

2025

19th Annual

EVIDENCE-BASED PRACTICE POSTER DAY



ABSTRACT
BOOK

HUNTER **CU
NY**

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

19th Annual Evidence-Based Practice Poster Day & Spring Forum

Wednesday, April 30, 2025, 4:00-7:00 PM

Hunter College Brookdale Health Sciences Campus
[EBPposterday.commons.gc.cuny.edu](https://ebp.posterday.commons.gc.cuny.edu) | Socials: [#EBPposterday](https://twitter.com/EBPposterday)

PROGRAM

4–5 pm Auditorium **Inaugural Claire M. Fagin Lecture**



Sherry Greenberg, PhD, RN, GNP-BC, FGSA,
FNAP, AGSF, FAANP, FAAN

Dr. Sherry Greenberg is the inaugural Evelyn Lauder Chair in Adult Gerontology and a professor at the Hunter-Bellevue School of Nursing.

A national leader in gerontological nursing, Dr. Greenberg is a nurse practitioner advisory group member on the Institute for Healthcare Improvement's Age-Friendly Health Systems initiative and past president of the Gerontological Advanced Practice Nurses Association. She is also a member of the Gerontology & Geriatrics Education Editorial Board and a peer reviewer for multiple journals.

Dr. Greenberg is a Fellow in the American Academy of Nursing, American Association of Nurse Practitioners, American Geriatrics Society, Gerontological Society of America, National Academies of Practice, and New York Academy of Medicine, as well as Distinguished Educator in Gerontological Nursing through the National Hartford Center of Gerontological Nursing Excellence.

Dr. Greenberg earned her baccalaureate, master's, and PhD from the University of Pennsylvania School of Nursing and was a Jonas Nurse Leaders Scholar. She has extensive experience as a certified gerontological nurse practitioner in acute, long-term care, and outpatient primary care practices, and has taught at undergraduate, graduate, and doctoral levels.

5:15–7 pm Rotunda

Poster Session

Poster Presentation Awards to be announced.

ACKNOWLEDGMENTS

Conference support provided by the National Center for Advancing Translational Sciences, National Institutes of Health, Award Number UL1TR002384. The content presented is solely the responsibility of its authors and does not necessarily represent the official views of the National Institutes of Health.

The conference organizers gratefully acknowledge Dr. Julianne Imperato-McGinley, Associate Dean for Translational Research and Educational Training and the Director and Principal Investigator of the Clinical and Translational Science Center (CTSC) at Weill-Cornell Medicine for her contributions to nursing research and her dedication to advancing nursing science.

Thank you to Dean Ann Marie Mauro for her leadership and steadfast commitment to excellence in research, scholarship, and service.

We 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 and poster reviewers, event volunteers, and to Dr. Sherry Greenberg for their participation and support.

Conference Organizing Committee

Health Professions Education Center

Martin Dornbaum, MS, FAAN

Hunter-Bellevue School of Nursing

Erin Bach

Shawn McGinniss, MEd

Melissa O'Connor, PhD, MBA, RN, FGSA, FAAN –
Committee Chair

School of Health Professions

Physical Therapy

Cristiana K. Collins, PT, PhD, CFMT, NCS

Speech-Language Pathology & Audiology

Michelle MacRoy-Higgins, PhD, CCC-SLP

Staff Event Volunteers

Hunter-Bellevue School of Nursing

Alicia Brown

Carol Davis

Michelle De Assis

Edna Flores

Madison Guptaill

Henrietta Jones

Tanit Lang-Michelson

Sarah McGuire

Maria Mendoza

Jeffrey Owens

Alexandra Plavskin

Zinnia Rodriguez

Abstract & Poster Reviewers

Health Professions Education Center

Martin Dornbaum, MS, FAAN

Hunter-Bellevue School of Nursing

Elizabeth Capezuti, PhD, RN, FAAN

Maya Clark-Cutaia, PhD, RN, ACNP-BC

Elsie Jolade, DNP, RN, FNP-BC, ACNS, CCRN

Jennifer Majumdar, PhD, MSN, CRNA

Melissa O'Connor, PhD, MBA, RN, FGSA, FAAN

Deirdre O'Flaherty, DNP, ANP-BC, NEA-BC, ONC, FFMRCISI

Bobbie Posmontier, PhD, CNM, PMHNP-BC, FAAN

Stephen Yermal, PhD, RN, CRNA

School of Health Professions

Physical Therapy

Cristiana K. Collins, PT, PhD, CFMT, NCS

Speech-Language Pathology & Audiology

Michelle MacRoy-Higgins, PhD, CCC-SLP

Other Event Support

CUNY Academic Commons

Health Professions Education Center

Hunter College Duplicating Services

John Jay College Print Shop

POSTER PRESENTATION AWARDS

^(F) Designates Faculty Sponsor and/or Clinical Advisor of a student project.

Clinical & Community Partners

POSTER 10 *Interventions to Prevent Falls and Injuries in Inpatient Oncology Units: A Scoping Review*
Elizabeth Capezuti, PhD, RN, FAAN¹; **Amil Tan**, PhD, RN¹; **Maria Scaramuzzino**, MS, RN²;
Seema Lall, PhD, RN²; **Roseline Martelly**, DNP, RN²; **Patricia Tennill**, BSN, RN²; **Annie George**, PhD, RN, NEA-BC, NPD-BC, CCRN-K²

⁽¹⁾Hunter-Bellevue School of Nursing, Hunter College, CUNY; ⁽²⁾NYC Health + Hospitals

Nursing DNP Final Capstone Project

POSTER 20 *Sternal Wound Complication Reduction in Adult Cardiac Surgery*

Psylane George-Barton, MS, RN, AGNP-BC; **Aliza Ben-Zacharia**, PhD, DNP, RN, ANP-BC, FAAN^(F)

Nursing DNP Scholarship (Pre-Capstone/Dissertation)

POSTER 17 *Utilizing the Timed Up and Go Assessment for Falls Prevention in Medical Oncology Inpatients: A Literature Review*

Bayley Sharma, MS, RN, AGPCNP-BC, PCCN; **Aliza Ben-Zacharia**, PhD, DNP, RN, ANP-BC, FAAN^(F)

Nursing PhD Scholarship (Pre-Capstone/Dissertation)

POSTER 26 *Unraveling the Complexity of Decisional-Capacity: A Dimensional Concept Analysis*

Solange Marcel, DNP, RN, ANP-BC, PMHNP-BC; **Margaret Barton-Burke**, PhD, RN, FAAN^(F)

Student & Resident Nursing

POSTER 30 *Post-Operative Pain Management of Orthopedic Surgical Patients: Complementary and Alternative Medicines (CAMs) - Music Therapy*

Sigrid Squicciarini, BSN, RN; **Krystaline Velez**, BSN, RN, CRRN, GERO-BC

Master of Science, Adult-Gerontology Primary Care Nurse Practitioner;

Third Annual Cohort, Evelyn H. Lauder Community Care Nurse Practitioner Fellowship

Doctor of Physical Therapy

POSTER 42 *High Intensity Interval Gait Training Improves Balance in Multiple Sclerosis*

Herbert Karpatkin, PT, DPT, DSc, NCS, GCS, MSCS^(F); **Zachary Amster**; **Giovanna Bonilla**;
Emily Giovine; **Jaya Rachwani**, PT, MS, PhD^(F)

Speech-Language Pathology and Audiology (2 awards)

POSTER 48 *Impact of Group Speech-Language Therapy on Perceived Social Participation Outcomes in Adults with Aphasia*

Julia Grant; **Amy Vogel-Eyny**, PhD, CCC-SLP^(F)

POSTER 59 *Comparing Cueing Methods for Spontaneous Speech in a Child with a Speech Sound Disorder (SSD): A Case Study*

Sydney Kleyman; **Michelle MacRoy-Higgins**, PhD, CCC-SLP, TSHH^(F); **Lauren Cohen**, MS, CCC-SLP, TSSLD^(F)

POSTER NUMBERS BY PRESENTERS

Akter, Ruzina: 41
Alvarez, Kayla: 35
Amalraj, Mary: 3, 4
Amster, Zachary: 42
Auriemma, Luigi: 39
Austin, Anita: 43
Bell, Frances: 18
Beneway, Jessica: 35
Benjuya, Elizabeth: 56
Bonilla, Giovanna: 42
Borzooeyeh, Gabrielle: 47
Bukhari, Saud: 41
Capezuti, Elizabeth: 10
Chang, Katie: 35
Chatelain, Christina: 12
Chen, Joyce: 43
Cheung, Tricia: 31
Criss, Rachel: 37
Czartoryski, Paulina: 38
Dean, Samantha: 63
Devadoss, Esther: 1
Donnelly-Cokinos, Rachel: 7
Drakopoulou Kalantzi, Georgia: 46
Elgohail, Mona: 35
Filatova, Elena: 11
Gannon, Arielle: 16
Garcia, Lauryn: 50
Garcia, Pamela: 53
Geller, Pamela: 35
George, Annie: 9, 10
George-Barton, Psylane: 20
Giovine, Emily: 42
Goldberg, Ariella: 38
Grant, Julia: 48
Guevarro, Kayla: 32
Gutch, James: 41
Horowitz, June: 35

Jambois, Rachel: 38
Janvier, Wendeline: 37
Javid, Mohammad: 38
Joseph, Kaitlyn: 61
Joseph, Nadia: 2, 3, 4
Julien, Christelle: 40
Jung, Young Sun: 19
Kaleta, Janusz: 34
Kaplan, Sarah: 23
Kenney, Alan: 40
Khatun, Fatema: 32
Kiggins, Kyra: 49
Kilkenny, Olivia: 58
Kleyman, Sydney: 59
Lall, Seema: 9, 10
Lauren, James: 21
Levine, Chloe: 54
Levitt, Nathan: 24
Lewin, Stéphanie: 51
Liang, Jonathan: 37
Lin, Shu: 22
Liu, Jennifer: 31
Ma, Tony: 35
Malecki, Jakub: 37
Manning, Judith: 1
Marcel, Solange: 26
Marium, Salma: 32
Martelly, Roseline: 9, 10
Mattson, Christina: 14
McCrary, Brittany: 27
McDonough, Mary: 35
Ochoa, Elisabeth: 38
O'Leary, Justin: 25
Ortega, Chelsea: 44
Pachter, Rachel: 45
Palladino, Brittany: 36
Pikulinski, Oliwia: 62
Pinard, Tamara: 13

Posmontier, Bobbie: 35
Quantz, Richard: 43
Rakhmanova, Zarina: 61
Ren, Michelle: 31
Rios, Eddylys: 32
Rios, William: 41
Robinson, Sean: 8
Scaramuzzino, Maria: 9, 10
Scarlett, Oliver: 28
Sharma, Bayley: 17
Sharma, Manish: 5
Shor, Alya: 31
Spektor, Marina: 29
Squicciarini, Sigrid: 30
Starobin, Julia: 36
Tabbanella, Dana: 36
Tan, Amil: 9, 10
Tarannum, Nuha: 32
Tennill, Patricia: 9, 10
Than, May Thazin: 6
Theodore, Richardeanea: 1
Thompson, Veronica: 57
Tsilerides, Barbara: 36
Utoko, Kamila: 31
Van Doran, Kasey: 40
Velez, Krystaline: 30
Vora, Mahima: 52
Vulovich, Nicole: 43
Wang, Yiqi: 35
Waugh, Jendayi: 15
Weng, Rachel: 33
Wilson, Thomas: 39
Yank, Stella: 60
Yun, Boyoung: 29
Zelevsky, Sheryl: 36
Zhang, Michelle: 31
Zheng, Leo: 39
Zhuk, Vera: 55

Faculty Sponsors/Mentors

Andrades-Schroeder, Antonia: 45
Babyar, Suzanne: 39
Barton-Burke, Margaret: 26
Ben-Zacharia, Aliza: 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22
Capezuti, Elizabeth: 23, 24, 25, 27
Chen, Stanley: 49, 51, 52, 53, 60, 61, 62
Clark-Cutaia, Maya: 28
Cohen, Lauren: 59
Collins, Cristiana: 36, 37
Eng, Nancy: 44, 45, 51, 54, 57, 60, 61, 62
Erblich, Joel: 33
Gupta, Kavita: 22
Heagele, Tara: 23
Herbold, Janet: 39
Holland, Thomas: 41
Karpatkin, Herbert: 42, 43
Kofsky, Steven: 37
Levenson, Hayley: 58
Louis, Marjory: 6, 7, 8
MacRoy-Higgins, Michelle: 44, 45, 46, 47, 55, 58, 59, 63
Rachwani Parshotam, Jaya: 36, 37, 42, 43
Silberman, Nicki: 38
Terranova, Beth: 38
Vogel, Donald: 44, 49, 55, 56
Vogel-Eyny, Amy: 47, 48, 50, 54, 56
Woodard, Chad: 40

ABSTRACTS

^(F) Designates Faculty Sponsor and/or Clinical Advisor of a student-led project.

#1 (QUALITY INITIATIVE/EBP SCHOLARLY PROJECT)

CLINICAL & COMMUNITY PARTNERS

Enhancing Nursing Practice Through Nursing Grand Rounds: A Catalyst for Evidence-Based Care

Esther Devadoss, DNP, RN, NEA-BC, NPD-BC; Judith Manning, DNP, RN, NE-BC, CMSRN, GRN;
Richardeanea Theodore, PhD, RN, PMHCNS-BC

NYC Health + Hospitals/Jacobi

Background: As a dynamic platform to advance nursing science and evidence-based practice within the clinical setting, Nursing Grand Rounds provides nurses with opportunities to expand their knowledge, refine clinical skills, and enhance critical thinking. Nursing Grand Rounds have become a sustained initiative at this level one tertiary hospital.

Purpose: The objective of Nursing Grand Rounds is to provide nurses with evidence-based knowledge that informs their daily clinical decision-making. Nursing Grand Rounds serve as a strategic tool to cultivate clinical excellence, strengthen professional development, and empower the nursing workforce. These sessions align with healthcare's quintuple aim.

Methods: Nursing Grand Rounds are conducted monthly as interprofessional, one-hour 'Lunch and Learn' sessions on both in-person and virtual platforms. Topic selection is based on data collected quarterly from direct care nurses. Nurse planners collaborate with unit-based nurse educators, frontline staff, and nurse leaders to develop evidence-based presentations. Content experts are invited to present the latest evidence-based practices. Participants receive certificates of completion with continuing education credits. After each session, an evaluation is conducted to assess the achievement of learning objectives. Nursing Grand Rounds were expanded in 2024 to off-tour nursing staff.

Results: From 2022 to 2024, a total of 51 Nursing Grand Rounds were conducted, engaging 1,353 participants - including 79 participants from off-tour. Direct care nurses and content experts played active roles in presenting evidence-based projects. Participant feedback consistently affirmed the achievement of learning objectives; many nurses expressed confidence in applying newly acquired knowledge to their clinical practice.

Conclusions: Nursing Grand Rounds serve as an effective mechanism for promoting evidence-based practice, professional development, and optimal patient outcomes. The hybrid in-person and virtual format ensures accessibility and inclusion. Participant feedback plays a crucial role in shaping future sessions. Healthcare institutions should consider integrating Nursing Grand Rounds as a standard practice to improve patient care.

Contact: Esther.Devadoss@nychhc.org

#2 (QUALITY INITIATIVE/EBP SCHOLARLY PROJECT)

CLINICAL & COMMUNITY PARTNERS

Preceptor Role in Facilitating the Transition from Academia to Practice

Nadia Joseph, MSN, RN-BC, CNEcl

Mount Sinai South Nassau Hospital

Background: According to Frankenberger et al., 2021, the COVID-19 pandemic has been a dreadful accelerant of this prospected nursing shortage, leaving additional challenges in its wake. Nurse preceptors now encounter many new graduate nurses entering the healthcare environment facing

higher patient acuity with limited clinical experiences due to the pandemic restrictions. It is imperative to have a preceptor program to facilitate the transition

Purpose: Preceptor plays an essential role guiding and supporting graduate nurses through transition into practice. The preceptor program improves registered nurses' skills, knowledge, and ability to precept nurses.

Methods: Preceptor program consists of three stages: initial preceptor selection, formal training, and continuous coaching by a nurse educator. Preceptor selection is a joint decision encompassing the preceptor, the nurse manager, and the nurse educator. Cotter Preceptor Selection instrument ensures that chosen preceptors are qualified to guide and facilitate learning experience. Potential preceptors consult with their manager and complete a pretest to assess their current knowledge and skills. A 6-hour preceptor workshop conducted by nurse educators consists of a blended teaching methodology that meets the learning needs of different generations and fills identified gaps.

Results: Nurses identified in approved departments completed the 6-hour training.

Conclusions: Nurse Leaders need to ensure that preceptors have the training to educate and evaluate the new nurse's clinical performance. A comprehensive preceptor program improves the expertise of the nurse preceptor and ensures new nurses develop and ultimately transition into the role of a competent professional nurse.

Contact: nj2582@yahoo.com

#3 (LITERATURE REVIEW)

CLINICAL & COMMUNITY PARTNERS

How nursing students' stress and anxiety affect patient outcomes in the clinical setting

Mary Amalraj, PhD, RN, NPD-BC; Nadia Joseph, MSN, RN-BC, CNEcl

Nassau Community College

Issue: The student nurses' mental health challenges can negatively impact the nursing student's well-being, academic performance, and the quality of patient care they provide. Nursing students experience high levels of stress, anxiety, and depression stemming from academic pressures, demanding clinical experiences (including exposure to patient suffering and ethical dilemmas), and personal responsibilities. The literature review highlights the importance of integrating mental health support into nursing education through early identification and intervention strategies, curriculum adjustments, and fostering supportive learning environments prioritizing self-care practices.

Description: This systematic literature search and review was conducted using Google Scholar, CINAHL, Science Direct, Cochrane, and the PubMed Database. Keywords used included stress, anxiety, nursing students, clinical learning environment, emotional freedom technique, mindfulness, and patient outcome.

Results: key findings indicate that providing nursing students with various stress reduction techniques including psychological interventions, mindfulness-based techniques, stress management programs incorporating cognitive-behavioral skills, and alternative approaches such as the Emotional Freedom Technique will improve students' current mental health, increase resilience and self-efficacy, improve academic performance and positive patient outcome.

Conclusions and Recommendations: Student nurses experience a high level of stress throughout their educational journey. This heightened stress level affects their well-being, academic performance, and patient outcomes. Future research is needed to properly identify the stress level, evaluate interventions, including developing culturally sensitive approaches, and utilize technology for students' mental health support.

Contact: Maryamalraj63@gmail.com

Transitioning from Nursing Practice into Academia: What Do We Need?

Nadia Joseph, MSN, RN-BC, CNEcl; Mary Amalraj, PhD, RN, NPD-BC

Nassau Community College

Issue: In 2021, U.S. nursing schools turned away 91,938 qualified applicants from baccalaureate and graduate nursing schools due to faculty shortage. AACN reported that more than 2,000 full-time faculty vacancies were identified in a survey of approximately 900 nursing schools in the United States. Additionally, one third of the current nursing faculty plan to retire by 2025. Nursing Schools are hiring novice adjunct faculty who have limited exposure to academia. Exploring and identifying the key areas to support the novice clinical faculty is warranted to create a positive learning outcome in a clinical setting.

Description: The Novice clinical Adjunct faculty needs a structured program to be competent and successful in their teaching practice. Nursing programs are responsible for supporting novice faculty. Collecting data from different educational entities is crucial to the development of a program to support them. It is imperative that the school administration incorporate the National League for Nursing Core competencies into their program to develop competent clinical faculty. Our poster will summarize the identified factors and recommendations for educational institutions to develop competent and successful clinical faculty support programs.

Lessons Learned: Literature research revealed that a structured orientation for novice clinical adjunct faculty can increase their confidence, competence, and enhance teaching and learning experiences. Thus, developing the clinical faculty will enhance their professional growth and empower the future nurses with the required knowledge, skills and clinical reasoning capability.

Next Steps: Communicate and collaborate with the educational institutes in disseminating the key supporting factors to improve the future of nursing education and student learning outcomes. More collaborative research is recommended.

Contact: nj2582@yahoo.com

Pediatric Sedation: Pros, Cons, and Alternatives.

Manish K. Sharma

Department of Nursing and Allied Health Sciences, Bronx Community College, CUNY

Issue: Pediatric sedation in MRI plays a crucial role in ensuring immobility for accurate imaging in children. However, its use raises concerns regarding safety, potential adverse effects, and the procedural and financial implications, making a review of its advantages, limitations, and alternatives essential.

Description: This comprehensive review explores pediatric sedation in MRI, emphasizing its necessity for motion-free imaging and patient cooperation. The literature was analyzed to understand the effectiveness, risks, and non-sedation alternatives. Studies were identified using advanced search engine queries with criteria that included research focusing on different types of sedatives and their outcomes, safety concerns, and alternatives to sedatives. Excluded studies primarily addressed unrelated imaging techniques or outdated sedation methods.

Results: Pediatric sedation has been effective in reducing motion artifacts, thereby improving diagnostic accuracy and limiting the need for repeat scans. Pharmacological sedation methods, such as the use of propofol, midazolam, chloralhydrate, etc. are applied but may cause side effects like respiratory depression, nausea, or irritability, and raise concerns about long-term exposure in pediatric populations.

Non-pharmacological alternatives, including mock MRI scanners, distraction techniques like virtual reality (VR), and support from child life specialists, faster scanning protocols including motion correction techniques have demonstrated potential to enhance cooperation and reduce sedation rates. These methods may require longer preparation times and additional resources.

Conclusions and Recommendations: Sedation is essential for pediatric MRI but comes with risks and significant resource demands, emphasizing the need for alternative approaches. Incorporating non-drug methods into clinical practice can improve safety and reduce reliance on sedation. Limited research exists on sedative quality and long-term effects, despite adverse side effects in children post-recovery. Further studies must explore sedation's short- and long-term impacts on vital systems to establish safer, more effective practices for pediatric MRI procedures.

Contact: manish.sharma@bcc.cuny.edu

Catheter Associated Urinary Tract Infection Prevention

May Thazin Than, BSN, RN; Marjory Louis, DNP, MSN-NP, CLC, EBP-C^(F)

RN Transition-to-Practice (RNTTP) Residency Program, VA NY Harbor Healthcare System

Issue: Catheter-associated urinary tract infections (CAUTIs) frequently occur because of indwelling catheter and other variables in a hospital or Nursing home settings. Inappropriate use or not following the guidelines for CAUTI prevention care may lead to increased morbidity and mortality, rehospitalization rates, and health care costs. The purpose of this review was to explore the incidence of CAUTI and prevention strategies.

Description: A literature review was performed through PubMed and CINAHL to identify best practice and evidenced based information for CAUTI prevention. Key works included "CAUTI", "Infections", "Long Term Care", "Care Bundle", and "Prevention strategies". Inclusion criteria included recent articles within 5 years and published in English. Dissertations and review articles were excluded.

Results: Catheter-associated urinary tract infections (CAUTIs) are a significant healthcare-associated infection (HAI) that contribute to increased morbidity, mortality, and healthcare costs. Effective prevention strategies focus on minimizing unnecessary catheter use, ensuring proper catheter insertion and maintenance techniques, and promoting early removal when clinically appropriate. Regular assessment of catheter necessity, coupled with nurse-driven protocols for timely removal, has been shown to significantly reduce CAUTI rates. Additionally, education and training programs for healthcare providers enhance adherence to best practices, ensuring standardized care.

Conclusions and Recommendations: Implementing a multimodal approach, including infection surveillance, hand hygiene compliance, and patient education, further strengthens CAUTI prevention efforts and improves overall patient safety in healthcare settings.

Acknowledgements: Department of Veterans Affairs, RNTTP program

Contact: jjjthazin@gmail.com

How A Unit-specific SBAR Handoff Tool Could Improve Perceived Nurse-to-Nurse Communication

Rachel E. Donnelly-Cokinos, MS, RN; Marjory Louis, DNP, MSN-NP, CLC, EBP-C^(F)

RN Transition-to-Practice (RNTTP) Residency Program, VA NY Harbor Healthcare System

Background: Background: Accurate transfer of information between healthcare personnel is vital to continuous, quality patient care. In 2002, Kaiser Permanente hired David Bonacum, quality expert in the aeronautics industry to investigate an increase in patient safety adverse events. He discovered many of those adverse events occurred due to communication failures. Nuclear submarine and aeronautics industries adopted a communication model for briefing colleagues on vital information concisely with the structure of situation, context, situation analysis, and recommendation for issue resolution. Bonacum and Kaiser colleagues brought SBAR to inpatient acute and intensive care settings, noting a decrease in sentinel events following implementation.

Purpose: This evidence-based practice intervention aims to evaluate the impact of a unit-specific SBAR (Situation-Background-Assessment-Recommendation) handoff tool on perceived communication accuracy among registered nurses (RNs) on an inpatient medical-surgical unit, with a high percentage of oncology patients.

Methods: With oversight from the Brooklyn VAMC facility's nurse educator, we conducted an initial brief education session with registered floor nurses (n=10), and discussed case studies in order to practice SBAR utilization. An adjusted version of the MICU-Shift Reporting Scale (MSR) was used to collect pre- and post-implementation data on perceived communication accuracy. Three options for SBAR handoff tools (1,2 and 3 patients per sheet) were created using the same single-patient template. Additional data was randomly collected through direct observation and assessment of handoff accuracy over 4 weeks, focusing on written completeness.

Results: The study results are currently pending and will be reported after the final data analysis is completed.

Conclusions: This project contributes to evidence-based practice outcomes on improving nurse-to-nurse communication and ideally supports the use of structured communication tools to mitigate errors and enhance clinical decision-making. Since the early 2000s, SBAR has been widely accepted as a standardized method for handoff. As new evidence-based practice interventions evaluate valid SBAR alternatives, future work should continue to evaluate if the SBAR format is truly optimal for providing accurate, comprehensive patient handoff and improving patient safety.

Acknowledgements: Kathleen Malone, Nurse Educator, for your patience and assistance; Marjory Louis, RNTTP coordinator; Audrey Graham O'Gilvie, Manhattan VA Patient Services Director; Carol Morry, Patient Services Secretary; and Brooklyn VAMC 8 West.

Contact: rdcokinos@gmail.com

Harbor VA Implementation of MAHC-10 Fall Risk Screening Tool in the Community

Sean Robinson, BSN, RN; Marjory Louis, DNP, MSN-NP, CLC, EBP-C^(F)

RN Transition-to-Practice (RNTTP) Residency Program, VA NY Harbor Healthcare System

Issue: NYC Home based Primary Care (HBPC) has been using the Morse falls risk tool which has been ideally created for patients who are admitted to inpatient facilities. There is evidence that suggest using a falls risk tool which has been validated for patients in the home/community may increase the accuracy of identifying patients that are at risk for falls. The purpose of the literature review was to explore the effectiveness of the Missouri Alliance of Home Care (MAHC-10) falls risk tool at improving the predictability of falls.

Description: A literature review was performed through PubMed, CINAHL, Google Scholar, and Sage Journal, to identify best practice and evidenced based information for falls risk assessments. Key words included "Falls", "Home Care", "Elderly Falls in The Community", "Falls Risk Tool", "Morse Falls risk tool",

"HBPC Toolkit", and "the Missouri Alliance of Home Care (MAHC10)". Inclusion criteria included recent articles within 5 years and published in English. Dissertations and review articles were excluded.

Results: The MACH-10 falls risk tool has been validated for community patients at risk for falls. The research evidence supporting the MACH-10 tool demonstrates its ability to enhance the accuracy of risk stratification, thereby facilitating early intervention and targeted prevention strategies. By incorporating multiple risk factors, such as gait instability, medication use, and environmental hazards, the tool allows healthcare providers to make evidence-based decisions in fall prevention programs. Furthermore, its validation in community settings ensures its applicability beyond clinical environments, enabling broader utilization in home care, primary care, and community health initiatives.

Conclusions and Recommendations: Timely identifying patients at risk will help reduce the number of falls at home which will also reduce injuries and re-hospitalization. This evidence-based approach underscores the importance of systematic fall risk assessment in enhancing overall community health and safety.

Contact: sean.robinson3@va.gov

#9 (QUALITY INITIATIVE/EBP SCHOLARLY PROJECT)

CLINICAL & COMMUNITY PARTNERS

Fall Risk Factors Among Oncology Patients of a Large, Urban, Public Hospital

Amil Tan, PhD, RN⁽¹⁾; Maria Scaramuzzino, MS, RN⁽²⁾; Seema Lall, PhD, RN⁽²⁾; Roseline Martelly, DNP, RN⁽²⁾; Patricia Tennill, BSN, RN⁽²⁾; Annie George, PhD, RN, NEA-BC, NPD-BC, CCRN-K⁽³⁾

⁽¹⁾Hunter-Bellevue School of Nursing, Hunter College, CUNY; ⁽²⁾NYC Health + Hospitals/Bellevue; ⁽³⁾NYC Health + Hospitals Central Office

Background: Healthcare settings continue to face a burden of falls among hospitalized patients. There has been some preliminary research on falls among hospitalized cancer patients; however, there is still little information on the relationship between communication, isolation status during hospitalization, and the impact of chemotherapy.

Purpose: To examine risk factors associated with fall events among hospitalized cancer patients.

Methods: We conducted retrospective case-control analysis of electronic medical records from spanning January, 2022, to December, 2022. Descriptive statistics, including odds and odds ratios, bivariate analyses, and logistic regression models, were used to investigate factors associated with fall events and falls with injuries.

Results: There were 40 patients with fall events and 148 without fall events. Bivariate analysis indicated that the following variables were associated with falls in cancer patients: Male (OR = 5.2, 95% CI: 2.24 – 14.95), English language preference (OR = 2.0, 95% CI: 1.07 – 4.29), solid tumor diagnosis (OR = 7.0, 95% CI: 1.80 – 6.99) and metastatic cancer (OR = 6.5, 95% CI: 3.14 – 16.07), not receiving chemotherapy (OR = 3.3, 95% CI: 1.67 – 5.88), use of psychotropic medications (OR = 3.2, 95% CI: 1.53 – 7.85), and have any isolation precautions (OR = 4.4, 95% CI: 1.73 – 15.22). High Morse Fall Scores, English as preferred language, and the combination of receiving chemotherapy and any isolation precaution ($p < .001$) were found to be highly predictive of a fall event during hospitalization among cancer patients in a multivariable model component.

Conclusions: Oncology inpatients have some fall risk factors similar to all inpatients such as higher general fall risk but also have unique risk factors including language preference, chemotherapy, and isolation measures. Thus, fall prevention strategies need to be designed, implemented, and monitored with these factors taken into account.

Contact: at5528@hunter.cuny.edu

Interventions to Prevent Falls and Injuries in Inpatient Oncology Units: A Scoping Review

Elizabeth Capezuti, PhD, RN, FAAN⁽¹⁾; Amil Tan, PhD, RN; Maria Scaramuzzino, MS, RN⁽²⁾; Seema Lall, PhD, RN⁽²⁾; Roseline Martelly, DNP, RN⁽²⁾; Patricia Tennill, BSN, RN⁽²⁾; Annie George, PhD, RN, NEA-BC, NPD-BC, CCRN-K⁽³⁾

⁽¹⁾Hunter-Bellevue School of Nursing, Hunter College, CUNY; ⁽²⁾NYC Health + Hospitals/Bellevue; ⁽³⁾NYC Health + Hospitals Central Office

Issue: Individuals with cancer are at a heightened risk of experiencing falls and related injuries during hospitalization. Our aim was to systematically summarize and evaluate the literature examining the effectiveness of fall prevention interventions employed in oncology inpatient setting.

Description: Guided by PRISMA statement, a health librarian conducted searches of five databases, which uncovered 1,039 unduplicated studies that were screened by two independent reviewers and resulted in ten quality improvement evaluations. The Quality Improvement Minimum Quality Criteria Set was used to evaluate methodological quality.

Results: All studies used a multi-factorial approach to intervention and most based these on assessment with few targeting cancer-specific factors. Most interventions were staff-focused with a few incorporating the patient's input.

Conclusions and Recommendations: Individualized assessments and interventions enhance care effectiveness when healthcare teams and patients are aligned. Nurse rounding and engaging patients improve communication, self-assessment, satisfaction, and adherence, warranting further research and technological advancements.

Contact: ec773@hunter.cuny.edu

Delirium Screening in Oncology

Elena Filatova; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Delirium is a common and often misdiagnosed complication in hospitalized cancer patients, which is related to multiple etiology, such as comorbidities, chemotherapy, steroids, and advanced disease. Delirium can lead to prolonged hospital stays, increased morbidity and mortality, distress for patients and caregivers, and higher healthcare costs.

Description: This literature review aims to explore recent research on delirium in oncology inpatients and evaluate valid delirium screening tools. Databases include PubMed, CINAHL, and PsycINFO with keywords such as 'cancer patients,' 'delirium,' and 'screening tools for delirium' were used. Studies published between 2018 and 2025 in English were included, while studies focusing on delirium in ICU or outpatient settings, children/adolescents, or related to substance use were excluded. A total of 109 articles were identified, and 20 of the most relevant studies, including systematic reviews, cohort studies, and descriptive studies, were selected for review.

Results: The prevalence of delirium in cancer patients varies widely, from 15% to 66%, and can rise to 80% to 90% in advanced and terminal cancer stages. Accurate recognition of delirium is clinically important to effectively provide clinical care and reduce late complications. There are multiple delirium screening tools, such as the Confusion Assessment Method (CAM) and the Single Question in Delirium (SQiD). These screening tools are mostly patients' screening instruments except for the SQiD, which is a

caregiver-centered tool that is helpful in detecting early mental status changes and delirium but should not be used as a sole screening tool.

Conclusions and Recommendations: Timely recognition and management of delirium are crucial to improving patient outcomes and reducing healthcare burdens. A multifactorial approach combining valid screening tools, comprehensive staff education, delirium management protocols along with family involvement is most effective. Integrating staff screening tools and caregiver-centered tools, such as the SQiD, could enhance delirium detection, further improving patient outcomes.

Contact: ELENA.filatova62@myhunter.cuny.edu

#12 (LITERATURE REVIEW)

NURSING DNP SCHOLARSHIP

Utilization of a Psychiatric Fall Risk Assessment Tool for Prevention of Falls in the Behavioral Health Unit: A Literature Review

Christina Chatelain; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Falls are a major health event that can lead to sequelae of health complications. In behavioral health units, falls occur 3 to 4 times more often than in medical care units. Health care systems have historically used the Morse Fall Tool (MFS) to identify fall risk. In the behavioral health (BH) setting, these patients encounter distinct fall risk factors that are not included in the MFS. This literature review aimed to explore fall tools specific to behavioral health populations.

Description: Relevant articles were retrieved from PubMed, PsycINFO, MEDLINE, and CINAHL using key search terms. All searches and data retrieval were conducted with no custom publication time, and the abstracts reviewed were peer-reviewed. Search terms yielded 419 articles; 53 articles were relevant to falls within the behavioral health population. Twenty-two articles studied behavioral health fall tools.

Results: Literature shares the necessity of BH fall tools to replace the MFS. Studies state BH fall tools have a specificity similar to MFS but greater sensitivity a rate greater than 50% compared to the MFS. BH fall tools include criteria specific to BH populations, such as cognitive status, prescribed psychotropic medication, drug and alcohol detoxification, as some major contributing factors for falls.

Conclusions and Recommendations: The currently used MFS does not include fall risk factors that affect behavioral health populations. Therefore, behavioral health patients are not accurately identified for falls. This demonstrates the importance of healthcare providers utilizing appropriate fall tools for this population.

Acknowledgements: My DNP cohort, Marie Chatelain, Dr. Safford

Contact: cchatelain808@gmail.com

#13 (LITERATURE REVIEW)

NURSING DNP SCHOLARSHIP

Enhancing Continuity of Care: Evaluating Structured Transition Protocols from Psychiatry to Primary Care

Tamara R. Pinard, MSN, PMHNP-BC; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: The transition from outpatient psychiatric treatment to primary care is critical for individuals with mental health disorders. Disruptions can lead to fragmented care, treatment discontinuity, hospital readmissions, and reduced patient satisfaction. Despite growing awareness, systematic mechanisms for seamless transitions remain under-researched. Research highlights the importance of structured communication, provider collaboration, and patient-centered strategies in ensuring continuity of care.

However, gaps persist, underscoring the need for evidence-based interventions. This project evaluates a structured care transition protocol and checklist versus standard processes to improve continuity of care, follow-up adherence, hospital readmission rates, and patient satisfaction.

Description: A comprehensive search was conducted using CINAHL, PubMed, PsycINFO, and Google Scholar with keywords such as mental health, care transition, primary care, structured protocol, checklist, care coordination, and hospital readmissions. Peer-reviewed articles (2020–2025) in English focusing on adults transitioning from psychiatric to primary care were included.

Results: Structured interventions improve follow-up rates and reduce hospital readmissions. Shared electronic health records and provider facilitators increased follow-up by 40% in schizophrenia patients. Standardized discharge summaries improved follow-up by 25%, while structured checklists reduced 30-day readmissions. Follow-up calls and peer support programs enhanced medication adherence by 30%. Telehealth increased appointment attendance by 20%. Psychiatric nurse practitioners reduced medication errors, and case managers lowered emergency visits by 35%. Psychoeducation and transition planning improved self-management, decreasing crisis episodes by 28%. Medication reconciliation reduced adverse drug events by 15%. Community interventions, including peer navigators and mobile apps, lowered relapse rates by 22%.

Conclusions and Recommendations: Implementing structured protocols, including checklists and follow-ups, enhances care continuity, reduces hospitalizations, and improves long-term patient outcomes.

Acknowledgements: I sincerely thank Dr. Aliza Ben-Zacharia for her invaluable guidance, expertise, and support.

Contact: tamara.pinard82@myhunter.cuny.edu

Flu Vaccination Rates in 9/11 First Responders

Christina M. Mattson, MSN, AGPCNP-BC, OCN; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)
Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: The influenza vaccination rate in the United States for the 2023-2024 flu season was 44.9%. At an NYC-based World Trade Center (WTC) clinic, the vaccination rate for the 2023-2024 flu season was 58%. This clinic is federally funded and must adhere to the federally established benchmark of 70% for the flu vaccination rate. In an attempt to improve the vaccination rate, a literature review was done to establish best practice for streamlining the communication to patients about the flu vaccine.

Description: A literature search was conducted using CINAHL and Medline. Searching peer-reviewed journals, terms used were 'flu vaccination education', 'vaccine hesitation', 'communication about influenza vaccination.' Articles were excluded that focused on COVID vaccination. A total of 587 articles were identified, and 20 of the most relevant studies, including systematic reviews, cohort studies, and descriptive studies, were selected for review.

Results: The evidence shows that digital reminders about flu vaccination prior to scheduled appointments result in an increased vaccination adherence. Patients reported a higher plan for adherence when knowing the negative effects of influenza for both them and society. Educating patients about the complications and sequela of the flu, the importance of vaccination, and debunking vaccine myths have shown to increase vaccination adherence. Vaccination adherence increases when logistical information regarding vaccine administration is discussed. Adherence also increased when the message was personal to the patient.

Conclusions and Recommendations: Flu vaccines improve quality of life and reduce mortality and morbidity. Practical communication between patients and providers including reminders improve flu

vaccine adherence. While there has been research conducted on vaccination campaigns and vaccination rates, further research should include comparison of different interventions to evaluate effectiveness.

Acknowledgements: Dr. Ben-Zacharia

Contact: christina.mattson01@myhunter.cuny.edu

#15 (LITERATURE REVIEW)

NURSING DNP SCHOLARSHIP

Prediabetes Screening and Management

Jendayi R. Waugh; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Thirty four percent (34%) adult Americans are prediabetic and only 15% recall being informed by their Primary Care Provider of their condition. There is a clear association between elevated hemoglobin A1C (HbA1C), increased body mass index (BMI) and the likelihood of acquiring diabetes over a two-year period. Prediabetes screening and management are vital to diabetes prevention. This literature review explored the importance of early screening for diabetes and proper referrals to enhance timely management.

Description: A comprehensive search of the CINAHL, Cochran, and PubMed databases using the keywords: 'prediabetes' and 'interventions', 'prediabetes and 'primary care', 'prediabetes' and 'diabetes prevention' resulted in more than 200 articles. Twenty-four articles met the inclusion criteria. These studies included systematic reviews, randomized control studies, observational studies, and a qualitative study.

Results: Prediabetic screening programs are successful in identifying persons who are at a high risk of developing diabetes. The literature emphasized the importance of identifying at risk patients. Additionally, studies found that lifestyle interventions were associated with a reduction in progression to diabetes and treatment effects did not differ by age, sex, race and ethnicity, or BMI. In most trials, lifestyle interventions focused on both diet/nutrition and physical activity. Several trials reported the effects of lifestyle interventions on intermediate outcomes. In pooled analyses, lifestyle interventions were associated with a reduction in weight, BMI, blood pressure lipid profile and subsequent diabetes progression.

Conclusions and Recommendations: The benefits of early screening for prediabetes and timely management including referrals are numerous providing enhanced quality of life. Behavioral counseling focused on diet, physical activity, or other factors maximize the effectiveness of prediabetes management and minimize progression to diabetes.

Acknowledgements: Dr. ABZ for her guidance on this as well as Dr. Samuels for guidance on interpretation of research data

Contact: jw1775@hunter.cuny.edu

#16 (LITERATURE REVIEW)

NURSING DNP SCHOLARSHIP

Nurse Driven Protocols for Stroke Patients in the Emergency Room

Arielle Gannon

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: The need for nurse driven protocols in the emergency room (ER) for the management of stroke patient to enhance the timely identification, assessment, and treatment of stroke symptoms, improve patient outcomes, and streamline the care process in alignment with best practice guidelines.

Description: This literature review aims to explore the impact of nurse-driven protocols on the management of stroke patients in the emergency room (ER). The rationale for the review is to evaluate whether implementing structured, nurse-led protocols improves early identification, rapid assessment,

and the initiation of appropriate interventions, thereby optimizing patient outcomes and reducing delays in care. The analysis will focus on studies investigating the role of nursing protocols in the ER setting, with an emphasis on improving response time, adherence to clinical guidelines, and patient outcomes such as mortality, functional recovery, and complication rates.

Results: The review identified several key findings regarding the implementation of nurse-driven protocols for stroke patients in the emergency room (ER). Nurse-led protocols were consistently associated with improvements in the timely recognition and initial management of stroke symptoms, leading to reduced door-to-needle times for thrombolytic therapy and more rapid initiation of stroke care. Several studies reported a significant increase in adherence to established stroke treatment guidelines when protocols were nurse-driven, which contributed to improved clinical outcomes, including higher rates of functional recovery and lower mortality in stroke patients.

Conclusions and Recommendations: The literature review underscores the positive impact of nurse-driven protocols on the management of stroke patients in the emergency room (ER). Key findings demonstrate that nurse-led protocols can significantly improve the timely identification and management of acute stroke, reduce delays in administering treatment (e.g., thrombolysis), and enhance adherence to clinical guidelines.

Contact: arielle.gannon14@myhunter.cuny.edu

Utilizing the Timed Up and Go Assessment for Falls Prevention in Medical Oncology Inpatients: A Literature Review

Bayley Sharma; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Falls among medical oncology inpatients remain a critical safety concern, leading to increased morbidity, extended hospital stays, and higher healthcare costs. Mobility impairment is a major contributor to fall risk, yet mobility assessments are not routinely implemented in oncology inpatient settings. The Timed Up and Go (TUG) assessment is a validated tool evaluating mobility and fall risk, however, its integration into oncology care remains inconsistent.

Description: This literature review evaluates the role of the TUG mobility assessment in fall prevention among hospitalized oncology patients. A literature search of PubMed, CINAHL, and Cochrane Library databases was conducted using keywords: 'Timed Up and Go', 'fall prevention', 'oncology patients', and 'mobility assessment.' Studies were included if they assessed the predictive validity of the TUG in oncology populations or its impact on fall prevention strategies. Studies focusing solely on non-oncology populations were excluded.

Results: The literature demonstrates that the TUG assessment is a reliable tool for evaluating functional mobility in oncology patients, where treatment-related fatigue, deconditioning, and sarcopenia contribute to fall risk. Studies indicate that implementing a standardized mobility screening, including the TUG, facilitates early identification of at-risk patients and supports timely interventions such as physical therapy referrals, assistive device recommendations, and structured mobility programs. However, despite its established validity, the routine use of the TUG in inpatient oncology care remains limited. Studies support a multifactorial fall risk screening to obtain more information to help identify inpatients at risk for falls.

Conclusions and Recommendations: The findings support the integration of the TUG assessment into oncology inpatient care to proactively identify patients at risk for falls and implement targeted mobility

interventions. Expanding the use of evidence-based mobility screening may improve patient safety, reduce falls, and enhance functional recovery in this vulnerable population.

Acknowledgements: Dr. Aliza Ben-Zacharia, Dr. Nora Love

Contact: bayley.butler@gmail.com

#18 (LITERATURE REVIEW)

NURSING DNP SCHOLARSHIP

Frailty Screening and Geriatric Interventions in Multiple Myeloma/Oncology: A Literature Review

Frances Bell; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Frailty and aging in the oncology population can greatly affect outcomes and survival. By 2030, 80% of those diagnosed with Multiple Myeloma will be over 65 years old. Early screening and involvement of a multidisciplinary team in the treatment trajectory can improve patient outcomes. Despite several oncology guidelines recommending frailty screenings and geriatric assessments, oncology teams often fail to complete them due to barriers such as time, resources, and lack of knowledge about the recommended tools. This literature review investigates the evidence supporting the use of the Geriatric 8 (G8) Frailty Screening tool in the outpatient oncology setting.

Description: PubMed and CINAHL databases were searched using the key words specific to frailty screening/assessment and oncology. The final analysis included 21 studies: 6 systematic reviews, 8 randomized controlled trials, 4 cohort studies, 2 observational studies, and 1 consensus-based guideline.

Results: The literature reveals that frailty tools like the G8 predict mortality, treatment tolerance, and functional decline in older cancer patients. Frailty screening, when combined with use of a multidisciplinary team, reduces higher-grade treatment toxicities, unplanned hospitalizations, and emergency room visits. Additionally, it improves communication with healthcare providers and may influence treatment decisions. Tailored geriatric interventions lead to better clinical outcomes by addressing patient vulnerabilities such as malnutrition, cognitive decline, and mobility issues. Several studies highlight that multidisciplinary team involvement enhances patient care and can help optimize treatment plans.

Conclusions and Recommendations: The G8 Frailty Screening tool is strongly supported by evidence and is recommended for routine clinical use. Early identification of frail or vulnerable patients is crucial. However, the involvement of a multidisciplinary team, including geriatricians, nutritionists, physical therapists, pharmacists, and social workers, is essential to improving patient outcomes. Implementing these interventions in oncology care can enhance both survival rates and quality of life for older cancer patients.

Contact: Frances.Bell40@myhunter.cuny.edu

#19 (QUALITY INITIATIVE/EBP SCHOLARLY PROJECT)

NURSING DNP FINAL CAPSTONE PROJECT

Hemodialysis Vascular Access Complication Reduction Using a Nurse-Led Protocol

Young Sun Jung; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Background: Vascular access (VA) is critical for hemodialysis (HD) components in end-stage renal disease patients. Complications such as thrombosis and stenosis in Arteriovenous fistulas (AVF) and arteriovenous grafts (AVG) lead to VA access failure, increasing patient morbidity and healthcare costs. Early detection of thrombotic flow-related dysfunctions in AVF and AVG through routine physical

assessments, as recommended by the 2019 Kidney Disease Outcomes and Quality Initiative (KDOQI) guidelines, is paramount.

Purpose: To standardize VA assessment in an acute HD unit.

Methods: A quality improvement project was conducted in an inpatient HD unit at an academic institution. Primary outcomes included nursing checklist utilization, high-risk VA screening, and complication rates. The secondary outcome measured clinical team knowledge scores.

Results: Twenty patients were screened using a newly developed tool. The complication rate increased between 2024 and 2025 due to improved screening, documentation, and training ($t(21)=2.079$; $p=.001$). There was a significant rise in referrals for further evaluation and intervention ($t(38)=2.024$; $p<.001$). Nursing staff knowledge significantly improved post-education ($t(9)=2.262$; $p<.001$).

Conclusions: Standardized VA assessment and high-risk screening enhance early detection and management of complications. Implementing this protocol improves referrals, staff education, and patient outcomes in ESRD patients on HD.

Contact: youngsun.jung48@myhunter.cuny.edu

#20 (QUALITY INITIATIVE/EBP SCHOLARLY PROJECT)

NURSING DNP FINAL CAPSTONE PROJECT

Sternal Wound Complication Reduction in Adult Cardiac Surgery

Psylane George-Barton; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Background: Sternotomy wound infection (SWI) and dehiscence remain significant concerns in cardiothoracic surgery, with incidence rates ranging from 0.3% to 3.4%. High-risk patients undergoing complex procedures, such as coronary artery bypass grafting (CABG) and valve replacement, are particularly vulnerable. SWI not only increases early and late mortality but also prolongs hospital stays and imposes substantial financial burdens on healthcare systems. Effective prevention strategies are essential to mitigate these risks.

Purpose: To introduce a quality improvement initiative aimed at developing and implementing a standardized protocol incorporating cost-effective wound care strategies, designed to reduce mediastinal wound infections and dehiscence within 30 days following adult cardiac surgery, thereby minimizing postoperative complications, improving patient outcomes, and reducing healthcare costs.

Methods: A quality improvement (QI) project was conducted to enhance SWI screening and prevention through a multidisciplinary, evidence-based approach, incorporating Closed Incision Negative Pressure Therapy (cINPT). The project aimed to develop a comprehensive protocol for sternotomy wound infection prevention. A screening tool was implemented to assess for key risk factors, including uncontrolled diabetes, chronic steroid use, obesity, and prolonged surgical times.

Results: A total of 30 patients were screened and 28 clinicians participated in the pre and post knowledge survey. Following implementation, there was a statistically significant decrease in antibiotic use ($t(22)=2.074$; $p<.001$), correlating with reduced mediastinal infection rates. Standardization of care improved, as evidenced by an increase in the number of patients screened using the SWI risk assessment tool ($t(30)=2.042$; $p<.001$). Additionally, the use of negative pressure devices decreased ($t(41)=2.019$; $p<.001$). Clinician knowledge significantly improved after the educational session ($t(28)=2.048$; $p<.001$).

Conclusions: Early identification of risk factors is critical for implementing effective preventive measures. This project demonstrated a reduction in SWI rates, leading to improved patient outcomes, reduced healthcare costs, and enhanced quality of care in cardiothoracic surgery.

Contact: psylane.george-barton14@myhunter.cuny.edu

Screening and Prevention of Sexually Transmitted Infections in a Primary Care Clinic

James Lauren; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Background: Bacterial sexually transmitted infections (STIs) continue to rise, with CDC data showing over 600,000 gonorrhea and 1.8 million chlamydia cases reported in 2019, and 176,113 cases of syphilis in 2021. Despite established guidelines, STIs remain undetected due to inadequate screening practices.

Purpose: This quality improvement project's purpose is to enhance screening, prevention, and provider STI knowledge.

Methods: An STI reduction bundle was implemented in a primary care clinic using an STI screening tool, STI protocol, and provider education. Outcome measures included rates of both urogenital and extragenital gonorrhea (GC) and chlamydia (CT) screening, syphilis blood screening, doxycycline treatment prescriptions, doxycycline post exposure prophylaxis (Doxy-PEP) prescriptions, and provider pre- and post- intervention knowledge scores.

Results: Analysis demonstrated increased screening rates, doxycycline treatments, and providers' knowledge after the intervention. Comparing September-December 2023 (pre-intervention) with September-December 2024 (post-intervention), statistically significant increases were observed in urogenital screenings for GC/CT ($t(569)= 1.964, p<.001$), blood screening for syphilis ($t(452)= 1.965, p<.001$), extragenital screenings using self-swab for GC/CT ($t(10)= 2.228, p<.001$). The number of STI treatments with doxycycline also increased significantly ($t(19)= 2.101, p<.001$). Healthcare provider STI knowledge scores showed statistically significant improvement after education ($t(7)= 2.365, p<.001$). Doxy-PEP preventive prescriptions showed a positive trend but didn't reach statistical significance.

Conclusions: The STI reduction bundle improved STI screening and prevention in primary care. Results demonstrate that standardized protocols combined with provider education can significantly enhance STI detection and prevention, while demonstrating the feasibility of implementing complex practice changes in primary care settings.

Acknowledgements: Thanks to Professor Dr Aliza Ben-Zacharia, Hunter College classmates, clinic site administration, staff, and patients

Contact: jameslaurennp@gmail.com

Uric Acid Renal Stones Screening and Recurrence Management

Shu Lin⁽¹⁾; Aliza Ben-Zacharia, PhD, DNP, RN, ANP-BC, FAAN^{(1)(F)}; Kavita Gupta^{(2)(F)}

⁽¹⁾Hunter-Bellevue School of Nursing, Hunter College, CUNY; ⁽²⁾Urology Department of Mount Sinai West Hospital

Background: Uric acid stone (UAS) is the second most common type of nephrolithiasis, with increased prevalence and remarkable healthcare costs in the United States and worldwide over the past 30 years. UAS is strongly associated with diabetic mellitus and metabolic syndrome. Despite preventative measures, the recurrent rate of UAS is significant.

Purpose: The purpose of this project was to screen, reduce and manage recurrent uric acid renal stones.

Methods: This quality improvement project aimed at the reduction of uric acid stones recurrence rate and enhanced adherence was performed in a nephrology clinic in an academic medical institution. The

primary outcomes were the screening, adherence and emergency department (ED) admission rates. The secondary outcome included the clinical team's education scores.

Results: Thirty three patients were screened by the newly developed screening tool. There was a decrease in the number of ED visits from 2023 to 2024 ($t(6)=2.447$; $p=.03$). There was a statistically significant improvement in the urine pH after the implementation of the project. Higher number of patients had alkalizing urine pH after the implementation ($t(26)=2.056$; $p=.022$). Lastly, There was a statistically significant difference between the pre and post knowledge tests. The clinicians (nurses, medical assistants, nurse practitioners, MD fellows) improved their knowledge after the educational session ($t=2.262$, $p<.001$).

Conclusions: There is a clear benefit of follow-up and education on the reduction of uric acid stone recurrence. Healthcare professionals must possess a deep comprehension of the etiology, risk factors, and proficient treatment strategies for uric acid nephrolithiasis to deliver holistic and effective care to high-risk individuals.

Contact: shumlin.lin92@myhunter.cuny.edu

Registered Nurses and Climate Change: Role and Practices for Heat Related Illnesses

Sarah Kaplan, MSN, RN; Tara Heagele, PhD, RN, FAAN^(F); Elizabeth Capezuti, PhD, RN, FAAN^(F)
Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Extreme heat has negative impacts on the physical environment and physical and mental health. However, the negative effects of extreme heat are not equally distributed across society and communities. Registered Nurses play an essential role in the promotion of health equity and the prevention, mitigation, and treatment of heat-related illnesses. This review explores nurses' practices and professional role surrounding mental and physical heat related illness.

Description: Five databases were systematically searched following the JBI methodology for conducting a systematic review with results reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses. Two reviewers performed the initial and full-text screening with conflicts resolved via discussion. Data were extracted using a standardized spreadsheet and quality of included studies were appraised using the JBI instruments based on study design and article type and purpose.

Results: Fifteen articles were included in this review, with most of the literature categorized as expert opinion. Articles described the role of nurses in prevention, mitigation, adaptation, and treatment of heat related illness, climate related disparities, opportunities for clinical and continuing education, and the role of nurses in advocacy.

Conclusions and Recommendations: The review demonstrates that registered nurses have a role in the prevention, mitigation, treatment of heat related illnesses and advocacy for extreme heat solutions. Further research is needed to examine nurses' roles, practices, and perceptions around extreme heat to strengthen current interventions, identify barriers, and promote prevention of heat related illnesses.

Contact: sarah.kaplan42@myhunter.cuny.edu

Experiences of Transgender Individuals in Healthcare: The State of the Science Towards Establishing an Affirming Model of Care

Nathan Levitt

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: In recognition of the health disparities among the lesbian, gay, bisexual, and transgender (LGBT) population, health authorities have called for increased knowledge and research. Evidence shows that transgender individuals often face the most severe forms of discrimination and health disparities. Given this, establishing an affirming care model is crucial for guiding both research and practice. The purpose of the literature review is to provide insight into the current state of knowledge on the experiences of transgender communities in healthcare to contextualize the need for an affirming framework.

Description: Relevant peer-reviewed articles were retrieved from Ovid MEDLINE(R), OVID Embase, CINAHL, and Web of Science within the last 10-15 years using key search terms.

Results: Sixty studies were imported for screening. After screening, 10 studies were included - 8 qualitative, 1 cross sectional secondary analysis, and 1 mixed methods study. The themes that emerged from the literature were barriers to accessing healthcare including discrimination and stigma and lack of medical provider knowledge, mental health impacts, and positive experiences towards best practices.

Conclusions and Recommendations: This review sought to provide a more in-depth understanding of the challenge's transgender communities face within health care and potential affirming models of care. The findings highlight the need for additional research on interventions, such as a trauma informed framework, to reduce health disparities. Future research directions are to conduct a secondary analysis with systematic coding of qualitative data from patient and medical provider interviews at a community-based transgender clinic.

Acknowledgements: Dr. Gus Klein, Hunter Alliance for Research and Translation; Dr. Clark-Cutaia, Associate Dean for Nurse Practitioner Programs, Hunter-Bellevue School Nursing; Dr. Capezuti, Director, PhD in Nursing Program, Hunter-Bellevue School Nursing

Contact: nathan.levitt12@myhunter.cuny.edu

Cancer Related Financial Burden in Sexual & Gender Minorities: A Literature Review

Justin O'Leary

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: 40.5% of Americans are estimated to be diagnosed with cancer within their lifetime. Cancer patients are at risk for financial burden- an adverse financial effect of cancer treatment. Sexual orientation & gender identity are often omitted from datasets leaving the with financial burden faced by sexual & gender minority (SGM) cancer patients understudied.

Description: This literature review summarizes the literature of cancer-related financial burden in SGM. A systematic search of PubMed, CINAHL, & PsychInfo was conducted in Q2 2024 for any form of financial burden in SGM cancer patients. Search terms were bucketed by SGM status, cancer, and financial burden. Conference abstracts were excluded as well as articles on cancer screening, cancer prevention strategies, fertility preservation, financial burden on healthcare systems/insurance/ cost analyses.

Results: 6 studies were identified that addressed cancer related financial burden in SGM patients. Financial burden was assessed with different methodologies across each study. This population experiences higher financial burden compared to cisgendered heterosexuals with identified contributing factors including transportation costs, health fees, loss of employment, and minority status. LGBTQ+ patients who attempt online crowdfunding for cancer care were found to raise less money than non-LGBTQ+ patients.

Conclusions and Recommendations: SGM patients are at risk for cancer related financial burden. Limited literature on the topic indicates the need for additional research to inform future interventions.

Contact: justin.oleary41@myhunter.cuny.edu

#26 (RESEARCH)

NURSING PHD SCHOLARSHIP

Unraveling the Complexity of Decisional-Capacity: A Dimensional Concept Analysis

Solange M. Marcel; Margaret Barton-Burke^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Background: The concept of decisional capacity is often associated with definition ambiguity along with misinterpretations in the healthcare context, confirming the need for an in-depth analysis that offers conceptual clarification. Objective/Aim: The aim of this paper is to perform a concept analysis of decisional capacity to improve conceptual clarity and enhance research and clinical practice methods to provide greater meaningful concept appreciation.

Methods: A dimensional concept analysis offered the most appropriate methodology for dimensionalizing decisional capacity's social constructs and contextual associations while historically grounded in a qualitative approach.

Results: Throughout the concept analysis, dimensions and sub-dimensions were categorized across contexts with the intention to clarify conceptual definitions and ambiguities. The following four relevant dimensions, or themes, evolved with contextual sub-dimensions co-occurring: conflicting synonyms, conceptual domains, bioethical dimensions, and capacity as a continuum.

Conclusions: To improve concept clarification, further exploration through a grounded theory study is recommended to assess the relationship between the clinician's ethnicity, value system and socioeconomic culture to determine whether these attributes directly or indirectly affect clinician judgment of decisional capacity.

Acknowledgements: Elizabeth Capezuti, PhD director (mentor); Sarah Kaplan, PhD cohort peer (poster design)

Contact: sm10972@hunter.cuny.edu

#27 (CLINICAL, PROGRAMMATIC, OR POLICY INTERVENTION)

NURSING PHD SCHOLARSHIP

Transfusion after prophylactic eculizumab use in individuals with sickle cell disease and a history of delayed hemolytic transfusion reaction: A single-center case series

Brittany McCrary; Elizabeth Capezuti, PhD, RN, FAAN^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Transfusion support is crucial in managing sickle cell disease (SCD) complications, but repeated transfusions can lead to alloimmunization and transfusion reactions. A rare, life-threatening complication is delayed hemolytic transfusion reaction (DHTR) with hyperhemolysis. First-line

treatments include steroids and IVIG, while anti-C5 complement inhibitors (eculizumab) are second-line, according to 2020 American Society of Hematology guidelines. Patients with DHTR history should avoid transfusions unless lifesaving, and steroids and IVIG are given prophylactically. However, no literature supports prophylactic eculizumab use.

Description: We describe two cases where patients with DHTR history developed hyperhemolysis despite steroids and IVIG, but were successfully transfused with eculizumab prophylaxis.

Lessons Learned: Patient 1. A 36-year-old pregnant female with HbS β 0 and a history of DHTR with hyperhemolysis was transfused 2 units of PRBCs matched to her antibodies (ANTI-C, -E, -K, -JKB, -S, -JsA, -VS, -Kn, -Cob) with IVIG and steroid prophylaxis with appropriate response. Three days later, she presented with pain and anemia with ongoing hyperhemolysis. Four weeks later, she was hospitalized for a C-section due to abnormal fetal dopplers. She received IVIG, steroids, and eculizumab for transfusion prophylaxis. Hb was 6.8 g/dL on admission, and she received 4 units of PRBCs during admission. She was discharged with Hb 8.9 g/dL and no signs of hyperhemolysis. Patient 2. A 26 year-old male with HbSS and stroke (on hydroxyurea and chronic red cell exchanges) presented for pain crisis and symptomatic anemia which he received 8 days prior with Hb 8.9 g/dL but dropped to Hb 6.3 g/dL on admission. He received IVIG, steroids, and eculizumab as treatment for hyperhemolysis. During admission, he received 1 unit PRBC matched to known anti-bodies (ANTI-C,-E, -I) for Hb 4.4g/dL. Four months later he was re-hospitalized for pain and anemia and was given IVIG, steroids without eculizumab and 1 unit PRBC. He was given eculizumab, as Hb nadired to 4 g/dL and he received 1 unit PRBC without recurrence of hyperhemolysis.

Next Steps: DHTR with hyperhemolysis in SCD is a life-threatening complication. No guidelines exist for treating patients with a history of DHTR who develop recurrent hyperhemolysis despite IVIG and steroid treatment. We administered eculizumab prior to transfusion in two such patients, preventing hyperhemolysis. These cases suggest a novel use of eculizumab for safe transfusions in SCD with DHTR. Further studies are needed to support its prophylactic use.

Contact: brittany.mccrary55@myhunter.cuny.edu

How Do Lower Patient to Nurse Ratios Impact Pressure Injury Incidence?

Oliver Scarlett, BSN, RN, RT(R)(BD)(ARRT); Maya N. Clark-Cutaia, PhD, RN, ACNP-BC^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Hospital acquired pressure injuries (HAPI) are a major quality improvement concern and source of economic burden on the U.S. healthcare system with costs exceeding \$26.8 billion. The cost a single HAPI diagnosis ranges between \$500 to more than \$70,000. About 59% of these costs are disproportionately attributable to a small rate of stage 3 and 4 full-thickness wounds, which occupy clinician time and hospital resources. Pressure injuries can result from patient confinement to a bed and restricted blood flow to the tissue leading to break down. Pressure injury risk begins upon admissions. Given these facts, we sought to determine whether changes to nurse-patient ratios impact incidence of pressure injuries in an inpatient, tertiary care center.

Description: This scoping review employed the JBI methodology for scoping reviews. Two databases were searched (PubMed, CINAHL). Dates and English language limits were used. Once articles were identified, two independent reviewers screened for title and abstract relevance. A third reviewer resolved discrepancies where necessary. Agreed upon articles underwent full text screening to determine eligibility and inclusion. Article quality was also scrutinized.

Results: Based upon the extant body of literature, greater ratio of nurses at the bedside is associated with better outcomes for patients and nurses. Higher patient load was associated with higher rates of infection, while higher nurse staffing was associated with fewer deaths, failure-to-rescue incidents, lower rates of infections, and shorter hospital stays. The increase in the RN or CNA hours lowered the likelihood of HAPI development.

Conclusions and Recommendations: Nurse patient ratio reduction is a potential quality improvement initiative that can be implemented to reduce HAPI development.

Contact: oliver.scarlett63@myhunter.cuny.edu

A Literature Review of Enhanced Perioperative Communication Through Intraoperative Text Messaging

Boyoung Yun; Marina Spektor

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Family members play a critical role in providing emotional support to patients during surgery. Family satisfaction is an important quality metric that can drive improvements in the perioperative process. However, during surgery, family members often report feelings of helplessness, insecurity, and powerlessness. This literature review aims to address the question: Does sending intraoperative text messages to family members, as compared to standard oral communication, help reduce anxiety and improve satisfaction during the perioperative period?

Description: A comprehensive literature search was conducted using PubMed and Hunter College Libraries One Search. The search identified six articles on anxiety, patient satisfaction, text messages, surgery, and caregivers. These articles included five randomized controlled trials and one quality improvement initiative. Relevant studies were gathered using the following MeSH terms in PubMed: (((SMS or Text Message or short messages or communication) AND (patient or famil* or relatives or caregivers or adult* or child*)) AND (perioperative or intraoperative or real-time or perioperative care or intraoperative care)) AND (anxiety* or satisfaction or patient satisfaction)) AND (surgery or surgical procedure* or invasive procedure*).

Results: The findings from all six studies strongly support the hypothesis that intraoperative text messaging can reduce caregiver anxiety and potentially improve their overall satisfaction during the perioperative period. While the studies varied in their measurement of satisfaction, the consistent reduction in anxiety across all studies provides strong evidence for the efficacy of text messaging as a low-cost, effective tool for enhancing communication and supporting caregivers during surgery.

Conclusions and Recommendations: Intraoperative text messaging is a practical, affordable intervention for reducing caregiver anxiety and improving family satisfaction during surgery. While more research is needed to standardize practices and assess long-term effects, existing evidence supports its use in perioperative care. To maximize impact, institutions should refine message content, timing, and accessibility, ensuring integration into healthcare systems. This approach can improve communication, increase caregiver satisfaction, and ultimately improve patient outcomes.

Contact: boyoung.yun98@myhunter.cuny.edu

Post-Operative Pain Management of Orthopedic Surgical Patients: Complementary and Alternative Medicines (CAMs) - Music Therapy

Sigrid Squicciarini; Krystaline Velez

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Issue: Effective pain management remains a significant challenge for both health care professionals and post-operative patients. Past studies have shown that patients recovering from orthopedic surgeries have some of the highest pain levels compared to other surgical procedures. This systematic review explores the following question: Among adult orthopedic surgery patients, are complementary and alternative medicines (CAMs) like music therapy effective in reducing pain levels and improving patient outcomes when compared to patients who receive traditional pharmacological therapy before hospital discharge? This topic is important and essential for developing optimal pain management strategies, reducing adverse effects and improving overall patient outcomes.

Description: In our systematic review, a search through Medline Complete was conducted for peer-reviewed studies (2019–2024) on therapeutic music for postoperative pain in adult orthopedic patients. Six studies were included and consisted of randomized control trials (RCTs), quasi-experimental studies, and QI projects comparing music therapy to traditional pain management. Exclusions included non-orthopedic, preoperative, intraoperative, pediatric studies, and systematic reviews.

Results: Findings in this study indicated that music therapy reduced pain and enhanced patient outcomes by addressing factors such as agitation, kinesiophobia, and heart rate variability. The studies also showed notable improvements in range of motion, exercise adherence, and decreased opioid use. These findings emphasized the value of incorporating a holistic approach to postoperative care. Limitations included lack of generalizability due to single site studies, homogenous participant groups, and small sample sizes.

Conclusions and Recommendations: Further research and RCTs with larger sample sizes are needed to support the rigor of current findings; it is also needed to improve evidence-based practice and to standardize music interventions to evaluate long-term outcomes. In conclusion, the different methods and outcome measures of the studies suggest music therapy is a non-invasive, cost-effective intervention that significantly improves both physical recovery and patient experience in the postoperative period for orthopedic patients.

Contact: sigrid.squicciarini79@myhunter.cuny.edu

Does family presence have a positive or negative influence on patients and staff during resuscitation and invasive procedures?

Alya Shor; Tricia Cheung; Michelle Zhang; Jennifer Liu; Kamila Utko; Michelle Ren

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Background: Family presence during resuscitation or invasive procedures is becoming a recognized component of family-centered care. Studies indicate that over 50% of emergency patients prefer having family members present during critical interventions. Evidence supports the emotional benefits of family presence, such as reduced post-traumatic stress disorder (PTSD) and improved coping mechanisms for family members. While some healthcare professionals express concerns about interference with clinical care, research suggests no significant negative impact on patient outcomes. This topic is increasingly

relevant as healthcare systems shift towards transparent and compassionate care models that prioritize both patient well-being and family involvement.

Purpose: This guideline evaluates patient, family, and provider perspectives on family presence during resuscitation and invasive procedures. It aims to address challenges, highlight benefits, and provide evidence-based recommendations to support family-centered care while ensuring clinical effectiveness and emotional well-being in emergency and critical care settings.

Methods: The guideline was developed through a systematic review and expert consensus approach, adhering to the rigorous standards set by the Emergency Nurses Association (ENA). Research was conducted between 2005 and 2017, focusing on English-language studies involving human subjects. Data was collected from reputable databases such as PubMed, Cochrane, the Agency for Healthcare Research and Quality (AHRQ), CINAHL, and the National Guideline Clearinghouse. The inclusion criteria prioritized studies assessing the impact of family presence on patient outcomes, provider experiences, and emotional well-being. Evidence was categorized into three levels (A: High, B: Moderate, C: Weak) to guide clinical recommendations.

Results: Findings indicate that family presence during resuscitation fosters trust, transparency, and emotional support without negatively affecting clinical outcomes. Patients and families reported increased satisfaction, reduced anxiety, and improved coping mechanisms. Institutions implementing family presence policies observed enhanced provider-patient relationships and alignment with family-centered care principles. The evidence supports the inclusion of family presence in emergency protocols, with Level A and B recommendations emphasizing its positive impact. No substantial data suggest adverse effects on healthcare team performance, reinforcing the viability of this practice in hospital settings.

Conclusions: The implementation of family presence during resuscitation and invasive procedures is a crucial step toward humanizing healthcare. By integrating this practice into clinical policies, hospitals can enhance trust, emotional well-being, and patient-centered care. The guideline strongly supports family presence as a beneficial approach, backed by high to moderate evidence. Future efforts should focus on standardizing institutional policies, offering training for healthcare providers, and further research on optimizing the experience for both patients and families.

Contact: alya.shor50@myhunter.cuny.edu

Screening for Depression & Suicide Risk in Adults

Fatema Khatun; Salma Marium; Nuha Tarannum; Kayla Guevarro; Eddylis Rios

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Background: Depression is a mood disorder characterized by persistent feelings of sadness or general apathy lasting for at least fourteen days, which could potentiate suicide. Suicide is the tenth-leading cause of death in US adults and the second-leading cause of death in individuals aged between 10 and 34 years, affecting mostly Black and Hispanic populations. (USPSTF and WHO)

Purpose: The evidence-based guideline is to evaluate screening for depression and suicide in adults aged 19 years and older, including pregnant, postpartum, and older adults. The overall objective is to improve early identification of suicide as well as manage depression timely to reduce the risks of depression and suicide.

Methods: The guideline was created using a systematic review of evidence by carefully analyzing 14 pre-existing and 10 existing research studies to understand the effectiveness of suicide and depression

screening tools. The databases included are MEDLINE, PsychINFO, and the Cochrane Database of Systematic Reviews. The guideline focused on adults 19+, pregnant/postpartum individuals, and older adults (65+). The exclusion criteria were only focused on MDD and a primary care setting. The evidence grading system by the USPSTF was used to evaluate how strong the evidence is.

Results: The PHQ-9 screening tool correctly identified 85% of individuals with major depression (sensitivity) and 85% of individuals without major depression (specificity). The USPSTF gives this approach a Grade B, indicating moderate evidence of benefit. Follow-up is crucial for monitoring progress and preventing relapse, also rated Grade B.

Conclusions: Preventative action, screening, and follow-up are advised for all adults, including pregnant and postpartum individuals, to manage anxiety and substance use. Behavioral counseling can help reduce substance use. In the Geriatric Depression Scale, scores of 10-12 suggest possible depression, while over 12 indicates a higher risk, allowing for early detection and treatment access.

Contact: fatema.khatun47@myhunter.cuny.edu

Genetic Variation in ALDH1A1 is Associated with Expectancies of Behavioral Disinhibition and Problem Drinking in a Community Sample of Smokers

Rachel Weng; Joel Erblich^(F)

Hunter-Bellevue School of Nursing, Hunter College, CUNY

Background: Problem drinking plays a pivotal role in the health of consumers and a risk factor for both liver and head and neck cancer. Consumers' experiences with alcohol and their expectations about the effects of consumption vary among individuals, as social, cultural, religious, and genetic backgrounds all influence experiences with alcohol consumption. Studies demonstrated that biological factors associated with alcohol metabolism, including acetaldehyde accumulation in the body can influence alcohol consumption. Because such accumulations can be driven by aldehyde dehydrogenase (ALDH) deficiencies, we hypothesized that genetic variations in ALDH1A1, a gene regulating the production of ALDH, would predict problem drinking.

Methods: In this study, healthy smokers (n=187) from the greater NYC community were genotyped for 26 single nucleotide polymorphisms (SNPs) at ALDH1A1, and completed demographic questionnaires, the Short Michigan Alcoholism Screening (SMAST) and the Comprehensive Effects of Alcohol scale (CEOA), a measure of drinking expectancies.

Results: Findings indicated that one SNP (rs2773806) was significantly associated with both higher SMAST scores and higher scores on two key CEOA scales. In particular, individuals who were homozygous for the G_G allele had significantly higher mean SMAST scores (3.0 ± 1.6), compared to heterozygotes (0.9 ± 0.2) and non-carriers (1.0 ± 0.2). Similarly, homozygous carriers reported higher Liquid Courage and Risk and Aggression scores, compared to heterozygous and non-carriers.

Conclusions: The results point to the importance of the ALDH1A1 'G' allele in predicting expectancies for greater disinhibition from drinking and higher drinking problems among smokers. The study highlights a possible biobehavioral link between alcohol metabolism and dysregulated drinking. Moreover, further research is needed to replicate results in larger samples, including both smokers and non-smokers.

Acknowledgements: Grant #R25CA260125

Contact: wengrachel01@gmail.com

Addressing SUD (Substance Use Disorder) through Access to BRAINxAi Care

Janusz Kaleta

CUNY School of Professional Studies (CUNY SPS)

Background: SUD (Substance Use Disorder) has devastating effects on families and communities in US. The CDC estimates that 40.3 million Americans have an SUD, with Black and American Indian/Alaska Native people in the highest rates of fatal overdose in 2021. Data from CDC's indicates an estimated 107,543 drug overdose deaths in the United States during 2023. The estimated cost for substance misuse to society is more than \$820 billion each year and is expected to continue increasing. Brain circuits and how addiction occurs is poorly understood. Interventions are needed to reduce overdose and societal costs of SUD. Can timely access to BRAINxAi care prevent SUD?

Methods: Interprofessional collaboration of SUD scientists and tech innovators at MIT. The program was supported by the NIH (National Institute of Health) and NIDA (National Institute of Drug Abuse) and included (n = 95) participants from 25 US States and 12 countries. The presenter was the only RN, PhD from NYS. The presenter's team reached the finals at MIT showcasing the most promising new technologies and interventions for SUD.

Results: Removing STIGMA from SUD and addressing structural racism on addiction and addiction research can increase community's trust and early access to BRAINxAi care services. Bringing evidence-based interventions into practice and adapting them to community needs can reduce risk factors for drug use and SUD.

Conclusions: Early Access to BRAINxAi Care (ABC) can reduce overdose and harms from SUD within underserved populations in the USA.

Acknowledgements: MIT, MIT SUD Ventures, TEAM 11 members: Andrew Ma, MD/PhD (c), Prem Umang, MS, JP, MBA and Dr. Ioannis, PhD.

Contact: jkaleta@gradcenter.cuny.edu

Perspectives of Black/African American women on a digital healthcare platform to reduce PPD and improve mother-infant interaction

Bobbie Posmontier⁽¹⁾; June Horowitz⁽²⁾; Pamela Geller⁽³⁾; Mary McDonough⁽²⁾; Kayla Alvarez⁽²⁾; Jessica Beneway⁽⁴⁾; Katie Chang⁽⁵⁾; Tony Ma⁽⁵⁾; Mona Elgohail⁽⁵⁾; Yiqi Wang⁽⁵⁾

⁽¹⁾Hunter-Bellevue School of Nursing, Hunter College, CUNY; ⁽²⁾UMass Dartmouth; ⁽³⁾Drexel University; ⁽⁴⁾Thomas Jefferson University; ⁽⁵⁾Benten Technologies

Background: Postpartum depression affects 20% of postpartum women with higher prevalence among Black/ African American (B/AA) women. Stigma, racial and healthcare inequities, Strong Black Woman Schema, poor access, and childcare and transportation challenges prevent women and their infants from obtaining treatment for PPD and related suboptimal mother-infant interaction. These barriers may escalate for women facing adverse social determinants of health including cultural and economic conditions. Evidence supports digital healthcare interventions as convenient, cost-effective, and accessible. A culturally tailored digital healthcare platform has potential to address health disparities and improve treatment access and health outcomes for B/AA women and their infants.

Purpose: To describe perspectives of B/AA women on the development of MommaConnect, a digital healthcare platform to augment treatment for PPD and mother-infant interaction. We are tailoring

MommaConnect to B/AA women experiencing PPD and their infants to address their perspectives and reduce cultural barriers to treatment.

Methods: As part of a User-Centered design, we conducted focus groups via HIPAA compliant video-conferencing with 6 B/AA women to gain their perspectives on the development of MommaConnect. Recordings were transcribed verbatim and qualitative data were analyzed by the research team via content analysis.

Results: We elicited perspectives on barriers (e.g., stigma, poor treatment access, provider bias, and cultural factors such as the Strong Black Woman Schema) and motivators (e.g., desire to be good mothers). Themes included systemic /cultural barriers to mental healthcare, racism/discrimination in healthcare, effectiveness of mental health treatment approaches, alternative mental health support and self-care strategies, and technology -based mental health support preferences. Overall, the results informed the research team on culturally relevant development of MommaConnect.

Conclusions: Results from this study informed development of MommaConnect to meet the needs of B/AA women with PPD to improve health outcomes for both mothers and infants.

Contact: bp2015@hunter.cuny.edu

The Impact of Parent Knowledge and Routine Activities on Infant Motor Development

Brittany Palladino; Julia Starobin; Dana Tabbanella; Barbara Tsilerides; Sheryl Zelefsky; Jaya Rachwani Parshotam, PT, MSPT, MS, PhD^(F); Cristiana Collins, PT, PhD, CFMT, NCS^(F)

Department of Physical Therapy, Hunter College, CUNY

Background: Caregivers are influential in children meeting their motor milestones through the environment and expectations they create. Referrals to early intervention programs are high in NYC, likely due to inaccurate parental assumptions regarding the timing of motor milestones. However, many of these referrals do not necessitate physical therapy services, but rather would benefit from caregiver education centered on typical developmental trajectories. This research hypothesized that there is a gap in parental knowledge of pediatric motor milestones.

Methods: A 30 question electronic survey was conducted to gather parental knowledge of infant motor development, routines, and current motor status. A total of 70 first-time parents, 18-65 years old, with a child under one year old and living in NYC were recruited. Participants were excluded if the child was born prior 37 weeks gestational age, diagnosed with disorders affecting the nervous or musculoskeletal systems, or already enrolled in an early intervention program.

Results: The results showed that 81.4% of parents identified as White and 90% being of non-Hispanic or Latino ethnicity. 82.9% of parents had at least a Bachelor's degree. The percentages of parents who correctly identified motor milestone timelines were as follows: 36% for head lifting, 41% for rolling over, 20% for walking while holding onto furniture, and 44% for unsupported sitting. 51% of infants were reported to spend one hour or more per day in containment apparatuses. 70% of infants engaged in less than 30 minutes of tummy time per day.

Conclusions: Our research indicated that parents underestimate infant motor milestones which may lead to unnecessary referrals. Results show that infants are spending prolonged periods in contained apparatuses and not enough time prone, potentially leading to developmental delays. Future research must test the effectiveness of parent education programs for first time parents to reduce unnecessary referrals and to promote healthy development.

Acknowledgements: This study was funded by the Hunter College Chair Fund.

Contact: brittany.palladino70@myhunter.cuny.edu

The Effect of Scapular Mobility on Cervical Rotation Range of Motion: A Pilot Study

Rachel Criss; Wendoline Janvier; Jonathan Liang; Jakub Malecki; Cristiana K. Collins, PT, PhD, CFMT, NCS^(F); Steven K. Kofsky, PT, DPT, CMP, CFMT, OCS^(F); Jaya Rachwani Parshotam, PT, MSPT, MS, PhD^(F)

Department of Physical Therapy, Hunter College, CUNY

Background: Current treatments for cervical impairments focus on the cervical and thoracic spine. Cervical musculature responsible for cervical mobility is also responsible for scapular mobility. Due to this association, cervical rotation mobility is directly related to the mobility of scapula downward rotation. The purpose of this study is to examine whether increasing scapular downward rotation mobility increases ipsilateral cervical rotation active range of motion (ROM) in healthy adults.

Methods: A total of 20 healthy adults presenting with non-symptomatic impairments in cervical rotation active ROM were enrolled in this study. Combination of Isotonics (COI), a Proprioceptive Neuromuscular Facilitation (PNF) technique, was utilized to increase ipsilateral active ROM of scapula downward rotation. Measures of cervical rotation active ROM were taken for a pretest and posttest using the CROM Deluxe™ device.

Results: The results demonstrated a significant improvement in cervical rotation active ROM following the COI intervention used to gain mobility of ipsilateral scapula downward rotation. The post-test measurements revealed an average increase in active ROM of 10.1 degrees surpassing the Minimal Detectable Change (MDC) of 4.9 to 6.1 degrees for cervical ROM measured with the CROM Deluxe™ device. The results indicate that change was not due to chance variation.

Conclusions: This pilot study demonstrates a link between ipsilateral scapula downward rotation and cervical rotation mobility in healthy adults with non-symptomatic cervical rotation limitations. Future randomized controlled trials are needed to explore the role of scapula mobility in treating non-radicular cervical dysfunction presenting with impairments in cervical spine mobility.

Contact: cc5144@hunter.cuny.edu

Kinesiophobia and Quality of Life in Adults with Idiopathic Scoliosis: The Impact of Information Sources and Bracing History

Paulina Czartoryski⁽¹⁾; Ariella Goldberg⁽¹⁾; Mohammad Javid⁽¹⁾; Rachel Jambois⁽¹⁾; Elisabeth Ochoa⁽¹⁾; Nicki Silberman, PT, DPT, PhD^{(1)(F)}; Beth Terranova⁽¹⁾⁽²⁾

⁽¹⁾Department of Physical Therapy, Hunter College, CUNY; ⁽²⁾Strength and Spine

Background: Kinesiophobia, commonly defined as fear avoidance, is a significant barrier to exercise for many individuals. Many patients with scoliosis remain fear-avoidant despite current research supporting the benefits of exercise and lack of contraindications if performed correctly.

Methods: Adults with diagnosed IS completed an anonymous online survey including demographic information, scoliosis and exercise history, information-seeking behaviors, the Tampa Scale for Kinesiophobia (TSK), and the Scoliosis Research Society-22 (SRS-22) questionnaire. Exclusion criteria included pregnancy, musculoskeletal conditions, cognitive impairments, and recent fractures. Optional semi-structured interviews were conducted to gain deeper insight into participants' perspectives on exercise and scoliosis. Relationships between curve severity, TSK scores, SRS-22 scores, and bracing

history were analyzed using correlation coefficients. Qualitative methods were used to analyze interview data.

Results: Among 52 participants (95% female, 80% Caucasian, 74% with higher education), most reported regular exercise participation, with only 5% reporting no physical activity in the previous two weeks. Healthcare professionals were the primary information sources (43%). No significant correlation was found between curve severity and TSK scores ($r_s = .07$, $p = .605$) or SRS-22 scores ($r_s = -.01$, $p = .970$). However, bracing history showed significant correlations with both higher kinesiophobia ($r_s = .50$, $p < 0.001$) and lower quality of life scores ($r_s = -0.41$, $p < 0.05$).

Conclusions: Contrary to previous assumptions, adults with IS demonstrated low levels of exercise fear avoidance, regardless of curve severity. However, bracing history emerged as a significant factor associated with both increased kinesiophobia and decreased quality of life. Healthcare professionals served as primary information sources, potentially contributing to positive exercise behaviors. These findings suggest a need for targeted interventions for previously braced individuals and highlight the importance of healthcare providers in sharing exercise-related information.

Acknowledgements: Dr. Rachwani, Dr. Silberman, Dr. Terranova, the participants for contributing to our study.

Contact: ariella.goldberg30@myhunter.cuny.edu

#39 (RESEARCH)

DOCTOR OF PHYSICAL THERAPY

A Retrospective Comparison of Functional Outcomes of Persons using Medicare Fee-for-Service versus Medicare Advantage during Inpatient Rehabilitation: Stroke, Orthopaedic and Cardiopulmonary Cohorts

Luigi Auriemma⁽¹⁾; Leo Zheng⁽¹⁾; Thomas Wilson⁽¹⁾; Suzanne Babyar, PT, PhD^{(1)(F)}; Janet Herbold, PT, PhD, MPH^{(2)(F)}

⁽¹⁾Department of Physical Therapy, Hunter College, CUNY; ⁽²⁾The Arthur S. Abramson Dept of Rehabilitation Medicine, Albert Einstein College of Medicine

Background: Traditional Fee-for-Service (FFS) Medicare and Medicare Advantage (MA) are government health insurances that are provided to people 65 and older or to younger individuals who have specific disabilities. Prior studies have yielded conflicting results regarding how MA enrollees' clinical outcomes compare to those of FFS enrollees.

Methods: In this retrospective study, we evaluated clinical outcomes (length of stay, functional ability as measured by Section GG admission and discharge scores, and discharge location) across Stroke, Orthopaedic and Cardiopulmonary cohorts in persons with FFS vs. MA during inpatient rehabilitation.

Results: T-tests demonstrated that within the Orthopaedic cohort, patients with MA had a significantly longer LOS than those with FFS. Within the Stroke cohort and the Cardiopulmonary cohort, those with FFS were significantly older than their MA counterparts. Chi-square demonstrated that, within the Stroke cohort, patients with FFS were more likely to be discharged home without home care and to Skilled Nursing Facilities than patients with MA, while patients with MA were more likely to be discharged home with home care.

Conclusions: Although differences were observed when the sample was stratified by cohorts, functional outcomes did not differ between FFS and MA groups when analyzed as a whole, suggesting that the treatment provided was similar.

Contact: luigi.auriemma60@myhunter.cuny.edu

Male Pelvic Floor: Barriers to Treatment

Kasey Van Doran; Christelle Julien; Alan Kenney; Chad Woodard, PT, PhD, DPT, SCS, MCPT, CLT^(F)

Department of Physical Therapy, Hunter College, CUNY

Background: Pelvic floor dysfunction is widely thought to be under-diagnosed among men for reasons including lack of knowledge, perceived social 'taboo', stigma, and lack of access. This study investigates men's knowledge and perceptions of the pelvic floor and pelvic floor therapy as well as factors that inhibit them from seeking out therapy for pelvic floor dysfunction.

Methods: A 46 item qualitative survey was distributed via social media and administered via Qualtrics. 525 responses were obtained. Chi squared analyses were used to explore relationships among the measures.

Results: Among respondents 55.3% did not know what their pelvic floor was and 74% did not know what pelvic floor therapy was. These responses were associated with smoking history, age, education level, and BMI. Lack of knowledge of the pelvic floor was correlated with uncertainty about seeking help, and a preference for medication over alternative treatments.

Conclusions: Respondents indicated lack of knowledge of pelvic floor therapy and the pelvic floor. A considerable minority of respondents were not willing to seek treatment for PFD or would seek treatment after delay. Increasing knowledge is an avenue with significant potential for increasing utilization of pelvic floor therapy. Results suggest that outreach should target men that are older, have lower levels of education and weakly suggest targeting men with higher BMI and high-risk health behaviors.

Acknowledgements: Dr. Jaya Rachwani

Contact: alan.kenney36@myhunter.cuny.edu

An Investigation of the Influence of Lower Leg Girth and Cuff Size on Measures of Ankle Systolic Pressure in Healthy Individuals

James Gutch; Ruzina Akter; Saud Bukhari; William Rios; Thomas Holland, PT, PhD^(F)

Department of Physical Therapy, Hunter College, CUNY

Background: Ankle systolic pressure is an important clinical measurement that is used as part of the ankle-brachial index to screen for peripheral arterial disease. To improve the accuracy and provide patients with more reliable diagnoses, clinicians need to ensure the ankle blood pressure cuff matches the patient's lower leg girth measurements. This study aims to determine if lower leg girth and cuff size influence measures of ankle systolic blood pressure in healthy individuals.

Methods: Twenty-nine subjects aged 18-65 years old were selected after screening questionnaires and meeting the inclusion criteria. Girth measurements were taken at the level of the malleoli, 5 cm above, and 10 cm above. ASP was recorded in two trials, one with a 10 cm cuff and one with a 12 cm cuff. A doppler probe was used to listen to the flow of the posterior tibial artery and determine the pressure at which the flow was no longer occluded by the cuff. All measurements were taken of the subjects' left lower extremity for consistency.

Results: A paired t-test found a statistically significant ($p < 0.001$) mean difference of 7.59 mmHg in ASP readings recorded by the 10 cm and 12 cm cuff. In the 13 subjects whose difference fell outside of the tolerable error of a blood pressure measuring device there was a statistically significant ($p < 0.001$) mean difference in ASP readings of 15.77 mmHg.

Conclusions: A relationship between cuff size and ASP was found. However, there was no statistically significant relationship between cuff size and leg girth and ASP. Further investigation should be conducted in more diverse sample sizes to determine if this effect does exist and make recommendations about what cuff size is appropriate for different sized lower limbs.

Contact: james.gutch53@myhunter.cuny.edu

#42 (RESEARCH)

DOCTOR OF PHYSICAL THERAPY

High Intensity Interval Gait Training Improves Balance in Multiple Sclerosis

Zachary Amster; Giovanna Bonilla; Emily Giovine; Herbert Karpatkin, PT, DSc, NCS, GCS, MSCS^(F); Jaya Rachwani, PT, MSPT, MS, PhD^(F)

Department of Physical Therapy, Hunter College, CUNY

Background: High-intensity interval gait training (HIIGT) has been shown to improve walking performance in people with neurologic health conditions such as stroke. The current standard of care for gait training for pwMS includes moderate-intensity continuous gait training (MICGT). However, the effect of either type of gait training on balance has not been examined. The purpose of this study was to compare the impact of HIIGT to MICGT on balance performance in pwMS. We hypothesized that persons with MS would perform better on the Functional Gait Assessment (FGA) following a HIIGT protocol compared to a MICGT protocol.

Methods: To date, 12 participants (7 male, mean age 54, mean EDSS 3.4) completed the study. Ambulatory pwMS were randomized into a HIIGT or a MICGT condition. Participants in the HIIGT condition alternated 30 seconds of maximum effort fast walking with one minute of seated rest for 20 minutes. The MICGT group walked for 20 continuous minutes at a comfortable pace. This training was performed twice a week for 6 weeks. Balance was measured using the FGA.

Results: Preliminary results from the 12 participants indicate that both conditions were well tolerated with no adverse events. The HIIGT improved in FGA from 16.7 to 23.0 while the MICGT improved from 17.8 to 19.2. Nine of the 10 items on the FGA improved following the HIIGT, while four items improved and 3 worsened following the MICGT. Item 4 on the FGA, (gait with vertical head turns) improved the greatest amount in HIIGT training (1.3 to 2.6) while decreasing in MICGT (2.2 to 1.8).

Conclusions: Both groups improved in FGA performance but there was a much larger improvement in the HIIGT group suggesting that the higher intensity walking resulted in greater improvement in balance. Despite the fact that the training was not specific to balance, participants who underwent the HIIGT training improved balance performance, suggesting that the impact of HIIGT may extend beyond walking.

Contact: hkarpatk@hunter.cuny.edu

#43 (RESEARCH)

DOCTOR OF PHYSICAL THERAPY

The Effects of Cooling on Balance Performance in Multiple Sclerosis

Anita Austin; Joyce Chen; Richard Quantz; Nicole Vulovich; Herbert Karpatkin, PT, DSc, NCS, GCS, MSCS^(F); Jaya Rachwani, PT, MSPT, MS, PhD^(F)

Department of Physical Therapy, Hunter College, CUNY

Background: Balance impairment and associated falls are common in persons with Multiple Sclerosis (pwMS). Fatigue increases the likelihood of falls in this population and is often brought about by a surge in core temperature with sustained exercise. Cooling garments such as vests have been shown to improve walking performance in pwMS, but their effect on balance has not been studied. This study

aims to examine the impact of cooling on balance performance in pwMS, hypothesizing that participants who wear the cooling vest will demonstrate better balance performance after exercise compared to an uncooled condition.

Methods: 15 ambulatory pwMS perform the Mini-Balance Evaluation System Test (MBT) before being randomized into a cooled or uncooled condition. In the cooled condition, participants wear a commercially available cooling vest while inducing a thermal load by pedaling a recumbent bicycle for 20 minutes at 70% of their maximum rate of perceived exertion. Immediately following the exercise task, the MBT is repeated. Subjects in the uncooled condition crossover--follow an identical protocol without the cooling vest. One week later the participants return and repeat the alternate condition.

Results: The dynamic gait subsection and total score of the MBT showed significant improvements in balance performance when subjects underwent the cooled condition; balance performance worsened in subjects in the uncooled condition.

Conclusions: Improvements in the MBT were shown following 20 minutes of exercise in the cooled condition. However, balance performance markedly decreased following exercise in the uncooled condition. This suggests that the use of a cooling vest can prevent worsening of balance during exercise in pwMS, thus decreasing risk of falls under circumstances of heat-induced fatigue as well as enhance physical therapy intervention by allowing adequate training volume.

Acknowledgements: We acknowledge the subjects who participated. We thank Dr. Rachwani for assistance with statistical analysis.

Contact: hkarpatk@hunter.cuny.edu

Mental State Word Production in Adults with Autism Spectrum Disorder, Developmental Language Disorder, and Neurotypical

Chelsea Ortega; Michelle MacRoy-Higgins, PhD, CCC-SLP, TSHH^(F); Nancy Eng, PhD, CCC-SLP^(F); Donald Vogel, AuD, CCC-A^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Mental state words (MSWs) are terms that describe a person's internal states such as desire (e.g., want), emotional (e.g., sad), physiological (e.g., hungry), perceptual (e.g., look), and cognitive (e.g., think). MSWs enable people to understand and communicate abstract concepts such as feelings and thoughts in various social contexts. Individuals with autism spectrum disorder (ASD) and developmental language disorder (DLD) have difficulty inferring and using MSWs. This study compared MSW production in an adult with ASD, an adult with DLD, and neurotypical adults.

Methods: Twelve adult participants (i.e., one adult male with ASD, one adult male with DLD, and ten neurotypical controls) completed this study. Participants watched a wordless animated video and were asked questions to elicit MSWs (e.g., 'How did the woman feel when the man started eating the cookies?'). The type and frequency of MSWs produced were analyzed.

Results: Preliminary findings indicate that emotional words were the most frequently produced, and words describing physiological states were the least frequently produced MSWs in all participants. The adult with DLD exhibited a limited range of MSWs when compared to neurotypical controls. The adult with ASD produced the fewest total MSWs compared to the adult with DLD and neurotypical controls; however, he produced a similar range of MSWs.

Conclusions: Treatment for these adults with language impairment (i.e., ASD and DLD) could focus on interpreting the mental states of others and producing MSWs to improve conversational speech.

Acknowledgements: Thank you to Hunter College department of Speech-Language Pathology, my advisors, classmates, family, and friends who supported me through the process!

Contact: Chelsea.ortega69@myhunter.cuny.edu

#45 (RESEARCH)

SPEECH-LANGUAGE PATHOLOGY & AUDIOLOGY

Assessment of Developmental Language Disorder in Adults: A Case Study

Rachel Pachter; Nancy Eng, PhD, CCC-SLP^(F); Michelle MacRoy-Higgins, PhD, CCC-SLP, TSHH^(F); Antonia Andrades-Schroeder, MS, CCC-SLIP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Developmental language disorder (DLD) negatively impacts a person's ability to produce and understand language. Most individuals with DLD are diagnosed during early childhood. Limited standardized assessments are available for adults over 24 years old. In addition, few assessments are appropriate for individuals who speak languages other than English. This case study explored the effectiveness of standardized and non-standardized language and cognitive assessments in evaluating a bilingual adult.

Methods: This case study included a 23-year-old English-Spanish bilingual adult male. Formal and informal measures of language and cognition were administered over five sessions. Formal measures included the Test of Adolescent and Adult Language- 4, the Gray Oral Reading Test-5, The Peabody Picture Vocabulary Test- 4, the Expressive Vocabulary Test- 2, and the Test of Nonverbal Intelligence- 4. Informal assessments included the Language Experience and Proficiency Questionnaire, Stroop Task, Trail Making Task, narrative sample obtained from a short animated wordless film, and interview.

Results: The standardized and non-standardized assessments highlighted the participants' challenges with written and oral expression and reading comprehension. Cognitive measures revealed average performance. The interview and language questionnaire revealed that the participant has a history of language challenges, and struggles in both languages depending on the context in which he uses them.

Conclusions: The participants' strengths and weaknesses were identified using both standardized and non-standardized assessments. For clients who are older than 24 years and for those who speak languages in addition to English, non-standardized assessments including interview questions, language background questionnaires, and narrative sampling are recommended.

Contact: rachel.pachter75@myhunter.cuny.edu

#46 (RESEARCH)

SPEECH-LANGUAGE PATHOLOGY & AUDIOLOGY

Overinformative Descriptions in Autism: An exploration of Adjective Use in a Referential Communication Task

Georgia Drakopoulou Kalantzi; Michelle MacRoy-Higgins, PhD, CCC-SLP, TSHH^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Children with autism spectrum disorder (ASD) often exhibit differences in pragmatic language, particularly in adapting communication across contexts. In referential communication tasks, they may provide too little (underinformative) or too much (overinformative) information. These tasks require speakers to provide enough information for a listener to identify objects (e.g., small cup with two present). Some studies suggest ASD children produce more overinformative descriptions, especially in perspective-taking tasks. However, little is known about the adjectives they use when providing

excessive detail. This study examines how children with ASD use color, scalar, and descriptive adjectives in overinformative utterances compared to neurotypical peers

Methods: Forty-two children (26 neurotypical, 16 with ASD), aged 6–9, participated in a referential communication task requiring object descriptions under varying contextual conditions. Utterances were coded for informativeness (optimal, overinformative, underinformative) and adjective type (color, scalar, descriptive).

Results: Preliminary analyses suggest that children with ASD may rely more on color adjectives and, to a lesser extent, descriptive adjectives, while using scalar adjectives less frequently in overinformative utterances.

Conclusions: Findings will contribute to a deeper understanding of pragmatic language differences in autism, particularly how linguistic choices shape informativeness. If children with ASD show distinct adjective use in overinformative descriptions, this may suggest that their challenges are not just about excessive detail but differences in how they prioritize information. These insights may help speech-language pathologists support them in refining adjective use for clearer, contextually appropriate communication while respecting individual styles.

Contact: georgia.drakopouloukalantzi26@myhunter.cuny.edu

The Effect of Music Support Type on One-Word Productions in a Minimally Verbal Child with ASD

Gabrielle Borzooyeh; Amy Vogel-Eyny, PhD, CCC-SLP^(F); Michelle MacRoy-Higgins, PhD, CCC-SLP, TSHH^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Music and songs can be used in speech-language interventions to support language delays in children diagnosed with autism spectrum disorder (ASD). Their repetitive and predictable nature shares prosodic similarities with language perception, and accompanying supports such as gestures and pictures may further enhance language learning. While pictures in music-based interventions have facilitated language production in children with ASD, the specific effect of gestures on one-word verbal outcomes remains unclear.

Methods: This study examined the impact of support type on one-word verbal productions in a 7-year-old, minimally verbal child with ASD. A single-subject ABAB design spanning four sessions assessed the child's production of pre-selected target words from two children's songs under two conditions: (A) music plus pictures and (B) music plus gestures. The order of these conditions was alternated each session for each song (e.g., The Wheels on the Bus: Session 1 - A, Session 2 - B; Head, Shoulders, Knees, and Toes: Session 3 - A, Session 4 - B).

Results: Preliminary results suggest that the music-plus-picture condition facilitates eye contact and use of spontaneous gestures. The participant demonstrated sustained eye contact when the picture cards were presented for the target words as well as the use of gestures such as reaching towards the picture card and spontaneous hand movements. No vocalizations were observed.

Conclusions: While the primary outcome measure was verbal productions, these preliminary findings suggest that the use of pictures can facilitate nonverbal communication skills. The results of this study have the potential to inform speech language pathologists' approach to enhancing language acquisition in minimally verbal children with ASD. Future studies should examine how each condition facilitates additional language skills, such as the use of an augmentative and alternative communication (AAC) device.

Contact: gabrielle.borzooyeh87@myhunter.cuny.edu

Impact of Group Speech-Language Therapy on Perceived Social Participation Outcomes in Adults with Aphasia

Julia Grant; Amy Vogel-Eyny, PhD, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Aphasia, a neurological language disorder commonly resulting from stroke, can severely limit communication and reduce social participation, negatively impacting emotional well-being and quality of life. While traditional speech-language therapy predominantly targets linguistic deficits, emerging evidence suggests that group therapy may offer additional benefits through increased social interaction and improved communication confidence. However, there is limited research on the direct relationship between group therapy participation and perceived social engagement outside of treatment among individuals with aphasia. This study aims to address this gap by investigating the potential impact of group therapy on social participation outcomes in adults with aphasia.

Methods: Participants were recruited from an established aphasia group. They took part in semi-structured interviews designed to explore changes in social interactions, communication confidence, and overall quality of life associated with group therapy. The data was analyzed using thematic analysis to identify recurring patterns and themes in participants' experiences.

Results: Preliminary results indicate that participants reported increased social engagement and improved communication confidence as a result of group therapy. Common themes identified during the interviews include reduced anxiety in interactions, application of learned strategies in social contexts, and increased willingness to initiate conversations. Additionally, participants discussed the emotional benefits of attending group therapy, including establishing peer connections, discussing shared experiences, and feeling less alone.

Conclusions: These findings shed light on the broader functional benefits of group therapy beyond linguistic gains, underscoring its potential to improve social participation and overall quality of life for individuals with aphasia. These findings can inform clinicians in developing comprehensive treatment goals that address both language remediation and social engagement. Future studies may consider longitudinal designs and participants' premorbid social experiences to further validate and expand upon these insights.

Contact: juliagrants158@gmail.com

Data Accuracy of Self-Monitoring Applications in Gender-Affirming Voice Therapy

Kyra Ann Kiggins; Stanley Chen, PhD^(F); Donald Vogel, AuD, CCC-A^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Gender-affirming voice therapy is a necessary healthcare service for gender-diverse individuals. Voice therapy can help individuals modify characteristics of voice, such as pitch and resonance, as they play a key role in how we identify and perceive gender. While voice therapy with trained clinicians provides effective intervention and results, therapeutic outcomes can be improved and carried over with accurate self-monitoring tools used outside of the clinical setting. This study examines how the acoustic data obtained from two smartphone applications, VoiceTools and Voice Analyst, compare to data from Praat software.

Methods: Data was collected using an experimental design from two participants. Voice assessments were conducted on one cisgender 25-year-old male participant and one 23-year-old cisgender female participant. Acoustic analyses were performed on recorded speech excerpts of approximately one minute in duration from a reading of The Rainbow Passage. Measurements obtained included minimum frequency, maximum frequency, and average frequency for both participants.

Results: Preliminary results suggest that Voice Analyst yields acoustic measurements that align more closely with data from Praat compared to VoiceTools. Voice Analyst showed greater consistency with Praat across measures of minimum frequency, maximum frequency, and average frequency.

Conclusions: Conclusions will be drawn following final data analysis, detailing which smartphone application provides data most closely aligned with Praat. These findings will help clinicians make more informed therapeutic recommendations.

Contact: kyra.kiggins98@myhunter.cuny.edu

The impact of attention and verbal working memory on dual task performance in healthy adults in distracting environments

Lauryn Garcia; Amy Vogel-Eyny, PhD, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Cognitive functioning skills—such as attention and memory—influence higher-level executive functions (e.g., planning, organizing, and multitasking), which are crucial for many service-oriented jobs. Individuals are often required to manage multiple tasks simultaneously (dual tasking) while adapting to distracting environments. There is limited information on how these executive function domains jointly affect dual task performance in healthy adults. This study intends to highlight the impact of attention and verbal working memory on dual task performance in healthy adults in distracting environments.

Methods: Participants of this study are a convenience sample of healthy adults between 20-30 years old. To evaluate dual task performance, a prop-based version of the Breakfast Task will be employed. Participants will prepare a simulated meal while simultaneously engaging in a distractor task; mimicking real-world challenges. Performance metrics (e.g., completion time, error rates, and adherence to task priorities) will be analyzed alongside standardized assessments of attention (i.e., Trail Making Task B) and verbal working memory (i.e., Digit Span Task) to identify how these cognitive factors jointly predict multitasking success.

Results: Preliminary data suggests a positive correlation between level of performance in cognitive tasks (i.e., Digit Span Task, Trail Making Task B), and level of multitasking performance in the Breakfast Task. Completion of the Prop-Based version of the Breakfast Task is feasible; however, multiple adjustments were necessary to ensure validity and reliability of the study due to limited explicit instruction in prior studies.

Conclusions: The data suggests that attention and working memory capacities influence dual task performance under distracting conditions, as seen in the Breakfast Task simulation, which offers insights into targeted interventions that can strengthen these cognitive domains. Such evidence-based approaches may help clinicians and other professionals optimize therapy protocols aimed at improving functional multitasking skills in healthy adults.

Contact: lauryn.garcia75@myhunter.cuny.edu

SLP Students' Explicit Syntax Knowledge: Does It Matter?

Stéphanie Lewin; Stanley Chen, PhD^(F); Nancy Eng, PhD, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Issue: SLPs are expected to be language experts with knowledge of all five linguistic domains, including syntax. However, research suggests that they have limited knowledge of complex syntax, which is an important indicator for many diagnoses across the lifespan; that is, SLPs often lack confidence in its clinical application. This project aims to evaluate a language assessment protocol that targets complex syntax and its use with young adults. Pilot data from the oral language sampling protocol along with feedback on a developed questionnaire are used to assess its efficacy. The goal of this protocol is to assess first-year SLP graduate students' explicit syntax knowledge and its possible effects on clinical confidence. Information on prior linguistics experience and proficiency in a second language is expected to contribute to explicit knowledge and clinical confidence when assessing young adults with language deficits.

Description: The participants include a first-year and a second-year SLP graduate student at Hunter College, and one GED student at Borough of Manhattan Community College (BMCC) with self-identified learning disabilities. The Language Experience and Proficiency Questionnaire (LEAP-Q) was used to determine mono- or bilingual status of participants. An intake questionnaire was given to the first-year student to collect information on prior linguistics training and perceived confidence with syntax. Formal assessment consists of the Test of Integrated Language and Literacy Skills (TILLS), while informal oral language sampling is based on an evidence-based protocol to elicit complex syntax.

Lessons Learned: Preliminary results from qualitative pilot data describe areas of success and weakness in this protocol. This data includes results from a post-assessment interview with the first-year student. Critical analysis by the second-year student describes key strengths and necessary improvements of the protocol.

Next Steps: Future studies should examine the use of this developed protocol to elicit complex syntax from adult participants. Future studies should also consider its effectiveness as a tool to assess SLP graduate students' clinical confidence in evaluating this population.

Contact: stephanie.lewin78@myhunter.cuny.edu

Efficacy of behavioral swallowing intervention for patients with dysphagia due to head and neck cancer: A scoping review

Mahima Vora; Stanley Chen, PhD^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Issue: Dysphagia is a fatal condition characterized by swallowing difficulty, commonly observed in patients with head and neck cancer (HNC), leading to aspiration and reduced quality of life (QOL). Behavioral swallowing interventions (BSI) are common strategies used for dysphagia patients with HNC to reduce dysphagia severity and improve QOL. However, the benefits and optimal timing of BSI (before, during, or after HNC treatment) are not well documented. This scoping review aims to investigate whether BSI in conjunction with HNC treatment (e.g., chemotherapy) are successful in reducing dysphagia severity, improving QOL and the best time to administer them.

Description: A scoping review was conducted and reported following PRISMA guidelines. Five databases including EBSCO, The Cochrane Database, EMBASE, MEDLINE, and Pub-Med were searched. Keywords

included head and neck cancer, swallowing interventions, dysphagia, and quality of life. Results included one retrospective study and seven randomized control trials.

Results: Out of eight studies, five reported improvements in dysphagia severity, while three reported no changes after BSI. All eight studies reported improvements in their QOL. Regarding the impact of BSI timing on dysphagia severity, positive changes were reported in 2/2 swallowing studies conducted before HNC treatment, in 2/3 studies conducted during HNC treatment, and in only 1/3 studies conducted after HNC treatment. Most studies demonstrated that improvements in dysphagia severity lasted up to one year post HNC treatment but began to decline thereafter, despite continued BSI, suggesting no positive long-term effects.

Conclusions and Recommendations: It appears that BSI are generally effective in improving swallowing functions, especially when they are applied before or during HNC treatment. More importantly, BSI in conjunction with HNC treatment can improve an individual's QOL, highlighting the importance of early interdisciplinary planning and BSI implementation. Further research is recommended to investigate the long-term effects of BSI in reducing dysphagia severity in HNC patients.

Contact: mahima.vora94@myhunter.cuny.edu

Hypoxic-Ischemic Encephalopathy & Feeding Intervention: A Scoping Review

Pamela Garcia; Stanley Chen, PhD^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Issue: Feeding impairment is often treated with sensory stimulation and oral motor exercises in infants with Hypoxic-Ischemic Encephalopathy (HIE). There is a gap in research comparing the two approaches. This scoping review aims to determine if one is more effective than the other for transitioning infants from nasogastric feeding tubes (NG tubes) to oral feeding and whether severity, dosage, or initial age of intervention affects outcomes.

Description: The review was performed following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR). The search was conducted using the CINAHL Complete, Health Source: Nursing/Academic Edition, Medline Complete, PubMed, Science Direct, and Web of Science databases.

Results: Two hundred and eighty articles were screened for eligibility, and nine were included in the review. While the articles included explored related topics, none of the studies directly addressed the research questions that this review posed.

Conclusions and Recommendations: Further research is necessary to determine if one intervention for feeding impairment (i.e., sensory stimulation or oral motor exercises) is more effective than the other. Future studies should investigate the impact of variables such as severity, dosage, and initial age of intervention on treatment outcomes.

Contact: pamelagarcia91@myhunter.cuny.edu

Speech Language Pathologists' Identification of Gestalt Language Learners

Chloe Danielle Levine; Amy Vogel-Eyny, PhD, CCC-SLP^(F); Nancy Eng, PhD, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Gestalt language learners (GLL) acquire language as unanalyzed “chunks,” often without clear comprehension of individual lexical units. This phenomenon is observed in some individuals diagnosed with autism spectrum disorder (ASD). Although speech-language pathologists (SLPs) report recognizing gestalt language, the specific features they use to do so have not been systematically examined. This gap in the literature is important given the American Speech-Language-Hearing Association’s emphasis on evidence-based diagnostic and treatment practices. This study aimed to investigate how SLPs identify GLLs by focusing on two language components—content and form—based on Bloom and Lahey’s (1978) framework.

Methods: A semi-structured interview design was used with six ASHA-certified SLPs with at least one year of experience working with individuals with ASD. Participants described their current identification practices for GLLs, and answered questions pertaining to their criteria for identifying gestalt units in connected speech. In addition, they also responded to a brief (3–4 minute) audiotape of a speaker with ASD, focusing on the speaker’s language behaviors. SLPs responses were analyzed qualitatively to determine which content and form features were most salient in identifying gestalt language.

Results: Preliminary findings suggest the need for a comprehensive evaluation, including the analysis of multiple language samples, when assessing a suspected GLL. Additionally, data suggests that SLPs were consistent in identifying language that appeared to have been acquired as a gestalt unit. Clinicians also reported that Bloom and Lahey’s framework may provide a valuable structure for organizing clinician’s identification practices, particularly for GLLs in the mid to late stages of Natural Language Acquisition—a theory describing GLLs progression from delayed echolalic speech to self-generated language.

Conclusions: By delineating key features of gestalt language, this study establishes clearer clinical guidelines for identifying GLLs. These findings will stand to support the development of evidence-based assessment strategies and ultimately promote more consistent and effective intervention approaches for this population.

Acknowledgements: I would like to express my gratitude to the participants, faculty advisors and the Hunter College Department of Speech-Language Pathology & Audiology for their support in making this research possible.

Contact: chloe.levine94@myhunter.cuny.edu

SLP Strategies for Supporting Gestalt Language Learners

Vera Zhuk; Michelle MacRoy-Higgins, PhD, CCC-SLP, TSHH^(F); Donald Vogel, AuD, CCC-A^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Unlike typically developing children, many children with autism spectrum disorder acquire language through gestalt processing. Gestalt language processors/learners (GLP/GLLs) initially learn language in fixed chunks (e.g., 'doyouwannabuildasnowman?') and later break them down to create self-generated language (e.g., 'If it snows tomorrow, let’s make a snowman!'). The Natural Language Acquisition (NLA) framework (Blanc et. al, 2023) outlines stages and supports for GLPs. However, little is known about how speech language pathologists (SLPs) implement these strategies in clinical practice. This study identified strategies used by SLPs to support GLPs.

Methods: This study surveyed licensed SLPs who have at least one year of experience working with identified or suspected GLPs. A survey distributed via Qualtrics collected demographic information, assessed SLPs' familiarity with the NLA framework, and gathered information about intervention strategies. Questions addressed responses to echolalia, knowledge of and adherence to NLA stages, frequency and type of treatment strategies, and family involvement in therapy.

Results: Preliminary findings suggest SLPs explore the communicative intent behind gestalts, establish a strong connection with the client, and model language gestalts for novel experiences to support language development in children who are GLPs. SLPs also report family involvement to be important in interpreting and attaching meaning to language gestalts. Preliminary findings suggest that SLPs have a limited knowledge of the NLA stages, with SLPs reporting grammar development to be the most challenging when working with GLPs.

Conclusions: Findings from this study have the potential to guide the development of evidence-based strategies for SLPs when working with children who are gestalt language processors.

Contact: vera.zhuk64@myhunter.cuny.edu

Technology and Synthetic Voices for Enhancing Social Communication in Individuals with Autism Spectrum Disorder: A Scoping Review

Elizabeth Benjuya; Donald Vogel, AuD, CCC-A^(F); Amy Vogel-Eyny, PhD, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Issue: Individuals with autism spectrum disorder (ASD) frequently encounter challenges in social interaction, communication, and language processing—particularly in interpreting vocal cues such as tone, prosody, and emotional intent. Synthetic voices and social robots offer the potential for more predictable and less variable interactions, which may be beneficial for those with ASD. Despite growing interest, evidence on the effectiveness of these interventions for enhancing social communication remains limited.

Description: To explore this emerging field, a scoping review was conducted following PRISMA 2020 guidelines and the Joanna Briggs Institute Framework. Four electronic databases—Web of Science, PubMed, Scopus, and APA PsycInfo—were systematically searched. Predefined inclusion criteria guided the selection of studies examining how synthetic voices and social robots influence social communication outcomes in individuals with ASD. Relevant articles were then reviewed to identify both the scope and the nature of current research on these interventions.

Results: Preliminary findings suggest that synthetic voices and social robots may support social communication by providing consistent, structured interaction opportunities. Studies indicate potential improvements in social skills, communication confidence, and engagement for individuals with ASD when exposed to these technologies. However, the overall evidence base is modest, reflecting an under-researched area with varying methodological approaches and outcome measures.

Conclusions and Recommendations: Although synthetic voices and social robots appear promising for enhancing social interaction in individuals with ASD, more robust, longitudinal studies are needed to determine efficacy, optimal implementation strategies, and long-term impacts. Future investigations should include standardized outcome measures, larger participant samples, and comparative designs. Establishing clear guidelines for clinical integration will be crucial for ensuring that these technologies effectively address the social communication needs of individuals with ASD.

Contact: Elizabeth.benjuya59@myhunter.cuny.edu

Artificial Intelligence and Developmental Language Disorder in Children: A Scoping Review

Veronica Thompson, BFA; Nancy Eng, PhD, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Issue: Developmental Language Disorder (DLD) is a communication disorder characterized by receptive and expressive language deficits. Due to symptom overlap with other neurodevelopmental conditions, such as Autism Spectrum Disorder (ASD) and dyslexia, accurate diagnosis remains challenging and requires a comprehensive and wholistic evaluation. Artificial intelligence, a technology that enables machines to analyze data, recognize patterns, and make predictions, has shown promise in screening and diagnosing cognitive and language disorders, yet its application to DLD is not well-defined. Given AI's ability to process large datasets and detect patterns, it could enhance early identification and intervention for children with DLD.

Description: The purpose of this study is to examine the scope of existing literature on Artificial Intelligence and its use in screening for Developmental Language Disorder (DLD) within pediatric populations. A systematic search was conducted using PRISMA-ScR guidelines and the Joanna Briggs Institute Framework, across four electronic databases: Medline, Web of Science Core Collection, ERIC EBSCO, and APA PsycInfo. Studies were included if they focused on pediatric language disorders involving AI, specifically SLI, DLD, and expressive/receptive language disorders. Exclusion criteria filtered out studies on adult conditions, dyslexia, autism, and other unrelated topics.

Results: Preliminary findings suggest that AI has the potential to enhance early identification of Developmental Language Disorder (DLD) by integrating multiple data sources, including standardized assessments, developmental history, and parent-reported observations. Preliminary findings indicate that AI models may improve screening accuracy and efficiency, though variability exists in methodological approaches and validation efforts.

Conclusions and Recommendations: AI-driven tools could aid in early screening for DLD, providing clinicians with additional insight and support, particularly in complex cases where traditional assessment methods may be inconclusive. Further research is necessary to establish the reliability, validity, and ethical considerations of these approaches. Future studies should focus on refining AI models and further exploring incorporation into clinical practice.

Acknowledgements: The author would like to sincerely thank Dr. Nancy Eng for her guidance and support.

Contact: veronicathompson198@gmail.com

Strategies to Provide Family-Centered AAC Services for School-Aged Students: A Semi-Structured Interview

Olivia Kilkenny; Michelle MacRoy-Higgins, PhD, CCC-SLP, TSHH^(F); Hayley Levenson, MS, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Family-centered augmentative and alternative communication (AAC) therapy engages families as equal partners in treatment planning and implementation. It has been found to reduce rate of device rejection or abandonment, increase parent satisfaction and understanding, and improve communication skills across settings. Previous research has studied the challenges school-based speech language pathologists (SLP) face in providing family-centered services to AAC users. However, there is limited information on if and how they overcome the barriers.

Methods: After completing a pre-screener survey to determine eligibility, SLPs participated in a semi-structured interview over Zoom. The interview gathered information about beliefs of the role of family in treatment, how they interact with the families of their students, limitations they face in implementing family-centered services, how they overcome limitations, and resources needed to make implementing family-centered services easier. The data was transcribed and analyzed using thematic analysis.

Results: Preliminary results suggest that SLPs use a multitude of tools to engage with parents including contact forms, exit slips (which review goals targeted in session), and parent trainings. The most frequent limitation that SLPs reported they were unable to overcome was caseload demands, which results in limiting time for interaction with families. Another limitation was SLP burnout.

Conclusions: This research can be used to inform SLPs on how to circumvent device rejection, increase parental involvement, and increase generalization. Recommendations include implementing strategies including engaging in parent communication using notebooks sent home weekly, providing parent training, and implementing caseload caps to lower SLP burnout.

Acknowledgements: Thank you to the Hunter College Department of Speech-Language Pathology, my family, and my friends for their support in developing this presentation!

Contact: olivia.kilkenny97@myhunter.cuny.edu

Comparing Cueing Methods for Spontaneous Speech in a Child with a Speech Sound Disorder (SSD): A Case Study

Sydney Kleyman; Michelle MacRoy-Higgins, PhD, CCC-SLP, TSHH^(F); Lauren Cohen^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Speech sound disorders (SSD) impact children's intelligibility, academic success, and social interactions. Treatment often incorporates cueing strategies (e.g., gestural or verbal) tailored to individual needs in order to establish production of target sounds. A particular challenge for children with SSD is generalizing learned sounds to spontaneous speech. This study utilized a single-case design to determine which cueing strategy: verbal or gestural is more effective in promoting generalization in a child with a SSD.

Methods: One seven year old participant diagnosed with a phonology-based SSD received intervention targeting specific speech sounds over the course of 14 sessions. Each session included production of target sounds at the word, phrase, and sentence-level tasks. The participant was provided with gestural cues for half of the sessions (7 sessions) and verbal cues for half of the sessions (7 sessions). Spontaneous speech samples were collected at the end of each treatment type. Percent of Correct Consonants (PCC) was calculated to determine which cueing method led to greater generalization of target sounds in spontaneous speech.

Results: Preliminary findings indicate that both cueing methods improved target sound production at the word, phrase level and sentence level. However, gestural cues resulted in greater carryover of target sounds in connected speech as compared with verbal cues.

Conclusions: These results support the use of gestural cues for improving spontaneous speech sound accuracy for this participant with a phonology-based SSD.

Contact: sydney.kleyman38@myhunter.cuny.edu

The Effects of Dysarthria on Toisanese Lexical Tones: A Case Study

Stella Yank; Nancy Eng, PhD, CCC-SLP^(F); Stanley Chen, PhD^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Tonal languages use suprasegmental pitch contour to convey lexical information. Dysarthrias are neurological motor speech disorders that reduce speech intelligibility. Research on dysarthria's effects on lexical tone production remains limited. This study investigated the impact of dysarthria on Toisanese tone production, a Chinese dialect with five distinct pitch contours.

Methods: MM is a 44-year-old native Toisanese speaker presenting with bilateral toxic-metabolic or ischemic changes resulting in symptoms consistent with spastic dysarthria. Four cognate sets were selected for this study. Each set consisted of five Toisanese words sharing the same syllable but differing in lexical tone, i.e., T1-T5. MM repeated each word three times following a researcher's model; productions were audio-recorded for quantitative and qualitative analyses. A healthy 61-year-old Toisanese speaker served as MM's control. Five native Toisanese speakers assessed subjective intelligibility. PRAAT was used to examine pitch duration, height, and contour.

Results: Data analyses are ongoing. To evaluate intelligibility, raters discriminated among words of each cognate set. The healthy control's accuracy rate was judged to be 100% across all tones. In contrast, raters struggled to distinguish among all tones produced by MM. His overall accuracy rate was 36.1%, with T1 (high level) being the most difficult to perceive (6% accuracy) and T3 (low level) the easiest to perceive (53% accuracy). Acoustical measures of MM's productions are currently being analyzed. Once completed, quantitative findings will determine whether perceptual ratings are supported by acoustical information.

Conclusions: Preliminary results suggest lexical tone production deficits across MM's tone profile. Comparative analysis of perceptual and acoustic data will further determine how dysarthria affects lexical tone production in our subject. By constructing a detailed tone profile for MM, this research seeks to enhance the understanding of dysarthria-related tone deficits and inform therapeutic interventions for speakers of tonal languages.

Contact: stella.yank94@myhunter.cuny.edu

Lexical Tone Sensitivity: Blind Vs. Sighted Monolingual English Speakers

Kaitlyn Joseph, BA; Zarina Rakhmanova, MS; Stanley Chen, PhD^(F); Nancy Eng, PhD, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: In addition to segmental information, tone languages such as Mandarin use pitch contours for lexical functions. Perception of tone is elusive, as evidenced by reports on the performance of monolingual, non-tone language speakers on tasks targeting this acoustic feature. Sensory (visual) deprivation leads to heightened sensitivity with respect to subtle auditory differences. As a result, blind individuals outperform their sighted counterparts on tasks involving pitch discrimination as well as lexical and sentence processing. Therefore, this study aimed to determine if blindness offers any advantage in discriminating among novel lexical tones after brief exposure compared to their sighted counterparts.

Methods: Ten monolingual English speakers, five blind and five sighted, participated in this study. Each trial was conducted via Zoom and lasted approximately 80 minutes, consisting of both a learning and an

assessment phase. During the learning phase, participants underwent a novel word learning task with target Mandarin nouns in the initial, medial, and final position of English carrier sentences with substantial sentential support. During the assessment phase, participants underwent a sentence verification task in which they judged whether three statements were true or false. The target noun was pronounced with either a correct or an incorrect tone pair.

Results: The participants' performance during the assessment phase were analyzed using A-prime (A') scores and mean response accuracy rates, which were calculated in Excel. Two-tailed t-tests, assuming equal variance, revealed statistically significant differences, indicating that individuals who are blind demonstrate greater lexical tone sensitivity compared to their sighted counterparts.

Conclusions: The findings of this study suggested that sensory compensation for the absence of visual input may also extend to the linguistic aspects of auditory perception and that blind individuals may process and learn novel phonological patterns more effectively than sighted people.

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

Contact: kaitlyn.joseph20@myhunter.cuny.edu

Prosodic and Segmental Characteristics of Mandarin-Influenced Pronunciation of English

Oliwia Pikulinski; Stanley Chen, PhD^(F); Nancy Eng, PhD, CCC-SLP^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Mandarin speakers may transfer both segmental (vowel formants) and non-segmental (tonal pitch) features when speaking English, influencing their perceived accent. Mandarin uses pitch (F0) lexically to distinguish word meanings, unlike English, which employs intonation for sentence-level meanings such as stress and emotion. Additionally, Mandarin's vowel inventory is more limited, potentially causing deviations in vowel formants (F1, F2) during English speech. Although L1 transfer effects are recognized in accentedness, no previous research made comparisons between segmental and prosodic influences.

Methods: The study involved 10 native Mandarin speakers and 10 native English speakers, all with college education or beyond and no reported speech or hearing impairments. Mandarin speakers read the Diagnostic Passage, which was acoustically analyzed for vowel formants (F1, F2) and pitch contours (F0) using Praat software. Native English listeners rated the perceived accentedness of five randomized recordings on a 6-point Likert scale. A subset of native English recordings was used for comparison. Statistical analysis through ANOVA and t-tests was applied to examine differences in accentedness ratings and acoustic measures.

Results: Preliminary results indicated that tonal influence had a greater impact on perceived non-nativeness than vowel formant differences. Mandarin-accented speech received higher accentedness ratings due to prosodic deviations, particularly when tonal shifts and increased F2 values co-occurred. Mandarin speakers exhibited higher F2, likely due to difficulties distinguishing English front-back vowel contrasts. Tonal transfer played a key role in accent perception. Mandarin speakers applied native tonal patterns to English, leading to atypical intonation. For example, they used Tone 3 (falling-rising tone) instead of rising intonation in yes/no questions and falling intonation in wh-questions, creating unnatural contours. This prosodic mismatch, especially when combined with vowel deviations, amplified perceived accentedness.

Conclusions: Preliminary results suggest that tonal transfer from Mandarin into English plays a more dominant role in perceived accentedness than deviations in vowel formants. This implies that Mandarin speakers may be applying tonal language strategies to English intonation, resulting in non-native prosody. These findings highlight the importance of pronunciation training that targets both vowel accuracy and appropriate intonation patterns to enhance intelligibility and reduce perceived accent among Mandarin L2 English speakers.

Acknowledgements: Thank you to the Hunter College Department of Speech-Language Pathology, my family and my friends for their support and participation in this presentation!

Contact: Oliwia.pikulinski16@myhunter.edu

Effects of Tier 2 Vocabulary (thematic vs. general) Instruction on Reading Comprehension of Children with Dyslexia: A Single Case Study

Samantha Dean; Michelle MacRoy-Higgins, PhD, CCC-SLP, TSHH^(F)

Department of Speech-Language Pathology & Audiology, Hunter College, CUNY

Background: Children with dyslexia struggle with reading comprehension due to decoding and linguistic deficits. Vocabulary instruction enhances reading comprehension. One approach is teaching Tier 2 words, which are abstract and found in academic texts. Tier 2 words are classified as general, appearing across multiple texts (e.g., logic), or thematic, tied to specific themes (e.g., adaptation). There is limited research on whether general or thematic Tier 2 vocabulary instruction shows greater improvement of reading comprehension. Therefore, this study investigated whether general or thematic Tier 2 vocabulary instruction more effectively improves reading comprehension in a child with dyslexia.

Methods: A single-case study design was implemented with a fifth-grade participant who has dyslexia. The participant received explicit instruction of three general Tier 2 words with one text, and three thematic Tier 2 words with a different text. There were six treatment sessions across three weeks for each instructional approach. Literal and inferential comprehension was measured after each session.

Results: The findings revealed that while both approaches supported literal comprehension, thematic Tier 2 instruction supported inferential comprehension. The participant achieved 100% accuracy on responses to literal questions correctly after both general and thematic instruction, and achieved 40% accuracy on responses to inferential questions after general instruction, compared to 80% accuracy after thematic instruction.

Conclusions: Intervention for this participant with dyslexia should include thematic Tier 2 vocabulary words as instruction appears to support both literal and inferential comprehension of texts.

Contact: spdeann11@gmail.com

