation techniques, scenarios and skills building. Results also indicate that periodic training and ongoing support are necessary to maintain gains.

Conclusions and recommendations:

Psychosocial mental health training is effective in increasing knowledge, skill and overall competency of direct care workers in providing care for residents with a mental illness. Further research should investigate the effect of psychosocial training on specific patient outcomes, such as the use of PRN IM antipsychotics, hospitalizations related to aggression or violent behavior, and incidents over an extended period of time. Policy implications include regulatory agencies (CMS and state) mandating facilities to provide specialized psychosocial training for direct care workers when their census includes residents who have a mental illness.

Poster Number 26:

A Literature Review of the Effects of Music on Reducing the Levels of Pain and Anxiety in Cancer Patients

Authors:

John Raterman (Undergraduate A2D)

Alair Micocci (Undergraduate A2D)

Eliana Schreiber (Undergraduate A2D)

Faculty Advisor: Eloise Monzillo

Issue:

As nurses, we are frontline providers of patient comfort, often with more 1:1 patient time than other members of the healthcare team. Treatment for cancer patients usually involves multiple surgeries and procedures that evoke pain and anxiety. This literature review analyzes the effectiveness of music interventions for cancer patients, and methods in which nurses can implement these interventions to increase patient comfort.

Description:

This systematic search and limited review of research literature utilized the Cochrane Database, PubMed, and the Hunter College Library Journal and OneSearch engines. Keywords used in our search included the following: cancer, pain, anxiety, alternative medicine, integrative modalities, complementary medicine, music, oncology, and therapy. Studies in this review included one systematic review, nine primary source clinical trials, and one health science journal for historical reference.

Results:

Key findings suggest that music may have beneficial effects on pain and anxiety in cancer patients. Additionally, “music medicine” is a convenient and cost-effective method to implement in nursing practice.

Conclusions and recommendations:

Throughout history, music and medicine has intertwined since as early as ancient Greece. Centuries later, current clinical trials suggest quantifiable benefits of pain and anxiety relief, particularly for cancer patients. The literature referred to in this study did not find conclusive evidence whether music therapy was more effective when provided by a licensed therapist or other medical personnel; more research is encouraged. Meanwhile, suggesting a patient to listen to headphones while undergoing a stressful procedure is a convenient integration of these findings into nurses’ evidence-based practice.

Poster Number 27:

A Literature Review of Length of Maternity Leave and its Relationship to Postpartum Depression

Authors:

Guylda Alphonse (Undergraduate, Queensborough Community College)

Kristen Kelly (Undergraduate, Queensborough Community College)

Erica Rodriguez (Undergraduate, Queensborough Community College)

Ellen Skaris (Undergraduate, Queensborough Community College)

Samantha Snyder (Undergraduate, Queensborough Community College)

Dhanrajie Sookchan (Undergraduate, Queensborough Community College)

Melody To (Undergraduate, Queensborough Community College)

Faculty Advisor: Barbara Rome, MS, RN, SANE-A

Assistant Professor Department of Nursing Queensborough Community College

Issue:

In the United States, the Family Medical Leave Act (FMLA) requires most companies to allow employees up to 12 weeks of unpaid family leave following childbirth or adoption. Many argue that there is a correlation between the length of maternity leave and the development of postpartum depression. This literature review addresses the following question: Is there enough information to support the need for mandated paid maternity leave, to minimize the risk of postpartum depression?

Description:

A systematic search of the literature was conducted utilizing CINAHL, Medline, ProQuest and PubMed databases. Keywords used in the search included maternity leave and postpartum depression. The inclusion criteria included peer-reviewed articles that were published between 2011 and 2016 and included two descriptive studies, two longitudinal studies, one qualitative study, and two systematic reviews.

Results:

Key findings indicate that the optimal length for maternity leave is a minimum of six months. Maternity leave of less than this time has been linked to an increased incidence of postpartum depression.

Conclusions:

Countries that allocate approximately six months of maternity leave to mothers report lower rates of postpartum depression. Additionally, mothers experience increased physical health with this increased length of maternity leave. Future research should include a longitudinal study of the cost analysis of the management of a postpartum depressive patient. This data should be compared with the cost of implementing a mandated six-month paid maternity leave.

Poster Number 28:

Evidence-Based Systematic Review: The Effects of Transcutaneous Neuromuscular Electrical Stimulation on the Vocal Mechanism

Authors:

Lily P Ellerin (M.S. Candidate, Speech-Language Pathology)

Faculty Advisor: Michelle MacRoy-Higgins, PhD CCC-SLP, TSHH

Issue:

The use of transcutaneous neuromuscular electrical stimulation (NMES) in conjunction with traditional swallowing exercises is becoming a popular mode of dysphagia treatment delivery by Speech-Language Pathologists (SLPs). Some SLPs are applying a similar model to address various vocal pathologies. The purpose of this study was to systematically review the extant literature examining the effects of NMES on vocal anatomy and physiology; on perceptual vocal quality, performance, and acoustic measures; and the efficacy of NMES in treatment and management of voice disorders.

Methods:

A systematic search was conducted to identify relevant studies published in peer-reviewed journals from 1990 to 2015. All papers meeting the inclusion/exclusion criteria were appraised for study quality and categorized as efficacy or exploratory research.

Results:

Of 102 citations initially identified as relating to the application of NMES to voice parameters, 10 articles qualified for inclusion. Of these 10 studies, 4 were categorized as exploratory, 5 were categorized as efficacy, and one study was a meta-analysis of NMES that included several studies with voice applications.

Conclusions and recommendations:

This systematic review reveals that the current literature relating to the effect of transcutaneous NMES on the vocal mechanism is limited both in quantity and quality to exploratory studies or small-scale research designs. High-quality controlled trials are needed to provide evidence of efficacy in treating vocal pathology. Until further research can document the effects of NMES on vocal parameters, clinicians should be cautious when considering incorporating NMES into voice treatment.

Poster Number 29:

Perinatal Healthcare for Women with Disabilities: Clinical Considerations

Author:

Alisa Sponton, Student

Faculty Advisor: Lorraine Byrnes PhD, FNP, PMHNP, CNM

Abstract:

Women with disabilities account for approximately 12% of the childbearing population and a substantial number intend to have biological children and fully experience motherhood. However there are substantial barriers to achieving this goal for the majority of women with disabilities. A disability is a physical or mental impairment that substantially limits one or more major life activities, is not regarded as transitory and is of record. This presentation discusses the impact of disabilities on care during the perinatal period and how nurses and other health care providers can meet this growing and understudied need.

Poster Number 30:

A Literature Review of Maternal Death related to Post-Partum Hemorrhage

Authors:

Aram Tahmasebi (Undergraduate, Queensborough Community College)

Ingrid Bedoya (Undergraduate, Queensborough Community College)

Maria Sergiadis (Undergraduate, Queensborough Community College)

Marta Pirog (Undergraduate, Queensborough Community College)

Rafik Bijoyan (Undergraduate, Queensborough Community College)

Faculty Advisor: Barbara Rome, MS, RN SANE-A

Assistant Professor Department of Nursing Queensborough Community College

Issue:

Although healthcare in America is considered advanced compared to many other countries, post-partum hemorrhage (PPH) is still a huge problem. A literature review of the literature was conducted to explore the incidence and causes of maternal death related to PPH as well as the prevention. This literature review addresses the statistics and causes of maternal death related to PPH as well as the prevention and treatments.

Description:

An organized search and review of the literature was conducted to identify empirical research related to PPH and maternal death. To conduct the literature review several databases were used which include; CDC, ProQuest, and EBSCO. The keywords used were; *hemorrhage, post-partum, maternal death, and nursing interventions*. Studies found involved six descriptive studies and one meta-analysis.

Results:

Statistics show that 11.3% of pregnancy-related deaths in the United States are caused by PPH. Hypovolemic shock is the most common cause of death in PPH. Half of the maternal deaths in the United States are preventable. Key findings indicated that women who were adequately monitored for bleeding, received uterine massages post-partum, and received oxytocin were less likely to hemorrhage.

Conclusions and recommendations:

Prevention and early intervention is key in preventing negative outcomes in PPH. Women who receive appropriate have satisfactory medical care and attention during labor are less likely to have post partum hemorrhage. Future research can include how many of those maternal deaths could have been prevented and how many of them received treatment. Educating medical professionals on the assessment, risks, and interventions for PPH is very important for the safety of the patients.

Poster Number 31:*Implementing Quality Measures in Caring for Stroke Patients: A Literature Review***Authors:**

Oscar Perez (Undergraduate Nursing, Queensborough Community College)
Da Young Park (Undergraduate Nursing, Queensborough Community College)
Diana Ovsepyan (Undergraduate Nursing, Queensborough Community College)
Richard Kim (Undergraduate Nursing, Queensborough Community College)
Padmanie Ramdas (Undergraduate Nursing, Queensborough Community College)
Stephanie Jaramillo (Undergraduate Nursing, Queensborough Community College)
Rachel Ko (Undergraduate Nursing, Queensborough Community College)
Nicole Mowatt (Undergraduate Nursing, Queensborough Community College)

Faculty Advisor: Georgina Colalillo, MS, RN, CNE

Issue:

Stroke is the fifth leading cause of death and the first leading cause of serious long-term disability in the US. To improve care of patients with stroke, the Joint Commission has established core measures and certification for health care facilities to become primary or compressive stroke centers. Yet, only about 10% of patients are treated adequately and timely according to the recommendations. Nurses, as members of the inter-professional team, are in a key position to collaborate on consistent care protocols throughout healthcare systems to control costs and improve outcomes in stroke patients.

Description:

A literature search was done to explore the use of core measures and standardization of stroke care in improving patient outcomes. The databases searched are CINAHL, Science Direct, Proquest, and Medline from the years 2009-2016. Keywords used were stroke, cerebral vascular disorder, core measures, quality measures and nursing care. Research included a pilot interventional study, a systematic review of literature, a retrospective cohort study, and a longitudinal study.

Results:

Findings include having certified stroke centers, dedicated inter-professional teams, and universal protocols for scoring stroke severity. Early recognition and timely patient-centered interventions are key in improving outcomes. The organizational structure of having a total team approach, including nurse-led units incorporating the family and unlicensed professionals, contributed to minimizing long-term disabilities.

Conclusions and recommendations:

More research is necessary to explore best practices for standardization of stroke protocols and interventions that result in improved access and quality of care.

Poster Number 32:

Pre-Exposure Prophylaxis for HIV Prevention: Improving Adherence by Reducing Anxiety in Men Who Have Sex With Men

Authors:

Rusty Greene, BSN, RN, CNI, DNP-S

Faculty Advisor: Caroline M. Hewitt, DNS, RN, WHNP-BC, ANP-BC

Project Purpose:

Next Step Counseling (NSC) may reduce HIV-related anxiety and increase medication adherence in men who have sex with men (MSM) taking pre-exposure prophylaxis (PrEP) for HIV prevention.

Background & Significance:

HIV-related anxiety is a desirable secondary benefit of PrEP. This benefit has been overlooked as a motivation for PrEP uptake and adherence. NSC may enhance this benefit and improve adherence to PrEP regimens.

Community Assessment:

HIV prevention continues to be a community health priority in New York City's Washington Heights.

Agency Description:

The Farrell Community Health Clinic in Washington Heights will be the site of a study to measure the efficacy of NSC as counseling technique for PrEP users.

Intervention:

Two cohorts of 20 MSM starting PrEP will be exposed to either NSC or clinic-based counseling at initial visits and one-month follow up appointments. This study will be guided by Peplau's Theory of Interpersonal Relationships to establish good patient-provider rapport.

Evaluation Methods:

The Worry About Sexual Outcomes Scale will be administered to measure HIV-related anxiety in members of both cohorts at initial visits and one-month follow up appointments. Self-reported adherence to PrEP will also be measured. Results from both cohorts will be compared to determine if NSC is a more effective tool for reducing anxiety and improving adherence.

Poster Number 33:

Exploring the Barriers for Achieving the Core Measures for Exclusive Breast Feeding

Authors:

Amy Vongwattanakit, S.N.

Katrina Bautista, S.N.

Rubal Chaudhary, S.N.

Ekaterina Muller, S.N.

Giselle Osorio, S.N.

You Wu, S.N.

Faculty Advisor: Georgina Colalillo, MS, RN, CNE

Issue:

Breastfeeding has been found to play a significant role in overall health outcomes for both mother and baby. Despite its benefits, the CDC Report Card (2014) reveals that exclusive breastfeeding rates are only 41% at 3 months and 19% at 6 months. This emphasizes the need to examine barriers to exclusive breastfeeding. The Joint Commission recently published core measures for exclusive breastmilk feeding, leaving nurses in a key position to intervene with barriers and promote breastfeeding success.

Description:

A literature search was performed to explore factors that prevent breastfeeding success and determine which interventions promote exclusive breastfeeding six months and beyond. Nurses play a significant role in educating, and supporting mothers in breastfeeding. Databases searched include ProQuest, PubMed, CINAHL, Medline and Science Direct from 2010-2016, together with the CDC and Joint Commission guidelines. Keywords used were breastfeeding, barriers, promotion, support, attitudes, duration, and infant health.

Results:

Research included randomized controlled studies, concept analysis, and longitudinal studies. Findings reveal the intention to exclusively breastfeed was directly correlated with maternal knowledge, comfort with breastfeeding in social settings and knowledge of health benefits. Father's emotional support and nurse's attitudes also attributed to successful breastfeeding. Patient education on alternative methods of breastfeeding along with ongoing social support positively contributed to exclusive breastfeeding.

Conclusions and recommendations:

Recommendations include pre-natal breastfeeding instructions, involving partners in breastfeeding plan, improving coordination of lactation services, educating health-care providers and creating a culture of breastfeeding support. Future research is needed on effectiveness of support groups through social media and community peer groups.

Poster Number 34:

Absolutely Unique, Totally Inspiring, Sometimes Misunderstood: Investigating support needs for able students on the spectrum in postsecondary education at Hunter College

Authors:

Gianina Giangrande, Masters Candidate 2016, Speech-Language Pathology Program

Faculty Advisor: Nancy Eng, PhD

Issue:

In recent years, CUNY has seen an increase in students enrolling that self-disclose their diagnosis of having Autism Spectrum Disorder (ASD). While these students are intellectually capable of success in postsecondary education, they face newfound challenges they are largely unprepared for. In the absence of ties to community initiatives such as Project REACH, Hunter College must allocate internal resources to address the unique learning and social needs of students with ASD.

Description:

A qualitative study was employed to gather perspectives of eleven participants in the ASD community on the needs of these students in postsecondary education to inform future initiatives. A series of questions were posed to identify barriers to college success and accommodations that students with ASD would benefit from. Triangulation of data and peer debriefing was used to validate recurrent themes.

Lessons Learned:

Hunter College students with ASD would benefit from (1) the development of a 'safe space' when overwhelmed, (2) training on handling unexpected changes in commute or schedule, (3) individualized attention to manage independent living skills, and (4) guidance for professors to reduce access to learning.

Next Steps:

Speech-language Pathology department partners with CUNY faculty to implement cost-effective programming to better serve this population.

Poster Number 35:

Simon Says: A Case Study of Decoding in a Child on the Autism Spectrum with Dyslexic-Like Impairments

Authors:

Michael Solano, B.S., Hunter College Graduate Student, Speech-Language Pathology

Faculty Advisor: Michelle MacRoy-Higgins, PhD CCC-SLP, TSHH

Background:

The purpose of this study was to examine the decoding skills of one particular child with diagnosed ASD and suspected dyslexia compared to reading-matched peers.

Understanding of this child's overall decoding skills in conjunction with noted trends related to sequencing and memory in both reading and non-reading tasks may lead to improved intervention strategies for this particular client.

Methods:

Decoding skills including letter-sound correspondence and blending were assessed using a list of one-syllable non-words with common orthographic spellings (e.g., -an, -ane).

Cognitive skills linked to decoding and sequencing were assessed using the Test of Nonverbal Intelligence, Fourth Edition, as well as a visual and auditory-based memory task.

Results:

Client presented with unpredictability in decoding of non-words with regular and irregular vowels compared to reading-matched peers. All participants exhibited greater variation in pronunciation of non-words with irregular vowels as well as consonant cluster onsets, as compared to non-words with regular vowels and in the CVC condition. Participants' scores on a non-reading cognitive task closely correlated with non-word decoding results. Participants' performances on visual/auditory memory task were poorer predictors of both reading and non-reading decoding tasks.

Conclusions:

Decoding accuracy and performance on non-reading cognitive task suggest that decoding and sequencing abilities carry over between reading and non-reading cognitive demands. Visual memory may prove less effective for reading uncommon words due to irregular pronunciations. In the case of the targeted client, memory and phonological knowledge appear to exceed decoding and sequencing skills. Future intervention strategies for this client may be more functional and beneficial if they are focused on the latter components.

Acknowledgements:

This research was supported by the Hunter College Department of Speech-Language Pathology.

Poster Number 36:

Enhancing Adult Protective Service Workers' Abilities to Detect Physical Signs of Abuse

Authors:

Anh Phuong Tran, BS, RN-BC, ONC

Background:

Elder Abuse (EA) prevalence in the U.S. is estimated to be between 7.6 to 11%. Trained Adult Protective Service (APS) workers are better equipped to investigate EA and assist older adults obtain needed resources, yet there is no national standard education or training for APS workers. NYC has a higher elder abuse prevalence than New York State overall. APS workers in NYC require a minimum of a bachelor's degree, but the field of study varies. Training specifically on physical signs of abuse is lacking.

Aim:

This capstone project aims to enhance APS workers abilities to detect physical signs of elder abuse and to improve communication with healthcare providers.

Method:

Focus groups will be conducted to identify the APS workers' baseline knowledge and to elicit feedback for the proposed educational curriculum. APS workers, the population being served by this capstone, will have input into the proposed curriculum. The curriculum will be piloted with Manhattan APS workers.

Outcome Measures:

This capstone hopes to do achieve a number of outcomes: (1) increased self-efficacy in identifying physical signs of elder abuse and communication with healthcare providers (2) increased knowledge in identifying physical signs of abuse and communication with healthcare providers (3) satisfaction with education curriculum and resource guide (4) improvement in investigative skills. Data will be collected in the form of pre- and post-education quizzes, surveys, and self-efficacy assessments. Improvement in investigative skills will be measured by reports from APS supervisors and nurses and APS data revealing an increase in substantiation rates.

Keywords:

Elder abuse, physical signs, adult protective service worker, communication, training, education.

Poster Number 37:

Riluzole prevents activation of metabotropic glutamate receptors, mGluR1 and mGluR5, and downstream signaling pathways in osteosarcoma cells to inhibit growth

Authors:

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Faculty Advisor: Shahana M. (Associate Professor, MLS)

Background:

Osteosarcoma is one of the most common primary bone cancers. About 40% of osteosarcoma patients develop metastasis. The prognosis of patients with metastatic osteosarcoma is very poor and less than 30% of these patients have a 5-year survival rate post treatment. Mechanisms of metastasis are not completely understood, however, new drugs for better treatment outcome for metastatic osteosarcoma are urgently needed. Several cancers secrete and use glutamate to sustain their growth. Riluzole, a drug that inhibits glutamate secretion, has been used in cancers such as breast, prostate and melanoma to inhibit their growth. The effect of Riluzole on osteosarcoma was not known.

Methods:

We have utilized LM7 cells, a metastatic osteosarcoma cell line, to study the effect of Riluzole on growth. We have investigated the molecular mechanism by which Riluzole prevents invasive growth of LM7 cells. In addition, we have utilized different inhibitors targeting mGluR1 and mGluR5 receptors to investigate their involvement in the aggressive growth behavior of LM7 cells. We have also knocked down the expression of mGluR1 or mGluR5 in LM7 cells to study their effect on LM7 growth

Results:

Using specific inhibitors and knock down of expression, we have demonstrated that mGluR1 and mGluR5 are activated in an autocrine manner to stimulate the growth of LM7 cells

Poster Number 38:

Patient-Centered Dementia Care Education Program for Certified Nursing Assistants (CNAs)

Author:

Edward Williams, MSN, MPH, PMHNP-BC

Abstract:

In New York State, the majority of elderly individuals living in supervised residential facilities have some form of dementia, and caring for them can be a difficult job. Certified Nursing Assistants (CNAs) provide the bulk of care to persons with dementia but their educational preparation is not adequate for caring for these individuals. The aim of this capstone is to improve dementia knowledge and the use of effective communication in CNAs. The secondary aims are decrease caregiver distress, improve job satisfaction and lower rates of verbal and physical aggression in caring for residents with dementia. Data will be obtained from 8 CNAs during the 7am to 3pm shift during alternate weekends at a nursing home. The nursing unit consists primarily of residents 65 years and above and who have a diagnosis of dementia.

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Poster Number 39:

Sepsis: Early detection educational intervention for ED nurses at Southside Hospital

Author:

Margaret Stroehlein, RN, ANP-BC, DNP Student

Faculty Advisor: Elizabeth Capezuti, PhD, RN, FAAN

Background & Significance:

Sepsis is a life threatening complication of an infection. Even with current quality initiatives Sepsis remains as the top expensive condition treated in US Hospitals, reported as \$20.3 billion in 2011 was spent in the US with mortality rates for patients with severe sepsis and septic shock ranging from 10-50%. Early recognition is crucial to improve outcomes and decrease sepsis related mortality.

Methods:

Quality Improvement project at the ED of Southside Hospital

Agency Description:

Southside Hospital, a member hospital of the North Well health system, is a trauma center, general medical and surgical hospital in Bay Shore, NY, with 300 bed and 71,012 patients ED visits/yea.

Purpose/Intervention:

The purpose is to develop and then evaluate an educational program for the ED nurses at Southside Hospital that will increase awareness, understanding, and adherence to the current national guidelines resulting in Sepsis mortality rates at or below benchmarks set by best practice guidelines (CMS, CDC, HANYS, IPRO, The Joint Commission, Surviving Sepsis Campaign).

Evaluation:

Will include survey results of nurse confidence pre and post intervention. Also monitoring of post intervention hospital sepsis mortality rates 3 months post intervention and 6 month post intervention (ideally sepsis mortality rates will decrease).

Poster Number 40:

The Effect of a Sexual Assault Intervention Prevention Program on Attitudes and Behaviors Among Ethnically Diverse Freshman College Students

Author:

Barbara Rome, MS, RN, SANE-A, Doctoral Candidate CUNY Graduate Center

Background:

Sexual violence against women is a multifaceted and complex phenomenon that knows no cultural, geographic, or social boundary. Women on college campuses are at high risk for experiencing sexual violence, which has been linked to substance abuse and higher college dropout rates. Although previous research has demonstrated that sexual assault prevention programs are effective in changing attitudes and behaviors regarding sexual assault, there is a clear gap in research with racial and ethnically diverse populations on college campuses. Before developing effective intervention programs to address sexual violence it is vital to understand the factors that influence attitudes and behaviors in all populations.

Purpose:

The purpose of this study is to examine the effect of a sexual assault intervention program on attitudes and behaviors of freshman students at an ethnically diverse urban community college.

Research questions:

What is the effect of an online sexual assault prevention program on attitudes about sexual assault among ethnically diverse college freshman?

What is the effect of an online sexual assault prevention program on ethnically diverse college freshman behaviors related to sexual assault?

Theoretical Framework:

The theoretical framework for this study is based on the Fishbein and Ajzen's (2010) Theory of Reasoned Action and the Theory of Planned Behavior.

Methods:

The study is a quasi-experimental design using a pre- and post-intervention survey to examine the effect of a forty-five minute online sexual assault prevention program on attitudes and behaviors regarding sexual assault. The participants will be a convenience sample of freshman students between the ages 18-24 at a community college in one of the most ethnically diverse cities in the northeast.

Results:

Pending

Conclusion:

Pending

Poster Number 41:

Increasing BRCA screening in Hasidic Women in Brooklyn

Author:

Blima Marcus

Abstract:

This DNP capstone project proposes to increase genetic screening among Hasidic women in Brooklyn. Hereditary breast or ovarian cancer has high rates in the Ashkenazi Jewish (AJ) community. Women of AJ descent have a tenfold increase in carrying the BRCA mutations, which are associated with a significantly increased likelihood of developing breast cancer, ovarian cancer, melanoma, and pancreatic cancers. However, few providers fully assess patient's family histories and many carriers are missed. The AJ women in Brooklyn, who are primarily Hasidic, have barriers to health screening including concerns about stigma and marriageability, low educational attainment, fear, and lack of sources due to insularity.

This intervention plans to use the Health Belief Model as a framework to understand women's fears and health beliefs in a sample of 30 women in the Hasidic community in Brooklyn. A tailored educational intervention will be provided to address their concerns. To evaluate outcomes, intent to be tested will be measured after the intervention. This DNP capstone project may result in increased uptake of screenings and improve health outcomes in this community.

Poster Number 42:

Group Therapeutic Riding and Social Functioning: A Case Study

Author:

Dolores Cutler

Faculty Advisor: Nancy Eng, PhD

Background:

The purpose was to examine the effects of group therapeutic horseback riding (TR) on a child who demonstrates deficits in pragmatic language skills and has been diagnosed with Turner syndrome and Attention Deficit/Hyperactivity Disorder (ADHD). The research on TR is limited and mainly focuses on children with autism spectrum disorders.

Purpose:

The subject participated in 12 weekly group TR lessons. Lessons consisted of activities on and off the horse that required engaging with a peer, following directions, and balance and coordination. The parent completed a standardized rating scale and responded to non-standardized open-ended questions pre- and post-intervention.

Results:

No significant improvements were found after TR and a regression was noted in the area of social interaction skills. Parent responses indicated that the participant formed a friendship and interacted well with peers during TR sessions as compared to other environments.

Conclusion:

TR may be beneficial for a child with this social profile, as it is perceived by the parent to have a positive effect on social functioning within the specific context. Psychosocial development and school transitions in the child's life may have affected the outcomes of this study. Future research on this population with a larger participant pool and control group might control for the impact of development.

Poster Number 43:

CAUTI: A Clinical Indicator of the Quality of Nursing

Authors:

Eun-Song Choi

Peter Jo

John Lam

Shanta Liverman

Faculty Advisor: Janice Molloy, RN, MS, CNE

Issue:

Catheter associated urinary tract infections (CAUTI) are the most common type of health-care associated infections (HAI), these account for about 80% of infections in hospitals. Essentially all of these urinary tract infections are due to the use of an indwelling urinary catheter. CAUTIs have been associated with increased morbidity, mortality, hospital cost, and length of stay. It has also been noted that urinary drainage systems are often reservoirs for multidrug resistant bacteria and a source of transmission to other patients.

Description:

This research literature review was conducted using ProQuest, Infotrac, and the EBSCO Database. The keywords included *Catheter Associated Urinary Tract Infections, CAUTI, Research, and Hospital.*

Results:

Findings indicate that hospitals in the state of Michigan have a higher success rate with CAUTI prevention. This was done by implementing at least one of the four of the following practices: use of portable bladder ultrasound scanners, condom catheters for men, urinary catheter reminders or stop-orders, or nurse-initiated urinary catheter discontinuation.

Conclusions and recommendations:

Upon learning that Michigan Hospitals have a high success rate with the prevention of CAUTIs, we believe that hospitals should follow the same model. In addition we believe that hospitals should add one of the following practices: proper staff education on catheter care/technique, visual reminder on patient's door, include Catheter placement during shift handoff, or starting an ad-hoc committee to oversee the use of Foley catheters.

Poster Number 44:

Raising Awareness of LGBT Health Disparities and Improving the Cultural Competency of Registered Nurses at North Shore University Hospital

Author:

Bryanna Kelly, RN (BSN-DNP)

Purpose:

Raising awareness of Lesbian, Gay, Bisexual, and Transgender (LGBT) communities' health disparities and improving the cultural competence of registered nurses (RNs) at North Shore University Hospital (NSUH) through education focused on enhancing non-discriminatory/linguistically-appropriate environments and the advancement of efficacious patient-specific interventions supporting the health and safety of all LGBT patients, families, and staff.

Background and Significance:

Numerous The U. S. Department of Health and Human Services has established national goals addressing health disparities and barriers to quality health care exist in LGBT communities, including social stigma and a lack of culturally-competent health providers.

Community Assessment:

NSUH, the second largest organization in Northwell Health, is recognized by the Human Rights Campaign (HRC) as a "Leader in LGBT Healthcare Equality" yet does not offer staff training in LGBT patient-centered care or provide opportunities to collect LGBT-specific patient data as recommended by the federal government..

Intervention:

One educational session about LGBT health-related issues will be offered monthly (3 times) to RNs at NSUH. Recruitment via email, manager assignment, verbal exchange, and visual advertisement will begin August 2016.

Evaluation Methods:

This single group, pre/post test design will use anonymous survey data to assess knowledge of LGBT health-related and affirming-behavior knowledge, perceived comfort and/or self-efficacy in caring for LGBT individuals, and views on LGBT-health training and its relevance to their professional roles.

Poster Number 45:*Listener Reactions to Accented and Disfluent Speech***Author:**

Inslee Coddington, Graduate Student (Speech-Language Pathology)

Faculty Advisor: Nancy Eng, PhD

Background:

Listeners assign personal attributes based on speakers' fluency and accent. Listeners identify stuttering in nonnative languages, and judge speech with an accent similar to their own as "more favorable." When asked to rate the competency of a speaker, how will listeners with different linguistic backgrounds evaluate audio samples with accents and levels of fluency?

Methods:

Ten monolingual English speakers with exposure to Cantonese or Mandarin and ten monolingual English speakers heard four audio samples (Cantonese accented fluent/disfluent, American English "unaccented" fluent/disfluent), and asked to evaluate the competency of each speaker by responding to six statements using a Likert scale.

Results:

Repeated measures analysis of variance compared mean Likert rating for each audio sample, found to be significantly different. One way analysis of variance showed significant difference in responses to the six items as well. Independent ttest showed no significant relationship between linguistic background and rating of speaker's competency

Conclusions:

Analysis of listener responses to evaluative statements illustrates reactions to different speakers. No significant relationship between rating and linguistic background was established. Results may indicate transference between listeners' general biases towards accented speech and disfluent speech, and biases to speech that is both accented and disfluent.

Poster Number 46:

A Literature Review of Therapeutic Hypothermia for patients after Cardiac Arrest as an Effective Treatment in Preventing Neurological Damage or Decreasing Mortality

Authors:

Jenny Gachelin
Philippe Trabado
Michel Anton Davis
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Amanda Budhram
Daniella Babayeva
Kate Brennan

Faculty Advisor: Dee Weber, RN, MS, FNP

Issue:

Well documented research supports the benefits of therapeutic hypothermia (TH) to patients suffering out-of-hospital cardiac arrest (OHCA). For patients who remain comatose following resuscitation, therapeutic hypothermia induces a drop in core body temperature, with the intention of improving both survival and neurologic outcomes. This therapy has been incorporated into the guidelines for routine post-resuscitation care and has been in clinical use for over a decade. However, continuous research into this treatment has helped to address significant questions and controversies.

Description:

Our investigation into therapeutic hypothermia aims to review various research examining the significance of Therapeutic Hypothermia (TH) following out of hospital cardiac arrest (OHCA), for patients with successful return of spontaneous circulation (ROSC), in terms of documented reductions in mortality rate and neurologic morbidity. The studies examined were conducted using randomized control trials of large samples, AGREE II (Appraisal of Guidelines for Research & Evaluation II) recommendations, a retrospective observational study using a Korean national EMS-assessed OHCA cohort database, data search and study selection using MEDLINE (through PubMed), EMBase (through Ovid SP) and CENTRAL (through Cochrane library) databases.

Results:

Findings outlined results concluding that “Out of hospital Cardiac Arrest” (OHCA) patients with shockable rhythm, such as ventricular tachycardia, had better prognosis after therapeutic hypothermia treatment, with improved neurological status and mortality rates, in comparison to patients who suffered with non-shockable rhythms, such as pulseless electrical activity and asystole.

Conclusion and recommendation:

As a result of the overall successful outcomes of TH, this method has been included in post-resuscitation care recommendations, with a high success rate for out-of-hospital cardiac arrest patients. Yet, review of all the parameters surrounding the efficacy of this treatment necessitates further examination and thus provides a perpetuation of the unanswered questions surrounding the complexity of this treatment.

