

15th Annual Evidence-Based Practice Poster Day & Spring Forum

April 28, 2021 - May 7, 2021

Abstract Book

Hunter College Schools of Nursing and Health Professions Hunter College Schools of Nursing and Health Professions

15th Annual Evidence-Based Practice Poster Day & Spring Forum

Opening Wednesday, April 28 on the CUNY Academic Commons: EBPposterday.commons.gc.cuny.edu

Pre-Conference

April 26, 2021



Sneak Peek: Keynote Video Presentations

Carol Scheffner Hammer, PhD, CCC-SLP (<u>View</u>) Cheryl Giscombé, PhD, RN, PMHNP-BC, FAAN (<u>View</u>)

April 28, 2021

10:00 AM



Conference & Poster Gallery Opening

Posters and keynote videos available all week.
Poster discussion/visitor comments through May 7

3:30-5:00 PM



Virtual Meet & Greet on Topia Platform*

Meet poster presenters and other conference attendees in our virtual conference environment. A link will be posted to our conference homepage on April 28. If prompted, enter code EvidenceBP2021

*Requires a desktop device with a webcam and Google Chrome; a headset is recommended, but not required.

5:00 - 6:00 PM



Live Q&A with Keynote Speakers

Hosted on Zoom; RSVP by 4:00 PM for a link.

6:00-6:15 PM



Poster Awards Announced on Zoom

Immediately following Live Q&A session

May 7, 2021

5:00 PM



End of Extended Poster Discussion/Visitor Comments Period

INVITED SPEAKERS



Links to our Keynote video presentations are below. Join us for a live Q&A with the presenters on **Wednesday, April 28 at 5:00 PM** on Zoom - <u>RSVP here</u> by 4:00 PM Wednesday to receive a link (sent ~30 minutes in advance).



Keynote

Developing Culturally & Linguistically Responsive Interventions: A Team-Based Approach
Carol Scheffner Hammer, PhD, CCC-SLP

https://ebpposterday.commons.gc.cuny.edu/keynote/

Carol Scheffner Hammer, PhD, CCC-SLP is Vice Dean for Research and Professor of Communication Sciences and Disorders in the Department of Biobehavioral Sciences at Teachers College, Columbia University. Dr. Hammer's research aims to eliminate educational disparities by promoting the language, literacy, and academic achievement of children from culturally and linguistically diverse backgrounds and children from low-SES homes. She has a particular interest in developing culturally and linguistically responsive interventions.

Closing Speaker

Research to Address Stress-Related Health Disparities in African American Women

Cheryl Giscombé, PhD, RN, PMHNP-BC, FAAN

https://ebpposterday.commons.gc.cuny.edu/closing-speaker/

Cheryl L. Woods Giscombé, PhD, RN, PMHNP-BC, FAAN is the Melissa and Harry LeVine Family Professor of Quality of Life, Health Promotion and Wellness at the University of North Carolina at Chapel Hill. Her research focuses on understanding and reducing stress-related health disparities among African Americans by incorporating sociohistorical and biopsychosocial perspectives to investigate how stress and coping strategies contribute to stress-related psychological and physical health outcomes. Dr. Giscombé has a particular interest in the potential for integrative approaches to reduce mental health-related disparities among African Americans.



ACKNOWLEDGMENTS

This activity is supported by the National Center For Advancing Translational Sciences of the National Institutes of Health under Award Number UL1TR000457 [Weill Cornell CTSC]. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Organizers & Reviewers

The organizers are deeply appreciative of the work by those who go above and beyond to make this annual event a success. We extend our gratitude to this year's presenters, faculty sponsors, community partners, abstract/poster reviewers, keynote speakers, and moderators for their participation and support.

- Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN Assistant Professor, School of Nursing
- Elizabeth Capezuti, PhD, RN, FAAN William Randolph Hearst Foundation Chair in Gerontology and Professor, School of Nursing
- Elizabeth Gross Cohn, PhD, RN, NP, FAAN Associate Provost for Research, Hunter College; Rudin Professor of Nursing, Associate Dean for Research, and Director, Center for Nursing Research, School of Nursing
- Martin Dornbaum, MS, FAAN Director, Health Professions Education Center (HPEC)
- Tara Heagele, PhD, RN, EMT Assistant Professor, School of Nursing
- JungMoon Hyun, PhD Assistant Professor, Department of Speech-Language Pathology and Audiology
- Michelle MacRoy-Higgins, PhD, CCC-SLP Associate Professor and Chair, Department of Speech-Language Pathology and Audiology
- Ellen McCabe, PhD, RN, PNP-BC Assistant Professor, School of Nursing
- Shawn McGinniss, MSEd Instructional Designer/Technologist and Institutional Research Specialist, School of Nursing
- So-Hyun Park, PhD, RN, ANP-BC Assistant Professor, School of Nursing
- Avena Sanassie Administrative Assistant, School of Nursing
- Jin Young Seo, PhD, RN, WHNP-BC Assistant Professor, School of Nursing
- Carolyn Sun, PhD, RN, ANP-BC Assistant Professor, School of Nursing
- Don Vogel, AuD, CCC-A Assistant Professor, Department of Speech-Language Pathology and Audiology and Director, Hunter College Center for Communication Disorders
- An-Yun (Emily) Yeh, PhD, RN Assistant Professor, School of Nursing

ABSTRACTS

(F) Designates Faculty Sponsor/Advisor

Abstract #1

Implementation of Oral Program to Prevent Non-Ventilator Associated Hospital-Acquired Pneumonia (NV-HAP)

Adebisi Adeyeye
Audrey Graham-O'Gilvie
Aimee Fredeline
Ebenezer Ametam
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VA NY Harbor Health Care System; (2) Faculty, Hunter College School of Nursing

Issue: Hospital-acquired pneumonia (HAP) is the second leading cause of infection in Hospitals. Admittedly, non-ventilator hospital pneumonia (NV-HAP) incidence is more prevalent than ventilator acquired pneumonia (VAP) resulting in comparable mortality and morbidity. However, prevention guidelines have focused more on VAP. There is paucity of evidence on its prevention. Some evidence exists on oral care initiatives, which has led to 40%-60% reduction in NV-HAP. NV-HAP can be prevented by oral care and other interventions.

Description: To establish an oral care bundle to prevent NV-HAP in admitted patients at VA NY Harbor Health care System (VANYHHS) resulting in a 25% reduction and an estimated cost avoidance up to \$3 million over 12 months. Guided by Lewin's unfreezing-change-refreeze model of change management, this project will use the Plan-Do-Study-Act (PDSA) methodology. Baseline data will be based on 6 months retrospective chart review of admitted patients from September 2020 to February 2021. The project implementation will involve adoption of the enhanced VAP prevention bundle and cover activities such as resource planning, staff education, documentation template implementation and monitoring.

Outcomes/Lessons Learned: Increased compliance in the use of the enhance VAP bundle, adapted documentation template will lead to a 25% reduction in NV-HAP.

Implications/Next Steps: All campuses across the VANYHHS will adopt the oral care bundle in the in the care of admitted patients. This project will lead to practice change, minimizing non-ventilator hospital pneumonia (NV-HAP) incidence and improved patient outcomes.

Keywords: non-ventilator acquired pneumonia bundle; nVAP; hospital acquired pneumonia

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Tagged: Acute Care, Infection Control, Nursing, Quality Improvement, Clinical/Program Intervention

The Implementation of Nursing Bedside Shift Report and the Effects of Patient Safety and Injury

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Issue: Despite the strong evidence supporting the use of nursing bedside shift report (NBSR) to improve patient safety and quality of care, many hospitals have been challenged with successfully implementing this change in practice (Walsh et al, 2018). This literature review addressed the following question: How does the implementation of NBSR reduce patient safety risk and injury?

Description: Published research was searched using OneSearch to search several databases (including PubMed). The search strategy conducted using "bedside shift report" and "safety". The articles were selected based on the article abstract, patient population, hospital setting and years between 2016-2021.

Results: The review discovered that complex communication skills were needed to improve nurse to patient communication. Implementation practices of NBSR have proven to improve nursing accountability and empowerment (Walsh et al. 2018). Utilizing recommended and innovated structured processes to standardize NBSR provides a stable and consistent information exchange (White-Trevino & Dearmon, 2018). In addition, key findings indicate that patient-centered approach in communication reduce patient safety risk and injury while improving patient satisfaction.

Conclusions and Recommendations: NBSR is a complex multidimensional collaboration in clinical nursing practice (Forde et al. 2020). To fully reap the benefits of effective patient-centered communication and patient participation to reduce risk and injury, the implementation process needs to be embedded in a hospital's policy and procedure (Forde et al. 2020). A comprehensive structed process may assist in improving patient-centered communication. Engaging patients in healthcare may improve patient satisfaction and ultimately improve safety and reduce risk.

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Tagged: Acute Care, Nursing, Quality Improvement, Teamwork and Collaboration, Literature Review

Suicide Risk Assessments in Oncology Patients

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Master's AGNP Program, Hunter College School of Nursing

Issue: The oncology patient population suffers from multiple risk factors for suicide. This literature review focuses on the question: In oncology patients, what suicide risk assessment tools are the most valid and reliable?

Description: A literature search was used with CINAHL, Medline and Science Direct databases for studies analyzing the utilization of suicide risk assessment tools and their effectiveness of addressing and identifying suicidality. Keywords included suicide, prevention, cancer, oncology, Columbia Suicide Severity, screening, C-SSRS. Inclusion criteria are English-speaking oncology patients, adults older than 18 years of age, literature published within the last 10 years.

Results: Studies showed that the use of suicide risk assessments are valid and reliable in patients with cancer, and they are considered a key intervention in identifying suicide risk, and contribute to the ongoing assessment of depression and anxiety in the context of cancer and cancer pain.

Conclusions and Recommendations: Suicide is common in older adults, especially in white males. This risk is increased in persons with significant chronic and life-threatening illness, particularly those that have chronic pain and serious side effects from chemotherapy. Identifying risk factors for suicide with a suicide risk assessment tool, especially in oncology patients, is imperative on early interventions and prevention of suicide. Such tools that can be used during nursing assessments include the Columbia-Suicide Severity Rating Scale.

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Tagged: Chronic Diseases and Conditions, Community/Public Health, Nursing, Mental/Behavioral Health, Quality Improvement, Teamwork and Collaboration, Literature Review

Transitive and Intransitive Verb Retrieval Performance Across Tasks in a Patient With Anomic Aphasia (PWAA)

Stella Anagnostakos

Don Vogel, AuD, CCC-A^(F)

Department of Speech-Language Pathology and Audiology, Hunter College

Issue: Anomic aphasic (AA) patients usually present with salient word retrieval difficulties. Past literature focused solely on noun retrieval and largely neglected other word classes (i.e., verbs), and the few studies that investigated verbs typically utilized picture naming tasks. This study examined the accuracy difference between two verb-types in a patient with AA across three different types of tasks.

Methods: One participant with a diagnosis of anomic aphasia (aged 58 years) was evaluated for retrieval of transitive and intransitive verbs in three different tasks: picture naming, auditory descriptive naming, and spontaneous narratives. Target transitive and intransitive verbs were matched for word frequency and syllable length through the CELEX database. Descriptive and picture stimuli were piloted for stimuli naming reliability in three healthy adults, and only pictures and verb descriptions correctly named by all three participants were included in the study.

Results: The participant in the study achieved a similar accuracy ratio between transitive and intransitive verbs in a picture naming task. The participant required multiple trials to accurately name transitive verbs, but accurately named all intransitive verb stimuli on the first attempt in a picture naming task. Preliminary results reflect a greater difficulty producing transitive verbs than intransitive verbs in individuals with anomic aphasia.

Conclusions: Results of this study inform speech-language pathologists that word retrieval can be assessed using multiple modalities of task. Suggestions for future research include expanding the participant pool to include a variety ages, and ethnic and cultural backgrounds to ensure reliability of results and study replication across populations and contexts.

Acknowledgements: The authors would like to thank the participant and Dr. Jungmoon Hyun, PhD, and the Master's program of Speech-Language Pathology at Hunter College.

Keywords: anomic aphasia, verb retrieval, transitive verbs, intransitive verbs, picture naming, descriptive naming, spontaneous narratives

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Tagged: Chronic Diseases and Conditions, Rehabilitation, Speech-Language Pathology/Audiology, Research/Case Study

Searching for Significance During a Pandemic: A Muslim Perspective

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Issue: Religious beliefs and spiritual practices inform many persons perception of what is important and their view of what is possible, and they also often reflect their highest goals and deepest meaning, even in dark and difficult times. Searching for a sense of purpose and being able to enjoy solitude as well as intimacy are at the heart of being human (Pargament et al., 2000). Cherished beliefs in times of difficulty help us accept reality and avoid meaningless distractions that modern society is so good at providing.

Description: This article seeks to describe the importance of keeping one's beliefs and spiritual practices alive during the COVID-19 pandemic from a Muslim perspective, and it considers this challenge in light of the theory of religious coping (Pargament et al., 2000) and the growing literature on the benefits of mindfulness. It provides for nurses and other healthcare providers a view into the beliefs and practices of a Muslim-American family and consider how faith practices can help people not only cope but grow in difficult times.

Outcomes/Lessons Learned: The paper has also suggested that Ramadan, virtual or otherwise, and other Muslim practices, can be seen a form of the practice of mindfulness, particularly by facilitating awareness, living in the present moment, and connectedness, which has been shown to alter the brain, and overall person, in positive healthy ways and reduces suffering.

Implications/Next Steps: Nurses themselves need to remain optimistic, find their own way to balance reason and faith, secular or religious, to continue to serve all of their patients and to take care of themselves (Mental Health America, 2020). Understanding strategies such as religious coping and mindfulness may assist in developing avenues to address the long-term effects and enhance post traumatic growth related to COVID-19.

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Tagged: COVID-19, Work Environment, Nursing, Mental/Behavioral Health, Diversity/Equity and Inclusion, Clinical/Program Intervention

Implementing a Remote Telephone Coaching Session for World Trade Center Responders to Improve Continuous Positive Airway Pressure Adherence and Evaluate Sleepiness

Keisha Bennett

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Issue: Improve continuous positive airway pressure (CPAP) adherence among world trade center (WTC) responders with WTC-Obstructive Sleep Apnea (WTC-OSA) as a way of improving sleepiness and improving a practice change in this population.

Description: After IRB approval and consent, a target enrollment of twenty-five WTC-responders with CPAP non-adherence was identified. Informed by the Lewin change theoretical framework telephone coaching sessions on CPAP via telehealth were implemented. The epworth sleepiness scale (ESS) was administered remotely pre-and-post-intervention. Also, staff OSA educational sessions were implemented with a pre-and-post survey

Outcomes/Lessons Learned: Thus far data showed a 5% increase in the 90-day CPAP use and 0% increase in CPAP use above 4 hours 3-months post-intervention. Also, a 2- hour increase in CPAP use and lower ESS score 3- months post-intervention.

Implications/Next Steps: Significant opportunities exist to identify patient barriers for CPAP non-use and to implement interventions to improve adherence. CPAP adherence is imperative to improving overall health and quality of life.

Keywords: Obstructive Sleep Apnea, Continuous Positive Airway Pressure Adherence, World Trade Center Responders, Sleepiness Scale

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Tagged: Chronic Diseases and Conditions, Health Outcomes, Nursing, Quality Improvement, Telehealth, Clinical/Program Intervention

Effect of a Behavioral Skills Training (BST) On the Conversation Skills of a Young Adult With Autism Spectrum Disorder (ASD)

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Issue: Young adults with Autism Spectrum Disorder (ASD) often exhibit conversational deficits, which are detrimental in establishing and maintaining social relationships. Behavioral Skills Training (BST) has been effective in improving social skills, however, it is unclear whether it improves specific conversation skills (topic initiation, maintenance, transition). This study's purpose is to examine a modified BST in improving the aforementioned skills of individuals with ASD. We hypothesize that individuals with ASD would benefit from BST protocols.

Methods: The participant was a 23-year-old male with a diagnosis of ASD. The training was conducted via telepractice for three sessions. BST sessions consisted of explicit instructions and rules, target behavior modeling, practice, and reinforcement or corrective feedback. Before and after the training, the same assessments were conducted to measure the topic initiation, maintenance, and transition skills of the participant.

Results: After training, the participant showed improved topic initiation (40%->75%), maintenance (60%->85%), and transition abilities (33%->66%) in conversation with an unfamiliar person.

Conclusions: The modified BST was effective in improving the conversational skills of a young adult with ASD. Future BST studies should assess the effects of BST across additional participants and settings.

Acknowledgements: Dr. Nancy Eng

Keywords: Autism Spectrum Disorder (ASD), conversation skills, social skills, Behavioral Skills Training (BST)

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Tagged: Education and Training, Mental/Behavioral Health, Speech-Language Pathology/Audiology, Developmental Disability, Diversity/Equity and Inclusion, Research/Case Study

Visual Speech Cues and the Acquisition of Phonological Awareness Skills

Kerin A Brennan

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Issue: The integration of visual speech cues and auditory speech signals aids phonological development. Phonological awareness, linked to literacy development, is the ability to detect and manipulate sounds in words. Due to COVID-19, face coverings are a widely-used measure. It is unknown whether reduced visual speech cues due to face coverings negatively affects phonological awareness skills in children. This study examined the role of visual speech cues on the phonological awareness performance of a typically-developing four-year-old.

Methods: A single-subject ABAB design that spanned four sessions assessed performance during onset identification and blending tasks under two conditions: with access to visual speech cues (unmasked condition), and without access to visual speech cues (masked condition).

Results: For onset identification, average accuracy across unmasked sessions was 43%, and there was a 6% increase in accuracy between the two unmasked sessions. Average accuracy in masked conditions was 50%, and a 20% increase was observed between the two sessions. For blending, average accuracy was 70% and no increase in accuracy was observed between the unmasked sessions. Average accuracy in masked sessions was 33%, and there was a 16% increase in accuracy between the masked sessions

Conclusions: Reduced visual speech cues led to poor performance on blending but not onset identification tasks. These novel results point to a differential effect of the absence of visual speech cues on phonological awareness skills. Further research should examine the long-term effects of face coverings on literacy development in children.

Acknowledgements: The participant, Dr. Macroy-Higgins

Keywords: Phonological Awareness, COVID-19, Literacy, Preschool

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Tagged: COVID-19, Pediatric, Speech-Language Pathology/Audiology, Language Development,

Research/Case Study



Reducing Suicidal Behavior Among Psychiatric Patients in the Community: Implementation NP-Led Safety Planning Bundle

Jazmin Caceres

Abstract #9

Viktoriya Fridman, DNP, RN, ANP-BC(F)

DNP Program, Hunter College School of Nursing

Issue: In the US, death caused by suicide occurs every 12 minutes and 17% of people who died of suicide between 2005 and 2017 had recently been discharged from the ER or inpatient unit. Suicide attempts among psychiatric patients residing in the Bronx have increased in recent years and even more during the COVID19 pandemic. Poor outpatient follow-up care after hospital discharge has been associated with an increased risk of suicide for the mentally ill. The purpose of this scholarly project is to introduce evidence-based practice change utilizing a safety planning bundle to reduce suicidal behaviors during the transitional period.

Description: Lewin's theory will be employed to provide a framework for introducing the practice change to prepare for restraining forces, identify driving forces, and maintain equilibrium to implement the project successfully. The DNP scholarly quality improvement project will use a pre-and post- comparison design to implement the NP-Led Safety Planning Bundle comprising suicide risk assessment tool- Columbia Suicide Severity Scale (C-SSRS), post suicide/suicidality huddles, and 72 hours post-discharge follow-up protocol for the high-risk suicidal clients. This quality improvement project will utilize cycles of the Plan-Do-Study-Act (PDSA) model to implement the project's interventions.

Outcomes/Lessons Learned: This DNP quality improvement project's anticipated results are to decrease suicidal behaviors among the adult psychiatric population in the community setting supported by improved provider knowledge, early identification of suicidality during home visits, and prompt follow-up of suicidal clients within 72 hours.

Implications/Next Steps: The introduction of the evidence-based practice changes in utilizing an NP-led safety planning bundle to reduce and prevent suicidal behaviors during the transitional period among the adult psychiatric population can significantly decrease suicidal behaviors in the community setting.

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Tagged: Care Transitions/Continuity, Community/Public Health, Nursing, Mental/Behavioral Health, Quality Improvement, Teamwork and Collaboration, Clinical/Program Intervention

The Lived Experience of the Physical Therapist Simulated Patient

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Issue: Simulated patients (SP) are people who play the role of the patient during simulation-based learning experiences (SBLE). The SP role is typically played by a trained actor, potentially requiring significant cost to the program for training. A physical therapy program recruits practicing physical therapists (PT) to play the SP role. There is limited literature regarding the SP experience, especially from the clinician perspective.

Methods: The purposes of this study were to describe the lived experience of PTs in the role of the SP and ⁽²⁾ determine if playing the role of the patient has any impact on PTs' clinical or teaching practices. A qualitative phenomenological study explored the experiences of practicing PTs who act as SPs. Eight clinicians each participated in an individual semi-structured interview to gather information about their experiences playing the role of the patient in SBLEs. Three researchers completed an inductive cross-case thematic analysis.

Results: Qualitative analysis revealed four themes: Becoming The Patient, ⁽²⁾ A Window into the Student Experience, and (3) Using Experience to Guide Performance, and (4) Giving Back Through Teaching.

Conclusions: SPs gained understanding of stepping into the shoes of a patient, physical therapy students' experiences and knowledge, and how previous clinical experience could provide background for accurately portraying a patient. Further investigation is necessary to reveal the extent to which the SBLE may influence their clinical or teaching practices. Future studies may compare the efficacy of clinician SP's against actors, peers, or other healthcare professionals playing the same role.

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Tagged: Education and Training, Work Environment, Physical Therapy, Rehabilitation, Research/Case Study

EBP Protocol: Acute Osteoporotic Vertebral Compression Fracture Management

Tao Fen Cheng

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Issue: Older adults with acute osteoporotic vertebral compression fracture (AOVCF), pain, and prolonged immobilization lead to secondary medical complications. Two-thirds of 750,000 annual compression fractures are not diagnosed promptly, and over 100,000 hospital admissions at the cost of 1.5 billion dollars occur annually.

Description: The purpose of the EBP protocol implementation is to shorten the acute phase by improving timely clinicians' management and streamlining the process by standardizing office management. The Donabedian framework illustrates the core concepts of structure, process, and outcomes. This project follows Iowa's 7-step model includes pre/post knowledge surveys and AOVCF protocol implementation. After IRB approval, EBP protocol educational sessions and pre/post-intervention surveys will be conducted. The analysis will include the surveys' findings and timely management of AOVCF based on a 7-day referral rate to kyphoplasty, timely management of pain, and physical mobilization score using convenience sampling within 12 weeks.

Outcomes/Lessons Learned: The result of pre/post knowledge surveys will reveal enhanced knowledge of AOVCF guidelines. The main findings will include analysis of early clinical detection, timeliness of treatment, pain reduction, and physical mobilization improvement.

Implications/Next Steps: Organizational structural change will improve clinicians' decision-making through standardization of the process. Anticipated outcome improvement will be exhibited by the timeliness and streamlining of the process, timely pain reduction, and prompt physical mobilization.

Keywords: Compression fractures, early pain management, mobilization, referrals

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Tagged: Gerontology, Mobility and Ambulation, Nursing, Quality Improvement, Clinical/Program Intervention

Decreasing COPD Re-Admissions Utilizing Educational Videos and Follow Up Calls to Improve Inhaler Use

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DNP Program, Hunter College School of Nursing

Issue: Chronic obstructive pulmonary disease (COPD) is linked with 1.8 million emergency room visits in the US, and caused 3,518 per million deaths in 2016. Unplanned re-admissions are common which can potentially increase the morbidity and cost burden associated with the disease.

Description: The project aims to evaluate the use of supplemental educational videos and follow up calls remotely to improve inhaler use knowledge and skills among COPD patients. A one-group pre-test and post-test design will be utilized to compare baseline data on inhaler use knowledge, skills, and COPD re-admissions collected three months before the project implementation with post-test data.

Outcomes/Lessons Learned: Preliminary Results- 42% don't understand written instructions; 58% of patients reported having at least two episodes of COPD exacerbation in the past 3 months; 46% of patients had a successful return demonstration; 31% have been hospitalized at least once in the past 3 months. From this experience, I learned the importance of using proper communication skills to earn people's trust and empower health workers in the clinics with the knowledge of the importance of quality improvement for the well-being of patients.

Implications/Next Steps: If the results indicate the interventions are effective in reducing COPD re-admissions, this may lead to many hospitals in NYC to adopt the use of educational videos to teach proper inhaler use.

Acknowledgements: Dr. Lynda Olender PhD, ANP, RN, NEA-BC (faculty advisor); Dr. Jean Macenat, MD (agency mentor)

Keywords: COPD re-admissions, proper inhaler usage, COPD educational video

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Tagged: Care Transitions/Continuity, Chronic Diseases and Conditions, Education and Training, Health Outcomes, Nursing, Clinical/Program Intervention

Improving Patient Outcomes Utilizing the MATCH Toolkit to Improve Medication Reconciliation

Nancy Cruz Sitner

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Issue: Medication errors are prevalent across the healthcare continuum and transition of care. Accurate medication reconciliation is one method to help protect patients from adverse medication reactions. The World Health Organization (WHO) listed medication reconciliation as a top patient safety priority. Medication reconciliation is a formal process used by health care providers to gather a complete and accurate medication list to identify discrepancies, inform prescribing decisions and identify and prevent medication errors. Performing high-quality medication reconciliation can have a positive impact in reducing adverse medication events and improving patient outcomes.

Description: The Agency for Healthcare Research and Quality (AHRQ) supported the development of the Medications at Transitions and Clinical Handoffs (MATCH) toolkit, a process designed to reduce medication errors and patient harm. MATCH is an evidence-based toolkit that provides step-by-step guidance to improve healthcare facilities' medication reconciliation process. The process examines internal processes, workflow, and staff responsibilities related to medication reconciliation based on strategies developed in acute-care settings. The MATCH toolkit provides a clinical practice guideline that can be used in the implementation of medication reconciliation studies.

Results: While hospitals may document compliance with medication reconciliation, it is unclear how much medication safety has improved. The key to accurate medication reconciliation post-discharge is helping patients work with intake nurses to identify, monitor, and track medications across healthcare entities. This study shows how empowering patients and caregivers with tools and language to work with providers, particularly nurses, to conduct medication reconciliation during primary care clinic visits is key to improving patient medication reconciliation in rural settings. Findings from MATCH implementation indicate that the process improved medication reconciliation workflow.

Conclusions and Recommendations: MATCH demonstrates the potential of an evidence-based toolkit and mentored implementation to improve medication reconciliation processes across a wide variety of hospitals. Future studies may help identify whether medication reconciliation efforts can be successfully targeted to a smaller group of patients, such as the BMT population, exercising this evidenced-based approach to improve patient outcomes.

Acknowledgements: Dr. William Samuels

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Tagged: Care Transitions/Continuity, Chronic Diseases and Conditions, Nursing, Quality Improvement, Literature Review

The Vocabulary Characteristics in Late Talking Toddlers: Noun Learning Strategies

Alana Curcione

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Department of Speech-Language Pathology and Audiology, Hunter College

Issue: The purpose of this study is to examine the noun characteristics in late talkers' vocabularies. Late talkers are identified around 24 months of age, if they say less than 50 words, and display slow acquisition of new words. Previous studies have reported the differences in the characteristics of early vocabularies between late talkers' and age-matched, typically developing toddlers. However, the comparison between late talkers and younger, vocabulary-matched peers has not been investigated.

Methods: This cross-sectional study included vocabulary data from 14 late talkers (average age=23 months) and 14 vocabulary-matched peers (average age=15 months). Parents of the participants reported children's vocabulary words using The MacArthur-Bates Communicative Development Inventories (CDI). The individual noun CDI-categories (e.g., animals) and their attributes were analyzed to identify the most frequently used noun categories and prominent attributes (shape, material, color, sound, solidity) in each group.

Results: Preliminary data showed late talkers and vocabulary-matched peers acquired similar noun categories, but late talkers most frequently produced words that represented animal sounds, while vocabulary-matched peers produced words that represented food/drink. Also, nouns with prominent shape attributes (e.g., ball) were dominant in both groups' vocabularies; however, nouns with sound attributes (e.g., vroom) were higher in late talkers than vocabulary-matched peers.

Conclusions: These findings indicate similarities and differences in vocabulary composition among late talkers and vocabulary-matched peers. Late talkers displayed differences in preference for noun attributes when learning early nouns as compared to younger, vocabulary-matched peers. Results can inform Speech-Language Pathologists to consider different noun attributes when selecting target words for therapy.

Acknowledgements: The authors would like to thank Dr. Samuelson from The University of East Anglia for the noun classification data.

Keywords: Late Talker, Nouns, Acquisition, CDI, Attributes, Language Development

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Language Development, Research/Case

Study





Improving Inpatient Glycemia in a Post-Operative Orthopedic Unit: A Nurse-Driven Early Clinical Decision-Making Guide

Jenny Dejesus

Viktoriya Fridman, DNP, RN, ANP-BC(F)

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Issue: Acute glycemic complications are a prevalent issue in the inpatient setting. In the postoperative orthopedic patient, hyperglycemia can lead to surgical site and peri-prosthetic infections as well as an increased need for transfusions, pneumonia, urinary tract infections, increased length of stay, and inhospital mortality. Hypoglycemia is detrimental to patients' safety in the short-term and poses additional long-term risks including prolonged length of stay and 1-year post-discharge mortality. This quality improvement project aimed to change the nursing practice on the early recognition of acute glycemic complications to decrease the incidence of hyperglycemia in the postoperative orthopedic population and improve nurses' response to acute glycemic complications.

Description: John Kotter's 8-step change model served as the framework for this quality improvement project, focused on these three themes: Creating a climate for change, engaging & enabling the organization, and implementing & sustaining the change. The scholarly quality improvement project utilized a pre-and post-design process improvement approach to adopt an Evidenced-Based early acute glycemic complication recognition clinical decision-making guide. The Plan-Do-Study-Act (PDSA) model was applied to carry out a stepwise approach to promote timely nurses' response to acute glycemic complications by creating a clinical decision-making guide and implementing staff nurse education, unit huddles, and enhancement of the electronic medical record (EMR). The project evaluation considered a pre-post glucose data review and analyzed nurses' recognition of acute glycemic complications over two months of implementation.

Outcomes/Lessons Learned: The project evaluation demonstrated a 35% decrease in the incidence of hyperglycemia in the postoperative orthopedic unit. Additionally, nurses' recognition of hyperglycemia with resulting escalation and documentation in the electronic medical record increased by 45%. Lastly, the average time between the hypoglycemic events and glucose recheck decreased from 27.8 to 17.9 minutes.

Implications/Next Steps: The use of an evidence-based clinical decision-making guide can result in improved nurses' response to adverse glycemia and decreased incidence of hyperglycemia in the post-op orthopedic population.

Keywords: Hyperglycemia, Orthopedic surgery, Nurse-driven, Clinical decision making guide

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Tagged: Acute Care, Care Transitions/Continuity, Health Outcomes, Nursing, Quality Improvement, Clinical/Program Intervention

The Transfer Effects of Gesture Training: A Pilot Study of Systematic Exploration Training in Cognitively Healthy Late-Middle Aged Adults

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Issue: The purpose of this study was to explore whether Systematic Exploration Training (SET) could improve flexible thinking and word retrieval abilities in cognitively healthy late-middle-aged adults. SET utilizes non-verbal gesture activities to explore and discover many different responses with hierarchical guidance. We hypothesized that participants would benefit from cognitive intervention utilizing relatively intact non-verbal abilities to improve age-related declining cognitive and language abilities.

Methods: A total of 11 healthy late-middle-aged adults (age = 51-64, mean 58) participated. They were randomly separated into training (five people) and non-training (six people) groups; both groups underwent pre- and post-testing, with the SET group partaking in five training sessions over three weeks. Pre- and post-tests measured flexible thinking abilities (Nonverbal Gesture & Alternative Uses), and word retrieval abilities (Semantic Fluency and Letter Fluency).

Results: Comparison between pre- and post-tests showed that the training group increased responses on tests of Non-verbal Gestures, Alternative Uses, and Semantic Fluency, whereas the non-training group either decreased or produced a similar number of responses on these tests. On the other hand, the training group showed no increase in responses in Letter Fluency, while the non-training group increased the number of responses.

Conclusions: SET facilitated flexible thinking and semantically related word retrieval performance. Speech-language pathologists may consider employing intact cognitive and gesture abilities to improve declining abilities in healthy adults or adults with dementia.

Acknowledgements: Faculty advisor JungMoon Hyun, PhD, the summative advising team, and the study participants.

Keywords: gesture, training, transfer effect, word retrieval, cognitively healthy adult

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Tagged: Gerontology, Health Outcomes, Speech-Language Pathology/Audiology, Research/Case Study

Hospital-Wide Practice Change From Sliding-Scale to Basal-Bolus Insulin

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Issue: The relationship between hyperglycemia and poor outcomes in post-operative surgical patients, such as increased surgical site infection and length of stay (LOS), has been well documented. Insulin administration is the pharmacologic treatment of choice in the hospitalized patient requiring regulation of blood glucose levels. Research studies have concluded that the safety and efficacy of a more physiologic approach to insulin delivery as basal-bolus insulin (BBI) is superior to sliding-scale insulin (SSI) in achieving and maintaining blood glucose control.

Description: The primary aim of the quality improvement initiative, was to reduce the rate of hyperglycemia in an adult inpatient orthopedic surgical noncritical care population by implementing a practice change of hospital-wide electronic insulin order sets from SSI to BBI. This quality improvement scholarly project used a pre-post design to implement the order sets for noncritical care patients consisting of subcutaneous basal and correctional insulins using lispro and glargine insulins.

Outcomes/Lessons Learned: Hyperglycemia rate to decrease and hypoglycemia events no difference expected. LOS and surgical site infection secondary outcomes measures expected to decrease.

Implications/Next Steps: Hospitals transitioning from SSI to BBI in the noncritical care inpatient setting can benefit from short-term data demonstrating improvement in patient outcomes. As hospitals strive to provide evidence-based, patient-centered care, implementing basal-bolus insulin therapy is an effective intervention.

Keywords: diabetes, orthopedic, blood glucose, sliding scale insulin, basal bolus insulin, inpatient glycemic management

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Tagged: Acute Care, Health Outcomes, Nursing, Quality Improvement, Clinical/Program Intervention

Examining the Feasibility of Remote Cranial Nerve Examinations With a Facilitator: Developing a Protocol for SLPs

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Issue: A cranial nerve examination is crucial in an SLP's assessment because nerve damage can influence respiration, speech, and/or swallowing. SLPs must use a facilitator to address sensory and motor tasks via telepractice. However, no studies have examined the feasibility of using a facilitator within cranial nerve examinations. This pilot study will develop a protocol to conduct remote cranial nerve examinations with facilitators and determine how their level of familiarity will impact the assessment.

Methods: Two sessions were scheduled with six pairs of participants (six 55+ year old neurotypical and healthy examinees; six 18+ year old neurotypical facilitators). Half of the facilitators were unfamiliar with cranial nerve examinations and half of the facilitators were graduate SLP students. The SLP administered the remote cranial nerve examination to the examinee while providing explicit instructions to the facilitator. Data was collected regarding the cueing needed to complete each task item on a scale of 0 (i.e., no cueing) to 4 (i.e., maximal cueing).

Results: The remote cranial nerve examination protocol with explicit instructions for the facilitator resulted in difficulty with some tasks. Additionally, unfamiliar facilitators required more cueing throughout the examination than facilitators familiar with the examination.

Conclusions: This protocol may help address limitations of completing cranial nerve assessments via telepractice. The results of this experiment will benefit the field of speech-language pathology by identifying which tasks are the most challenging to perform during remote cranial nerve examinations with familiar and unfamiliar facilitators. Ultimately, it will help determine what specific additional training may be required to utilize facilitators in remote cranial nerve examinations.

Keywords: cranial nerve examination; telepractice; facilitator

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Tagged: Chronic Diseases and Conditions, Quality Improvement, Speech-Language Pathology/Audiology, Telehealth, Research/Case Study

Identifying Intervention Strategies to Improve Conversational Interactions via Remote Platform for Adolescents With High Functioning Autism: A Systematic Review

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Issue: Video calling is a popular platform for individuals to collaborate in today's society. However, adolescents with high functioning autism (AHFA) may avoid the video-calling platform due to social deficits leaving them at risk for social isolation. The purpose of this study is to create recommendations for intervention to improve conversational skills in AHFA when video calling by identifying the most common features of face-to-face group social skill interventions.

Description: A systematic search of the literature was conducted using 12 electronic databases. Search terms included key words such as 'High Functioning Autism', 'adolescent,' 'Asperger Syndrome,' 'group social skill intervention,' 'topic maintenance', and 'termination.' Among others. Ultimately, 18 articles were selected for review to identify intervention strategies to improve conversational interactions via remote platform for AHFA.

Results: Results identified the theoretical approach, delivery format, participants, and duration and intensity that were most commonly incorporated into face-to-face social skill groups. The features identified lead to maximal outcomes for participants and inform clinicians to improve conversational interactions for AHFA via remote platforms.

Conclusions and Recommendations: Of the interventions reviewed, the majority were guided by the cognitive-behavioral approach of social learning (i.e., prompting, modeling, role-playing etc.) and had a combination of didactic, activity-based and modeling delivery formats in 90-minute sessions over the course of 14 weeks or longer. From the features identified from this systematic review, a social skills group framework format was recommended for intervention using video-calling platform for AHFA.

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Developmental Disability, Diversity/Equity and Inclusion, Literature Review

Effects of Background Noise on Performance on Verbal and Non-Verbal Tasks in an Adolescent With Autism Spectrum Disorder

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Issue: Healthy adults perform poorly on short-term-memory (STM) and working-memory (WM) tasks during verbal background noise. It is unknown whether differences exist between verbal and nonverbal measures of STM and WM. Individuals with ASD show differences between verbal and nonverbal domains. Therefore, background noise may differentially influence verbal and nonverbal STM and WM performance. This study examines the effect of background noise on verbal and nonverbal STM and WM performance in an individual with ASD.

Methods: One individual with ASD and two typically-developing (TD) individuals will complete verbal and nonverbal STM and WM tasks. A letter span forward and backward task will evaluate verbal STM and WM, respectively. A corsi block forward and backward test will evaluate nonverbal STM and WM, respectively. Each task will be administered via Zoom with and without the presence of verbal background noise. Between- and within- group comparisons will compare performance with and without background noise in each group.

Results: The anticipated outcome of this study is that the ASD individual will perform comparably with the TD individuals on the verbal tasks but poorer on the nonverbal tasks. It is also hypothesized that the ASD individual will perform poorer on conditions with noise than without noise relative to TD participants.

Conclusions: Hypothesized outcomes may demonstrate that the presence of background noise negatively affects memory in individuals with ASD due to the increased complexity of the memory tasks when background noise is present. This may contribute to processing challenges for individuals with ASD in loud environments.

Acknowledgements: Thank you Hunter College Center for Communication Disorders and Dr. Nancy Eng for assistance in finding participants.

Keywords: working memory; cognition; ASD; autism; memory; noise

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Developmental Disability, Research/Case Study

Safe Use of Lift Equipment: Implementation of a Nurse-Led Assistive Device Decision Algorithm

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Issue: Direct caregivers who engage in transferring, lifting, and repositioning patients are at risk for musculoskeletal and work-related injuries. The literature connects the use of lift equipment in reducing occupational injuries at the bedside. National Safe handling guideline support using an assistive device where there are 35 lbs or more. Despite a mandate such as this, lift equipment is underused. Therefore, the promotion in the application of lift equipment at the bedside can improve safety and reduce injury to staff.

Description: The DNP scholarly quality improvement project used a pre-and post-design process improvement approach to implement EMR nurse-led assistive device decision algorithm to improve nurses' competence to evaluate lift equipment needs during patient lifts. The objective was facilitated by collaborating with unit nurse champions, team meetings, and evaluated by lift equipment use documentation in Electronic Medical Record (EMR). The project's next objective implementation was carried out by educational sessions, teach-back methodology, and bedside coaching, and pre-and post-survey was used to evaluate the nurses' knowledge in promoting confidence in the use of lift equipment. The Plan-Do-Study-Act (PDSA) model was applied.

Outcomes/Lessons Learned: The DNP scholarly quality improvement project results showed an increase in the safe use of lift equipment and a decrease in occupational injuries among nurses.

Implications/Next Steps: The adoption of the evidence-based nurse-led assistive device decision algorithm improves the nurse practice of guiding the decision to select the appropriate lift equipment during patient lifts/transfers and significantly reduces the risk of occupational injuries in promoting safe transferring, repositioning, and lifting of patients at the bedside.

Acknowledgements: The attainment of this doctorate is a significant achievement in my life and professional career. I extend my gratitude for the support of Dr. Fridman, family, colleagues, and classmates.

Keywords: Lift equipment, assistive device, occupational injuries among nurses, safe patient handling, manual lifting

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Tagged: Acute Care, Work Environment, Nursing, Quality Improvement, Clinical/Program Intervention

The Development of Verb Arguments in Typically Developing Children

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Issue: It is easier for children to acquire nouns compared to verbs. A noun bias exists until at least three years old and is particularly obvious in children with SLI. Studies show that semantics, rather than syntax, is a contributing factor to verb learning. This study analyzed the development of semantic content categories, specifically the use of Dowty's sixteen thematic roles, as verb arguments, in typically developing children from age 1;6 to 8;6 years old.

Methods: The verb usage of 18 children (divided into three groups: 6 aged 1;6 - 2;6, 6 aged 4;6 - 5;6, and 6 aged 7;6 - 8;6) throughout 50 utterances were analyzed. Each verb argument was categorized into one of the 16 roles. The presence of each thematic role and the proportion of each of the thematic roles used by each age group of children will be calculated.

Results: Preliminary results suggest that by 2;6 years old, only the content categories of agent, experiencer, theme, patient, instrument, location, direction/goal, source/origin, and manner make up verb usage. However, by 8;6 years old, all 16 content categories should be used.

Conclusions: This analysis provides detail regarding the time in which typically developing children have the ability to use verbs for different semantic functions. These developmental guidelines can help clinicians determine which types of verb arguments to introduce in language therapy in order to teach verbs in a meaningful way.

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Language Development, Research/Case Study

The Effect of Postural Alignment on Motor Output Of the Upper Extremity

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Issue: Although clinicians commonly use postural assessments as part of the evaluation of function, researchers have contested the influence of posture on physical function. The Saliba Postural Classification System (SPCS) provides a tool for assessing the relationship between posture and function. The purpose of this study was to investigate the effect of different postural alignments as defined by the SPCS on upper extremity muscle force generation.

Methods: Four healthy adult participants chosen from a sample of convenience within a university physical therapy department were screened by an expert to determine the SPCS classification of their habitual standing posture. Anterior deltoid manual muscle testing was performed with a handheld dynamometer on the dominant arm with the participants standing in a habitual posture and in a corrected, vertical/vertical (V/V) posture as defined by the SPCS. Individuals with a habitual V/V posture were excluded. The order of testing was randomized. The dependent variable was the average of 3 maximum dynamometer readings. Data were analyzed using a repeated-measures design.

Results: Non-parametric data analysis (Independent-Samples Mann-Whitney U test) revealed no significant difference in force output between habitual and corrected postures (p = 0.932; Z = 0.000).

Conclusions: The small sample size was not sufficient to adequately test the research question. Minor differences observed between postures raise the question of potential clinical significance. Further study is indicated with a larger sample size and electromyographic data collection to obtain information about posture-dependent muscle activation.

Acknowledgements: Vicky Saliba, PT, FFFMT, FAAOMT

Keywords: Posture, Postural alignment, Motor output, Dynamometry, Shoulder girdle, Anterior deltoid muscle

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Tagged: Mobility and Ambulation, Physical Therapy, Rehabilitation, Research/Case Study

Effects of the COVID-19 Response and Management on Nurses' Mental Health

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Issue: In 2019, the novel coronavirus SARS-CoV-2 (COVID-19) rapidly approached the United States healthcare systems resulting in unprecedented challenges for nurses. These include increased exposure to infection, lack of personal safety, and subjection to high death rates. With no conclusive treatments and end to COVID-19 nurses are consequently affected psychologically.

Description: Nurses are identified for this research in consideration of their large presence in the healthcare workforce and their close proximity to COVID-19 patients, and the lasting impacts and mental health burdens that they are experiencing. This systematic search and limited review of research literature were conducted utilizing MEDLINE Complete and CINAHL Complete. Keywords included Covid-19, nurses, depression, anxiety, burnout, and challenges. Results included a systematic review and meta-analysis, a systematic review and meta-regression analysis, three cross-sectional survey analyses, and multiple regression analyses.

Results: Key findings indicate that perceived risk, social stigmatization, and poor hospital resources for disease management are causative factors in the increase in burnout, stress, depression, anxiety, and sleep deprivation that nurses are experiencing.

Conclusions and Recommendations: This review of literature concludes that nurses are experiencing psychosocial effects in response to the deficient healthcare response to the COVID-19 pandemic. An urgent need for nursing mental health coping measures and stress management programs has been identified. Future research should focus on longitudinal studies that assess the psychosocial effects of disease management during and after outbreaks, as well as longitudinal results of the pandemic in order to develop preventative mental health measures.

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Tagged: COVID-19, Work Environment, Nursing, Mental/Behavioral Health, Literature Review

Implementing an Evidence-Based Escalation Protocol to Reduce Surgical Cancellations in the Outpatient Surgery Setting

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Issue: Throughout the literature, there is clear evidence of the detriments of surgical cancellations for the preoperative patient as well as the healthcare institution. While the institution suffers significant reputational and financial drawbacks, the patient also experiences psychological, social, and financial consequences as a result of futile preparation for their surgical procedure. Since many reasons for surgical cancellations are preventable, the key to reducing surgical cancellations is establishing a standardized, evidence-based practice as the foundation of care in the preoperative outpatient setting.

Description: The purpose of this DNP scholarly project is to implement an evidence-based escalation protocol to reduce surgical cancellations in the outpatient surgery setting to give the ambulatory surgery nurse clear parameters for identifying high-risk patients for referral to the Pre-Admission Testing clinic provider. This project will use the pre/post-intervention to increase appropriate nurse-to-provider referrals using multiple cycles of the Plan-Do-Study-Act model. An escalation protocol will be constructed using the American Society of Anesthesiologists physical status classification system to standardize the preoperative assessment process. The second objective consists of educational sessions to improve nurse knowledge to encourage appropriate referrals.

Outcomes/Lessons Learned: Significant improvement in nurse knowledge and referral of highrisk patients for further evaluation by the PAT provider as evident by reduced surgical cancellations in the outpatient surgery setting.

Implications/Next Steps: The evidence-based escalation protocol assumes a significant influence in nurse expertise screening high-risk in the outpatient surgery setting. That will allow the PAT provider to order diagnostics tests and refer patients to the appropriate specialty for surgical clearance before the procedure to avoid cancellations.

Keywords: Surgical Cancellations, Escalation protocol, Pre-Admissions Testing Clinic

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Tagged: Nursing, Quality Improvement, Teamwork and Collaboration, Clinical/Program Intervention

Integrating a Long-Term Evidence-Based Online Anti-Vaping Educational Orientation Program Within an Urban Community College to Create Awareness of the Health Risks of Vaping

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Issue: E-cigarettes have been used as an alternative to quit smoking tobacco, but instead has led to serious lung illnesses and dozens of deaths among younger adults. Studies have demonstrated that a school-based anti-vaping online educational program increase students' knowledge of vaping, elicits readiness to quit, and prevents vaping related illnesses.

Description: To translate evidence into practice by helping college students gain more knowledge about the dangers of vaping and likely reduce the number of students from ecigarette use. Informed by the theory of change model, an evidence-based anti-vaping online educational program by Essentia Health will be implemented to evaluate for short and long-term outcomes. This program includes a pre-post survey, a film, and a PowerPoint Presentation. Participants will be community college students aged 18-45 who will complete the same survey immediately before, after, and about 3 months via Qualtrics Survey after completing the online educational program.

Outcomes/Lessons Learned: Key findings indicates that the program showed a change in attitude and increase in knowledge, which demonstrates to be an effective long-term educational program. Post-test were statistically significant from the pre-survey (p <0.05) and 3-month post-survey (p <0.001).

Implications/Next Steps: Compared to student's baseline understanding on vaping, the online educational program was associated with an increased knowledge, awareness, and change in attitude among community college students.

Acknowledgements: I would like to take this opportunity to express my sincerely appreciation to thank all the Hunter and QCC faculties who helped me with my project. Thank you.

Keywords: Vaping, e-cigarette, educational program

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Tagged: Community/Public Health, Education and Training, Nursing, Clinical/Program Intervention

Reducing Self-Neglect in Adult Protective Service Clients: Implementation of Visiting Psychiatric Service's Self-Management Adherence Protocol

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Issue: Elder Self-Neglect (ESN) prevents APS clients from independent living and is an independent predictor for higher mortality and cause of premature death. ESN also contributes to increased rates of hospitalization and contributes more than \$5.3 billion to the nation's annual health expenditure. One of the goals of Healthy People 2020 is to increase the number of older adults who report confidence in managing their chronic diseases. The DNP scholarly quality improvement project aimed to introduce practice change in self-neglect management to reduce ESN in the community health setting.

Description: The project used a pre-and post-design process improvement approach to implement visiting psychiatric service's self-management adherence protocol. The project's first objective involved implementing a comprehensive self-care toolkit and implementing an evidence-based Abrams geriatric self-neglect scale to improve ESN assessment. The pre/post-intervention questions survey evaluated the attainment of clinical staff's knowledge of implementing practice change in proper detection and self-neglect management. The project implementation adopted a Plan-Do-Study-Act model to implement and test a practice change. Chart reviews were conducted to audit for compliance with the use self-neglect scale. Dynamic Cybernetic Team Model (DCTM) was used to guide project activities.

Outcomes/Lessons Learned: The DNP scholarly project implementation demonstrated a significant reduction in cases of self-neglect in APS clients within 3 months of implementation.

Implications/Next Steps: Implementing Visiting Psychiatric Service's Self-Management adherence protocol can significantly improve clinician's knowledge, assessment, and management of elder self-neglect.

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Tagged: Gerontology, Home and Long-Term Care, Nursing, Mental/Behavioral Health, Quality Improvement, Teamwork and Collaboration, Clinical/Program Intervention

The Effect of Life-Long Residence on Verbal Fluency Performance in Polish-English Bilinguals
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Issue: Verbal fluency is measured by the ability to produce words from a category within time constraints, and performance on verbal fluency tasks is used to assess executive functioning skills. Linguistic experiences in an environment can influence verbal fluency performance in bilinguals. Studies including long-term immigrants have found that residing in an L2 dominant environment benefits L2 fluency over L1 fluency. The present study examines whether lifelong exposure to a single dominant language environment influences verbal fluency performance in bilinguals.

Methods: Eight college-aged English-Polish bilinguals participated. Half of the participants were life-long residents of Poland, and the remaining half were life-long residents of the United States. Each participant provided information regarding language use and exposure in their environment via completion of the Language Experience and Proficiency Questionnaire (LEAP-Q). All participants completed semantic fluency and letter fluency tasks in English and Polish. Verbal fluency scores were compared within and between groups, and a correlational analysis examined relationships between information gathered from the LEAP-Q with verbal fluency scores.

Results: Participants residing in the United States performed better on the English semantic and letter verbal fluency tasks, and the participants residing in Poland performed better on the tasks in Polish. Participants who reported increased use of the non-dominant language in a lifelong environment (e.g., English performance of participants living in Poland) resulted in comparable semantic and letter verbal fluency scores in both languages.

Conclusions: It is important to understand how bilinguals from varying linguistic environments perform on verbal fluency tasks given the importance of the assessment in language and neuropsychology.

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Tagged: Speech-Language Pathology/Audiology, Diversity/Equity and Inclusion, Language Development, Research/Case Study

Reducing CAUTI Rates in the Medical-Surgical Setting: A Nurse Driven 'CUT CAUTI' Protocol

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Issue: CAUTI's make up 40% of all hospital acquired infections (making it one of the most common sources of infection) and 13,000 patients in the United States die yearly from CAUTI's. In general, 80% of urinary tract infections are associated with indwelling urinary catheters. To implement a quality improvement "CUT CAUTI" protocol to address a gap in practice concerning Foley catheters through the use of a checklist and to improve the decision making of catheter alternatives through use of an algorithm.

Description: E.M. Roger's Diffusion of Innovation Theory explains that over time, an idea gains momentum and diffuses through different populations. Individuals will be more willing to adopt new ideas than others. The DNP scholarly quality improvement project will utilize pre- and post-comparison design to implement a "CUT CAUTI" protocol which comprises of an evidenced based algorithm and a checklist tool to support nursing decision making. The protocol will be enhanced with E-Learning on proper maintenance of indwelling catheters when in place. The project will utilize the Plan-Do-Study-Act (PDSA) cycle method to test the practice change at multiple implementation levels.

Outcomes/Lessons Learned: The anticipated results of this project include a significant reduction in the CAUTI rates on 3 medical surgical units.

Implications/Next Steps: Implementing an evidenced- based algorithm and checklist may significantly decrease Foley catheter days and catheter utilization rate on the initiated units to promote better patient outcomes.

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Tagged: Acute Care, Infection Control, Nursing, Quality Improvement, Clinical/Program Intervention

Implementation of an Evidence-Based Acupuncture Referral Consideration to Decrease Prescribed Pain Medication, and Increase Acupuncture Utilization

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Issue: Older adults are more likely to experience chronic pain than younger adults. Pain medications that are commonly used can harm older adults. Managing chronic pain can be difficult due to multiple comorbidities and risks of polypharmacy. Many studies show that acupuncture is safe and effective in treating chronic pain and can reduce the pain medication use.

Description: The aim of this project is to promote a change of acupuncture referral process and consideration in chronic pain management among older adults (aged 60-90) to increase acupuncture referrals and decrease their pain medication use.

Outcomes/Lessons Learned: Informed by Bandura's Social Cognitive Theory (SCT) the option and referral for acupuncture referral for patients receiving chronic pain medications was considered and Primary Care and Geriatric providers educated via video conference at their regularly scheduled meetings. Acupuncture educational materials provided online. Pre-and-post-tests demonstrated an increase in knowledge, acupuncture referrals increased and the utilization of chronic pain medication was reduced.

Implications/Next Steps: The project of changing practice of acupuncture referral consideration and process can increase the acupuncture referrals and decrease the use of oral pain medications.

Keywords: Acupuncture Referrals, Chronic Pain, Pain Management

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Tagged: Chronic Diseases and Conditions, Gerontology, Nursing, Quality Improvement, Clinical/Program Intervention

Knowing the Patient as a Person in the Era of Precision Nursing

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Issue: Knowing the Patient is central to nursing practice however, as the nursing profession is under pressure to adapt to the contemporary value-oriented healthcare system, the concept of knowing the patient as a person has become difficult to attain. Inconsistencies and questions have emerged such as: how to know the clinical needs of the patient without forgetting that the same patient is also a person with complex life and a unique state of normal self?

Description: Cumulative Index to Nursing and Allied Health (CINHL), PubMed, and PsychINFO databases were used to search the literature published from 2000 to 2020. Search terms included: knowing the patient, someone's normal self, and nursing. Articles written in English from various countries were included to gain a global perspective. The search resulted in a total of 14 papers from six countries: the USA, Canada, UK, Japan, Sweden, and Denmark meeting the inclusion criteria. PRISMA model and Levels of Evidence rating system were used during this review.

Results: All fourteen articles included in this study were read in full twice to identify any similarities in the research design, methodology, nursing interventions in the inquiry process of knowing the patient, and study outcomes. The analysis yielded three main emerging themes: 1) Knowing the Patient's bio-physiological and clinical information, 2) Knowing the Environment (clinical and non-clinical), and 3) Knowing the Persona holistically and beyond the identified clinical tasks.

Conclusions and Recommendations: While the current digitized, cost-effective healthcare environment promotes knowing the patient's clinical needs, not enough attention is being paid to knowing the patient as a person. In order to maintain the fundamental belief in the uniqueness of every human being, nurses must stay true to their core professional and ethical values of knowing each patient as a whole person.

Acknowledgements: I would like to recognize: Prof. Elizabeth Cohn, RN, PhD and Prof. Liz Capezutti, RN, PhD

Keywords: Knowing the Patient as a Person, Precision Nursing, Personomics

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Tagged: Health Outcomes, Nursing, Diversity/Equity and Inclusion, Literature Review

The Effectiveness of a Subject-Verb-Object (SVO) Training Protocol for Syntax Intervention in a Child With ASD

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Issue: Syntax is typically considered an area of strength for children with autism spectrum disorder (ASD). There is a limited amount of literature on syntactical intervention for the small population of children with ASD who struggle with syntax. The purpose of this study is to assess the effectiveness of a subject-verb-object (SVO) training protocol for syntax intervention in a child with ASD.

Methods: The participant of this study was a nine-year old male with a diagnosis of ASD. This study included three phases: pre-training (baseline), eight-week training protocol period (20 minutes per week), and post-training. Stimuli included a set of images to elicit concrete, high-frequency subjects, verbs, and objects. The training protocol incorporated characteristics that are considered to be beneficial for ASD language treatment and Language Impairment syntax treatment (e.g., visual supports and repetitive verbal routines). Performance pre-training and post-training were compared to examine the effectiveness of the SVO training protocol.

Results: Preliminary data suggests that this protocol would be a beneficial intervention strategy for this child with ASD who struggles with syntax.

Conclusions: The results of this study will contribute to current data on syntax intervention for children with ASD. Children with ASD who have similar difficulties with syntax may also benefit from intervention strategies that incorporate visual supports and repetitive routines to improve the accuracy of SVO constructions.

Acknowledgements: The authors would like to thank Dr. Nancy Eng, the participant, and the Hunter College speech-language pathology program for their contributions to this study.

Keywords: Syntax; ASD

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Tagged: Education and Training, Pediatric, Speech-Language Pathology/Audiology, Developmental Disability, Language Development, Research/Case Study

Using Female External Catheters to Reduce CAUTI's and Pressure Ulcer: A Literature Review

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Issue: Urinary incontinence is a common issue that patients in health care settings encounter during hospitalization. Urinary incontinence can lead to hospital acquired problems such as urinary tract infections and pressure ulcers as well as loss of dignity. Catheter associated urinary tract infections (CAUTI) are costly for both the hospital in terms of loss of funding and increase in patient length of stay. In addition, the risk for pressure ulcers for patients who are incontinent is higher than continent patients. External urinary catheters can be an answer to the issues of CAUTI's and pressure ulcers from incontinence.

Description: A literature search was conducted using CINAHL, ProQuest, Medline, and webbased databases to examine peer-reviewed articles published between 2016-2021. Articles addressed urinary incontinence and the use of external catheters to prevent CAUTI's and pressure ulcers.

Results: External urinary collection devices adhere to the external genitalia or pubic area and collect urinary output. External catheters are easy to use but are not consistently implemented for patients with urinary incontinence. External urinary catheters (condom catheter) are successful with male patients due to better anatomical adaptability and have resulted in preventing pressure ulcers and CAUTI's. The development of female external urinary catheters have not been as successful as male external catheters, mainly due to poor fitting, leakage, and skin irritation. A newly developed female external catheter called PrimaFit® offers an alternative to an indwelling catheter.

Conclusions and Recommendations: External catheters can be viable and effective solution to CAUTIs and pressure ulcers from urinary incontinence. PrimaFit® is a newly developed female urinary management system that offers better adherence, less leakage of urine and greater comfort and satisfaction for patients. Future implications include statistical data and analysis of overall effectiveness of the PrimaFit®.

Keywords: Urinary incontinence, catheter-associated urinary tract infections, external

catheters, pressure ulcers

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Tagged: Acute Care, Infection Control, Nursing, Literature Review



Processing Facial Emotions in Adolescents With Autism Spectrum Disorder

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Issue: There is controversy about how people with Autism Spectrum Disorder (ASD) understand facial emotions. Some studies have reported that people with ASD have difficulty identifying facial emotions, whereas, other studies have not yielded the same results. This discrepancy may have arisen from adopting different test methods. This study investigated whether adolescents with ASD have difficulty with emotion identification and how their performance differs in two tests with and without multiple-choices.

Methods: This study included five adolescents (average age 15.2, range 13-17) with a diagnosis of ASD. Participants were evaluated using a language screening and a series of four tasks. Participants were asked to identify emotions in four conditions: picture, written narrative, picture with multiple written choices, and narrative with picture choices.

Results: The group of adolescents with ASD performed poorly in the identification of others' facial emotions. The average accuracies of the ASD group were 68% in picture condition and 71% in written narrative condition. The accuracies were higher when there were multiple-choices in picture condition (18% increase) and written condition (13% increase).

Conclusions: Adolescents with ASD exhibited clear difficulties in identifying other people's facial emotions in two different modalities. They gained some benefit from the support of multiple choices. This difficulty on emotion identification in ASD should be explicitly addressed in clinical and educational settings and supportive cueing systems should be created for self-cueing and external feedback.

Keywords: Autism Spectrum Disorder, Emotion, Facial Expression Identification, Adolescents

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Developmental Disability, Diversity/Equity and Inclusion, Research/Case Study

The Relationship Between Word Learning and Vocabulary Growth From 2;0 to 3;0 in Children Who Are Late Talkers

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Issue: Late talkers are toddlers who are delayed in vocabulary and syntax at two years of age. Some late talkers' language skills catch-up to age-matched peers by kindergarten while other late talkers show continued language delays. It is difficult to predict which children will continue to show language delays at two years. This study will examine whether word learning in a group of two-year-old late talkers is correlated with vocabulary growth at three years of age.

Methods: Ten late talkers participated in a word learning task administered over ten training sessions. Based on word learning performance they were divided into two groups: high word learners (n=5) and low word learners (n=5). This data was then compared to performance on expressive and receptive vocabulary measures at three years of age.

Results: The data indicates that word learning performance at two years of age is correlated with receptive vocabulary growth at three years of age. Word learning was not found to be correlated with expressive vocabulary growth.

Conclusions: Speech-language pathologists can consider measuring word learning ability in late talkers at two years of age to determine which children are at risk for continued receptive language delays.

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Language Development, Research/Case Study

Collaboration Among Nursing, Physician Assistant Studies, Speech and Communication Disorders, Nutrition, and Occupational Therapy Faculty to Promote and Support Interprofessional Practice

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Issue: Historically it is known, and remains true today, faculty can be a barrier to interprofessional education that will support students in interprofessional practice. The siloing of disciplines and perceptions of disciplinary ownership of practice knowledge can hinder faculty across the disciplines from finding meaningful opportunities to authentically collaborate and model interprofessionalism for their students. Valuing disciplinary contributions is an essential foundation for interprofessional education.

Description: A core group of faculty led the interprofessional education and practice committee to collectively identify, plan, implement and evaluate meaningful opportunities for interprofessional education for our students. Our first successful initiative, No Practitioner is an Island, centered on palliative care, which was selected based on its interprofessional nature. Building on this work the faculty accepted an opportunity to work with a grant initiative focusing on individuals with disabilities who are supported by assistance animals. Students attended a masterclass for content, and small interprofessional discussion groups, including reflective practice, and group level debriefs for content and interprofessional learning.

Outcomes/Lessons Learned: Students report content confidence and identify the importance of interprofessional practice with this cultural community of patients.

Implications/Next Steps: Interprofessional faculty who are committed to supporting and modeling for their students in their education can be facilitators for interprofessional practice. Our interprofessional work continues with integration of an interprofessional event in each semester for all disciplines in our College of Health Professions.

Keywords: Interprofessional Education and Practice; Canines Assisting in Healthcare

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Tagged: Education and Training, Nursing, Speech-Language Pathology/Audiology, Teamwork and Collaboration, Clinical/Program Intervention



Implementation of Weekly Aerobic and Resistance Exercise Training for Reductions in HbA1c Levels

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Issue: Type 2 Diabetes Mellitus is an ongoing issue in healthcare and it is imperative that blood glucose levels are under control for quality of life. It has been proven that aerobic exercise vs resistance exercise training or a combination of both exercise types can significantly lower HbA1c levels. The literature reviews have successfully conveyed this question: In type 2 diabetics, how can daily aerobic exercise training affect HbA1c levels within a 3-6 month period?

Description: An advanced search of the literature review was done using CINAHL. Keywords used were type 2 diabetes, aerobic exercise, and resistance training. The results of the literature review contained a total of 87 academic journals, 11 periodicals, and 2 dissertation/thesis. Quantitative research and randomized control trials were utilized in the studies.

Results: The findings indicate that aerobic exercise vs resistance exercise decreased HbA1c to acceptable levels but a combination of both exercise types further reduced HbA1c levels significantly for a better quality of life. The Diabetes Aerobics Resistance Exercise (DARE) tool was used as data collection to adequately show these reductions in HbA1c levels.

Conclusions and Recommendations: Type 2 diabetics that perform aerobic exercise in combination with resistance training see a more pronounced reduction of HbA1c levels vs either exercise type alone. It is recommended that aerobic exercise be performed about 150 minutes a week for adequate management of type 2 diabetes. The DARE tool can continue to be utilized as a quality improvement measure to improve quality of life and health outcomes.

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Tagged: Chronic Diseases and Conditions, Health Outcomes, Nursing, Quality Improvement, Literature Review

How to Avoid Frequent Readmission of CHF Patients

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Issue: To avoid waste of money and to help suffering congestive heart failure (CHF) patients lead a more dignified and productive lives, hospitals need to establish a reliable plan for patient teaching and follow up to prevent their readmission.

Description: Readmissions within thirty days is one area that hospitals lose a lot of revenue. Hospitals spend a lot of money on the so called, "Frequent flyers," patients who keep on being readmitted, yet the cost of their readmission within thirty days is not reimbursed by either Medicare or Medicaid. A much less amount of money could be spent on effective programs that follow patients up and ensure that they are taught how to manage their illnesses at home, and how to avoid CHF exacerbations, thereby avoiding unnecessary readmissions.

Outcomes/Lessons Learned: This patient suffering disproportionately affects the less leaned and minority populations because of their lack of knowledge and/or limited access to helpful health management information. The Centers for Disease Control and Prevention (CDC) and the American Heart Association (AMA) have easy to follow patient teaching brochures and guidelines that if properly used can help prevent CHF exacerbations in patients and consequent readmissions.

Implications/Next Steps: More research is needed to find out how the available CDC and AMA expertise and other data can be harnessed and utilized to help suffering patients, especially in underserved communities live more dignified and fulfilling lives, while at the same time save hospitals the much needed revenue.

Keywords: Congestive heart failure, Readmissions, Exacerbations

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Tagged: Acute Care, Care Transitions/Continuity, Nursing, Clinical/Program Intervention



Aromatherapy: Alternative Therapy to Manage Postoperative Nausea in the Orthopedic Patient Anna Larkin et al.

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Issue: Postoperative nausea (PON) is common among postsurgical patients with predictive risk factors (e.g., female, history of PONV, non-smoker and opioids). Antiemetic medications require time to coordinate, administer and take effect, and can entail side effects. Effective non-pharmacological nursing interventions to address PON have not been widely implemented in the orthopedic setting. Aromatherapy (AT) has shown to provide fast relief of nausea and reduce the need for medications while increasing patient satisfaction.

Description: The use of AT can provide patient comfort and empower RNs to exercise authority and freedom to make nursing care decisions within their scope of practice. Following the lowa Model, nurses at an orthopedic hospital piloted the effectiveness of an AT product. The chosen AT product was a handheld, leakproof delivery device containing unadulterated peppermint, ginger, spearmint, and lavender essential oils. Patients (n=105) receiving AT were instructed to inhale from the product as needed for 3-5 minutes, and nausea was measured with a numerical 1-5 scale before and after AT.

Outcomes/Lessons Learned: After using AT, 92% of patients reported some reduction in nausea, 62% reported complete resolution of nausea, and 90% stated they would likely use the product again. Additional outcomes included 98% patient satisfaction and 100% RN satisfaction. Results were presented to multiple stakeholders including the medical board, informatics team, and pharmacy department. Approval was granted to integrate AT into the hospital setting as a nurse-driven nonpharmacological intervention to address patient discomfort related to nausea. Due to budgetary constraints, product usage will be limited to the inpatient postoperative spine population.

Implications/Next Steps: Next steps are to design a teaching plan to educate staff on product usage, analyze cost and benefits, and evaluate the impact on nursing autonomy. Future goals are to expand product usage to all hospital patients. Work is currently underway to complete a formalized research study and disseminate findings at nursing conferences. The ultimate goal is to introduce additional alternative modalities to enhance patient comfort and recovery, and encourage creativity in nursing practice.

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Tagged: Acute Care, Health Outcomes, Mobility and Ambulation, Nursing, Quality Improvement, Clinical/Program Intervention

The Effectiveness of Intimate Partner Violence Screening in the Emergency Department

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Issue: Intimate Partner Violence (IPV) is a public health concern that affects individuals of all ages and sex. The high occurrence of IPV, including those undetected, made it necessary to implement a universal IPV screening tool and appropriate interventions in the emergency department.

Description: The Emergency Nurse Association (ENA) devised a clinical practice guideline that provides recommendation for nurse's role in IPV screening and interventions. Nurses in the emergency department should recognize, assess, and intervene in suspected cases of IPV. This poster presentation examines the effectiveness of each IPV screening and interventions to decrease long-term negative physical and psychological outcomes.

Outcomes/Lessons Learned: ENA's screening tools and interventions have high relevance and applicability to emergency nursing practice. IPV screening tools include: The Hurt, Insult, Threaten, and Scream (HITS), Woman Abuse Screening Tool (WAST), Partner Violence Screen (PVS), Abuse Assessment Screen (AAS), and the STaT screening tools. IPV intervention is aimed at providing a multifaceted approach in the emergency department.

Implications/Next Steps: Nurses should implement IPV screening in the emergency department. It is important to note that IPV screening increases detection of IPV patients but does not reduce the rate of IPV incidents. Future areas of study include addressing training, experience, and time and resource constraints.

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Tagged: Acute Care, Community/Public Health, Nursing, Mental/Behavioral Health, Quality Improvement, Clinical/Program Intervention



Family Caregivers' Lived Experience of Decision-Making With Chronically III Black Older Adults in NYC

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Issue: Despite a high prevalence of advanced chronic illness (ACI), research shows that Blacks are more inclined to prefer aggressive treatment and less willing to discuss goals of care (GOC) or use palliative care (PC). Family relationships are important in decision-making among Blacks; however, few studies examine the meaning of decision-making for family caregivers of community-dwelling older adults living with progressive chronic conditions in under-served communities.

Methods: Max van Manen's interpretative phenomenological approach was the philosophical underpinnings of this study. A purposive sample of eleven family caregivers were recruited from under-served urban communities in NYC. Semi-structured interviews were conducted to elicit narrative descriptions of participants' lived experiences and the meaning of decision-making. Data were collected, categorized, and coded until saturation, meaning no new information emerged.

Results: Analysis and interpretation of interviews revealed three essential themes: living out commitments with intention; making meaningful decisions situated in context; and reflecting on the past, anticipating the future. These essential themes culminated in an integrated interpretative statement: "Living out commitments with intentions of making or helping to make meaningful decisions that value the person, reflect past experiences, and anticipate the future."

Conclusions: There is a need for community programs about advanced care planning and PC in underserved communities. Family should be included in GOC discussions and interventions. Develop and implement community partnerships and education programs.

Acknowledgements: Special thanks to Dr. Elizabeth Capezuti, Dr. Donna Nickitas, Dr. Daniel Gardner, Dr. C. Alicia Georges, and Dr. Susan O'Connor

Keywords: Older adults, Black, advanced chronic illness, decision-making, family caregivers, goals of care, palliative care, phenomenology

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Tagged: Chronic Diseases and Conditions, Community/Public Health, Gerontology, Nursing, Diversity/Equity and Inclusion, Research/Case Study



The Effect of Computerized Crossword Puzzle Training on Word Retrieval Abilities in Neurotypical Late Middle-Aged Adults

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Issue: Word finding difficulty is one of the most common complaints among healthy older adults. Previous retrospective studies have found that many years of crossword puzzle participation has delayed cognitive decline; however, it is unclear whether crossword puzzles can improve word retrieval in the short-term. The purpose of this study is to determine whether a short-term computerized crossword puzzle training may positively influence word retrieval performance and verbal fluency abilities within cognitively healthy older adults.

Methods: Eight cognitively healthy late middle-aged adults (aged 57-67) were divided into two groups of four: training vs. non-training (control) groups. The training group received six lexical retrieval training sessions in the context of completing crossword puzzles. Pre- and post-training (or no training) measures of lexical retrieval and verbal fluency (semantic, letter, combination) were collected.

Results: Preliminary results indicate that the training group showed significant improvement in a lexical retrieval task on both trained and untrained items, although the training group did not exhibit significant improvement on verbal fluency tasks. As compared to the training group, the non-training group showed less significant improvement on a lexical retrieval task on both trained and untrained items as well as no significant improvement on verbal fluency tasks.

Conclusions: Short-term crossword puzzle activity may be beneficial for late middle-aged adults who are beginning to experience age-related lexical retrieval changes. However, the effect of this activity was not transferred to the performance on word fluency tasks. This invites further consideration of designing training protocols that have a broader impact on language performance.

Acknowledgements: I would like to thank my participants and Amy Vogel, CCC-SLP for her guidance.

Keywords: Crossword puzzle, training, word retrieval, healthy aging, older adults, transfer effects, verbal fluency

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Tagged: Gerontology, Health Outcomes, Speech-Language Pathology/Audiology, Research/Case Study

Verb Acquisition Patterns and Emergence of Word Combinations: A Longitudinal Case Study of a Late Talker

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Issue: The goal of this case study is to investigate verb acquisition and its potential relationship to longitudinal syntactic development in one late talking toddler. Late talkers (LT) show delayed language acquisition with particular difficulty acquiring verbs and combining words. Previous cross-sectional studies suggest that LT produce fewer syntactic and semantic verb types that require higher cognitive demand (ditransitive, manner, punctual). The syntactic verb types acquired may also predict the development of future syntactic structures.

Methods: This case study investigated the acquisition patterns of syntactic (i.e., intransitive, transitive, ditransitive) and semantic (i.e., manner, result, punctual, durative) verb types and development of early syntactic forms in one late talking toddler over a 6-month period (age 23 to 28 months) using parent-recorded data from the MB-CDI vocabulary checklist. Qualitative data on the client's utterances was also gathered. Data have been analyzed for verb types acquired monthly and cumulatively.

Results: Preliminary results suggest that the participant acquired fewer ditransitive than transitive and intransitive verbs, fewer manner than result verbs, and fewer punctual than durative verbs. As early syntactic forms emerged (age 27 months), the ratio of acquired verb types generally maintained. However, additional qualitative data on the client's utterances at this age indicated an increase in production of intransitive sentence structures.

Conclusions: Late talker verb acquisition may be influenced by the cognitive load of different verb types. Syntactic development may be influenced by early use of intransitive structures. Speech-language pathologists may consider such verb learning and use patterns when planning assessment and intervention. Future studies should further investigate the types of verbs used within language samples.

Acknowledgements: Our participant and his family

Keywords: late talker, verbs, syntactic development

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Language Development, Research/Case Study

Social Behavior Mapping for Middle Schoolers With Social Communication Deficits

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Issue: Social Behavior Mapping (SBM) is a cognitive- and language-based treatment method designed to improve social skills by encouraging students to consider the perspectives of other people. SBM is popularly implemented in schools, but there is a lack of scientific evidence to support its effectiveness. The goal of this study was to measure the effectiveness of SBM training in middle schoolers with social communication deficits.

Methods: This case study included three middle school students who have a deficit in social communication and struggle to employ theory of mind (ToM), or take the perspective of other people. They participated in 4-10 SBM treatment sessions, depending on the time needed to complete the tasks. Before and after the SBM treatment, the participants were given an assessment to measure their perspective taking ability. The assessment included false-belief tasks and two modalities of mental state inferencing tasks (photo and narrative). The data between the pre and post assessments was compared to measure the effectiveness of SBM.

Results: Comparison between pre-and post- training assessment scores showed that two out of the three participants showed a small improvement in perspective taking ability, but one participant did not show improvement. Among all participants, there was minimal to no improvement on the false belief tasks. The increase in scores was observed for both the photo and narrative inferencing tasks.

Conclusions: This result indicates that SBM has some potential to improve social skills in middle-school aged children. Further research with a larger sample size and longer duration of therapy is needed to validate SBM as an effective treatment for middle schoolers with deficits in social communication. Additionally, clinicians and educators may select another method to improve understanding of false-belief in this population.

Keywords: social communication, theory of mind, perspective taking, social behavior mapping (SBM), social thinking methodology

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Diversity/Equity and Inclusion, Research/Case Study

Variability in Multiple Sclerosis: Its Effects on Common Tests to Assess Mobility

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Issue: Multiple Sclerosis (MS) is a disease affecting ambulation and balance. Persons with MS (pwMS) experience day-to-day changes in their symptoms leading to difficulty for clinicians working with pwMS to accurately measure mobility and make appropriate treatment plans. By studying the variability in MS presentation, we can develop a more accurate way to measure mobility in pwMS. The purpose of this study is to analyze temporal variability of mobility measurements in pwMS from day-to-day and week-to-week.

Methods: A single group repeated measures design was chosen and subjects (n = 20) were pwMS (EDSS 4.38[1.3], Age 55.2[4.1]) with the ability to ambulate with or without an assistive device for at least 6 minutes. There were a total of 6 sessions for daily and weekly data collection. The primary outcome measure used was the 6 Minute Walk Test. Several secondary outcome measures were also used to assess within subject mobility variability.

Results: Using coefficient of variation, our results demonstrate daily and weekly variability (10-30%) in certain primary and secondary outcome measures.

Conclusions: One single testing session may not provide reliable data to make clinical decisions about pwMS. Perhaps, an "evaluation cycle" should be implemented instead of a single testing session.

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Tagged: Chronic Diseases and Conditions, Mobility and Ambulation, Physical Therapy, Research/Case Study

Improving Perspective-Taking Skills via Computer Mediated Instruction in Children With High-Functioning Autism: A Systematic Review

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Issue: The purpose of this systematic literature review is to determine the effect of the treatment dosage that may make one mode of instruction, video-modeling (VM) versus inperson instruction, more effective than the other. Individuals with high-functioning autism spectrum disorder (HFASD) present with deficits in social cognition, which is related to perspective-taking abilities. These individuals have difficulties with theory of mind (TOM) tasks, which attributes to their limited ability to understand another person's thoughts and desires.

Description: A systematic search of the literature was conducted using X electronic databases. All articles had to be in English, peer-reviewed, included participants aged 4-12, and included the results of the M&M False Belief Task.

Results: The present study examines the effects in dosage, both within and between modalities. Between modalities, individuals with HFASD showed greater carryover effects when receiving longer duration of treatment of VM compared to longer dosages of treatment of inperson instruction. Within modalities, individuals who received longer treatment durations of VM and in-person instruction performed better than those receiving a shorter duration of treatment.

Conclusions and Recommendations: This study provides evidence that video-modeling is more effective in teaching TOM to individuals with HFASD and can be further utilized to improve perspective taking abilities. Suggestions for future research include measuring the effect of the treatment dosage of VM and in-person instruction using second-order belief tasks.

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Tagged: Education and Training, Pediatric, Speech-Language Pathology/Audiology, Developmental Disability, Diversity/Equity and Inclusion, Literature Review

Assessment Methods to Identify Language Impairments in Bilingual Children With Selective Mutism: A Systematic Review

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Issue: Bilingual children are at higher risk for developing Selective Mutism (SM), as compared with monolingual children. Children with SM often have co-occurring speech and language impairments that can affect daily functional communication. Assessment of speech and language skills in the bilingual SM population is particularly challenging because the mutism can hinder true speech and language competence and components of second language acquisition can mimic signs of SM. This systematic literature review investigates various assessment methods Speech Language Pathologists (SLPs) can use to identify the presence of a speech and language impairment in bilingual children with SM.

Description: This review was conducted using 10 databases using guidelines provided by the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA). 22 articles were reviewed that included assessment methods in either the SM population of bilingual population. Dependent measures included: (a) standardized assessments, (b) criterion-referenced measures, (c) behavioral observations, (d) parent interviews, (e) teacher interviews, (F) psychologist reports, and (g) audio recordings. These dependent measures were evaluated for potential use with bilingual children with SM.

Results: Preliminary results from this review reveal that modifications to standardized tests, observation techniques, and parent/teacher interviews can be utilized to assess and diagnose co-occurring speech and language impairments in bilingual children with SM.

Conclusions and Recommendations: In order to properly assess speech and language skills of children who are both bilingual with SM, it is important to understand the stages of typical second language acquisition and the clinical presentation of SM. Future research include could measure the efficacy of this proposed assessment protocol.

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Tagged: Pediatric, Mental/Behavioral Health, Speech-Language Pathology/Audiology, Diversity/Equity and Inclusion, Language Development, Literature Review

School Nurses as Vital Team Members: The Importance of Policy

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Issue: In 2019, 10-20 million school-aged youth were identified as having a chronic health condition (CHC) or disability. Despite this large number, little is known about U.S. school district policies supporting these youth through school nurses' participation in IEP and Section 504 teams.

Methods: Using nationally representative district-level data from the 2016 School Health Policies and Practices Study, we examined whether U.S. school districts have policies on school nurse participation in IEP and 504 development. Additionally, we examined the relationship between having such policies and policies on (a) creating and maintaining school teams to assist students with disabilities and (b) the participation of other essential school staff in IEP and 504 development. We also examined regional and locale differences in these policies.

Results: Among districts with policies regarding school nurse participation in IEP development vs. those that did not, a significantly greater proportion had policies on student support teams and counselors' participation on IEP teams (79.2% vs. 44.4%, p<.001, and 98.7% vs. 56.2%, p<.001, respectively). Additionally, among districts with policies on school nurse participation in 504 development vs. those that did not, a significantly greater proportion also had policies on support teams and counselors' participation on 504 teams (77.5% vs. 43.1%, p<.001, and 97.2% vs. 50.7%, p<.001, respectively).

Conclusions: Findings encourage discussion on student support teams' role in school districts for students with CHCs and disabilities, how school nurses can be essential team members, and better coordination of student care to promote engaged, healthy, and supported children within the school community.

Keywords: chronic diseases, disabilities, school policies, school nurses, school health nursing

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Tagged: Chronic Diseases and Conditions, Work Environment, Nursing, Pediatric, Teamwork and Collaboration, Developmental Disability, Research/Case Study

Effectiveness of Randomized Practice for Script Training in an Individual With Acquired Apraxia of Speech and Aphasia

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Issue: Acquired apraxia of speech (AOS) is a speech disorder characterized by motor planning deficits, and frequently co-occurs with aphasia. Script training has been found to be an effective treatment method for individuals with AOS and aphasia. Previous studies with script training have used a blocked practice schedule for a portion of treatment. However, no studies have shown if script training is effective with a completely random practice schedule for those with AOS and aphasia.

Description: A 66-year-old adult with AOS and anomic aphasia completed 8 sessions of script training, twice weekly, in a random practice schedule. Four scripts were created for treatment, and two scripts were randomly selected and practiced each session. Data was collected pretreatment to confirm diagnoses. Dependent measures include the number of speech sound errors per session, and number of word retrieval errors per session. Post-treatment data will be collected 2 weeks after treatment to assess retention of speech production skills.

Outcomes/Lessons Learned: Data collection is currently on going. It is expected that the participant will decrease overall speech sound errors and word finding errors over the course of the 4-week treatment. It is also anticipated that the participant will require fewer cues throughout the course of treatment.

Implications/Next Steps: Based on preliminary results, script training with a randomized practice schedule may be a beneficial treatment plan for this participant.

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Tagged: Chronic Diseases and Conditions, Education and Training, Rehabilitation, Speech-Language Pathology/Audiology, Clinical/Program Intervention

Patient Fall Perceptions in the Acute Care Setting

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Issue: P- In the acute care setting, I- does including both the patient and their family in fall risk assessment C- Compared to no input, O- have the ability to reduce falls on a medical surgical unit

Description: Falls in the Acute Care setting continue to be a concern not only from the perspective of nursing, but also from the patient perspective. Falls do not only contribute to patient injury, but also prove to be costly as it adds to patient stays and rehabilitation. As the population continues to age the projection is so will inpatient falls both assisted and unassisted. Multiple methods to reduce falls are in place, these include medication management, fall education to both patients and nurses, gait assistance, vision assessments, and bed alarms.

Results: These interventions though helpful have not significantly decreased falls amongst patients in the inpatient setting. Disparities also continue to exist amongst the health care provider as well as the patient as to what the contributing event to the fall was. Including the patient and staff collectively has shown to be beneficial in the management of falls.

Conclusions and Recommendations: It would be beneficial to incorporate both the patient and their family in fall prevention. The strategy would be to first assess both the patient and their family in their perception on the patients likelihood to fall. This could be captured via a Likert scale type questionnaire, with one being no likelihood to have a fall this admission and 5 being a strong likelihood of having a fall this admission.

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Tagged: Acute Care, Gerontology, Mobility and Ambulation, Nursing, Literature Review

Implementing an Evidence-Based FaceTime APN-Led Program to Reinforce Diabetic Education and Self-Care

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Issue: The increasing prevalence of type 2 diabetes and obesity in the U.S.A. requires novel, low-cost interventions to motivate and mobilize patients towards more efficient self-management. Literature shows that combining education and technology with frequent telephone calls to adult diabetes patients, results in increased compliance, decreased weight, and lower HgbA1c.

Description: This is a quality improvement project comprising 30 adult patients with type 2 diabetes and obesity. Monthly FaceTime follow-up sessions were explaining the importance of self-care as described by the Health Belief Model. The project's purpose is to provide education, support, and engage patients in self-care with follow-up FaceTime conferences during a 6-month period. The expected outcomes are: reducing the no-show rate and decreasing HgbA1c by 2% and B.M.I. by 5% after 6 months.

Outcomes/Lessons Learned: All 30 patients attended the monthly-FaceTime meetings during the 6-month period. HgbA1c decreased by 9.33 % comparative to the goal of 2% decrease. The T-test / P value was 0.00027558 which is less than 0.005, and it is statically significant. B.M.I. decreased only by 3.41 % comparative to the goal of 5% decrease. The T-test / P value was 0.00000165 which was also less than 0.005 and it is statistically significant.

Implications/Next Steps: The Quality Improvement Project can assist advanced practice nurses in developing guidelines and health policies for treatment. With more effective treatment, diabetes complications can be minimized, costs reduced, and patients' participation can be improved. Implementing innovative educational programs via FaceTime to help patients lead their care and manage their medical problems, will have positive health implications.

Acknowledgements: Dr. Lynda Olender PhD, ANP, RN, NEA-BC; Dr. Fernando Barahona, MD

Keywords: Type 2 diabetes, Obesity, FaceTime Technology

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Tagged: Chronic Diseases and Conditions, Nursing, Quality Improvement, Telehealth, Clinical/Program Intervention

Interprofessional Education for Nursing Students: A Creative Approach During COVID-19
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Issue: During the pandemic of Covid 19, nursing schools needed to adapt to changes in all aspects of education. Nursing schools were forced to transition to online learning and needed to be create activities that mimicked the clinical environment. One method was to use to develop a curriculum to learn multidisciplinary approaches to patient care and learn to collaborate with other health professionals. Interdisciplinary approach to care remains lacking in health care and it is critical for nursing students to understand the role of the various disciplines involved in patient care in order to improve patient care and outcomes.

Description: A literature search was conducted using CINAHL, ProQuest, Medline, and webbased databases to examine peer-reviewed articles published between 2016-2021. Articles addressed nursing students and the concepts of collaborative care amongst various disciplines of health care, such as social work, medicine, dietary. Keywords include: continuity of patient care, elderly, interdisciplinary communication, interprofessional education, teamwork skills, online education.

Results: Nursing students need exposure interprofessional education and the importance of collaboration and communication in healthcare. Developing interprofessional education simulations and activities builds confidence and effective leaders. Multidisciplinary approaches of care can be taught and experienced in the online environment. Many colleges and universities have other disciplines within the setting that can be utilized to develop a curriculum to understand interprofessional collaboration.

Conclusions and Recommendations: Interprofessional collaboration in health care settings is critical in order to promote effective communication for positive patient outcomes. Collaboration depends upon a sense of trust and mutual respect of other disciplines. Nursing schools need to integrate interprofessional education through the curriculum, even in the online setting.

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Tagged: COVID-19, Education and Training, Nursing, Teamwork and Collaboration, Literature Review

Improving a Falls Prevention Program in the Long-Term Care Facility: Implementation of Evidence-Based Falls Prevention Bundle

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Issue: Falls pose severe consequences for older adults residing in Long Term Care facilities. Center for Disease Control estimates that about 3 million older adults are treated yearly in the emergency department. At least 300,000 are hospitalized due to fall-related injuries. These injuries can seriously impact older adults' quality of life and functional ability. Several studies have shown that evidence-based fall prevention programs significantly decrease older adults' falls in the Long-Term Care facility. The DNP scholarly quality improvement project aimed to reduce falls in the Long-Term Care facility by implementing an evidence-based fall prevention bundle to improve fall prevention practices.

Description: Kurt Lewin's change theory is an essential framework for implementing the fall prevention protocol to decrease the fall rate in the dementia unit in the Long Term care facility. The DNP scholarly quality improvement project used a pre/post design process improvement approach to implement evidence-based fall prevention bundles. Gaps in knowledge were identified and, staff education and bedside coaching were provided. The Plan-Do-Study-Act (PDSA) model was applied to the project's planning and intervention to test a change to see if it makes a difference. Multilevel interventions were delivered and evaluated across three months in the Long Term Care facility.

Outcomes/Lessons Learned: The result demonstrated a decrease in the monthly fall rate from 9 to 3. Also, the survey results clearly show significant improvement in staff knowledge post-intervention.

Implications/Next Steps: Implementing an evidence-based fall prevention bundle plays a significant role in improving older adults' safety and the nurses' knowledge, thereby decreasing the Long Term Care facility's fall rate. Long Term Care facilities' stakeholders should ensure that fall prevention education is inherent in their annual competency assessment for all staff.

Acknowledgements: I want to thank my faculty mentor, Dr. Viktoriya Fridman, and the agency's nursing director and mentor, Ms. Paula Noble, for their continued support and guidance.

Keywords: Falls, Long Term Care facility, Older adults, purposeful round, post-fall huddle, risk assessment tool

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Tagged: Gerontology, Home and Long-Term Care, Mobility and Ambulation, Nursing, Quality Improvement, Clinical/Program Intervention

The Treatment of Feeding Disorders in Preschool Children With ASD: A Systematic Literature Review

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Issue: Although Speech-Language Pathologists treat pediatric feeding disorders in children with autism (ASD) using behaviorally-based, sensory-based and multimodal-based treatment techniques, there are varying amounts of evidence that supports each intervention strategy. This literature review addressed the following question: Which treatment approach is most effective for the treatment of feeding disorders in preschool children with ASD?

Description: This systematic literature was conducted using MEDLINE Complete, Pubmed, and the EBSCO Database. Keywords used included feeding disorder, preschool, intervention, and autism. Five articles were reviewed to measure treatment outcome measurements (e.g., increase in positive mealtime behaviors, decrease in negative mealtime behaviors, etc.).

Results: Preliminary findings indicate that a multimodal treatment approach is most effective for improving positive mealtime behaviors and decreasing negative mealtime behaviors in preschool children with ASD.

Conclusions and Recommendations: It is recommended that Speech-Language Pathologists use a multimodal approach, that includes both sensory and behavioral techniques, to increase positive mealtime behaviors and decrease negative mealtime behaviors in preschool children with ASD. Future research can compare more specific outcome measures so professionals can choose a treatment approach that will best target the desired outcome measure (e.g., food refusal, pocketing, escape). This will help professionals decide how to individualize treatment for each child.

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Tagged: Pediatric, Mental/Behavioral Health, Speech-Language Pathology/Audiology, Developmental Disability, Literature Review

Oral Narrative Skills in a Child With DiGeorge Syndrome as Compared to a Child With Specific Language Impairment

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Issue: DiGeorge syndrome is a genetic disorder caused by a microdeletion on chromosome 22 at the q11.2 band. Speech-language deficits are a consistent feature of this disorder, including other impairments and physical anomalies. There is no research examining oral narrative skills in English-speaking children with DiGeorge syndrome. This study aims to determine how a school-age child with DiGeorge syndrome would perform on an oral narrative task compared to a child with SLI.

Methods: Recruited participant A (a child with DiGeorge syndrome) and recruited participant B (a child with SLI from CHILDES) were matched for chronological age and gender. The Edmonton Narrative Norms Instrument (ENNI) was used in person to elicit a language sample from both participants. The samples were analyzed for story grammar, first mentions, and syntactic complexity.

Results: Preliminary results show that participant A scored lower than participant B on story grammar when the story was of greater length and complexity. Participant B scored significantly lower than participant A on first mentions. There was no significant difference found between both participants for syntactic complexity scores. Compared to norms from a standard population of typically developing peers, both participants scored below the mean for all measures.

Conclusions: The Edmonton Narrative Norms Instrument preliminary results suggest that children with DiGeorge syndrome and children with SLI demonstrate deficits across story grammar, first mentions, and syntactic complexity skills when compared to a standard population. Areas of greatest weakness differ between the two populations. Early findings suggest that children with DiGeorge differ from children with SLI because they demonstrate greater weaknesses in story grammar knowledge related to social schemas.

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Tagged: Pediatric, Speech-Language Pathology/Audiology, Developmental Disability, Language Development, Research/Case Study

The Impact of Face Masks on Speech Intelligibility in a School-Age Child

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Issue: There are several factors that may negatively impact a speaker's ability to transmit a message clearly. In the case of widespread diseases, face masks may be enforced in public settings for medical protection. While most research available explores the impact of face masks on intelligibility in adults, the impact on children has been largely uninvestigated. Therefore, the objective of this study was to determine which type of mask most impacts intelligibility in school-age children.

Methods: Speech intelligibility was assessed in a typically developing 8;6-year-old female using sets of 50 isolated CVC words under 3 conditions: no mask; ⁽²⁾ wearing a child-sized surgical mask; and (3) wearing an N-95 mask. Output was recorded and played for two impartial student clinicians, who were unaware of the conditions and transcribed what they heard. Transcriptions were used to calculate proportion of whole word correctness (PWC) and percentage of consonants correctness (PCC) under each condition. An item analysis was also conducted, during which perceived phoneme errors were coded to identify error patterns.

Results: Preliminary results revealed N-95 masks having the most impact on intelligibility with a PWC of 85% and PCC of 81%, followed by the surgical mask with scores of 95% and 92%. Item analysis revealed the most common errors in perception in both mask conditions to be high frequency fricatives (i.e., /s/, /f/) and nasals (i.e., /m/, /n/).

Conclusions: Both masks appear to filter lower frequency sounds and weaken the amplitude of higher frequency sounds in school-age children, particularly the N-95 masks. This information may be used in choosing the optimal facial protection during speech assessments and therapy, so that both protection and intelligibility may be maximized. Further research may be conducted to identify the impact of face masks on connected speech, as well as on atypically developed children.

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Tagged: COVID-19, Pediatric, Speech-Language Pathology/Audiology, Research/Case Study

In the Adult Postoperative Orthopedic Population, Does the Use of Negative Pressure Wound Therapy Compared to Standard Gauze Dressings Reduce Surgical Site Infection?

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Issue: The population of these studies encompasses patients with diverse backgrounds, varying levels of confounding risk factors, and pre-existing health conditions. The advantageous to the orthopedic population is they have a higher risk of developing seromas and hematomas. Subsequently, utilizing Negative Pressure Wound Therapy (NPWT) can prevent surgical site infections (SSIs) by eliminating dead space, removing fluid and blood, decreasing edema, improve blood flow within the wound bed, making the incision site suitable for healing.

Description: This study utilized two systematic reviews and one meta-analysis that synthesize the available data on the application of NPWT on orthopedic surgical sites. Inclusion criteria for this research paper were: English-language research articles, ⁽²⁾ qualitative and quantitative research describing and understanding wound care regarding the prevention of SSIs, (3) levels of evidence that include randomized control trials, cohort studies, meta-analysis, and systematic reviews. Exclusion criteria: studies focusing on other types of wounds, ⁽²⁾ articles unrelated to postoperative orthopedic cases, (4) any patients under the age of 18.

Results: The finding in all these studies showed a statistically significant reduction in the occurrence of surgical site infections with the use of prophylactic negative pressure wound therapy in adult postoperative orthopedic patients compared to standard gauze dressing.

Conclusions and Recommendations: By utilizing NPWT on closed surgical incisions when patients or procedures have multiple risk factors, increases the potential for a lower reoperation rate for this population, decreasing insurance and Medicare cost and, has been shown to reduced SSIs.

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Tagged: Health Outcomes, Infection Control, Nursing, Quality Improvement, Literature Review

Implementing HIV Screening and Clinician Education in a Primary Care Practice

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Issue: Every year, an estimated 162,500 people with HIV go undiagnosed. The CDC recommends HIV screening for people between ages 13 to 64 at least once in their lifetime. Effective methods for identifying HIV status include providing HIV screening education for healthcare providers and adding the CDC-recommended HIV screening protocol to practice. This project explored the effects of implementing the CDC HIV screening protocol in a private practice.

Methods: This project was a one-group pre-test/post-test design coupled with retrospective and prospective chart reviews. The project consisted of healthcare provider education about HIV screening and implementation of a CDC-recommended HIV screening protocol. Two samples of 148 retrospective and prospective charts were reviewed to measure differences in HIV screening before and after clinician education and implementation of the CDC-recommended HIV screening protocol.

Results: There was an insignificant increase in knowledge about HIV (p = 0.11) among healthcare providers but a significant increase in HIV screening (p < .0001). In the retrospective sample, 6 of 148 patients (4.1%) were offered the HIV test; in the prospective sample, 132 of 148 (89.2%) were offered the test. For linkage to care data, 4 of 148 patients at high risk for HIV were linked to Pre-exposure Prophylaxis care, indicating improved adherence to CDC guidelines.

Conclusions: This project's results indicate that lack of awareness of CDC recommendations for HIV screening is a barrier to HIV screening. The education was statistically insignificant, but the new awareness of CDC recommendations may have increased screening.

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Tagged: Community/Public Health, Education and Training, Health Outcomes, Nursing, Quality Improvement, Research/Case Study

The Measure Right / Live Right Program for Hypertension Control

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Issue: Hypertension affects approximately 45% of the adult population, and is the most significant modifiable risk factor for heart disease and stroke, two leading causes of death in the nation. Yet, only 25% of those affected have the disease under control. Best practice guidelines advocate for ensuring accuracy of blood pressure measurement in the clinical setting and promoting lifestyle changes that have been shown to reduce blood pressure. In an outpatient cardiology practice, control of hypertension is below quality metrics put forth by the Centers of Medicare and Medicaid Service. A quality improvement program is planned address this issue.

Description: The program will implement a Measure Right / Live Right blood pressure management program using a pre- and post- design. The first objective is to improve the accuracy of blood pressure measurement by using an American Heart Association checklist to ensure proper technique by the medical office assistants. Next, patients who are not at blood pressure goal during an office visit will be identified and counseled on lifestyle modifications that have shown to be effective in managing hypertension using a revised handout from the American Heart Association.

Outcomes/Lessons Learned: Outcome data will include medical office assistant adherence to blood pressure measurement guidelines and the rate of hypertension control among patients within the practice. It is expected that the rate of blood pressure control within the practice will meet or exceed the organizational benchmark of 70%. Clinicians will consistently demonstrate proper technique in measuring blood pressure.

Implications/Next Steps: Successful use of an evidence-based program which can be replicated to improve control of hypertension will benefit patients by preventing the sequalae of uncontrolled disease. In addition, meeting CMS metrics will provide reimbursement rewards to the practice and organization.

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Tagged: Chronic Diseases and Conditions, Community/Public Health, Nursing, Quality Improvement, Clinical/Program Intervention

Effect of Respiratory Muscle Training on Gait Endurance, Balance, and Pulmonary Function in Persons With Multiple Sclerosis

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Issue: Previous studies have used inspiratory muscle training in persons with multiple sclerosis (pwMS) and demonstrated significant improvements in pulmonary function as evidenced by increases in the maximum inspiratory pressure (MIP). The present study was designed to examine the effect of inspiratory and expiratory muscle training on pulmonary function, gait endurance, and balance in pwMS.

Methods: Two ambulatory individuals with a definitive diagnosis of MS had their walking endurance, balance, and pulmonary function measured every three weeks for a total of 9 weeks with a 3-week detraining period after a 6-week intervention. Pulmonary function was assessed by spirometric measurements and the mouth pressures were measured with a manometer. The primary outcome measure of gait endurance was assessed by the six-minute walk test (6MWT) with a secondary outcome measure of balance measured by the Mini Balance Evaluation Systems Test (MiniBEST). Individuals completed a six-week home exercise strength training program, including both inspiratory and expiratory muscles.

Results: The respiratory muscle training protocol had no effect on either gait endurance or balance. While PFT results were inconclusive, the subjects demonstrated the ability to expel respiratory gases faster than baseline as seen in FEV1/FVC.

Conclusions: Inspiratory and expiratory respiratory muscle training may be included within neurologic rehabilitation as it potentially can improve gait endurance and pulmonary function in individuals with multiple sclerosis.

Acknowledgements: We gratefully acknowledge those who participated in our study. Dr. Axen was a special part of this project who ultimately passed from COVID-19 during the duration of this study.

Keywords: Multiple Sclerosis, Breathing Exercises, Resistance Training, Physical Therapy, Physical Endurance

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Tagged: Chronic Diseases and Conditions, Mobility and Ambulation, Physical Therapy, Rehabilitation, Research/Case Study



Interventions to Prevent Perinatal Depression

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Issue: Perinatal depression (PND) is a common and treatable issue that impacts as many as one in seven parents. PND exists on a continuum from mild to severe and is a potentially serious health risk regardless of age, race, income, culture, or education level. Despite the prevalence of PND it often goes untreated, and there are few clinical guidelines to direct clinicians toward best practices for screening for and supporting parents experiencing PND.

Description: 50 studies on a wide variety of PND interventions were analyzed through a systematic evidence review conducted by the United States Preventative Services Task Force to determine the benefits and harms of interventions for PND and establish high quality clinical practice guidelines for clinicians. Our poster will discuss the recommended guidelines and strengths of each.

Outcomes/Lessons Learned: Two interventions stood out as recommended clinical practice guidelines for the prevention and treatment of PND; screening clients for PND risk factors, which facilitated the second recommendation, to provide cognitive behavior therapy and interpersonal therapy interventions and referrals to pregnant and postpartum clients experiencing or at increased risk for PND.

Implications/Next Steps: It is recommended that these two clinical practice guidelines are implemented in a wide variety of clinical settings that serve perinatal clients to effectively screen for, prevent, and treat PND.

Acknowledgements: Funded by the Agency for Healthcare Research and Quality

Keywords: Perinatal, depression, postpartum, pregnancy, mental health, clinical practice guidelines, women's health, nursing, obstetrics

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Tagged: Community/Public Health, Nursing, Mental/Behavioral Health, Quality Improvement, Clinical/Program Intervention



The Effect of a Cooling Vest on Fatigability and Walking Endurance in Persons With Multiple Sclerosis

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Issue: Persons with Multiple Sclerosis (pwMS) suffer from fatigability, presumably due to activity dependent conduction block. The purpose of this study is to determine the effects of pre-cooling pwMS, using a commercially available cooling vest (CACV), on objective and subjective fatigability and walking endurance, using a 6-minute walk test (6MWT). We hypothesize pre-cooling pwMS will increase walking endurance and limit fatigue.

Methods: This randomized crossover design included 15 pwMS, 9 females, 61.13 + 6.57 years old, EDSS 4 + 0.71, for two sessions. Subjects were randomized into a cooled condition (CC) or uncooled condition (UC) at the first session and received the other at least 1 week later. In the CC, subjects were seated with the CACV for 30 minutes, then began the 6MWT, where perminute and total distances were recorded. In the UC, subjects performed the same without the CACV.

Results: Subjects walked longer distances overall during the 6MWT in the CC (795.54 + 546.33 feet) compared to the UC (749.45 + 550.30 feet), and during the first and last 3 minutes of the 6MWT, ps = .012. Subjects felt significantly cooler immediately after wearing the vest than after the 6MWT, ps \leq .038. Lastly, subjective fatigue between the CC and UC was insignificant, p = .348.

Conclusions: Pre-cooling pwMS significantly improved 6MWT performance as seen by greater total distance in CC. CACV should be incorporated into training programs for pwMS.

Acknowledgements: This research was supported by the grant provided by the Multiple Sclerosis Foundation.

Keywords: Multiple Sclerosis, pre-cooling, endurance, fatigability, 6-minute walk test

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Tagged: Chronic Diseases and Conditions, Mobility and Ambulation, Physical Therapy, Research/Case Study

Where SLPs Stand Regarding the Use of Telepractice: A Survey of Clinicians and Graduate Students

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Issue: Telepractice is a useful method of service delivery for speech-language pathologists (SLP); however, complexities to providing services through this method are acknowledged. Therefore, this study examines licensed SLPs and current graduate students' experiences with and perceptions of telepractice and its related barriers, so that the SLP community can be better equipped to use telepractice in the future.

Methods: A survey was administered to 44 graduate students (17 first-year students, 27 second-year students) enrolled in an SLP master's program at Hunter College, and 11 clinical educators working at Hunter College. Descriptive statistics were calculated to compare responses between first- and second-year graduate students and licensed-SLPs to determine if years of experience plays a role in the perceived efficacy of telepractice and associated barriers, if any.

Results: A survey was completed by 40 respondents (73% completion rate). Of respondents, 32.5% were first-year students, 52.5% second-year, and 15% licensed-SLPs. All respondents reported feeling telepractice services are effective; however, 56.7% of respondents (53.8% first-years, 61.9% second-years, 50% licensed-SLPs) believe in-person services remain the gold standard. The majority of respondents (93.3%) reported barriers to telepractice exist, and 93.3% of respondents reported feeling confident that telepractice is a viable method of service delivery for the future.

Conclusions: Although respondents identified barriers to telepractice, graduate students and SLPs alike reported feeling confident in the use of telepractice. The results of this study contribute to our understanding of the clinical areas for which telepractice is most appropriate and delineate associated barriers so that improvements can be made for future use.

Acknowledgements: The authors would like to thank Dr. Donald Vogel, Hunter College Center for Communication Disorders, and all participants of the survey.

Keywords: survey, telepractice, SLP

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Tagged: Work Environment, Speech-Language Pathology/Audiology, Telehealth, Research/Case Study

The Role of Visual Clinician Presence in Remote Vocational Training for a Young Adult With ASD and ID: A Case Study

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Issue: Vocational training is an essential skill to improve quality of life for young adults with ASD. Vocational training may be provided over tele-therapy services; however, it is unknown whether training through tele-practice can lead to independence of vocational skills. This study investigated whether manipulations of visual clinician presence during tele-therapy can influence mastery of a vocational skill.

Methods: With an experimental case study design, the role of visual clinician presence was investigated through a training program. The participant is a 24-year-old female, with ASD and intellectual disability (ID). The task of answering the phone for Hunter College Center for Communication Disorders was trained over six, 30-minute, tele-therapy sessions. For training, the task was divided into steps, each with an associated verbal-cueing hierarchy. Three conditions were presented with random assignment within each training session: video clinician presence, static photograph presence, and no visual presence. Data was collected on the amount of prompting required to complete the vocational task.

Results: The participant completed the task during each of the three conditions, with varying levels of verbal-prompting required. The participant required the least amount of verbal-prompting to complete the vocational task with video clinician presence and completed the task independently, twice. She required the most support with no visual clinician presence.

Conclusions: The results suggest that vocational training administered via tele-therapy for a young adult with ASD and ID is efficacious. These early findings have the potential to inform SLP's of new ways to incorporate manipulations of tele-therapy features to foster independence in vocational skills.

Acknowledgements: The authors would like to thank the participant, James Pellegrito, Lauren Zierer, Donald Vogel and the Hunter College Center for Communication Disorders.

Keywords: Vocational training, Tele-therapy, ASD

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Tagged: Education and Training, Speech-Language Pathology/Audiology, Telehealth, Developmental Disability, Diversity/Equity and Inclusion, Research/Case Study



Determinants and Interventions That Promote Vaccine Acceptance: A Limited Literature Review

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Issue: COVID-19 has spread across the United States, claiming more than 500,000 American lives, and causing disease and economic instability to millions. The US Food and Drug Administration has issued its first emergency use authorization for the Pfizer-BioNTech vaccine in December 11, 2020— approximately one year from when the pandemic started. This has set the record for COVID-19 vaccines as the fastest vaccines ever developed. However, it is vaccinations, not vaccines that saves lives.

Description: Vaccine hesitancy has been a concern among public health officials. A Pew Poll conducted in February 2021 revealed that only 69% of Americans are willing to take the COVID-19 vaccine. The following has led the investigators to ask: What are the determinants of, and interventions that promote vaccine acceptance? A limited literature review using several databases was conducted to answer this question. Articles were limited to peer-reviewed studies written in the English language from 2016 to 2021 and selected based on relevance.

Results: There was concordance in the literature that vaccine hesitancy is a complex and multifaceted phenomenon. A 2021 survey revealed that hesitancy to the COVID vaccine is higher among African-Americans and Hispanics, individuals with children at home, rural dwellers, and people in the northeast US. The literature identified several interventions to increase vaccine acceptance, including extended health knowledge, utilizing person-centered approach to encourage participation and coping during vaccination, use of reminders, improving vaccination access, and encouraging healthcare providers to offer vaccines.

Conclusions and Recommendations: Multimodal and tailored interventions are needed to combat misinformation, and increase vaccine acceptance.

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Tagged: Community/Public Health, COVID-19, Nursing, Diversity/Equity and Inclusion, Literature Review

The Effect of Submaximal Resistance Training on People With Multiple Sclerosis: A Clinical Trial Protocol

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Issue: The effects of strength training among persons with Multiple Sclerosis (pwMS) include improved balance and mobility leading to improved quality of life. Although Maximal Strength Training (MST) and Sub-Maximal Strength Training (SMST) have been analyzed separately in MS studies, a comparison of the two has not been made. The purpose of this clinical trial protocol is to compare the effects of SMST with MST in improving lower extremity strength, balance, and endurance in pwMS.

Description: In this clinical trial protocol, 20 pwMS will complete a SMST regimen for 8 weeks. The SMST regimen will include exercises at 60% of their 1-repetition maximum (1RM) for 8 repetitions in each set. Outcome measures will include a strength assessment with a 1RM performed unilaterally. Walking, balance, strength, and fatiguability will be measured with the 6-Minute Walk Test, Berg Balance Scale, Handheld Dynamometer, and the Fatigue Severity Scale. The previously collected data of pwMS following an MST regimen will be compared to SMST data using a 2 (condition) by 2 (time) mixed factor analysis of variance (ANOVA) format.

Outcomes/Lessons Learned: Based on our observations from 2 of our subjects, improvements demonstrated in the primary outcome measures of the MST protocol were more significant than the improvements in the SMST protocol.

Implications/Next Steps: Upon completion of this trial, the results will be presented at scientific meetings (Multiple Sclerosis Association of America annual) and published in the scholarly journal, Multiple Sclerosis International.

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Tagged: Chronic Diseases and Conditions, Health Outcomes, Mobility and Ambulation, Physical Therapy, Rehabilitation, Clinical/Program Intervention

College Students' Stress Levels While Attending School During a Pandemic: A Literature Review

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Issue: The COVID-19 pandemic has caused a significant negative impact on the mental health of college students. The number of students reporting depression, anxiety, suicidal thoughts are substantially increasing in addition to the usual stressors college students go through in a non-pandemic year. The mandated shelter in place, self-isolation, social distancing, and distance learning are projected to produce long-term dire consequences on their health and education.

Description: A literature search was conducted using CINAHL, ProQuest, Medline, and webbased databases to examine peer-reviewed articles published between 2016-2021. Articles addressed stress levels and mental health levels of students learning during a pandemic. Keywords include: College students, mental health, Covid-19, pandemic, and anxiety.

Results: Findings from a study conducted in Texas A&M University on 195 students showed that 71% experienced increased levels of stress and anxiety due to the COVID-19 pandemic, while 20% reported the same levels and 9% stated they had a decrease in levels of stress and anxiety. 44% of students in the study also reported depressive thoughts, and 8% indicated experiencing suicidal thoughts. This data mirrors the negative psychological impact of the COVID-19 pandemic on college students.

Conclusions and Recommendations: The COVID-19 pandemic has affected the psychological well-being of university students. College students confronted an array of challenges such as isolation, fear and uncertainty, and concerns for one's own health and loved ones. In this new era of online learning, students experiencing mental health issues are advised to seek assistance using digital technologies and Telehealth applications for counseling services.

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Tagged: COVID-19, Education and Training, Nursing, Mental/Behavioral Health, Literature Review

An Analysis of Self-Reported Compensatory Strategies Among Healthy Adult Speakers Who Wear Face Masks

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Issue: The purpose of this study was to examine if healthy adult speakers use compensatory strategies while wearing Personal Protective Equipment (PPE), specifically face masks. Healthy adults typically use such strategies when communicating with other populations, however, it remains unclear if they compensate when wearing a face mask during conversation with other healthy adults. Some compensatory strategies that have been observed by healthy adults in past studies include reduced rate of speech, overarticulation, gesturing, eye-contact, and increasing vocal loudness. For the purpose of this paper, these strategies were examined in healthy adult speakers who regularly wear face masks.

Methods: 101 healthy adult participants were surveyed on their communication in four social scenarios: indoor with background noise, quiet setting, outdoor setting, and while whispering. Participants reported strategies they used for each scenario in mask-on and mask-off conditions. Individual reports were compiled for an overall review. The percentages of each reported compensatory strategy were compared between mask-on and mask-off conditions.

Results: Participants reported using more compensatory strategies in the mask-on condition than in the mask-off condition. The majority of participants reported using at least two compensatory strategies in each of the four mask-on conditions. 37% of participants denied using compensatory strategies when not wearing a face mask. Less than 3% of participants denied using compensatory strategies in any condition while wearing a face mask. A majority of participants reported that mask use negatively impacts their communication and indicated a preference for communicating without a mask on.

Conclusions: Healthy adult speakers use more compensatory strategies while wearing a face mask. In mask-off conditions, it appears that healthy adults consciously use compensatory strategies to meet the demands of specific communicative environments. However, adults report using a greater variety of compensatory strategies in those same environments while wearing a face mask. These results indicate participant awareness of face masks creating a unique communicative barrier.

Acknowledgements: This research project was supported by the faculty of the Department of Speech-Language Pathology & Audiology at Hunter College.

Keywords: facemask, compensatory strategies, PPE, COVID-19, healthy adult speaker

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Tagged: Community/Public Health, COVID-19, Speech-Language Pathology/Audiology, Research/Case Study

Initiatives to Address Racial Disparities in Maternal Mortality in the United States: A Literature Review

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Issue: The maternal death rate in the United States is higher than in 29 other nations worldwide. Of those maternal deaths, a disproportionate number are women of color. Nationwide, the maternal mortality rate for women of color is three times that of white women. This disparity has prompted initiatives to address this divide. A literature review of initiatives to address racial disparities in maternal mortality in the United States was conducted.

Description: A literature search in CINAHL, Medline, Academic Search Complete was conducted using the terms maternal mortality (or maternal deaths, or pregnancy related deaths) and disparities (or disparity, or inequities or inequality, or bias, or disproportionality), quality improvement (or solutions or strategies or prevention), and United States. Inclusion criteria were: published from 2015-2021, published in English and in peer reviewed academic journals accessible through our institution. Exclusion criteria were: articles pertaining to populations outside the US, articles that did not describe initiatives to address the disparities in maternal deaths. The search yielded 48 articles. The articles were hand screened according to the inclusion and exclusion criteria yielding 12 articles that were included in the literature review.

Results: Overall, most initiatives to address disparities in maternal mortality rate (MMR) have been minimally evaluated. Increased pregnancy-related public health spending at the state level shows some promise in lowering maternal death overall and a reduction in the black-white maternal mortality gap. Community-based programs that addressed needs at all stages including the prenatal, intrapartum, and postnatal periods resulted in positive pregnancy and birth experiences for women of color. Initiatives within healthcare institutions involve guidance on interactions with individual health care providers focusing on communication including implicit bias training. System level initiatives included raising awareness through disparities dashboards, focusing on continuity of care, and recruiting representative providers at all levels of care.

Conclusions and Recommendations: Initiatives on the public health and institutional level require evaluation using standardized reporting methods to identify the best ways to address

disparities. Listening to women through qualitative research can provide important insights to shape initiatives. Initiatives that affect communication at the provider/patient level, such as implicit bias, should be further expanded and explored. Enhance programs at all educational levels to raise awareness of disparities and to build a more representative pregnancy-related workforce.

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Tagged: Community/Public Health, Health Outcomes, Nursing, Diversity/Equity and Inclusion, Literature Review

Do Activity Measure for Post-Acute Care (AM-PAC™) "6-Clicks" Functional Assessment Scores at Admission Predict Discharge Destination Following Acute Care Hospitalization?

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Issue: Activity Measure for Post-Acute Care (AMPAC) 6-Clicks scores guide discharge decisions. The purpose was to determine cut-off scores for the AM-PAC 6-clicks for recommending discharge from acute care to home versus institution for diagnostic categories. We examined: 1) the instrument for making finer distinctions in discharge destination; 2) the predictive power of 6-clicks Basic Mobility (BMob) versus Daily Activity (DA) scores; 3) need for more than one BMob or DA score for discharge planning.

Methods: Data was from a large metropolitan health network. Patients were over 18 years, admitted to acute care with Orthopaedic, Cardiac, Pulmonary, Stroke, and Other Neurological diagnoses between January and October 2018. Receiver operating curves delineated cut-offs distinguishing discharge to Home or Institution. Acceptable models that had Area Under Curve and overall model quality > 0.7.

Results: Standardized BMob cut-off score for predicting discharge destination to Home versus Institution was 42.88 for all diagnoses and for Pulmonary and Other Neurological. Orthopaedic cut-off was 41.46. Model quality for Cardiac and Stroke invalidated cut-off scores. BMob scores had greater predictive power for discharge destination than DA. DA predicted more nuanced discharge disposition Stroke. Second BMob Score predicted Home versus Institution better than the first BMob Score.

Conclusions: The study confirmed utility of AM-PAC 6-clicks for only for discharge recommendations to Home vs. Institution for the whole sample and 3 diagnostic groups. BMob scores predicted better than DA scores. Only one BMob score is needed to predict discharge destination.

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Tagged: Acute Care, Care Transitions/Continuity, Physical Therapy, Research/Case Study

A Literature Review of the Effects of the COVID-19 Pandemic on Nurses' Mental Health and the Use of Applications to Treat It

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Issue: With the rise of the global COVID-19 pandemic the mental health statuses of nurses has significantly declined. Incidence of PTSD,OCD,suicide,depression, and anxiety have become increasingly prominent. Statistics collected from June-September 2020 revealed 93% of health care workers were experiencing stress, 86% anxiety, 77% frustrated, 76% exhausted and burnt out, and 75% fearful of infecting loved ones. Adequate mental health services have yet to be provided leading to silent battles, break downs, and increase in suicide or self harm behaviors. The literature addressed the following question: Among registered nurses, how has the pandemic impacted mental health and can apps help?

Description: A search and review of the literature was conducted using several databases to determine the prevalence of mental health issues in nurses. A search of iPhone and android app stores identified several free mental wellness versions. Apps are easy to use and accessible. Nurses can use them to alleviate symptoms of stress, mental exhaustion, and decrease anxiety.

Results: Initial findings reveal that apps can provide a private, anonymous, or group platform where nurses can speak about their ordeals, fears, and existing anxieties without feeling pressured, uncomfortable or stigmatized.

Conclusions and Recommendations: By offering these services, early screening, and treatment can be initiated. By allowing for the safeguard and preservation of mental wellness of nurses we reduce fatal outcomes associated with untreated high anxiety/stress and ensure safe high quality care is delivered to patients. The next step is to measure usage of apps by nurses. Goals include sustaining services even after the pandemic is under control to promote self-care on a long-term basis.

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Tagged: COVID-19, Work Environment, Nursing, Mental/Behavioral Health, Literature Review

How the Home Environment Impacts Fall Risk in Patients With Parkinson's Disease

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Issue: Falls are a significant issue among the elderly population, and more so for individuals diagnosed with Parkinson's disease. Fall injuries account for approximately 2.8 million injuries annually, resulting in 800,000 hospitalizations and 27,000 deaths. Every year it is estimated that falls cost the healthcare system \$50 billion. There are multiple fall risk assessment tools for use within a hospital; but few are created for home assessment. This literature review addressed the following question: Would the development of an environmental fall risk assessment tool reduce falls in patients diagnosed with Parkinson's disease living at home?

Description: Research was conducted through Cochrane Database, NCBI, Google Scholar, and CINAHL. The following keywords were used: Fall Risk, Fall Prevention, Gait Instability, Environment, Community, Parkinson, Fall Assessment Tool, and Elderly. Studies were analyzed from 2015-2021.

Results: Findings revealed that adequate home environment assessment is inadequate for patients diagnosed with Parkinson's disease. The navigation and perception of their environment is greatly altered by stiffness, slow movement, postural changes, nuchal/truncal rigidity, sensory changes, and loss in balance.

Conclusions and Recommendations: The development of a home environment fall risk assessment tool will help identify hazards and decrease falls. This will promote maintenance in the quality of life for elders as they age in place. Other benefits include a decrease in health care costs, and the reduction of complications from hospital admissions and long lengths of stay.

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Tagged: Chronic Diseases and Conditions, Health Outcomes, Home and Long-Term Care, Mobility and Ambulation, Nursing, Literature Review



What Are Patients' Perspectives in Preventing Pressure Injury? An Integrative Review Shawna Townsend, MS, RN, CNL, ONC

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Issue: Pressure injuries (PIs) affect about 2.5 million people and about 60,000 die as a direct result. Prevention is the gold standard but one failure is that there is little to no patient involvement. Many studies on preventing PIs provide nurses' perspectives, yet there is limited research on patients' perspectives. The aim of this integrative review was to consider patients' perspectives in preventing PIs.

Description: An integrative review was conducted. An electronic database search was conducted for the years from 2010 – 2020. The Cumulative Index of Nursing and Allied Health Literature (CINAHL), Medline, PsycINFO, ProQuest databases, and Google Scholar were searched. Search terms were patient perception, patient knowledge, and pressure injury prevention. The PRISMA method was used for article selection. The methodological rigor appraisal of the included research studies was guided by the Hawker, Payne, Hardy, and Powell (2002) tool.

Results: Sixteen studies met inclusion criteria. Findings suggest that patients have inaccurate preconceptions, varied and incomplete knowledge about preventing PIs, value receiving education from nurses with leaflets as an adjunct and not a substitute, and that adequate pain relief fosters patient participation in prevention interventions.

Conclusions and Recommendations: Findings support that patients are willing to participate in preventing Pls. Nurses can facilitate patients' participation with educational interventions and appropriate pain assessment and plan. When nurses involve patients in their care, patients may feel listened to and valued which can positively impact patient satisfaction and their perception of the nursing care.

Keywords: pressure injury, prevention, skin-care, perception, patient-centered care, integrative review

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Tagged: Acute Care, Health Outcomes, Home and Long-Term Care, Infection Control, Nursing, Literature Review

A Limited Literature Review on the Risks of Cardiovascular Complications in Patients Receiving Hydroxychloroquine (HCQ) Therapy

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Issue: HCQ is an anti-malarial medication that is also widely used to treat various autoimmune diseases. It recently gained national attention for its off-labeled use in COVID-19 patients. Since then, it has been widely debated through the media on its potential to cause cardiovascular complications. This limited literature review will address the cardiovascular concerns in patients receiving HCQ therapy.

Description: A limited literature review of 15 articles from CINAHL, EBSCO, and Google Scholar were utilized to determine the cardiovascular risk factors of HCQ. Adverse reactions were determined by prolonged QTc intervals, arrhythmias, and cardiomyopathy. Keywords used included hydroxychloroquine, treatment, autoimmune, rheumatic, COVID-19, cardiovascular, risks, and complications.

Results: Acutely/critically ill COVID-19 patients receiving high doses of HCQ therapy were found to have increased risks for cardiac complications such as prolonged QTc intervals, lethal arrhythmias, and cardiomyopathy. Although rare, it was determined that these risks outweigh its benefits and should be used cautiously. Patients with autoimmune diseases such as systematic lupus erythematosus (SLE) receiving maintenance therapy of HCQ were found to have decreased or no cardiovascular risk factors. Although prolonged QTc intervals were found with chronic use, they were not clinically significant and can be taken safely with other medications that may prolong QTc intervals.

Conclusions and Recommendations: HCQ is generally safe and well tolerated for patients with autoimmune diseases. With adherence and routine follow up, patients can achieve remission and may benefit from its cardioprotective effects. For hospitalized COVID-19 patients, a baseline 12-lead EKG with continuous cardiac monitoring should be implemented. HCQ indication and risks may have been grossly overstated by its national attention from the media. Therefore, patients should consult their providers with any questions to determine its risks and benefits.

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Tagged: Acute Care, Chronic Diseases and Conditions, COVID-19, Health Outcomes, Nursing, Literature Review

The Effect of Visual Rehabilitation on Visual Impairments in Persons With Multiple Sclerosis: Protocol for a Case Series

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Issue: Approximately 80% of persons with Multiple Sclerosis (pwMS) develop visual deficits that can decrease independence and lead to poor quality of life. Previous literature demonstrated visual rehabilitation to be effective in persons with neurologic impairments similar to pwMS, including traumatic brain injury and stroke. This study protocol aims to determine the feasibility, safety, and proof of concept of visual rehabilitation for pwMS, with the expectation that visual rehabilitation will improve ocular function in pwMS.

Methods: Purposive sampling will be used to recruit participants who have a diagnosis of Multiple Sclerosis and experience an associated visual deficit. Ocular function will be evaluated with assessments for pursuits, saccades, sensory and motor fusion, cancellation, accommodation, stereopsis, and quality of life and symptom questionnaires at baseline, 6 weeks, and 12 weeks. Participants will be provided an individualized home exercise program (HEP) and notebooks to log their HEP activities in order to track progress and/or obstacles over 12 weeks. Descriptive statistics will be used to represent the data in order to demonstrate the effectiveness of visual rehabilitation in pwMS.

Results: This protocol will be the first to investigate the effects of visual rehabilitation on ocular function in pwMS. Data has not been collected.

Conclusions: This study will establish the feasibility and safety of implementing visual rehabilitation techniques on pwMS. The collected data may be used as the basis for future randomized controlled trials.

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Tagged: Chronic Diseases and Conditions, Physical Therapy, Quality Improvement, Rehabilitation, Research/Case Study

Challenges Faced by SLPs on Multidisciplinary Pediatric Feeding Teams

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Issue: Multidisciplinary teams are the best approach to evaluation and treatment of pediatric feeding/swallowing disorders. Research indicates that teams increase productivity and decrease workload. Teams experience challenges like undefined team member roles and financial constraints. This impacts productivity and quality of care, hindering services provided to medically-complex patients. Compared to other fields, research regarding challenges faced by teams is limited. This study crucially examined perspectives and experiences of speechlanguage pathologists (SLPs) working on multidisciplinary teams.

Methods: Semi-structured interviews occurred with four SLPs on multidisciplinary pediatric feeding teams. Open-ended interview questions were administered via Zoom or over the phone. Questions explored SLP experiences with multidisciplinary teamwork, including challenges, strengths, and weaknesses. Implemented and proposed solutions were also discussed. Answers were transcribed to determine response frequency and extract themes.

Results: Poor collaboration was the most prevalent weakness, followed by limited resources and reduced communication. Strengths included improved collaboration, communication, and multiple perspectives. Protocols and increasing communication and education were solutions implemented to target challenges. Creation of educational programs and protocols were cited as potential solutions.

Conclusions: Findings demonstrate that SLPs experience several barriers on multidisciplinary pediatric feeding and swallowing teams that reduce performance. This study uniquely offers a variety of SLP-generated solutions to remediate difficulties. Identifying common challenges and implementing the solutions noted has the potential to increase team productivity and improve the quality of care that teams provide to vulnerable populations. Future research should evaluate challenges reported by other team members to promote effective multidisciplinary healthcare.

Acknowledgements: I would like to offer my special thanks to my pilot study participants who helped make my study possible.

Keywords: Multidisciplinary teams, pediatric feeding and swallowing disorders

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Tagged: Work Environment, Pediatric, Speech-Language Pathology/Audiology, Teamwork and Collaboration, Research/Case Study

Quality Improvement: Guideline Development for Managing Second-Generation Antipsychotic Associated Metabolic Syndrome

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Issue: People with serious psychiatric illnesses (SPIs) have a life expectancy of 10-25 years less than the general population and are at high risk to develop metabolic syndrome (MS) and comorbid physical health conditions. These conditions are mostly related to the side effects of second-generation antipsychotics (SGA), as well as lifestyle and socioeconomic factors. Despite these outcomes, SGAs are widely recommended for SPIs management.

Description: This project is intended to create guidelines for the identification and management of SGA associated MS. The theoretical framework that guides this project is Kurt Lewin Change theory. It uses a three-stage model and provides guidelines to practice change. This project follows the IOWA model. The target population are individuals with SPIs while the active participants are the staff at a psychiatric clinic. This project focuses on measurement criteria that include surges in the metabolic note documentation, smart phrases and referrals. Descriptive and inferential statistics will be used to analyze the data.

Outcomes/Lessons Learned: The scholarly project is expected to improve the management and health outcomes of individuals with SPIs.

Implications/Next Steps: This project will have a positive impact on the health outcome of patients with SPIs. The clinical team will be more aware of the risk of SGA-associated MS and steps to improve patients' health outcomes. Patients will be empowered to be involved in their care and adhere to the referrals and management process. Finally, the information gained from this project can be utilized in similar settings.

Keywords: SPI, Metabolic Syndrome, Nutrition screening, Referrals

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Tagged: Chronic Diseases and Conditions, Nursing, Mental/Behavioral Health, Quality Improvement, Clinical/Program Intervention





A Comparison of the Immediate Effects of Manual and Self-Soft Tissue Mobilization on Capital Flexibility and Range of Motion

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Issue: The purpose of this study is to compare manual and self-soft tissue mobilization and its immediate effect on capital flexibility on healthy adults.

Methods: A randomized crossover design was used that included 4 healthy participants between the ages 18-65 years. All participants randomly received both interventions of foam rolling and gentle manual traction. A one day wash-out period was given between the interventions. Cervical range of motion was measured before and immediately after the interventions using the cervical range of motion device.

Results: Both groups had a significant improvement in R lateral flexion range of motion immediately after both interventions (p =.001.) There was no statistical difference in range of motion with the other outcome variables.

Conclusions: These interventions can be used in individuals to improve neck range of motion and muscle elasticity to prevent future impairments. Since the interventions were found to have similar results, we can infer that both foam rolling and gentle manual traction have an equal effect in improving neck alignment. Patients will be able to self-treat themselves with a foam roller when manual physical therapy is unavailable.

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Tagged: Mobility and Ambulation, Physical Therapy, Rehabilitation, Research/Case Study