

# 4<sup>th</sup> Edition of Singapore Nursing Research Conference

# 3<sup>rd</sup> Edition of International Public Health Conference



March 21-23, 2024

Venue:

Village Hotel Changi, 1 Netheravon Rd, Singapore 508502



MARCH  
**21-23**

Joint Event

# Nursing & Public Health 2024

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**ABSTRACTS**

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# Keynote Speakers



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**Jane Murray**  
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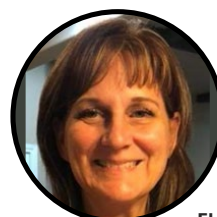
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**Lisa Wallace**  
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**Elaine Webb**  
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*Thank You  
All...*

# Keynote Speakers



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*Thank You  
All...*

# Speakers



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Henan University, China



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Marist College Doctor of Physical  
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**Zhang Yanjun**

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**Zhuoxia Li**

Shanxi Bethune Hospital, China

*Thank You  
All...*



# Welcome Message



**Deva-Marie Beck, PhD, RN, DTM**

**International Co-Director**

**Nightingale Initiative for Global Health (NIGH)**



On behalf of the Scientific Committee — and of my INGO, the Nightingale Initiative for Global Health (NIGH) — I appreciate the opportunity to welcome you to participate in the 4th Edition of Singapore Nursing Research Conference (NURSING 2024) here in the beautiful city of Singapore. In keeping with the theme of this year's conference — “Leading Innovation and Pathways Transforming Nursing Future” — My keynote presentation will focus on exploring how Florence's Nightingale's nursing career and her innovative view of nursing can continue to influence what we, as the nurses of the world, can do to make our contributions to the health of humanity, now and into the future. This presentation will contribute to this conference's mandate toward improving outpatient treatment, improving patient health and experience, and expanding data analysis abilities among nurses to embrace new challenges, and advance our profession.

While you are in Singapore — or attending virtually — I sincerely hope that you take the opportunity to network, learn, and enjoy this productive conference.

# Welcome Message



**Dr. Nina Beaman**

**Aspen University, United States**



On behalf of the Scientific Committee, I take great pleasure in welcoming you to the 4th edition of Nursing Research Conference (NURSING 2024), held in the beautiful city of Singapore. The theme of this year's conference is "Leading Innovation and Pathways Transforming Nursing Future." Informative sessions will focus on improving outpatient treatment, patient health and experience, expanding data analysis abilities among nurses to embrace new challenges, as well as advancing the profession. While you are here, I sincerely hope that you take the opportunity to network, learn, share, and collaborate with international experts. All of us on the Scientific Committee would take great pleasure in meeting you in person and learning more about your amazing contribution to nursing's future. I wish you an enjoyable and productive conference. I hope you enjoy your stay in this wonderful city and use pre- and post-conference times to enjoy the sites. We are enthusiastic about your attendance and participation. Enjoy the conference!

# Welcome Message



**Gregory S Anderson**  
Thompson Rivers University, Canada



On behalf of the Scientific Committee, I welcome to the 3rd edition of the International Public Health Conference (IPHC 2024). We extend a warm welcome to those who join us in person in Singapore, and to those who will join us virtually from around the globe.

On the heels of the pandemic and the variation in the international response, the congress will explore the timely theme “Restraining Pandemics Through Exploration of Trends and Public Health Challenges.” Participation in this event will highlight the importance of a coordinated, evidenced informed response to such events, and will help us address any similar events in the future.

A conference, by definition, is a venue where two or more persons meet for the purpose of discussing matters of common concern, with a formal and informal exchange of ideas. So, please engage in the sessions, the content, and engage in collegial discussions that lead to new actions and lines of scientific inquiry. Introduce yourself, share ideas, and let us learn about your work and scholarly contributions that will lead to innovations and new best practice guidelines.

# Welcome Message



**Prof. Elvessa Narvasa**  
Quebec CCN, Canada



Dear Colleagues and Health Care Providers,

My warm thanks to Magnus Conference Committee for the opportunity of welcoming and addressing you. It is an honor and privilege. I am grateful that we are gathered in this Hybrid Conference to exchange ideas on addressing the diversity of healthcare management worldwide especially in this critical juncture of our civilization where disease knows no borders.

The “4th Edition of Singapore Nursing Research Hybrid Conference (NURSING 2024)” is scheduled during March 21- 23, 2024 herein the stunning city of Singapore. It will cover a wide spectrum of presentations that focus around the theme “Leading Innovation and Pathways Transforming Nursing Future.” It will focus on improving patient health; outpatient treatment and expanding data analysis abilities among nurses to embrace new challenges and advance the profession. Moreover, it will feature internationally renowned speakers who will share, discuss, and dissect significant new developments and scientific advancements. They will also be sharing insights into cutting edge technologies that will impact the future of clinical trials and related fields. We are looking forward to a highly productive meeting of great scientists and nurses from different countries around the world.

I congratulate everyone for your commitment, active participation, and wish you All great success.

# Welcome Message



**Jane Murray**

**Northumbria University, United Kingdom**



On behalf of the Scientific Committee, I take great pleasure in welcoming you to the 4th Edition of Singapore Nursing Research Conference (NURSING 2024) here, in the beautiful city of Singapore. The theme of this year's conference "Leading Innovation and Pathways Transforming Nursing Future." will focus improving outpatient treatment, improving patient health and experience and expanding data analysis abilities among nurses to embrace new challenges and advance the profession. While you are here, I sincerely hope that you take the opportunity to network, learn, share and collaborate with international experts. All of us on the Scientific Committee would take great pleasure in meeting you in person and learning more about your amazing work. I wish you an enjoyable and productive conference. I hope you enjoy your stay in this wonderful city and use pre and post conference times to enjoy the sites. We are enthusiastic about your attendance and participation. Enjoy the conference!



## ABOUT MAGNUS GROUP

Magnus Group, a distinguished scientific event organizer, has been at the forefront of fostering knowledge exchange and collaboration since its inception in 2015. With a steadfast commitment to the ethos of "Share, receive, grow," Magnus Group has successfully organized over 200 conferences spanning diverse fields, including Healthcare, Medical, Pharmaceuticals, Chemistry, Nursing, Agriculture, and Plant Sciences.

The core philosophy of Magnus Group revolves around creating dynamic platforms that facilitate the exchange of cutting-edge research, insights, and innovations within the global scientific community. By bringing together experts, scholars, and professionals from various disciplines, Magnus Group cultivates an environment conducive to intellectual discourse, networking, and interdisciplinary collaboration.

Magnus Group's unwavering dedication to organizing impactful scientific events has positioned it as a key player in the global scientific community. By adhering to the motto of "Share, receive, grow," Magnus Group continues to contribute significantly to the advancement of knowledge and the development of innovative solutions in various scientific domains.



MARCH  
**21-23**

Joint Event

# Nursing & Public Health 2024

**DAY 01**

**KEYNOTE FORUM**

## A re-Introduction of the “Caring” capacity in nursing’s interactive field

While AI has made major contributions and inroads in our everyday lives, in person interactions are being seen as becoming more valuable (Frey & Osborne, 2013). The in person interactions in nursing, which is a “hands-on profession” requires engagement in the nursing interactive field.

That engagement requires the bio-behavioral synchrony that Dumas identified as interbrain- synchrony (Dumas, 2010). Interbrain-synchrony, a major aspect of socio-emotional development in the human being is part of everyday life. It is also a major part of what the nurse brings as an aspect of caring into the interaction with the patient. It is in the interactive field between the patient and the nurse that the healing and caring connection is forged.

However, Dumas also noted that lack of that synchrony happens with AI. Law et. al. noted that youngsters’ long term use of screen time resulted in deficits in executive functioning (2023). Our young students who are highly proficient with texting and other online practices noted having some problems with talking to patients. Although, they could proficiently start an IV, they didn’t know what to say after that. Introducing a course in therapeutic communications skills, early on in the BSN program may assist students to start building up those interpersonal skills that have been displaced by their online engagement.

The teaching of therapeutic communication skills and practice in early nursing education assists students in the development of a successful patient-centered care approach. It also allows them to develop and practice caring in the interactive field.



**Patricia M. Burrell**

Hawaii Pacific University,  
United States

### Biography

Dr. Burrell obtained her BSN from Northeastern University, Boston, Massachusetts her MSN from the University of Hawaii at Manoa, Honolulu, Hawaii her PhD from the University of Utah, Salt Lake City, Utah and her 1st Post-Doc from the C. G. Jung Institute, Zurich, Switzerland. She is a Professor of Nursing at Hawaii Pacific University’s College of Health and Society and is also Director of the Transcultural Nursing Center at HPU. She is a Transcultural Nursing Scholar. Dr. Burrell has a part-time practice in Psychiatric/Mental Health Nursing and as a Jungian analyst.

## Building a resilience ecosystem to improve employee mental health and well-being

The present health care model and research funding direction focus for mental health and well-being of employees is on diagnosis and treatment of illness and injury once symptoms are present, downstream from the actual onset. Much less attention paid to mitigation strategies reaching upstream building resilience prior to a problem. While “preventing” an injury or illness is near impossible (and hence a poor term), learning a suite of mitigation strategies may build one’s resilience to illness and injury.

Resilience is an evolving concept, and the word is used in many contexts. Today we look towards a reconfiguration wherein new skills and strengths are developed in response to adversity that offers some protection from further such events, often captured in words like posttraumatic growth. This modern concept of resilience extends beyond individual personality traits and involves behaviours, thoughts, and actions that can be learned and developed. Within this framework, the onus has been on the worker who is exposed, and their personal skills brought to each situation to avoid stress injury. This notion of resilience has been criticized in literature as it seems to impose self-responsibility on individuals with PTSD for post-traumatic growth. However, in a more holistic ecological approach resilience can be conceptualized at the individual, familial, and community (workplace) levels.

**Methodology & Theoretical Orientation:** This work reports on a series of investigations and line of research. A series of structured reviews examined mental health disorders, mitigation strategies, coping and resilience in public safety personnel and frontline health care workers. An ecological framework was utilized to focus on the variables that impact resilience to occupational stress injuries.

**Findings:** New conceptualizations of resilience focus on risk and protective factors emerging through ongoing transactions within networks of individual, familial, and community systems.

**Conclusion & Significance:** The shift from models emphasizing individual capacities to multi-systemic, contextualized conceptualizations raise awareness that some individuals may not be resilient not because they lack agency, but because they may be disconnected from the supports that ameliorate risk.

### Audience Take Away Notes

- Reflect on conceptualizations of resilience
- Understand an ecological approach to creating resilience that includes the individual, family and workplace
- Describe the importance of mitigation strategies and the desired shift in mindset
- Participants will increase their toolkit to address mental health and wellness in the workplace



**Dr. Gregory S. Anderson,  
PhD**

Faculty of Science, Thompson  
Rivers University, Kamloops, BC  
Canada

### Biography

Dr. Greg Anderson is a Professor and Dean, Faculty of Science at Thompson Rivers University. Greg is an applied researcher seeking solutions to real world problems, primarily studying the impacts of stress on work, and physical and mental health in public safety and frontline health care professions. Greg is well published in the area and has been an active contributor to the establishment of the Canadian Institute for Public Safety Research and Treatment. His present Canadian Institutes for Health Research grant is examining personal, family, and organizational factors contributing to resilience in public safety organizations in British Columbia.

## Meeting the needs of patients with moderate to severe dementia; telling lies to support personhood

Telling lies to patients with moderate to severe dementia is much debated in the literature. A whole range of words are used such as white lie, fiblet, therapeutic to reduce the emotional impact of the intervention being labelled as lie telling. In this presentation, Dr. Jane Murray will argue that lie telling is an effective and person centred intervention that can be used to maintain and support personhood in a compassionate and kind manner. A taxonomy of Lies will be used to help the audience to think about the language used around lie telling and how they might start to consider their own practice. The Lie ARM (Affective Reflective Model) will be used to demonstrate the importance of reflection on action and in action. There will be discussion around how Dr. Murray's research is challenging historical thinking around telling lies to people with moderate to severe dementia and how it can be used to meet the needs of people who often have time shifted reality.

### Audience Take Away Notes

- Communication strategies for use in practice will be shared and discussed
- The importance of discussing difficult topics such as telling lies, whilst considering the impact on the teller as well as the receiver
- That reflection in practice and on practice is essential for all health care providers
- Motivation and genuineness underpin all aspects of communication
- People will feel more confident when communicating with people with moderate to severe dementia



### Dr. Jane Murray

Department of Nursing,  
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of Life Sciences, Northumbria  
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### Biography

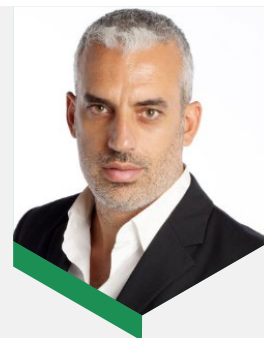
Dr. Jane Murray is an Assistant Professor at Northumbria University, Newcastle. Her main interests are older persons mental health, particularly dementia and its' associated issues, multimorbidity and frailty. She teaches these topics in the UK, China, and Singapore. Dr. Murray also has extensive experience teaching these topics into Borneo and Malaysia. She is currently Programme Lead for a Pre-registration nursing programme at the Shanghai University of Traditional Chinese Medicine and the Programme Director for a Bachelor of Science, Nursing, at Kaplan Singapore. She also has a keen interest in Nursing Ethics, which she leads on in the Kaplan programme.



## Rheumasync: Fostering community and empowering rheumatology through mhealth innovation

Rheumatological conditions pose multifaceted challenges, not only in their clinical management but also in the support and education available to patients. Amidst this landscape, the emergence of mobile health (mHealth) technologies has catalyzed a paradigm shift in healthcare delivery, particularly in rheumatology.

"RheumaSync" stands as a pioneering mHealth application meticulously crafted to cater to the diverse needs of stakeholders including patients, researchers, physicians, alternative therapists, etc. maneuvering through the intricate landscape of rheumatological disorders. The paper explores the comprehensive impact, mechanisms, and potentials of RheumaSync in reshaping the landscape of rheumatological care. At its core, RheumaSync is a multifunctional mHealth platform curated to establish a symbiotic relationship between patients, healthcare professionals, and stakeholders in the rheumatology domain. Its primary objective lies in bridging the gap between patients and care providers, offering a cohesive ecosystem that amalgamates information dissemination, patient support, and professional networking. Through a user-friendly interface, RheumaSync offers patients personalized resources, empowering them with educational materials, self-care tips, and access to a community of peers and experts. For healthcare providers, the application extends capabilities for seamless communication with patients, thereby optimizing care delivery and enhancing patient-clinician relationships. Central to RheumaSync's innovation is its emphasis on community building. By fostering a network of individuals affected by rheumatological conditions, the platform transcends geographical barriers, allowing users to share experiences, insights, and coping mechanisms. This communal synergy not only nurtures emotional support but also becomes a repository of real-world experiences, thus enriching the collective understanding of rheumatology. Furthermore, RheumaSync's integrative approach goes beyond patient care, serving as a hub for collaboration among healthcare professionals, researchers, and advocacy groups. It streamlines access to updated research, clinical trials, and best practices, fostering a culture of continuous learning and innovation within the rheumatology community. The current paper delves into the conceptualization, development, and transformative potential of RheumaSync, underscoring its significance in amplifying patient engagement, improving health outcomes, and advancing the frontiers of mHealth in the realm of rheumatology.



### Asst. Prof. Yiannis Koumpouros

Department of Public and Community Health, University of West Attica, Athens, Greece

#### Biography

Yiannis Koumpouros is Ass. Professor in the University of West Attica, Department of Public and Community Health. Specialized in digital health, health informatics, e-health, m-health, telehealth, assistive technologies, rehabilitation, users satisfaction assessment, and strategic management. Expert for the European Commission in the e-health and m-health sectors, and evaluator of numerous R&D projects. Responsible for the WHODAS 2.0 scale cultural adaptation in Greece. He is the Director of the Reserach Lab "Digital Innovations in Public Health" ([diginhealth.uniwa.gr](http://diginhealth.uniwa.gr)). Top-level managerial experience in the private and public healthcare sector (chairman of hospitals, member of the board of directors, business development and strategic management director, etc.). Chairman of several committees in the Ministry of Development. Regular member of the Consultative Technical Council, etc. He has published more than 70 papers in reputed journals and conferences and has been serving as an editorial board member of repute. He has participated in more than 50 R&D funded projects in the field of healthcare and ICTs.

### **Audience Take Away Notes**

- Participants will gain practical insights into implementing mHealth solutions within rheumatology
- They'll learn strategies for leveraging technology to foster patient engagement and community-building in chronic disease management
- Healthcare practitioners will acquire tools for effective patient communication, optimizing patient care
- Researchers can explore innovative methodologies for community-driven healthcare research
- Professionals in healthcare administration will grasp the potential of mHealth in improving healthcare delivery and patient outcomes
- Absolutely, this research provides a blueprint for incorporating mHealth technologies into various medical specialties
- It offers a framework for faculty to teach about patient-centric care, digital innovation, and community health models
- Yes, it presents a comprehensive platform that simplifies patient-doctor interactions, streamlining healthcare processes and enhancing efficiency
- Designers can grasp the importance of user-centered design in crafting mHealth interfaces for optimal patient engagement
- It will foster understanding on how to tailor mHealth applications for specific patient needs, potentially enhancing the accuracy of patient data collection and monitoring
- It introduces innovative approaches to data interpretation and analysis, aiding in refining mHealth design elements
- List all other benefits
  - o Encourages interdisciplinary collaboration among healthcare professionals, technologists, and researchers
  - o Promotes patient empowerment and engagement, fostering better disease management outcomes
  - o Offers insights into scalable and sustainable healthcare solutions, essential for future healthcare models
  - o Facilitates a deeper understanding of the intersection between technology and healthcare delivery



## Designing and managing integrable and interoperable transformed health ecosystems

Health and social care systems around the globe currently undergo a transformation towards personalized, preventive, predictive, participative precision medicine (5PM), considering the individual health status, conditions, genetic and genomic dispositions, etc., in personal, social, occupational, environmental and behavioral context. This transformation is strongly supported by technologies such as micro- and nanotechnologies, advanced computing, artificial intelligence, edge computing, etc. For enabling communication and cooperation between actors from different domains using different methodologies, languages and ontologies based on different education, experiences, etc., we have to understand the transformed health ecosystems and all its components in structure, function and relationships in the necessary detail ranging from elementary particles up to the universe. That way, we advance design and management of the complex and highly dynamic ecosystem from data to knowledge level. The challenge is the consistent, correct and formalized representation of the transformed health ecosystem from the perspectives of all domains involved, representing and managing them based on related ontologies. The resulting business view of the real-world ecosystem must be interrelated using the ISO/IEC 21838 Top Level Ontologies standard. Thereafter, the outcome can be transformed into implementable solutions using the ISO/IEC 10746 Open Distributed Processing Reference Model. Model and framework for this system-oriented, architecture-centric, ontology-based, policy-driven approach have been developed by the author and meanwhile standardized as ISO 23903 Interoperability and Integration Reference Architecture. The formal representation of any ecosystem and its development process including examples of practical deployment of the approach are presented in detail. This includes correct systems and standards integration and interoperability solutions.

### Audience Take Away Notes

- The audience will learn to formally and correctly represent and manage multidisciplinary business systems for any use case in any context
- This allows re-engineering any specification and artifacts to enable their integration and interoperability
- That way, the re-use of existing systems, but also the development of advanced solutions (e.g. 5PM) is enabled
- The presented solutions has been defined mandatory for all multidisciplinary projects and specification at the Health Informatics TCs of ISO and CEN, but also other SDOs
- The approach assists in the design and management of existing and new solutions



**Prof. Dr. Habil Bernd Blobel, FACMI, FACHI, FHL7, FEFMI, FIAHSI**

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### Biography

Dr. Bernd Blobel studied Mathematics, Technical Cybernetics and Electronics, Bio-Cybernetics, Physics, Medicine and Informatics at the University of Magdeburg and other universities in the former GDR. He received his PhD in Physics with a neurophysiological study. Furthermore, he performed the Habilitation (qualification as university professor) in Medicine and Informatics. He was Head of the Institute for Biometrics and Medical Informatics at the University of Magdeburg, before he moved as Head of the Health Telematics Project Group to the Institute for Integrated Circuits of the Fraunhofer Society in Erlangen. Thereafter, he acted until his retirement as Head of

the German National eHealth Competence Center at the University of Regensburg. He was German Representative to many SDOs such as HL7, ISO, CEN, OMG, SNOMED, etc., also chairing the national mirror groups. He is Fellow of several international academies, and published more than 600 papers and published/edited many books.

## Violence as a public health crisis

Despite the fact that in the timeline of world history, there are more safeguards against violence and more people in more countries value peace, violence continues to be a crisis in our world. The Philadelphia ACES project has documented the detrimental effects of societal violence on children. This keynote will address the problem of societal violence and encourage participants to promote violence reduction in their communities.

### Audience Take Away Notes

- Describe the impact of violence on children, families, and society
- Discuss the effects of violence on health and wellbeing of community members
- Discuss ways to reduce violence in communities



### Dr. Nina Beaman

School of Nursing and Health Sciences, Aspen University, Phoenix, Arizona, United States

### Biography

Dr. Beaman is the Chief Nurse Administrator of the School of Nursing and Health Sciences at Aspen University, where she also teaches forensic nursing courses. She has dedicated her nursing practice to helping victims of violence become survivors. Dr. Beaman is a parish nurse in Virginia, who supports the mental health of victims of domestic and societal violence, as well as disasters. She is certified as a nurse educator, psychiatric nurse, women's health nurse, and medical assistant.

## Change your genes – change your life: Epigenetics of longevity

Biology is no longer destiny. Our DNA doesn't determine our health and disease prospects, as geneticists once believed. According to the new science of epigenetics, the vast majority of our genes are fluid and dynamic and their expression is shaped by what we think and what we do. Our genetic profile may signal an inherited vulnerability to a disease, but our choices and behaviors determine whether these genes will be switched on or off. Each of us can influence our genes to create optimal health and longevity. Dr. Pelletier will discuss the latest epigenetic research, including progress on the \$ 101 Million X Prize, and share timely media coverage including details of the "Blue Zone" communities around the world and its potential impact on science. He will also cite the cutting-edge technologies that will forever change the landscape of optimal aging and longevity. We encourage you to attend and to engage with Dr. Pelletier in learning how to incorporate these new findings into your own lives.

### Audience Take Away Notes

- Differentiate generics vs epigenetics
- Apply practical, evidence-based epigenetic assays in practice
- Determine "personalized nutrition" based on latest data



**Dr. Prof. Kenneth R. Pelletier, PhD, MD**

Clinical Professor of Medicine,  
Department of Medicine,  
Department of Family &  
Community Medicine,  
Department of Psychiatry,  
University of California School of  
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States

### Biography

Kenneth R. Pelletier, PhD, MD is a Clinical Professor of Medicine, Department of Medicine; Department of Family and Community Medicine; and Department of Psychiatry at the University of California School of Medicine, San Francisco (UCSF). At the UCSF School of Medicine, he is Director of the Corporate Health Improvement Program (CHIP) which is a research program between CHIP and 15 of the Fortune 500 corporations including Apple, Cisco, American Airlines, IBM, Dow, Prudential, Cummins, Ford, NASA, and Pepsico. He also serves as a Vice President with American Specialty Health (ASH).

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# Nursing & Public Health 2024

DAY 01  
**SPEAKERS**



**Irene Harrison<sup>1\*</sup>, RN, PGDipNur, MProfPrac, Christine Mercer<sup>2</sup>, RN, BA, MEd, PhD, FCNA**

<sup>1</sup>Centre for Health and Social Practice, Unitec – Te Pūkenga, New Zealand

<sup>2</sup>Centre for Health and Social Practice, Waikato Institute of Technology (Wintec), Hamilton, New Zealand

## **Rapid Antigen Detection Testing for Diagnosis (RADT) of Group A Streptococcus (GAS) in children (Tamariki)**

Rheumatic fever is an autoimmune disease evolving from a GAS pharyngitis infection (Sika-Paotonu et al., 2017). It is a serious, potentially life-threatening illness and is preventable with early detection and intervention. Te Whatu Ora – Health New Zealand is concerned about rates of rheumatic fever among Maori and Pasifika children, which result from the complications of untreated or undiagnosed GAS pharyngitis (Ministry of Health, 2019). Current practice test for GAS testing involves taking throat swabs from students with sore throats, which are sent to the nearest laboratory for culture. The advantage of sending a throat culture to the laboratory is the ability to detect GAS from small amounts of bacteria on the swab. A limitation of this approach is the waiting time for results, which can take three to five days (Cohen et al., 2013). The waiting time for throat-swab results puts the student and close contacts at risk of spreading GAS pharyngitis infection.

The aim of this study was to evaluate the use of rapid antigen detection tests to provide timely service for the diagnosis and treatment of Group A Streptococcus (GAS) positive results for children experiencing pharyngitis symptoms. For this study, meta-ethnography was the approach used to synthesize the findings of published research on this subject.

This review found there were advantages to using rapid antigen detection testing for GAS infection – these included reducing the spread of GAS infection and reducing rheumatic fever admission rates. The synthesis of the studies identified three key elements: *closure of time gaps*; *antibiotic stewardship*; and *quality assurance*. This synthesis of research studies found that RADT testing improved outcomes for children with illnesses associated with GAS infection. It also decreased the severity of illness by allowing early intervention with antibiotics. The introduction of RADT testing may help reduce some of the barriers that exist in the current throat-swabbing practice guidelines, and in turn, may reduce overall rheumatic fever rates.

### **Audience Take Away Notes**

- Rapid antigen detection testing improves the management of Group A Streptococcus infection and supports early diagnosis and treatment. Improved diagnostic accuracy
- Alternative diagnostic tools such as Rapid Antigen testing for Group A Streptococcus could improve service delivery and treatment regime by closing the gaps in waiting time for GAS results
- Health professionals can differentiate between viral and bacterial throat infections. RADT testing reduces the use of inappropriate antibiotic prescribing and decreases the risk of antimicrobials. Health professionals can differentiate between viral and bacterial throat infections with
- The use of point-of-care testing allows for the best treatment decisions to be made at the time of the consultation, thus saving time, reducing referrals, and increasing the efficiency of patient care
- RADT test reduces transporting swabs to and from laboratories including laboratory fees to process the swab culture



## **Biography**

Irene Harrison is an academic lecturer who is teaching on the Bachelor of Nursing Programme specializing in Hauora Māori health papers. Irene Harrison is an evolving researcher with an interest in indigenous populations. Irene is a community nurse prescriber. Irene has led and managed health teams for the Rheumatic fever prevention programme based in South Auckland, New Zealand. Receiving two health awards: 2017 Whanau Whakaaro tika Whanau well-being and 2018 - Whanau Whai Hua – Outcomes matter Mana Kidz service delivery team- Hauora Coalition.



**Katie Hemmings Trigg**

University of Salford, Health and Society, United Kingdom

## **Investigating the retention and attrition rates of Advanced Clinical Practitioners (ACPS) in Emergency Care (EC) within the United Kingdom**

**T**his presentation will detail the motivation for this study as a background and include the findings from the literature review on the topic of Advanced Clinical Practitioners (ACP) in Emergency Care (EC).

ACPs are an integral part of the healthcare workforce across England, with the NHS recognising it as a priority for the future. ACPs within EC are often senior clinical decision makers that work within the multidisciplinary team to provide high quality care to a variety of patients, presentations and acuity. I work as a consultant level ACP and reflecting upon clinical practice over the last 7 years I have identified an issue with retention of experienced ACPs. Losing ACPs in a service that is already stretched for a variety of reasons, such as; increasing attendances to ED, longer waiting times and appropriate skill mix places burden on strained departments.

To provide an evidence-base a scoping review was conducted. The first stage was to identify the research question and second stage was to identify the relevant studies. A literature review was conducted using Keywords. The next stage was study selection, 892 studies were identified. After applying inclusion and exclusion criteria seven articles were charted and mapped to synthesize and interpret the data. No studies had been conducted with ACP's.

To collate, summarise and report the results analysis of the literature was conducted. Key themes included: a clear career pathway was integral; a structured training program and education reduced attrition rates; crowding and working conditions in EC results in burnout.

**Keywords:** Advanced Clinical Practitioner, Emergency Care, Retention, Attrition.

### **Biography**

Katie Hemmings Trigg is a second year doctoral researcher at The University of Salford conducting research investigating the retention and attrition rates of Advanced Clinical Practitioners (ACP) in emergency care. She is a Consultant ACP in paediatric emergency medicine at Salford Care Organisation in the UK and has been nursing in emergency care for over 15 years. Her data collection is underway using a mixed methods approach and will be presenting the findings from her scoping review which formed the initial part of her doctorate.



**Kate H. Knight**

University of Chester, United Kingdom

## Embedding salutogenesis in nursing student placements

Over the last three years, the Indirect Placement and Supervision Assessment model has been deployed across numerous undergraduate Health & Social Care programmes at UK Higher Education Institutes. The model instigates a salutogenic approach to student placement provision, and has attracted international attention. We evaluate the ongoing efficacy of the Indirect Placement and Supervision Assessment model, and chart its contributions in leading student placement access to third sector healthcare providers. Purposively sampled participants took part in a non-synchronous study, which was comprised of three intervention points, utilising a dynamic data collection model.

Initial data from the cohort was gathered via a Microsoft Forms service evaluation in early February 2023, with follow-up intervention points in late March and mid-May 2023. We collate and analyse the perspectives of educators involved in the model's dissemination, alongside the perspectives of those students who have undertaken Indirect placements. Participants answered a range of quantitative and qualitative questions in relation to their direct experiences of the Indirect Placement and Supervision Assessment model. Responses were thematically coded.

In quantitative responses, there was a strong thematic correlation between the model, successful salutogenic practices, and learning experiences. In quantitative responses, the model was rated highly by both educators and students. Our results indicate the shortfalls of exclusively medically-oriented models of student placement and assessment, and indicate the ongoing validity of the Indirect model and its salutogenic alignment.

### Audience Take Away Notes

- The paper will provide delegates with a workable and transferrable roadmap for implementing sustainable and cutting-edge methods of student placement provision in Nursing education
- The paper gives an example of best practice and success which helps facilitate both student retention and recruitment
- Those present will be able to use this knowledge to expand and productively update the teaching practices in place at their institutions

### Biography

Dr. Kate H. Knight is an Associate Professor and Head of Practice learning for the Faculty of Health, Medicine and Society and has the academic leadership for health and social care practice and governance and management of practice learning in her portfolio. This includes placement quality whilst developing the faculty practice learning provision. Kate leads the Practice Learning Team including Lecturers in Practice Learning and project teams expanding capacity and improving quality of placements. Kate is a registered children's nurse and a Senior Fellow of the Higher Education Academy.



**Natnicha Wareesamarn<sup>1</sup>, Waruntorn Jongrungrotsakul<sup>2\*</sup>,  
Anon Wisutthananon<sup>2</sup>**

<sup>1</sup>Provincial Administrative Organization Pattani Province, Thailand

<sup>2</sup>Faculty of Nursing, Chiang Mai University, Chiang Mai province, Thailand

## **The integrated safety promotion program on safety work behaviors among Thai waste collectors**

Occupational illnesses and injuries are the partly result of unsafe work behaviors. Safety training, an occupational health and safety standard, could either reduce or prevent such illnesses and injuries. This quasi-experimental research aimed to examine the effect of integrated safety training on safety work behaviors among 54 waste collectors working in Su-ngai Kolok and Muang districts in Narathiwat Province. The workers were equally divided into an experimental or a control group (27 in each). The study was implemented during September to November 2021. The research instruments consisted of 1) an integrated safety promotion program on safety work behaviors which was developed based on the literature review, and 2) a questionnaire on safe working behaviors among waste collectors modified from a safety work behaviors questionnaire by Sitthichai Jaikhan et al. (2019). The content validity of the questionnaire was confirmed by experts with a content validity index of 0.97 while reliability was at an acceptable level (0.86 - 0.90). Data were analyzed using descriptive statistics and t-test.

The findings showed that after receiving the integrated safety promotion program on safety work behaviors, the mean scores for safety work behaviors among the experimental group ( $\bar{x} = 73.89$ , S.D. = 1.12) were significantly higher than those of the control group ( $\bar{x} = 47.93$ , S.D. = 2.45) ( $p < .001$ ). Furthermore, it was found that the mean score for safety work behaviors among the experimental group after receiving the integrated safety promotion program ( $\bar{x} = 73.89$ , S.D. = 2.45) was significantly higher than that before receiving the program ( $\bar{x} = 47.85$ , S.D. = 2.16) ( $p < .001$ ).

These findings indicate that occupational health nurses and related staff should place great concern on the application of integrated safety promotion programs into their own work. This is anticipated to enhance safety work behaviors, thereby reducing occupational illnesses and injuries, as well as enhancing the quality of working life among waste collectors.

### **Biography**

Waruntorn Jongrungrotsakul, RN, Ph.D., Assistant Professor, Instructor at Public Health Nursing Department, Faculty of Nursing, Chiang Mai University, Thailand. She teaches nursing students in the Undergraduates of Community health nursing and Master program of occupational health nursing. She has several years of research experience as a specialist nurse, in occupational health nursing. Her research of interest is workplace health promotion, worker health assessment, and informal sector.





**Asst. Dr. Pei Wang<sup>1,3\*</sup>, Chen Zhang<sup>2</sup>, Da Pan<sup>1</sup>, Jiazhang Huang<sup>3</sup>, Junmao Sun<sup>3</sup>, Tong Jiang<sup>4</sup>, Guiju Sun<sup>1</sup>**

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<sup>2</sup>Center of Clinical Laboratory Medicine, Zhongda Hospital, Southeast University, Nanjing, P.R. China

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## Potential strategy to improve dyslipidemia: Combined intervention of health education and alfalfa powder in a randomized controlled trial

**Background:** Dyslipidemia represents a significant risk factor for cardiovascular diseases, such as coronary heart disease and stroke. In many researches, health education has been adopted alone as an intervention on improving dyslipidemia, which is believed to enhance individuals' health awareness, promote healthier lifestyles, and consequently impact blood lipid profiles. Alfalfa powder contains natural plant components such as alfalfa saponins and flavonoids, which may potentially exert beneficial effects on dyslipidemia. However, the study of health education combined with alfalfa to improve dyslipidemia is still rare.

**Objective:** This study aims to investigate the improvement effect of combining health education with alfalfa powder on human blood lipid disorders, and to provide a convenient, safe, and effective comprehensive intervention program for regulating blood lipid levels.

**Methods:** This study adopted a randomized controlled trial design and randomly assigned 140 dyslipidemia patients into two groups, each consisting of 70 patients. The control group received routine health education, which included dietary and exercise guidance, while the experimental group consumed 15g of alfalfa powder per day, in addition to receiving health education, for a continuous duration of 24 weeks. Prior to and after the experiment, the dietary conditions of the two groups were collected through questionnaires. Furthermore, measurements of Total Cholesterol (TC), Triglycerides (TG), high-density lipoprotein cholesterol (HDL-C), and low-density lipoprotein cholesterol (LDL-C) were conducted for each group. Data analysis was performed using R, with statistical significance set at  $P < 0.05$ .

**Results:** Comparing the pre- and post-intervention measures, alterations in blood lipid indicators were observed in both groups. Specifically, the experimental group exhibited a significant reduction in TC and LDL-C ( $p < 0.05$ ), while the control group demonstrated a declining trend in TC. Additionally, compared with the control group, the experimental group showed a significantly greater decrease in TC, TG, and LDL-C, with statistically significant differences ( $P < 0.05$ ).

**Conclusions:** Health education is an effective intervention approach that can assist patients in regulating their blood lipid levels. Combining health education with alfalfa powder as an intervention strategy yields superior outcomes, significantly improving the levels of total cholesterol, total triglycerides, and LDL-C in subjects.

**Keywords:** Dyslipidemia, Health Education, Alfalfa Powder.

### Audience Take Away Notes

- The significance of implementing combined interventions improve blood lipid indicators
- The challenges involved in improving blood lipid levels through health education, including the

development of appropriate dietary plans and exercise guidance

- The role of alfalfa powder in improving human blood lipid levels
- This research holds potential benefits for professionals working in the field of public health, particularly in the domain of nutrition. The combination of health education and nutrition interventions can yield greater advantages for individuals with dyslipidemia. Additionally, this study offers valuable references for other researchers seeking to devise intervention strategies aimed at improving blood lipid profiles. It emphasizes the importance of including well-designed dietary plans, exercise plans, and corresponding scales within health education programs. Furthermore, the study sheds light on the impact of alfalfa powder in improving blood lipids, thereby providing scientific evidence to support further nutritional interventions

### **Biography**

Mr. Pei Wang, Assistant Researcher, Doctor of Public Health, Southeast University, China. Master of Engineering, Chinese Academy of Agricultural Sciences, is the Deputy Secretary of the Green Agriculture and Food Nutrition Committee of China Green Food Association. His main research area is "evaluation of food and nutrition", "food nutrition education and health communication", etc. He is committed to the research of the effects of healthy food on human as a main member, and participated in over 20 scientific projects. He has published more than 20 research articles in journals and 2 patents, and contributed to the publication of 3 books.



**Liu Xinmin\*, Lin Lan, Yin Li**

Department of Neurology, The First Hospital of Jilin University, Chang Chun, Jilin Province, China

## Qualitative study of family resilience in patients with refractory epilepsy

**Objective:** The purpose of this study was to understand and identify the characteristics of family resilience in patients with refractory epilepsy in Chinese cultural context.

**Method:** A phenomenological study method was used to select 12 eligible subjects aged 22-68 years who were hospitalized with refractory epilepsy and/or their family members in the Department of Neurology of a grade-III hospital in Jilin Province of China from January to September 2023. Face-to-face, semi-structured and in-depth personal interviews were conducted. After the interview, the Colaizzi 7-step method was used to analyze the interview data. The specific analysis steps are to read and sort the data, find out, code and classify the meaningful nodes, extract the theme and list the description, identify similar views, and return to the participants for verification.

**Result:** In this study, 3 themes and 11 sub-themes were extracted. Theme 1: Patients with refractory epilepsy have a strong sense of family faith; Theme 2: Underutilization of family resources in patients with refractory epilepsy; Theme 3: There are many external support resources, which can basically meet the needs. Among them, theme 1 includes three sub-themes: positive views dominate, positive and negative evaluations of stress exist, and personal beliefs are absent or few, etc. Theme 2 includes 6 sub-themes: slightly rigid family functional model, good family cohesion, good family resilience, good family problem-solving ability, poor family communication ability, and good family economic support. Theme 3 consists of two sub-themes: more support from family and community, enough external medical support, etc.

**Conclusion:** This study identified characteristics of family resilience in patients with refractory epilepsy in a Chinese cultural context: a strong sense of family faith and underutilization of family resources, but abundant social support resources to meet the needs of patients and families. In response to this situation, psychological support skills for the clients should be added to the specialized training courses for epileptic caregivers, family-centered care should be deepened in the health education for epileptic patients, and multidisciplinary and family-centered resilience interventions should be developed to help epileptic patients and their families make full use of family and social resources to help families better cope with the disease and improve family resilience.

### Audience Take Away Notes

- First of all, this study design can be applied to qualitative studies of people with other diseases to find out the key questions in the research field
- Second, in the context of Chinese culture, this study found the family resilience characteristics of refractory epilepsy patients, such as slightly rigid family function mode, strong sense of family faith, defects in family communication ability, insufficient use of family resources, etc. At present, more community support and sufficient external medical support can meet the needs of patients and their families

- Finally, this study further explained the needs of patients for home nursing services, and provided a reference for training the curriculum design of specialist nurses, such as adding psychological support skills for service objects. Recommendations on how to better assist patients and families in family care in the future, such as developing multidisciplinary and family-centered resilience interventions, deepening family-centered care in health education for patients with epilepsy, helping families better cope with the disease and improving family resilience

### **Biography**

Master Liu Xinmin graduated from the First Clinical Medical School of Jilin University in 2016 and obtained a master's degree in medicine. In 2020, she was employed as the deputy chief nurse of the First Hospital of Jilin University in China. Currently, she is the tutor of postgraduate students in the School of Nursing of Jilin University and has published 1 articles in SCI and 5 articles in national core journals.





**Bettina Lim Wan Sieng<sup>1\*</sup>, Vivian Man Suk Yee<sup>2</sup>, Yan Chau Chain<sup>3</sup>**

<sup>1</sup>Nursing, National University Polyclinic, Singapore

<sup>2</sup>Dental, National University Polyclinic, Singapore

<sup>3</sup>Nursing, National University Polyclinic, Singapore

## Effect of COVID-19 on primary healthcare nurses' job satisfaction and their turnover intention in Singapore

**Background:** Globally, COVID-19 has added pressure to the healthcare workforce, particularly nurses, who face an exacerbated shortage. Few studies have investigated job satisfaction and turnover intention among primary healthcare nurses in the long-drawn pandemic situation. Hence, this study aims to examine job satisfaction and retention among primary healthcare nurses.

**Aims:** To assess the level of job satisfaction and identify factors that affect job satisfaction and turnover intentions among primary healthcare nurses. This will serve to inform organizations on ways to improve processes and support mechanisms that promote job satisfaction and retention for primary healthcare nurses.

**Methods:** A cross-sectional quantitative study was conducted that involved 132 primary care nurses from seven healthcare centers in Western Singapore. Level of job satisfaction and turnover intentions was assessed using a 39-item questionnaire. Relationships between job satisfaction and turnover intentions were analyzed using Pearson correlation and linear regression analysis.

**Results:** Among the five job satisfaction subscales, personal satisfaction had the highest score ( $M = 3.73$ ,  $SD = 0.47$ ), while satisfaction with workload had the lowest score ( $M = 3.24$ ,  $SD = 0.69$ ). The overall job satisfaction mean score of 3.47 ( $SD = 0.49$ ), is considered within the moderate range and is similar to other studies conducted during COVID-19 pandemic. Albeit the challenging period, more than half of the nurses reported their intention to stay in a primary healthcare setting.

**Conclusion:** This study demonstrated the multifaceted nature of nurses' job satisfaction and its intricate interplay with various factors, including personal accomplishment, workload, professional support, pay and prospects, training and the challenges posed by the COVID-19 pandemic. The findings of this study provide insight for organizations to look at targeted factors to improve the rate of retention for primary care nurses.

### Audience Take Away Notes

- Job satisfaction plays an important role as a key determinant of job performance and the intention of nurses to stay
- This study demonstrated the multifaceted nature of nurses' job satisfaction and its intricate interplay with various factors, including personal accomplishment, workload, professional support, pay and prospects, training and the challenges posed by the COVID-19 pandemic

### Biography

Bettina Lim, Nurse Manager of Queenstown Polyclinic at National University Polyclinic, Singapore. She has over ten years of nursing experience in primary healthcare. Bettina obtained a Diploma in Nursing at Ngee Ann Polytechnic, Singapore, and graduated in 2013, with a Bachelor of Nursing in 2016, a Master of Science in International Healthcare Leadership in 2019, and a Graduate Diploma in Community Health Nursing in 2021. She has a strong interest in research and has been an active member of Research & Evidence-Based Nursing at the National University Polyclinic.



**Maiyasa G AL-Saadi**

Oman College of Health Sciences, Oman

## **Predictors of parenting stress among mothers raising children with ASD in the Sultanate of Oman: Mediating role of self-compassion**

Autism Spectrum Disorder (ASD) is associated with comorbid medical and neurological conditions that affect the mental health status and Quality of Life (QOL) of those with the conditions, as well as their families and caregivers (Yaacob et al., 2021). Several studies among parents of children afflicted with ASD reported higher levels of parenting stress compared to parents of other children with Intellectual Disabilities (ID) or Typically Developing (TD) children (Miranda et al., 2019). Also, Omani literature postulates that Omani parents of children with ASD endure a higher parental burden, clinically significant stress levels, anxiety, depression, and an increased public stigma compared to parents of Typically Developing (TD) children. However, relatively little is known about parental stress constructs in the Omani literature. A cross-sectional design was used to test a predictive model of parental stress in mothers raising children diagnosed with ASD in the Sultanate of Oman. This study examined mental health, parental burden, and affiliate stigma as predictors of parenting stress. It also examined the mediating role of self-compassion and the moderating role of coping strategies, and social support between these potential predictors and parenting stress. Results showed that affiliate stigma and parental burden were significant predictors of parenting stress. Self-compassion partially moderated the relationship between mental health, parental burden, and parenting stress. Implications are discussed in light of supporting programs and interventions to help these mothers cope and ultimately improve the quality of life in families of children with ASD.

### **Biography**

Dr. Maiyasa AL Saadi is a faculty member at Oman College for Health Science in Oman with more than twenty-three years of nursing experience both as a practicing and teaching nursing. As a graduate of the same institution, she enjoyed fulfilling her role by teaching various nursing specialties including her main area of expertise (maternal and child health) and leading various nursing modules. The spectrum of her leadership experiences ranges from leading various nursing modules, chairing committees, and organizing large events such as the first nursing alumni gathering in south Batinah, ending with resuming duties as deputy dean. She has a bachelor's degree from the US, a Master's degree from the UK, and finally a Ph.D. degree from the University of Washington, Seattle, US. Her main research interest is in family dynamics, parenting, parenting stress, coping, and education and her huge fond is in the area of autism and children with special needs. She has already assumed her role in raising public awareness about autism and enhancing the knowledge of families with children diagnosed with autism about parenting stress through the execution and planning of workshops in collaboration with various institutions in Oman.



**Janice Koh Huimin**

Nursing, National University Polyclinics, Singapore

## Evaluating a nurse-led insulin tele-titration program on diabetes control in primary care

**Objectives:** In Singapore, nurses in primary care have been titrating insulin doses through weekly telephone calls based on patients' home glucose monitoring records. The primary aim of this study was to evaluate the benefits of one such intervention on improvements in glycaemic control over time. A secondary aim of this study was also to determine if clinical indicators, patient demographics, insulin dose and quantity of calls are predictors of HbA1c improvement in this nurse-led tele-titration program.

**Methods:** A purposive sample of 193 patients enrolled into this program from May to December 2021 was included in this study. Repeated-measures ANOVA test was conducted to determine if mean HbA1c differed significantly across four time points (baseline, 3, 6, 9 months). Multiple linear regressions and correlations were also used to compute which predictor (gender, ethnicity, insulin type, insulin dose, Type 2 Diabetes (T2DM) Duration, age and those with optimal and suboptimal clinical indicators) has the highest bivariate correlation with the dependent variable (HbA1c improvement).

**Results:** Repeated-measures ANOVA test found that mean HbA1c differed significantly across four time points ( $p < .001$ ). Linear regression models were able to explain 14.8% - 22.2% variation of HbA1c improvement, and it is useful in explaining HbA1c improvement at all time points ( $p < .002$ ) except for between 6 to 9 months. However, there was no independent variable which was able to consistently significantly predict HbA1c improvement at 9 months. This study also found significantly more HbA1c reduction for patients on lower total daily doses of insulin ( $p < .01$ ).

**Conclusion and Implications for Practice:** Significant improvements in HbA1c over time reaffirmed effectiveness of nurse-led telephone consultations for optimising glycaemic control for patients on insulin. Since there are no consistently significant predictors for HbA1c improvement in this program, all eligible patients can potentially benefit from enrolment. Additionally, study findings also suggest that enrolment should be considered even at lower total daily doses of insulin. Further studies should explore the use of a control group to more accurately isolate the benefits of the nurse-led insulin teletration program for evaluation.

### Audience Take Away Notes

- The introduction of a nurse-led insulin titration protocol to optimise diabetes control
- How to reduce physical clinic visits for patients with diabetes with the use of teleconsultations
- Benefits of using the nurse-led insulin teletitration program to improve long term diabetes outcomes

### Biography

Janice is a Care Manager at National University Polyclinics, Singapore. She has been working in primary care for 8 years and has a particular interest in Chronic Disease Management. Janice is an active member of the Evidenced-Based Nursing team at National University Polyclinics and has presented at conferences and authored research articles.



**Shu-Hui Li<sup>1,2\*</sup>, Hung-Ru Lin<sup>1</sup>**

<sup>1</sup>School of Nursing, National Taipei University of Nursing and Health Sciences, Taipei, Taiwan

<sup>2</sup>Department of Nursing, Hsin Sheng Junior College of Medical Care and Management, Taoyuan, Taiwan

## **Predictors the factors of getting lost behavior in dementia persons: Family caregivers' perspectives**

**Objectives:** Dementia persons were at high risk of getting lost, placing a heavy burden on family caregivers. Although getting lost was difficult to predict, observable predictive factors can be used to detect possible getting lost and preventive measures need to be taken to prevent getting lost. The purpose of this study was to explore the related factors and predictors of getting lost behavior in dementia persons through quantitative research.

**Method:** This study adopted a cross-sectional study design, convenience sampling was used to recruit 280 family caregivers of dementia persons from the neurology outpatient clinics of two hospitals in northern Taiwan, all procedures were approved by the Institutional Review Boards (NO. 202200584BO, 111-D-05-01) from July 2022 to February 2023, using demographic data, Questionnaire of Everyday Navigational Ability. Dementia persons were divided into getting lost group and non-getting lost group according to whether they were getting lost. Descriptive statistics, independent sample t test, chi-square test and hierarchical logistic regression model was used to analyze the data.

**Results:** The getting lost rate of dementia persons was 44.6%. Mean scores on attention deficit, heading disorientation, egocentric disorientation and landmark agnosia differed significantly between dementia persons with and without getting lost. Moderate dementia, attention deficit, landmark agnosia, and caregivers' perceived poor health increase the possibility of getting lost behaviors in dementia persons. For each additional level of attention deficit in dementia persons, the risk of getting lost increases 6.32 times (95%CI, 1.53-25.97,  $p = .01$ ). For each additional level of landmark agnosia in dementia persons, the risk of getting lost increased 46.44 times (95%CI, 7.02-307,  $p = .00$ ). Landmark agnosia is the most important predictor of getting lost behavior.

**Conclusion:** Family caregivers need to increase their sensitivity and observe the important predictors of getting lost behavior in dementia persons. They need to prevent getting lost before the symptoms of "attention deficit" and "landmark agnosia" appear in the dementia persons.

**Keywords:** Getting Lost Behavior, Dementia Persons, Family Caregivers.

### **Audience Take Away Notes**

- Getting lost is a serious problem for dementia persons. The getting lost rate of dementia persons is 44.6%. Getting lost can be very distressing for dementia persons and their family caregivers
- Although getting lost is difficult to predict, this study find that persons with moderate dementia, cases with attention deficit, landmark agnosia, and caregivers' perceived poor health are important indicators for predicting the getting lost behavior of dementia persons
- Family caregivers need to adopt preventive strategies to prevent getting lost before dementia persons develop symptoms of "attention deficit" and "landmark agnosia"

## **Biography**

Shu-Hui Li is a lecturer at Hsin Sheng Junior College of Medical Care and Management. She is pursuing a doctoral degree at the National Taipei University of Nursing and Health Sciences and is a doctoral candidate. Shu-Hui is interested in research on dementia-related care and caregiver burden.





**Dr. Sivasankari S<sup>1\*</sup>, Dr. Manju Vatsa<sup>2</sup>, Dr. Sandhya Gupta<sup>2</sup>, Dr. S. N. Dwivedi<sup>3</sup>**

<sup>1</sup>College of Nursing, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India

<sup>2</sup>Former Principal, College of Nursing, All India Institute of Medical Sciences, New Delhi, India

<sup>3</sup>Former Professor, Department of Biostatistics, All India Institute of Medical Sciences, New Delhi, India

## Professionalism in nursing on Indian context

**Introduction:** Understanding the cognitive base of professionalism renders to attain common consensus of concept, attributes, and indicators of professionalism in nursing. The study is aimed to define professionalism, its attributes and identify the indicators of professionalism in nursing in the Indian context.

**Methodology:** A qualitative-phenomenological study was conducted in four selected tertiary healthcare institutions each one from autonomous, central and state governments as well as from the private sector in NCT of Delhi. The stakeholders (n=40) composing of 28 nurse professionals and 12 nursing students selected by random selection through computer generated numbers participated in the study. The semi-structured interview schedule consisting of three open-ended questions was developed by the researcher and validated by the experts. Ethical clearance was obtained from the Institute Ethics Committee. Semi-structured interview was conducted on one to one basis and recorded digitally.

**Results:** Ethics, professional values, legal aspects, communication skills and interpersonal relationship and professional development emerged as domains of professionalism. Work within ethical boundaries, ethical principles, caring, respect to the individual, honesty and integrity, fidelity, morality, advocacy, professional conduct, practice in accordance with law, effective communication with patients, family members and team members, assertiveness, competency, professional accountability and professional autonomy, following standards and innovation and research were inferred attributes of professionalism.

**Conclusion:** The study highlights the concept and attributes of professionalism in the Indian context. The inferred attributes need to be clearly stated with appropriate instructional strategies and assessment methods and incorporated in the existing B.Sc. Nursing curriculum for professional value training.

**Keywords:** Professionalism, Professional values, Ethics, Professional conduct, and Professional development.

### Practice Points

- Caring is the essence of nursing through which trust is developed between health care professionals and the patients. Trust is the core value of professionalism.
- Professionalism is a theoretical construct more easily said than practice. Role modeling of the instructors in teaching professionalism enhances the practical learning and behavioural adaptation to reflect the professional values.
- Learning and practicing professionalism is the process of socialization required specific teaching, assessing and role modeling.
- Faculty training is required in the development of attributes of professionalism in nursing.

## **Biography**

Sivasankari S. studied Paediatric Nursing at College of Nursing, Madras Medical College, Chennai, Tamil Nadu and awarded M.Sc. Nursing in 2005. She then joined as educator and has taken the role of administrator in nursing colleges in India. She graduated MBA in Hospital Management at Alagappa University, Karaikudi, Tamil Nadu in 2010. She completed PhD in Nursing at All India Institute of Medical Sciences, New Delhi. I am working as Professor at College of Nursing, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh.



**Richard Nankervis**

CEO, Hunter New England Central Coast Primary Health Network, NSW, Australia

## Learnings from primary care in Australia emerging from COVID

Primary Care in Australia has needed to navigate a changing function and environment in recent years while responding to and emerging from waves of Covid variants. This role has varied from assisting control and preparation (providing the majority of Australia's vaccinations), to assessing and treating minor and moderate Covid cases, to the continuation of primary care clinical work. There has been significant learning and evolution of primary care during that time. The role of an Australian Primary Health Network (PHN) in supporting, coordinating, and in some cases commissioning primary care services has similarly needed to be adaptive. Areas of most impact on primary care have included changing modes of primary care service delivery (including greater telemedicine), a significant impact on the management of long term health conditions, and the adverse impact of the pandemic on staff wellbeing. For example, in 2022 general practices reported that 88% intend to continue to use telehealth consultations (a combination of video and phone consultations), 69% of practices have seen moderate to severe impact on the management of long-term health conditions, and 69% of practices report a moderate to severe impact on the update of cancer screening activities. 67% of practices have reported that Covid has had a serious to severe impact on caseloads, and 87% have reported that they are concerned about the future emotional wellbeing of staff.

The areas of support that primary care clinicians have reported being most appreciative of include timely information sessions presented by public health physicians and experts enabling direct access to advice for primary care clinicians, information updates broadcast by the PHN, and daily updates in clinical management requirements through 'HealthPathways'. Emerging from the most widespread impacts of Covid, primary care practices and clinicians have reported that their greatest concerns are for the wellbeing of their staff (firstly), and for their practice viability (secondly). Recently, 53% of practices have requested greater business continuity support, followed by workforce support, telehealth support, and HealthPathways (each at 45%).

The findings appear to highlight the contrast and tension between the high utilisation and value of primary care in a pandemic response, and the vulnerability of primary care clinical workloads and practice viability. Additionally, in practices of generally small to moderate sized primary teams of staff (particularly in regional and rural service provision), there has appeared to be a substantial impact on the emotional wellbeing of staff. At the same time, in responding to the pandemic the experience most valued by primary care clinicians were identified as when they have been seen as partners, and have had timely access to experts and expert advice. This has been most practically managed through webinars, and clinical information provided through updates and HealthPathways.

### Audience Take Away Notes

- This presentation will provide an analysis of the experience of primary care providers emerging from Covid, and the key learnings to consider as a part of future public health responses
- This will include the areas of greatest impact on primary care, the support that was most appreciated, and greatest concerns, and the changes in care provision as a result

- The findings of this will assist the audience in focusing on collaborating with primary care providers in ways that have the most impact, minimize effort and resourcing on areas of less effectiveness, and in understanding the new challenges that now need to be addressed in primary care, from the perspective of an Australian experience

### **Biography**

Richard Nankervis was appointed in July 2015 to the Chief Executive position of the Hunter New England and Central Coast Primary Health Network in Australia. Richard is a founding Director on the Board of the Centre of Innovation in Regional Health. Richard is the Australian PHN CEO lead for the National PHN Commissioning Review, and also sits on the Expert Advisory Group for the review of Aboriginal and Torres Strait Islander Mental Health and Suicide Prevention services, and the Integrated Team Care. Richard's university training includes a Bachelor of Science and a Bachelor of Applied Science (Physiotherapy), both at the University of Sydney, and a Master of Health Administration at the University of New South Wales.

**Dr. Lakmali Anthony\*, Dr. Madeline Gillies, Dr. Daniel Marascia, Dr. Ruwangi Udayasiri**

Department of Vascular Surgery, The Northern Health, Victoria, Australia

## **Trends in operative management for liver trauma in Australia: A ten-year population analysis**

**Background:** Liver trauma represents one of the most frequently encountered life-threatening solid organ injuries in Australian trauma patients. While Non-Operative Management (NOM) has become the mainstay of treatment for liver trauma, patients that fail NOM or present in extremis still require emergency operative management.

**Methods:** Procedure, admission and diagnosis data captured between 2012 and 2022 were collected from the Australian Institute of Health and Welfare and the Medicare Benefits Schedule. Simple linear regression evaluated trends over the ten-year period.

**Results:** From 2012 to 2022, 9,159 emergency hepatectomies were performed for liver trauma in Australia. Most patients were male (56.1%), aged between 60 and 74 (44.1%). During this period, there was a statistically significant decrease in the number of extended hepatectomies performed ( $\beta$ -0.21,  $p$  0.03), whereas segmental resections showed no significant change. Concurrently, superficial suture repair of liver lacerations increased significantly ( $\beta$  0.27,  $p$  <0.001). The number of hospital admissions for severe liver trauma remained stable, but the average length of stay in hospital significantly decreased ( $\beta$  -0.45,  $p$  0.02).

**Conclusion:** Over the last decade, there has been a decline in the use of more extended hepatectomies and a decrease in the length of hospital stay for liver trauma. This suggests that the trend towards NOM for liver injuries may be accompanied by a shift towards less invasive operative strategy for patients who do require operative management.





**Breanna Weigel<sup>1,2\*</sup>, Natalie Eaton Fitch<sup>1,3</sup>, Kiran Thapaliya<sup>1,3</sup>, Sonya Marshall Gradisnik<sup>1,3</sup>**

<sup>1</sup>The National Centre for Neuroimmunology and Emerging Diseases, Griffith University, Gold Coast, Queensland, Australia

<sup>2</sup>School of Pharmacy and Medical Sciences, Griffith University, Gold Coast, Queensland, Australia

<sup>3</sup>Disability and Rehabilitation, Griffith University, Gold Coast, Queensland, Australia

## **Patient-reported health outcomes are comparable between people with ME/CFS and post COVID-19 condition over time**

**Background:** Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) and Post Coronavirus Disease 2019 (COVID-19) are chronic, multi-systemic illnesses that require multidisciplinary management approaches. However, misalignment of care access assessments with the functional impairments associated with these illnesses and poor representation in health policies hinder the provision of necessary care and support. The present longitudinal study serves to highlight the long-term burden of living with ME/CFS and Post COVID-19 Condition by examining illness presentation and impact over time in an Australian cohort.

**Methods:** Online study advertisements were distributed between October 2021 and October 2023. Respondents were deemed eligible to participate if they: i) were aged between 18 and 65 years; ii) were a resident of Australia; and iii) had been diagnosed with ME/CFS or Post COVID-19 Condition by a physician. Data collection is ongoing and involves the distribution of three self-administered questionnaires separated by six months. The collection of symptom presentation data has been informed by the Centers for Disease Control and Prevention Symptom Inventory Questionnaire for ME/CFS. This study employs validated measures to capture patient-reported health outcomes, including the Australia-Modified Karnofsky Performance Scale, 36-Item Short-Form Health Survey version 2, World Health Organization Disability Assessment Schedule version 2.0, Modified Fatigue Impact Scale, and Dr Bell's Chronic Fatigue and Immune Dysfunction Syndrome disability scale.

**Results:** Most of the ME/CFS (n=54) and Post COVID-19 Condition (n=12) participants were female (n=41, 75.9% and n=8, 66.7%, respectively,  $p=0.70$ ) and the two cohorts were comparable in age (median (M)=48.00, interquartile range (IQR)=15.50 years and M=52.50, IQR=12.00 years, respectively,  $p=0.082$ ). Illness duration was significantly longer among the ME/CFS participants than those with Post COVID-19 Condition (M=14.25, IQR=15.79 years and M=0.75, IQR=0.32 years, respectively,  $p<0.0001$ ). All patient-reported outcome scores (except the Role Emotional domain among the Post COVID-19 Condition participants) were compromised at all timepoints for both illness cohorts. None of the patient-reported outcomes differed significantly between timepoints among the ME/CFS participants. At the six-month timepoint, the Post COVID-19 Condition cohort returned significantly higher Karnofsky Performance and Dr Bell's disability scale scores when compared with the ME/CFS group ( $p=0.0090$  and  $p=0.017$ , respectively). However, no significant differences were observed in any measure of quality of life, functional capacity, or fatigue impact at six months. Post-exertional malaise – the hallmark symptom of ME/CFS – was comparable in prevalence and severity between the ME/CFS and Post COVID-19 Condition cohorts at both the baseline and six month timepoints. PEM scores were not more likely to improve among people with Post COVID-19 Condition than those with ME/CFS ( $p=0.68$ ). Updated results will be provided as data collection continues.

**Conclusions:** The results of present study foreground the substantial and prolonged impacts of ME/CFS and Post COVID-19 Condition on patients' lives. These findings exemplify the ongoing functional limitations

associated with these illnesses and thereby underscore the need for accessible, holistic healthcare and disability support services for people living with ME/CFS and Post COVID-19 Condition. Mitigating the transmission of COVID-19 will be instrumental in reducing the long-term burden of chronic, multi-systemic illness on populations and healthcare systems.

### **Audience Take Away Notes**

- Patient-reported health outcomes were compromised at all timepoints among the ME/CFS and Post COVID-19 Condition participants
- The Post COVID-19 Condition participants' overall health perceptions scores increased from baseline and were significantly higher than the ME/CFS participants' at six months follow-up. However, no measures of quality of life, functional capacity, or fatigue impact differed significantly between the two cohorts
- Similarities between these two cohorts in patient-reported outcomes suggest that the illness trajectory of Post COVID-19 Condition may be comparable with that of ME/CFS
- ME/CFS and Post COVID-19 Condition have pervasive impacts of on patients' lives. These preliminary findings necessitate access to holistic and person-centered healthcare and disability services to support people living with these illnesses

### **Biography**

Miss Breanna Weigel is a third-year PhD candidate supervised by Prof Sonya Marshall-Gradisnik, Dr. Natalie Eaton-Fitch, and Dr Kiran Thapaliya at the National Centre for Neuroimmunology and Emerging Diseases, Griffith University, Australia. In 2020, Breanna graduated from Griffith University with BBiomedSc (Hons I). Breanna's current PhD studies investigate the illness impacts and experiences of Australians with ME/CFS and Long COVID and serve to support policy reform and improved care pathways. Policy development has been informed by Breanna's research, including a Health Policy Issues Brief of Long COVID patient experiences recently published in 2023.



**Jennifer Rhae J. Lim, RN. DNM**

Lung Center of the Philippines, Quezon City, Philippines

## **Organizational support, mental well-being and job satisfaction of nurses during COVID-19 pandemic crisis in selected tertiary hospital in Metro Manila**

**Background:** The increased workload and demands on healthcare workers suffering from COVID-19 is causing anxiety, especially when they are at high risk of contracting the disease, as well as their families and loved ones. Increased workload also caused stress for nurses.

Furthermore, as nurses were primarily focused on patient recovery and reducing the number of daily COVID-19 cases, the psychosocial and psychological health of nurses has often been overlooked. Increased stress and changes in psychological health can affect nurses' job satisfaction. Caregivers affected by COVID-19 need immediate organizational support, as the effects of the illness not only impact physical performance, but can also impact mental health and satisfaction.

**Methods:** The study utilized a descriptive-correlational research design which permits an understanding of phenomena, and personal values related to the evaluation of the organizational support, mental well-being, and job satisfaction of nurses during the COVID-19 crisis. A survey was administered on a digital platform.

**Results:** Comprehensively, nurse respondents' organizational support and mental well-being has a moderate negative correlation ( $-.629$ ). Moreover, nurse respondents' organizational support and job satisfaction has a high positive correlation with a coefficient value of  $.801$ . Job Satisfaction and Mental well-being of nurse respondents' also has a negligible positive correlation with a correlation coefficient value of  $.250$ .

**Conclusions:** Based on the presented results, there is a moderate negative relationship between organizational support and the psychological well-being of the studied nurses. Organizational support and job satisfaction among the nurses surveyed also showed a high positive correlation. Additionally, a negligible positive relationship was shown between job satisfaction and psychological well-being among the nurses surveyed.

**Keywords:** Organizational Support, Mental Well-Being, Job Satisfaction, Pandemic Crisis.

### **Biography**

Dr. Jennifer Rhae Lim is presently employed as a nurse researcher at the Lung Center of the Philippines. She dedicated her initial eight (8) years to clinical practice in the Medical Surgical Area. With a Master of Arts in Nursing degree, she stands as the youngest individual in her batch to hold a Doctorate Degree, specializing in Nursing Management. The researcher developed her own Bundle of Care for Community Acquired Pneumonia and presented her findings at Hong Kong University in 2018. This study gained recognition and was showcased at the 26th World Congress held in Osaka, Japan in 2019. In 2020, she had the opportunity to share her expertise in halting the transmission of COVID-19 at the Budi-Luhur Institute of Health and Sciences in Indonesia. Furthermore, this year in 2024, she presented another significant breakthrough in supporting the well-being of nurses and providing organizational support during the Covid-19 pandemic crisis at Hong Kong University. Dr. Lim's expertise lies in the domains of Descriptive, Experimental, and Quasi-Experimental studies. Presently, she is engrossed in exploring Quality Improvement Strategies and conducting

research within her current institution. Furthermore, she actively contributes to the academic community by serving as a panelist in conferences and forums held at different universities in her country. Her unwavering dedication to client satisfaction and her commitment to generating high-quality ideas that result in exceptional outcomes are truly commendable. Within the realm of health sciences, this individual embodies a right-brained disposition, characterized by her creativity and artistic inclination. She is an active advocate of arts delving into the realm of multimedia arts and painting during her leisure time. By incorporating travel and sea sport surfing into her routine, she is able to strike a balance between her professional and personal life, which allows her to see the world in a different perspective.



**Dr. Shubhangi Pingle\*, Dr. Rajani G. Tumane, Kartik Matte**

Regional Occupational Health Centre (Southern), NIOH, ICMR Complex,  
Kannamangala PO, Poojanahalli Road, India

## **Lead toxicity associated protein and its role in diseases in industrial workers**

The interaction between proteomic profiling and Alzheimer's disease, Dementia in industrial workers was not explored in occupational settings. Therefore, the present study, aimed to assess the proteomic profiling with among workers exposed to Pb with contemplation of varied blood lead levels and duration of exposure.

The study on the serum markers with reference to lead toxicity is limited in human beings. The obtained protein markers can be correlated with the exposure pattern and can have a broad range of potential applications. They may be used for clinical diagnostic or prognostic purposes like Alzheimer's disease and Dementia. The novel mechanistic links between lead exposure and protein expression can be evaluated. The earlier studies were conducted on common effect of heavy metals and does not covered about specific lead toxicity on proteomic profile. This is different pursuit in which the interaction between different diseases and proteomic profiling will be explored in occupational settings.

Assessment of proteomic profiling in occupational lead exposures settings will identify the functional classification and protein – protein interactions. It also highlights the interaction between Alzheimer's disease, Dementia and proteomic profiling among lead exposed workers.

### **Audience Take Away Notes**

- The study on the serum markers with reference to lead toxicity is limited to human beings. The obtained protein markers can be correlated with the exposure pattern and can have a broad range of potential applications. They may be used for clinical diagnostic or prognostic purposes. The novel mechanistic links between lead exposure and protein expression can be evaluated. The earlier studies were conducted on the common effects of heavy metals and do not cover specific lead toxicity on proteomic profile. This is a different pursuit in which the interaction between proteomic profiling and different diseases in industrial workers will be explored in occupational settings

### **Biography**

Dr. Shubhangi Pingle graduated, post-graduated and obtained her doctorate from RTM Nagpur University. She is Scientist D, ROHC, NIOH Bangalore, ICMR, India. She Published 110 research papers in National and International journals. She acquired 15 years of research experience in proteomics, Diagnostic Biomarkers, Development of ELISA and Animal cell culture biology. She has three Indian Patent granted and 6 submitted. She completed projects cost around ~US\$ 3 million. She implemented many areas first time in the diagnostic field of research by her differing approach. She has expertise in preventive measures of occupational health diseases used for beneficitation of industry workers.





### **Prof, Dr. M. R. Pooja**

Professor & Head Department of Computer Science and Engineering,  
Vidyavardhaka College of Engineering, Mysuru, Karnataka, India

## **Analytics for intelligent healthcare systems**

Intelligence has been an integral component of every aspect in all most all arenas of life. In the healthcare industry, the degree to which it has been impacted is comparatively low and the progress is in smaller steps when compared to those made in other fields. This can be attributed to several challenges and hurdles faced in healthcare systems. Adding to this, intelligence is not justified in beyond proof-of-concept studies. Recent years however have embraced hybrid models that involve incorporation of intelligence from AI systems, besides leaving the ultimate responsibility of disease identification/outcomes in the hands of the clinician as a means of critical intervention. Growing number of studies have indicated the successful implications of intelligence through analytics in areas including patient stratification, decisions at triage and prediction of severity levels of disease.

### **Audience Take Away Notes**

- The audience will be greatly benefited by the recent advances in Healthcare Analytics
- This would give the audience an opportunity to work in trending healthcare jobs
- A lot of scope lies in taking the aspects ahead for progress in research
- The event will provide a solution that can ease the work of a clinician/physician
- The event can greatly benefit by providing an assisted clinical decision support system
- List all other benefits
  - o A platform for prognosis of the disease at an earlier stage and improved patient outcomes
  - o Characterizing the risk features of any disease thereby helping in coming up with prescriptive measures

### **Biography**

Dr. Pooja M R is currently working as Professor and Head in the Department of Computer Science & Engineering at Vidyavardhaka College of Engineering, Mysuru. She has more than 40 research publications in peer reviewed international journals and international conferences. Her research interests include Machine Learning and Artificial Intelligence, Big Data Analytics and Health informatics. She has received appreciation for her multidisciplinary research with substantial contributions in the field of Health Informatics and Artificial Intelligence. She is nominated as Bentham Ambassador from INDIA in recognition of her research in Medical Informatics. She has been selected as Editorial Board Member for various peer reviewed international journals. Besides being honoured as session chair she has been the member of the Technical Program Committee of various international conferences be She has delivered talks as an invited speaker at various international conferences including COPD-2021, CWC-2021, World Conference on Pediatrics and Neonatal Healthcare, Global Conference on Healthcare held in North Macedonia, Turkey, US and UK. She has been a resource person for AICTE sponsored Faculty Development Programmes on both Data Science and Cyber Security. She has been the Speaker on Data Science at Annual International Meet on Women in Data Science -2021. She is a member of various international professional Bodies. She has attended various workshops organized by AICTE for implementation of Outcome Based Education and has been a resource person for the same. She was the Program Chair for AICDMB-2023, AICTE sponsored Fourth Annual International Conference on Data Science, Machine Learning and Blockchain Technology organized at Vidyavardhaka College of Engineering, Mysuru.

## **Norah Alqarni**

KSA-Jeddah-Military Hospital, Saudi Arabia

### **Trends in technology in senior care**

Since it's the era of technology and telemedicine and with the growing geriatric patients numbers. It's important to shed light on this topic. The technology is designed to support existing care systems, improve efficacy and enhance the overall well-being of older adult, Like

1. Remote Patient Monitoring
2. Smart Home Technology
3. Telemedicine and telehealth services
4. Wearable health devices such as fitness trackers, smartwatches, and health monitors
5. Robotics and Assistive Devices

#### **Audience Take Away Notes**

- Each attendee will benefit according to their responsibilities and capabilities in using this technology in their healthcare institution
- Establishing the use of technology as part of the health care system especially for the elderly to improve safety and quality of care
- Unfortunately, research is not yet finished with data collection we are working on it
- Of course, it will improve continuity of care, equity, and access to healthcare
- It could be the accuracy of a design, or provide new information to assist in a design problem

#### **Biography**

Norah A. Alqarni, a Family Medicine Doctor from Saudi Arabia, currently residing in Jeddah, holds a Saudi Board of Family Medicine certification obtained from the Saudi Commission for Health Specialties in 2019, and an Arab Board of Family Medicine certification in the same year. She completed her MBBS (Bachelor of Medicine and Bachelor of Surgery) at King Abdulaziz University in 2012. Born in 1987, Norah is married and a mother of three children. With over 11 years of experience in the field of Family Medicine in Saudi Arabia, she currently serves as a Family Medicine Consultant at King Fahad Armed Forces Hospital since October 2021. Prior to this, she worked as a Family Medicine Senior Registrar in the Ministry of Health from September 2020 to September 2021 and as a Family Medicine Resident at King Fahad Armed Forces Hospital from October 2015 to November 2019. Norah actively engages in extra clinical activities, participating in committees and attending numerous conferences both within and outside of Saudi Arabia. She is dedicated to contributing to the transformation and development of Family Medicine in Saudi Arabia. Norah has published research in the Saudi Medical Journal and has been a speaker at various international conferences on topics related to pain research, microbiology, infectious diseases, osteoporosis, arthritis, and musculoskeletal disorders. She aims to be a driving force for positive change in the field of Family Medicine Transformation in Saudi Arabia.

**Prof. E. Didem Evci Kiraz**

Department of Public Health, Faculty of Medicine, Aydın Adnan Menderes University, Aydın, Türkiye

## **Key points, practical, cheap, and sustainable actions for health sensitive adaptation policy for urban and rural governance**

When IPCC, Lancet Countdown and WHO reports are examined; vulnerability and risk analyses gain importance in the adaptation part of the twin actions of climate change. Vulnerability consists of sensitivity and adaptive capacity. The sensitivity and adaptive capacity of populations (human, animal, environment, system, service, etc.) are important for a healthy and safety future. The Health Sensitive Adaptation (HSAclimate) approach will shape the future. Key points for HSAclimate are; health impact chain of climate change, climate determinants of health, list of climate-sensitive diseases, climate-informed surveillance and public health early warning systems to protect health from the effects of climate change, climate-sensitive health policies (manpower, training, plan, program, project and budget) and others. Urban and rural governance should be able to produce HSAclimate policies that cover the entire population with practical, cheap, and sustainable actions. Since mitigation policies are at the forefront until COP28; Adaptation strategies and action plans that put health at the center and address health as the main topic remained in the minority. The COP28 Declaration on Climate and Health emphasizes the appropriate inclusion of a health perspective in any future studies on climate policies. It is necessary to quickly find answers to questions such as how it will happen, with what methodology, and who will do it. Without Practical, Cheap, and Sustainable Actions for Health Sensitive Adaptation Policy for Urban and Rural Governance, the desired speed cannot be achieved and adaptation will again be overshadowed by mitigation. Health is more than a sector, it is everything. Adaptation actions in climate change are the main actions to protect health. Every action that is not carried out means increased disease, loss of function and disability, and death.

### **Audience Take Away Notes**

- Health impact chain of climate change
- Climate determinants of health
- List of climate-sensitive diseases
- Climate-informed surveillance and public health early warning systems to protect health from the effects of climate change
- Climate-sensitive health policies
- Health vulnerability and risk assessment
- HSAclimate
- Health in climate change adaptation strategies and actions
- Health Guidance for policy makers

## **Biography**

Prof. E. Didem Evcı Kiraz is a medical doctor and academician in Public Health Department of Aydın Adnan Menderes University in Türkiye. She is one of the experts in the field of "Environmental Health" and "Climate and Health" in Türkiye. She is a member of the Scientific Committee of WHO (Healthy City) and Advisory Board of the Healthy Cities Association of Türkiye. She is working as a "Health Sector Expert" in the UNDP Adaptation to Climate Change Project. She is editor of two international journals: Climate and Health; City and Health. She has published more than 100 scientific publications.



**Prof. Dr. Kyriakos Kouveliotis FRSA**

Provost & Chief Academic Officer – Berlin School of Business and Innovation, Germany

## How artificial intelligence will change public health education

The world is changing at an incredible rate, and different processes are using technology more and more every day. One of the most widely used applications of artificial intelligence today is to simplify employee tasks and office automation especially on the domain of Public Health. In the future, robots can, like an author, produce articles or create conferences and instructional videos. The more intelligent AI becomes, the more advanced the new education system for Public Health will be. In such days, the educational method for each health professional may be different depending on his/her situation. The speed of teaching and learning, interaction with the teacher, and reaching answers in the intelligent education system increases. Artificial intelligence provides a variety of facilities for students with different physical problems. An increasing need for the use of the latest technology advances in learning students and students will accelerate their growth and progress, and gives them the ability to confront the challenges of the ever-competitive world. After the epidemic of the COVID-19 virus, both teachers and knowledge have been educated to a new understanding of technology use, which means that strategies for coping with real-world restrictions (such as what time limitations caused by this pandemic and quarantine have been witnessed) are more and more practical.

**Keywords:** Artificial Intelligence, Public Health, E-Learning, Education.

### Biography

Professor Dr. Kyriakos Kouveliotis is the Provost and Chief Academic Officer of the Berlin School of Business and Innovation (BSBI). He has a PhD in European Integration and International Relations awarded by Newcastle University whereas, he also holds an MA in Diplomacy awarded by Lancaster University UK, a certificate in Linguistics awarded by Bangor University UK and a BA in English Literature and Linguistics awarded by Aristotle University of Thessaloniki Greece. He has also completed two cycles of Post -Doctorate research one on Decision and Policy -Making and one on Conflict Resolution and Crisis Management. Professor Kouveliotis has worked in various research groups, he is an accomplished researcher in a variety of disciplines, and in the last 20 years he has been a Provost and taught in many Universities and educational organizations globally among which City Unity College, Newcastle University, University of Sunderland, Deree College, University of Indianapolis, Hellenic Air Force War College and Hellenic Naval War College to name a few. He is an expert in developing new curricula, programs syllabi and also in building new global educational networks and partnerships as he has already done with institutions from the US, UK, France, Italy, Switzerland and Ireland but also Singapore, India, and Somalia. Professor Kouveliotis has created around 100 new academic programmes at all levels, supervised a number of 5000 dissertations, published 12 books and dozens of original scientific articles. His track record of academic publishing is composed of a variety of papers concerning political, economic and educational issues. He has also served as a Scientific Advisor to the Minister of Defence, to the Deputy Minister of Development and Competitiveness and to the General Secretariat of Communication and Mass Media of the Greek Government. In addition, he was appointed by the Minister of Education as a Member in the Governing Committee of the Hellenic Open University. He also holds various professorships in institutions around the world as Honorary Chancellor and Founder of Longford International College in Ireland, Professor at Uninettuno University in Rome Italy and President of Atheneum Liberal Studies in Europe and in India. Recently, he received a fellowship in the Royal Society of Arts and created in the Hague his own not-for-profit Organisation the “Global Degree Foundation”.





**Xiaowei Dong\*, Nawi Ng, Ailiana Santosa**

School of Public Health and Community Medicine, Institution of Medicine, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

## **Family structure and depressive symptoms among older adults in China: A marginal structural model analysis**

**Background and objectives:** Mental well-being in late-life is inevitably connected to families due to the reliance of older adults on family members. The study aimed to investigate the causal relationship between family structure and depressive symptoms among Chinese older adults as well as gender and rural/urban disparities.

**Research Design and Methods:** We used the longitudinal data from China Health and Retirement Longitudinal Study (CHARLS) which was surveyed 4 times over 7 years. The depressive symptoms were assessed based on Centre for Epidemiological Studies–Depression scale with score of 12 as a cut-off. Family structures were grouped into single-member, couple, nuclear family and extended family. Marginal Structural Models (MSMs) were performed to estimate the causal effects of family structure on depressive symptoms, accounting for time-varying confounding.

**Results:** Cumulative exposure to single-member family type increased the odds of depressive symptoms by an average of 33% (95%CI: 1.22-1.44) than counterparts in the couple family after adjusting for confounding. People in the extended family may have 6% higher odds of depressive symptoms (95%CI: 1.00, 1.11). The longitudinal associations between family structure and depressive symptoms were consistent across subgroups of gender and residential area (P for interaction is 0.6638 for gender, and 0.7043 for residential area).

**Discussion and Implications:** People living alone and living in the extended family have increased risk of depressive symptoms. Early screening for depression in older population is recommended particularly from "at risk" family types to enhance their future psychological wellbeing.

### **Audience Take Away Notes**

- This study estimated the causal effects of family structure on depressive symptoms in a nationally representative cohort of Chinese older adults, with a biennial follow-up up to seven years
- Marginal Structural Models (MSMs) were used to allow for family dynamics and time-varying confounding
- Chinese older adults living in single-member and extended families were found to have a greater risk of depression than those living in couples. It is essential to enhance psychological support and promote mental health services for the older adults living in "at-risk" families

### **Biography**

Xiaowei Dong's research focus centers on ageing and mental health inequalities. She received her master degree at Umea University in 2019. She is currently pursuing her Ph.D. at Sahlgrenska Academy, University of Gothenburg.



### **Dr. Luis Portugal**

Partner and Managing Director ACTUARIAL Group, Portugal, DIFC Dubai and Hong Kong

## **Mortality in Portugal 2009-2022: Did we have excess mortality?**

Most of the time the news are mentioning the existence of Excess Mortality in the last years, in several countries, and in particular in Portugal. Here we analyse the mortality evolution from 2009-2022 and fit a model that explains the main drivers of mortality. Using this model, it's possible to see that there is no excess mortality in this period. What we have is an increasing mortality due to population ageing, Covid-19 pandemics, and more heat waves. When we exclude these effects, the population shows stability overtime. Eventually, some Long Covid-19 deaths may be arising in 2022, but this fact is not clear.

### **Audience Take Away Notes**

- Mortality main drivers
- How to model mortality time series
- Checking the existence of not of excess mortality
- Avoid “confounding” information

### **Biography**

Dr. Luis Portugal studied Management and Economics and develop his post-graduate studies in probabilities and statistics, actuarial science, financial mathematics, and applied mathematics to actuarial science. His PhD from University of Liverpool respect liabilities valuations in insurance companies. He was CEO of two insurance companies, president of the Portuguese Institute of Actuaries, Director of the Portuguese Association of Insurers and invited Lecturer during 20 years at the University of Barcelona, the ASAE University in Bucharest and several other Portuguese universities. Currently he is Partner and Managing Director of ACTUARIAL Group, a consulting company specialized in actuarial science that works in 21 countries, with head-office in Portugal and offices at Dubai International Financial Center and Hong Kong. He published a book about Insurance Companies management and actuarial science papers at some scientific journals.



**Dr. Aurelie Pelfrene<sup>1\*</sup>, Antonio Bispo<sup>2</sup>, Nicolas Saby<sup>2</sup>, Celine Ratie<sup>2</sup>, Alexis Durocher<sup>2</sup>**

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<sup>2</sup>INRAE, Info and Sols, F-45075 Orleans, France

## **Oral bioaccessibility of metal(loid)s as a relevant indicator for the health-environment link – Case study on arsenic in contaminated soils**

The Haute Autorite de Sante (HAS), a French health agency, recently published a best practice recommendation for healthcare professionals on the screening, management and monitoring of populations living on sites and soils contaminated or at risk of arsenic pollution. More specifically, the focus is on the concentration of bioaccessible arsenic in soil, i.e. the proportion of the metalloid capable of being solubilized in digestive fluids when soil particles are ingested and absorbed by the body. Thus, when the concentration of bioaccessible arsenic in soil exceeds 25 mg/kg, HAS recommends population monitoring.

To date, only the map of predicted total arsenic levels in France is available, based on measurements of 2,240 sites from RMQS (the Soil Quality Measurement Network). Approximately 350 soil samples among the 2,240 were collected throughout France, in areas with the highest concentrations. The objective of this study was to determine the oral bioaccessibility of arsenic using two in vitro methods (Unified Bioaccessibility Method ISO 17924 and a simplified method currently undergoing ISO standardization). Currently, ISO 17924 is considered as the reference method in France recommended by French Ministries in the national methodology for managing polluted sites and soils.

For the soil samples selected, total arsenic concentrations ranged from 25 to 412 mg/kg, while bioaccessible concentrations ranged from 0.7 to 76 mg/kg. Expressed in relation to total concentrations, percentages of bioaccessible arsenic ranged from 1.6 to 45% (median 7.1%). These results highlight the importance of considering bioaccessibility when assessing population exposure. Indeed, with one exception, predicted bioaccessible concentrations are below the threshold value of 25 mg/kg. Moreover, the percentages of bioaccessible As are relatively low (< 10% on average).

The aim of this study is to demonstrate the value of measuring bioaccessibility using in vitro tests to define appropriate management measures and recommend population monitoring.

### **Audience Take Away Notes**

- Raise awareness on the concept of bioaccessibility
- Promote the use of in vitro method to measure the oral bioaccessibility of metal(loid)s as a relevant indicator for the health-environment link

### **Biography**

Dr. Aurelie Pelfrene is Associate Professor in Environmental Toxicology at LGCgE-JUNIA, France. Over the last 15 years, she dedicated her research to the impact of metallic pollutants on humans. Her research interest is based on the assessment of human exposure through ingestion and inhalation of soil particles and dust, and consumption of homegrown vegetables cultivated in contaminated soils. Her works take into account the metal(loid) bioaccessibility to promote more proportionate and cost-effective remediation of contaminated land. She is a member of Bioaccessibility Research Group of Europe, working to develop harmonized protocols for bioaccessibility testing; member of the editorial board of EGAH journal; and author of around 45 scientific papers in refereed journals.



**Dr. Sessa Dassanayake<sup>1\*</sup>, Joshua P. French<sup>2</sup>**

<sup>1</sup>Department of Mathematics and Computer Science, Loyola University New Orleans, New Orleans, Louisiana, United States

<sup>2</sup>Department of Mathematical and Statistical Sciences, University of Colorado Denver, Denver, Colorado, United States

## New temporal methods for detecting disease outbreaks

A new procedure for detecting disease outbreaks using multiple data streams is presented. Three popular methods for identifying temporal clusters in Statistical Process Control (SPC) – the Shewhart chart, the CUSUM, and the EWMA – are extended for detecting disease outbreaks in multiple geographic regions. The proposed method has some features that are more advantageous for disease surveillance than most conventional SPC methods. The proposed method does not assume the disease counts to follow a specific distribution, as disease count data tend to violate assumptions of conventional SPC methods. A data-adaptive approach is used with the proposed method to regularly update baseline data to account for population changes over time, unlike conventional methods that rely on fixed baselines. The relatively low false alarm rate is a highlight of the proposed method, as excessive false alarms are a common problem with conventional SPC methods. The proposed method uses p-values and controls the false discovery rate enabling the utilization of more powerful multiple comparison procedure as opposed to conventional SPC methods that rely on less powerful family-wise error rate control methods. Through extensive simulation studies, it is shown that the EWMA and CUSUM methods have superior performance over the long-established Shewhart charts. The rapid detection ability of the method is illustrated with the 2011 E.Coli outbreak in Germany.

### Audience Take Away Notes

- The presentation provides novel methodologies to design disease surveillance systems
- Other faculty with research interests in areas such as outbreak detection, biostatistics, etc., could use this work to expand their own research

### Biography

Dr. Dassanayake is an Assistant Professor of Statistics at the Department of Mathematics and Computer Science at Loyola University New Orleans. He received his PhD in 2016 from University of Colorado Denver.



**Dr. Ana Sofia R. Tavares<sup>1\*</sup>, Elisabete Carolino<sup>1</sup>, Pedro Teques<sup>2</sup>, Luis Calmeiro<sup>3</sup>, Sidonio Serpa<sup>4</sup>**

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<sup>2</sup>Instituto Politecnico da Maia / Instituto Universitario da Maia, Portugal

<sup>3</sup>Nanyang Technological University, National Institute of Education, Singapore

<sup>4</sup>Faculty of Human Kinetics, University of Lisbon; CIDEFES, Faculty of Physical Education and Sport, Lusofona University, Portugal

## Protective factors of performance-enhancing substance use in a sample of Portuguese gym-goers

**Background:** Nowadays, the increased Performance Enhancing-Substance (PES) use in fitness centers is seen as a problematic phenomenon, since it has potential to grow, and could be seen as an emerging public health and societal concern. Studies focusing on PES use among gym-goers are few and they do not provide information concerning protective factors that justify the refusing intention to use these substances. Understanding the underlying psychosocial mechanisms of PES use and the protective factors of the gym-goers who refuse the use of these substances could help identifying those who are most resistant to PES use.

**Aim:** To investigate the protective factors (e.g., sociodemographic factors, exercise profile, gym modalities, peers, social influence, attitudes, subjective norms, beliefs, and intentions) of PES refusing intention in gym-goers.

**Participants:** A convenience sample of 453 Portuguese gym-goers having the mean age of 35.64 (SD = 13.08).

**Tool:** Web self-administered questionnaire containing questions related to sociodemographic characteristics and self-reported use of PES, as well as the QAD-Fit (Tavares et al., 2019) based on the Theory of Planned Behavior which is composed by questions grouped on four dimensions (attitudes, beliefs, intentions, and subjective norms).

**Procedures:** Data was collected using an on-line self-administrated questionnaire, and results were analysed using Decision Trees, which are a method widely used in classifying and identifying profiles, in machine-learning and data mining.

**Results:** 88,9% of gym-goers reported the refuse of prohibited PES, showing that being woman, training less frequently, not practicing bodybuilding and having a negative intention to consume PES, could be considered protective factors for PES use.

**Conclusion:** Results provide identifying the protective factors associated with PES refusing intention, which may support public health and clinical interventions to prevent abusive use of PES and improve the health and well-being of gym-goers.

**Funding:** This project was supported by FCT/MCTES (UIDB/05608/2020 and UIDP/05608/2020).

### Audience Take Away Notes

- The use of PES is not confined to elite and competitive sport, but is also spread throughout health clubs, gymnasia and other recreational activities
- The health risks gym-goers are exposed to are potentially more severe than for athletes because consumption is often done in the absence of regulatory guidelines or medical supervision



- The long-term use of these substances (e.g., anabolic-androgenic steroids or AAS, stimulants, erythropoietin, human growth hormone, diuretics) without proper control has been associated with several physical disorders (e.g., metabolic, endocrine, infectious, hepatic, renal, cardiovascular disorders) and psychological symptoms (e.g., depressive symptoms, antisocial and violent behaviors, suicidality) that may lead to irreparable health consequences
- Focusing on the study of protective factors of PES use can lead to an important complement to the ongoing research about risk factors related to PES use
- The search for protective factors does not involve the tie in of PES refusing intention but may also comprise a more generic protective process that applies to both users and nonusers of PES, which can contribute to building multifaceted interventions for the prevention of PES use in gym/fitness context

### **Biography**

Dr. Ana Sofia Tavares, Full Professor at the Department of Diagnostic, Therapeutic and Public Health Sciences and an integrated Member at H&TRC – Health and Technology Research Center of Lisbon School of Health Technology, Polytechnic Institute of Lisbon. Teacher of several curricular units in the degree in Biomedical Laboratory Sciences, and in the master's in Clinical Laboratory Technologies. As main research interests, the areas of Clinical Chemistry, Epidemiology, Doping, Behaviors, and additions with direct impact in terms of Public Health stand out, highlighting the investigation of attitudes and motivations that lead the individual to consume performance-enhancing substances in the practice of physical activity. She integrates several national and international funded projects and holds several publications as author and co-author. Member of the Human Enhancement Drugs Network.



**Rabbi Avrohom Marmorstein**

Hackensack University Medical Center, United States

## **Competing public health ethics: Quarantining for safety vs. Isolation anxiety and depression**

The first response to the worldwide COVID19 pandemic was to impose extreme constraints on activities which could allow spreading of a virus. Offices switched to remote work, schools tried distance teaching, gyms closed and houses of worship abandoned live services and we entered a state of lockdown. Zoom became a new normal, and this may have slowed progression of infection and prevented collapse of the health care system. However, isolation probably harmed the population, children are often years behind in progress, mental health issues have soared. Statisticians will study different locations and the risk-benefit ratios of stringent precautions. This presentation by a healthcare ethics professional who is also a member of the clergy, will question if the value of communal activities was underappreciated by those who made the guidelines. Should the priority have been for small groups to continue communal activities? Should we have been pushing for outdoor class activities with students 6-8 foot apart? Outdoor religious services to continue spiritual support and congregational strength? Could it be that a scientific bias underestimates value of congregate activity. Implications for management of subsequent epidemics will also be discussed.

### **Biography**

Avrohom Marmorstein is an ordained orthodox rabbi who has served as spiritual leader of congregations in New York City. He has provided pastoral care to hospital patients as a member of the spiritual care team at Englewood Hospital, Valley Hospital and the Hackensack University Medical Center, flagship hospital of Hackensack Meridian Health Network. He has received a Masters of Science in Bioethics from Mount Sinai School of Medicine-UGC (Clarkson) joint program. He is an ASBH certified Healthcare Ethics Decision Consultant (HCEC-C). He has written on many topics related to Jewish law, and on issues of bioethics. He has served on Ethics Committees and Institutional Review Boards for several hospitals and has presented at national and international conferences.



**Dr. Amir Hadanny, MD, Ph.D**

Aviv Clinics Chief Researcher and Head of Global Clinical Operations, The Villages, Florida, United States

## **Innovative approach to healthy aging utilizing hyperbaric oxygen therapy**

**T**his presentation from Dr. Amir Hadanny will highlight the relationship between oxygen, cognitive health and the aging process. Both have participated in extensive research and clinical studies on this topic and have valuable insight to share with the Public Health Conference. Dr. Hadanny help patients worldwide suffering from age-related health issues, whether it be symptoms of a disease or the natural cognitive changes that occur as people grow older. This presentation will discuss the latest scientific advancements in delaying age-related health issues, including how Aviv Clinic's multidisciplinary program enables individuals to take a proactive and holistic approach to healthy aging and slowing the decline of brain and body function.

While Hyperbaric Oxygen Therapy (HBOT) is the center of the Aviv Medical Program, the clinic provides patients with several specialists under one roof to manage neurocognitive symptoms. This team of specialists includes physicians, dieticians, neuropsychologists, physiotherapists, psychologists and more to help patients achieve brain health recovery. This HBOT protocol has helped people who have exhausted all other options while trying to return to their normal selves.

HBOT, in conjunction with Aviv's protocol, has been proven to help with age-related issues. The natural aging process and age-related illnesses lead to a depletion of oxygen in the body, causing a decline in cognitive abilities. HBOT has regenerative effects by delivering 100% pure oxygen to the body which assists in healing non-necrotic tissue damage in the brain by triggering neuroplasticity, creating new stem cells and increasing blood flow.

Dr. Hadanny will share their findings from case studies and detail the results they have seen firsthand, including a recent study around cognitive enhancement in older adults and the positive results seen in their attention and information processing speed. Both experts are passionate about sharing and educating the Public Health Conference attendees on the latest scientific discoveries and the impact HBOT can have on patients suffering from age-related diseases.

Here is a brief synopsis of the research and results to be presented and discussed: A 3-month randomized controlled clinical trial was conducted with 63 older adults. Some study participants underwent HBOT, while others were placed in the control group. The trial's primary goal was to understand and measure cognitive function post treatment. After the trial was completed, cerebral blood flow (CBF) was evaluated by perfusion magnetic resonance imaging to gauge overall results.

This study showed that HBOT induces cognitive enhancements in older aging adults. Significant improvements seen in participants included attention, information processing speed and executive functions, which normally decline with aging.

### **Audience Take Away Notes**

- The importance of an individual's brain health during the aging process and how oxygen loss damages the brain, causing cognitive and physical decline, and in turn expediting the aging process and increasing the risk of suffering from age-related diseases
- How HBOT can promote healthy aging, repair damaged brain tissue and help people suffering with symptoms of age-related diseases
- Results from Dr. Amir Hadanny's research using a comprehensive approach centered around HBOT and paired with physical and cognitive coaching, along with what they learned about the relationship between the brain, oxygen and various age-related symptoms

### **Biography**

Dr. Amir Hadanny is a board-certified neurosurgeon, researcher and physician at Aviv Clinics, and Chief Medical Research Officer at the Sagol Center for Hyperbaric Medicine and Research. For the past decade, he has researched neurorehabilitation, neuroplasticity and physiology, publishing more than 25 papers on the effects of HBOT on cognitive and physical performance. Before joining the Sagol Center, Dr. Hadanny was Chief Resident in the Galil Medical Center neurosurgery department. He earned his MD from Tel Aviv University and his Ph.D. in Bioinformatics and Machine Learning from Bar Ilan University.



**Dr. Heather Olivier, Ph.D, LPC, PMH-C, CCTP, NCC**

Southeastern Louisiana University, Baton Rouge, LA, United States

## **Constructing a holistic model of care addressing lasting mental health impacts of multidisciplinary perinatal practitioners in a post-pandemic world**

Existing literature is rich with evidence of healthcare workers' high rate of burnout during the pandemic. While many studies have identified the lasting impacts of being a healthcare worker post-pandemic, the literature does not illuminate the experiences of healthcare practitioners specifically working with the perinatal population. Furthermore, the experiences of perinatal healthcare workers that have been captured focus on a single discipline at a time, as opposed to providing intersectionality among disciplines and among the data. The aim of this study is to bridge the gaps between multiple disciplines providing care to individuals in the perinatal period by illuminating the shared mental health impacts resulting from providing care to perinatal patients during and after the pandemic. To do so, the study will differentiate between the various practitioners involved in a multidisciplinary team of care for perinatal patients, distinguish between their roles in providing care, and outline the existing literature that reveals mental health disparities within each discipline. After deconstructing the multidisciplinary team, the current study will reconstruct the multidisciplinary model in a holistic way that reveals intersectionality among disciplines regarding mental health disparities. By outlining the intersectionality of mental health impacts across disciplines, improved models of care can address mental health disparities from a systemic framework, encompassing the healthcare practitioners, the perinatal patients, and the community as a whole.

### **Audience Take Away Notes**

- Participants will benefit from this presentation as they will be able to
- Differentiate between the influential factors post-pandemic contributing to lasting mental health impacts unique to each discipline involved in perinatal healthcare
- Reconstruct an individualized perspective of each discipline to one of an interdisciplinary view of lasting impacts resulting from the pandemic that increase mental health disparities among perinatal practitioners as a whole
- Evaluate how patient care is influenced when reproductive practitioners do not receive adequate mental health care; and
- Evaluate the systemic factors contributing to mental health care disparities for reproductive practitioners in order to construct a holistic model of care that considers the mental health of the reproductive practitioners

### **Biography**

Dr. Heather Olivier is a psychotherapist specializing in working with clients experiencing traumatic loss, complicated grief, and psychosomatic trauma in the perinatal period. After obtaining her Ph.D. at the University of New Orleans in

the United States, Dr. Olivier has continued her research regarding cultural norming processes surrounding perinatal loss, the impact of the socialization of emotions on grief, and societal factors influencing the therapeutic process. In addition to being a National Certified Counselor (NCC) and holding specialty certifications in perinatal mental health (PMH-C) and trauma therapy (CCTP), Dr. Olivier is among the first cohorts trained in Brainspotting through the perinatal lens as well as Parental Leave Coaching.





**Dr. Angela Groves**

Bronson School of Nursing, Western Michigan University, Kalamazoo, Michigan, United States

## Peer (dyadic) support intervention for African American women with hypertension

African American women have a higher prevalence of hypertension than women of other ethnicities. Interventions have not adequately addressed the higher prevalence of hypertension in this population. Social support networks can be an effective strategy for improving hypertension self-management behaviors. The objective of this study was to evaluate the feasibility of an 8-week peer (dyadic) support intervention to improve diet adherence and reduce systolic blood pressure among older African American women with hypertension and describe the relationship that occurred during the intervention. This mixed methods study used a convergent parallel design. A total of 40 African American women diagnosed with hypertension, aged 60 and older were paired to form 15 dyads. All participants completed a 3-hour training session consisting of home blood pressure monitoring, DASH diet, and communication. Participants completed pre and post DASH diet surveys, and the Social Support Survey (MOS) post intervention. At the end of the 8-week intervention, participants discussed their experiences in a 60-minute focus group session. Content analysis was used to analyze focus group interviews. Preliminary data analysis will be presented. Emerging themes included, accountability, epiphany, challenges with hypertension management, communication with each other, and receiving support. Preliminary findings suggest that peer (dyadic) support is feasible and can be an effective intervention strategy to improve diet and blood pressure management. Future studies should address specific challenges to hypertension management identified by participants. Lastly, this study used random within site pairing for participants without an identified partner. Future studies should develop criteria for matching partners.

### Audience Take Away Notes

- Audience will increase their knowledge of a practical hypertension intervention for African American women
- Audience will learn how a peer (dyadic) support intervention can improve health outcomes and decrease health disparities in this population
- Audience will increase their knowledge concerning the health needs of African American women with hypertension

### Biography

Dr. Angela Groves is an Assistant Professor of Nursing in the Bronson School of Nursing at Western Michigan University. She earned a PhD in Nursing from Hampton University, Hampton Virginia, United States. Dr. Groves primary research interest is in the area of health disparities among midlife, and older AA women with hypertension. Her current research focuses on of a peer (dyadic) support intervention to improve diet adherence and reduce systolic blood pressure among African American women with hypertension. Dr. Groves has published several articles related to hypertension among African American women.



**Brook Lyn Mercado**

Public Health, Kent State University, Kent, OH, United States

## Health disparities during the COVID-19 pandemic in the United States Territories

The people of the United States territories have faced healthcare inequalities for years due to ongoing, complex issues with their public health infrastructure. During the 2009 influenza pandemic, the U.S. territories faced several dilemmas such as insufficient funding, a lack of laboratory equipment, personal protective equipment, and surveillance to predict the spread of the disease, due to the ongoing health disparities and complications with their public health infrastructure (Dopson, 2016). These patterns have also been seen during the COVID-19 pandemic in addition to new dilemmas such as damaged physical public health infrastructure. The objective of this research was to compare and contrast the effects of COVID-19 in the U.S. territories to the U.S. while examining the social and cultural conditions of these territories. A descriptive analysis of data on COVID mortality rates and vaccination rates has been completed showing that disparities did occur throughout the pandemic. These dependent variables were explored for all of the U.S. territories and thoroughly compared to one another to make a descriptive assessment of the vaccination and mortality outcomes. Relevant social and cultural conditions were examined as well (i.e. effects on infrastructure from natural disasters, and policies in place during the pandemic). Conclusions about these outcomes within the territories have allowed us to recognize distinct patterns from the latest data available. There are differences in how these disparities occur in the U.S. territories and how COVID-19 has affected them. Through this study, there have been new themes seen throughout the pandemic such as a sense of community and support, geographic isolation, and politics that may have contributed to the vaccination rates and mortality rates seen in these territories. The implications of this study push for future research to be completed as casual analyses were not completed and should be looked at moving forward.

### Audience Take Away Notes

- Ongoing health disparities that occur within the U.S. territories
- How COVID-19 impacted disadvantaged populations of the U.S. territories
- Foundational piece hopes to create new questions for further research regarding the impacts of COVID-19

### Biography

Brook Lyn Mercado graduated in December with her Bachelor's Degree in Public Health. In the fall, she will be attending the University of California Berkeley to obtain her Master's in Public Health. Her research interests lie within social and behavioral health as well as health policy. She hopes to continue her research focussing on health inequities within the U.S. territories and potentially advocating for policy change.

MARCH  
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Joint Event

# Nursing & Public Health 2024

DAY 01  
**POSTERS**



**Eriko Mizuno<sup>1\*</sup>, Sakai I<sup>2</sup>, Maeda J<sup>3</sup>, Takataya K<sup>4</sup>**

<sup>1</sup>Graduate School of Health Care and Nursing, Juntendo University, Chiba, Japan

<sup>2</sup>Graduate of Nursing Science, University of Yamanashi, Yamanashi, Japan

<sup>3</sup>Faculty of Nursing, Tokyo Ariake University of Medical and Health Sciences, Tokyo, Japan

<sup>4</sup>Graduate of Nursing Science, University of Yamanashi, Yamanashi, Japan

## Literature review of physical health for people with schizophrenia

Sudden cardiac deaths in patients with schizophrenia are about three times higher than in the general population, high prevalence of diabetes and cardiovascular disease shortens life expectancy by up to 25 years, and the gap in average age at death between patients with schizophrenia and the general population widens each year. Inactivity is associated with reduced health-related physical quality of life. In addition, stigma is often a barrier that prevents smooth access to medical care and treatment. It is necessary to improve physical health in order to continue to live a life that is unique to the individual. Therefore, we conducted a literature review on physical health for persons with schizophrenia. Using the keywords schizophrenia, physical activity, lifestyle, quality of life, and health management, we searched MEDLINE, Medical Journal, CINAHL, and PsycINFO for original articles from 2002 to 2022. Forty-six articles were ultimately extracted and examined. The largest number of cross-sectional studies (21), longitudinal studies (12), literature studies (8), and intervention studies (5) were identified. The prevalence of obesity in outpatient psychiatric patients was high, a significant increase in abdominal circumference and BMI was found in the schizophrenia group, and there was a significant decrease in eGFR and increase in CKD ratio in the mood disorder group compared to healthy subjects. Furthermore, physical activity level was associated with patients' sense of purpose in life, and physical risk in patients with schizophrenia was influenced by both the inpatient or outpatient treatment environments. Lower physical activity is correlated with lower executive functioning, work motivation, and vitality. The study also found that lifestyle programs improved physical activity and metabolic health. Also, self-records improved weight maintenance, prevention awareness, and perception of eating behavior. In addition, health education programs increased the number of steps taken, aerobic exercise reduced psychiatric symptoms and improved cognition and cardiopulmonary function, and lifestyle-enhancing treatment improved metabolic function. Although each study has shown a certain level of effectiveness, the number of subjects was small, and the outcome measures varied. In light of the above, we believe that there is a need to develop a nursing support program that is effective in maintaining the physical health of patients with mental illness.

### Audience Take Away Notes

- Increased awareness of the need to assess physical health of patients with schizophrenia
- Early detection of physical complications in patients with schizophrenia
- Development of approaches to maintaining quality of life in persons with schizophrenia
- Understand of the importance of physical health care in psychiatry

### Biography

Professor Mizuno studied nursing science at the Tokyo Medical and Dental University and graduated with a MS in 1995. Afterwards, she did clinical practice in the psychiatry ward of the university hospital. She then researched stress management for family caregivers at home. She received her PhD degree in 2000. She has been involved in nursing education and has conducted research on medication psycho-education for schizophrenia, care for persons with mental illness of family members, and stigma in recovery, etc. She is now professor at Juntendo University, and has published and delivered more than 100 research papers, publications, and presentations.



**Yasuko Koyano<sup>1\*</sup>, Yumiko Shimizu<sup>1</sup>, Mariko Hattori<sup>2</sup>, Mariko Kaneko<sup>3</sup>**

<sup>1</sup>Psychiatric and Mental Health Nursing, The Jikei University, School of Nursing, Cyofu, Tokyo, Japan

<sup>2</sup>Community Nursing, Saitama Prefectural University, School of Nursing, Koshigaya, Saitama, Japan

<sup>3</sup>Psychiatric and Mental Health Nursing, Wayo Women's University, School of Nursing, Ichikawa, Chiba, Japan

## Development of a mental health program using self-compassion

**Objective:** The aim of this study is to develop a mental health programme that incorporates self-compassion into a conventional stress reduction programme.

**Background:** The COVID-19 pandemic caused not only an epidemic of anxiety in the world, but also an increase in suicides. Although the effects of the pandemic are now in the past, people's mental health has not returned to pre-COVID-19 pandemic levels. Our survey in Japan in January 2023 showed that people's mental health was still at a level of 'psychological stress equivalent'. It is clear that people are still under stress, even though life is returning to the way it was before the COVID-19 pandemic. In response to the stress coping of people adjusting to the changes caused by the COVID-19 pandemic, the author focused on self-compassion. Self-compassion is the ability to be kind to oneself in difficult situations, to accept one's feelings as they are, in a balanced way, and to recognise that one's suffering is shared by others and that this is the human way of being (Neff, 2003). Higher levels of self-compassion are associated with higher levels of happiness, life satisfaction, motivation, relationships, physical health, anxiety and depression, and lower levels of resilience, as reported by Neff et al. (Neff, Germer, 2019).

**Methods:** A four-session programme was developed by adding self-compassion enhancement work from Neff's (Neff, 2019) workbook to the stress management programme.

**Results:** The mental health programme with self-compassion is a four-session programme of 90 minutes per session, delivered in groups of up to 10 participants. The sessions consist of lectures and work on objectifying the state of mind, self-compassion, deepening mindfulness and taking care of oneself.

**Consideration:** The four sessions of the mental health programme developed are half the number of sessions of the regular eight-session self-compassion course. A pilot study of a mental health programme incorporating self-compassion work into stress management was conducted and participants indicated that the stress awareness and soothing touch methods were effective. The programme should be implemented in the future to test its effectiveness.

### Audience Take Away Notes

- Audience can use the four sessions of the self-compassion program as a mental health program to reduce stress
- Nurses and researchers involved in health care can help maintain and improve people's mental health with the self-compassion-enhancing programs developed
- Programs can be used to help people reduce depression and improve resilience
- The program can be used to improve people's stress management as well as their wellbeing

## **Biography**

Dr. Koyano studied Nursing at St. Luke's International University, Japan and graduated as MS in 1998. She then joined the research group of Prof. Iwai at St. Luke's International University. She received her PhD degree in 2007 at the Tokyo Medical and Dental University. After one year she obtained the position of lecturer and an Associate Professor at the Juntendo University. After that she obtained the position of Professor at the Jikei University. She has published more than 50 research articles in Japanese journals.





**Nana Jiang<sup>1\*</sup>, Weiying Zhang<sup>2</sup>**

<sup>1</sup>Department of Respiratory and Critical Care Medicine, East Hospital Affiliated to Tongji University, Shanghai, China

<sup>2</sup>Department of Nursing, East Hospital Affiliated to Tongji University, Shanghai, China

## **Analysis of the effect of Yang-yin acupoint massage combined with five-tone therapy on insomnia among middle-aged and young patients**

**Objective:** To analyze the efficacy of Yang-yin acupoint massage combined with five-tone therapy in treating insomnia among middle-aged and young patients.

**Methods:** Fifty individuals with insomnia, aged between middle-age and young adulthood, were selected from the East Hospital Affiliated to Tongji University between June 2022 and June 2023. Pittsburgh Sleep Quality Index (PSQI) was compared before and 30 days after the intervention with self-induced Yang-yin acupoint massage combined with five-tone therapy.

**Results:** The scores obtained from the PSQI, which included parameters such as sleep quality, sleep onset latency, total sleep time, sleep efficiency, sleep disturbances, use of hypnotic drugs, and daytime functioning, showed significant differences among young and middle-aged patients after 30 days of treatment compared to the scores before the intervention ( $P < 0.001$ ).

**Conclusion:** The combination of Yang-yin acupoint massage and five-tone therapy demonstrates effectiveness in alleviating insomnia symptoms among both young and middle-aged patients, thus enhancing their overall quality of life. Moreover, the method is safe, convenient and feasible, and holds strong popularization value.

### **Audience Take Away Notes**

- Introduces the theoretical basis and operational essentials of traditional Chinese medicine for the improvement of insomnia by acupoint massage with Yang-yin combined with five-tone therapy, and medical workers can learn the specific implementation
- Introduces a new home-operable treatment method to improve insomnia, and broadens clinical treatment methods of insomnia
- Guide patients to learn the methods of acupoint massage and five-tone therapy, and continue extended care at home, save time for medical treatment in hospital, improve work efficiency and quality of life
- Provide traditional Chinese medicine reference for the clinical development of new treatment methods for other diseases

### **Biography**

Mrs. Nana Jiang studied nursing at Shandong University and received her bachelor's degree in 2008. Since 2012, she has been working as head nurse in the respiratory department. She received her master's degree from Shandong University of Traditional Chinese Medicine in 2013. In 2020, she joined East Hospital Affiliated to Tongji University and won the title of deputy chief nurse in 2022. As the first author, she published 1 article in SCI, IF6.4, and more than 10 articles in core journals. She presided over 7 projects and obtained 6 patents as the first inventor.



**Xiaohuan Qin<sup>1\*</sup>, Zhuojun Xu<sup>2</sup>**

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## Analysis of related factors affecting the therapeutic effect of DELP

**Objective:** To observe the therapeutic effect of DELP on blood lipid, and to explore the factors that may improve the therapeutic effect of DELP, so as to provide relevant experience for clinical treatment.

**Methods:** A total of 35 stroke patients admitted to the intensive care unit from January 2021 to August 2022 were selected to receive DELP treatment according to the patients' tolerance capacity and vascular conditions. By changing the number of treatment cycles and the amount of saline prefilling, the changes of triglyceride, high density lipoprotein, low density lipoprotein, total cholesterol, hematocrit, CRP and other related indexes were compared within three days before treatment and one day after treatment. By comparing the therapeutic effect, the related factors that may improve the therapeutic effect of DELP were discussed.

**Results:** Total cholesterol ( $5.01 \pm 4.10$ ), high density lipoprotein ( $1.05 \pm 0.90$ ), low density lipoprotein ( $2.91 \pm 2.63$ ) before treatment, total cholesterol ( $3.23 \pm 2.84$ ), high density lipoprotein ( $0.9 \pm 0.83$ ), low density lipoprotein ( $1.79 \pm 1.63$ ) after treatment; the differences were statistically significant ( $P < 0.001$ ). DELP significantly improved patients' total cholesterol, high density lipoprotein, low density lipoprotein, and CRP. Preoperative saline prefilling was correlated with the degree of HDL change, and the more saline prefilling, the greater the degree of HDL decline (correlation coefficient = 0.40,  $P = 0.021$ ); while the number of cycles was correlated with the degree of total cholesterol change, the more cycles, The more significant the reduction of total cholesterol was (correction correlation coefficient = 0.439, correction  $P = 0.009$ ).

**Conclusions:** DELP can significantly improve total cholesterol, high density lipoprotein, low density lipoprotein and CRP, and play a positive role in the treatment of clinical patients. The number of DELP cycles was significantly correlated with the decrease degree of total cholesterol, and the amount of saline prefilling was significantly correlated with the decrease degree of HDL.

### Audience Take Away Notes

- To understand the effect of patients who use DELP in neurology department
- To understand the related factors affecting the DELP effect of blood lipids
- By understanding the relevant influencing factors (such as the number of cycles, the amount of pre-filled fluid, the amount of sodium citrate, and the method of nursing) of DELP, in order to achieve better treatment and nursing effects

### Biography

Mrs. Qin, graduated from Anhui Medical University, is now working as a postgraduate student in Tongji University. Published two papers and obtained four utility model patents.



**Irene Harrison<sup>1\*</sup>, RN, PGDipNur, MProfPrac, Christine Mercer<sup>2</sup>, RN, BA, MEd, PhD, FCNA**

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## Management of acute rheumatic fever and rheumatic heart disease

**I**n 2020 a research review was conducted that evaluated the use of Rapid Antigen Detection Testing (RADT) as a means of early and accurate detection of strep A infections among school children. It was argued that the use of RADT by Public Health Nurses would reduce the risk of complications of Group A Streptococcus (GAS) throat infection, and the risk of complications of developing Rheumatic Fever.

**Aim:** The aim of this current analysis is to explore reports (governmental reports, policies, research articles, annual reports) to determine any changes in screening, new initiatives, or managing GAS or prevention of the onset of Acute Rheumatic Fever (ARF) and Acute Rheumatic Heart disease (RHD) in Aotearoa New Zealand and Australia. New Zealand Māori, Pasifika, and Aboriginal and Torres Strait Islander peoples are among the populations with the highest rates of ARF in the world and experience an inequitable burden of RHD. The process of conducting this review is content analysis. The framework for analysing the content in the reports is the principles of Primary Health Care which guide health and wellness promotion as well as fostering frameworks for preventing illness.

**Findings:** The following findings emerged under each key principle Accessible health care; barriers to healthcare were not only linked to physical locality but also the determinants of health (transport, income – cost of seeing GP, prescription costs.

**Appropriate technology:** The evolving technological advancements within healthcare are essential to improve diagnostic testing. The RADT molecular point-of-care tests play a pivotal role in diagnosis and treatment regimens they are especially needed in remote areas where accessibility to laboratories for GAS testing requires lengthy waits and are redundant by the time results are returned to the ordering practitioner.

**Health promotion:** Programmes such as those offered through the Mana Kidz intervention have extended the service to incorporate a broad range of health promotion. This may mean existing services are resourced to provide more wrap-around care. Cultural sensitivity and cultural safety: Indigenous-led models of care to be established and ensure cultural safety and sensitivity, including community contribution and ownership of the processes and outcomes of the research programs.

**Intersectional collaboration:** The upgrade of management systems to improve coordination of care and effective delivery is required to meet the needs of the community.

**Community participation:** Is an essential element in reducing rates of RF through partnering with Māori, Pasifika, and Indigenous agencies, the expertise of the community is required when planning, designing, and delivering initiatives and services related to RF prevention and management. This builds upon social capital, and strong communities based on trust, empowerment, and inclusive healthcare.

### Audience Take Away Notes

- **Technologically savvy:** Technological advances, the use of the Point of Care test can provide test results within five to ten minutes and molecular tests are more accurate and sensitive than the gold standard culture method
- **Centralised data management system:** A national database is required to keep track of patient's health records and movement within the healthcare system
- **Advocacy fuelled:** cultural safety and sensitivity reinforcement to reduce bias is a key factor in driving and achieving equity within the healthcare workforce
- **Partnership with a cultural lens:** For Māori, Pasifika, and Aboriginal and Torres Strait Island the importance of governance, co-designing culturally appropriate educational and health promotional resources to best meet the service user and communities needs in reducing Acute Rheumatic fever
- **Wrap-around service:** A wrap-around service is needed to reduce the gaps within service operation and reduce the disparities, inequities, and service deficits that exist within service delivery

### Biography

Irene April Harrison is an academic lecturer who is teaching in the Bachelor of Nursing Program specializing in Primary healthcare - Hauora Maori health papers. Irene Harrison is an evolving researcher with an interest in indigenous populations. Irene is a community nurse prescriber. Irene has led and managed health teams for the Mana Kidz Rheumatic Fever Prevention program based in South Auckland, New Zealand. Receiving two health awards: 2017 Whanau Whakaaro tika Whanau well-being and 2018 -Whanau Whai Hua – Outcomes matter Mana Kidz service delivery team-Hauora Coalition.



**Prof. Dr. Malgorzata Szczuko<sup>1\*</sup>, Urszula Szczuko<sup>1</sup>, Iwona Szydłowska<sup>2</sup>, Jolanta Nawrocka Rutkowska<sup>2</sup>, Maciej Zietek<sup>3</sup>**

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## The need to introduce interdisciplinary care for PCOS patients

**P**COS (Polycystic Ovary Syndrome) is a disease whose progression and consequences are largely modifiable and dependent on the approach of the patients, although there are many genetic determinants. Disorders of various metabolic pathways leading to disturbances in lipid, carbohydrate, and hormonal metabolism in patients require the implementation of a comprehensive dietary strategy and medical care in this group. This patient group is characterized by chronic oxidative stress, inflammation, sleep disorders, and changes in mental health parameters, which consistently lead to the development of serious diseases. The coexistence of diabetes, visceral organ steatosis, infertility, atherosclerosis, and other cardiovascular diseases, including cancer, is often observed. We propose lifestyle modification education, including increased physical activity and appropriate diet selection, as well as the inclusion of natural herbal supplementation and pharmacological treatment.

### Audience Take Away Notes

- A multidisciplinary approach taking into account the phenotypes of women with PCOS will enable targeted assistance
- It will delay the development of chronic diseases in patients, which poses a significant burden to public health
- A comprehensive approach to the problem will provide new information helpful in organizing care for PCOS patients

### Biography

Prof. Dr. Malgorzata Szczuko studied biology at the University of Szczecin, Poland, where she obtained her Master of Science degree in 2000. Due to her research interests, she completed her doctoral studies in the field of specialized nutrition in 2009. Since 2010, she has been a scientific and teaching staff member at the Pomeranian Medical University in Szczecin, where she focuses on comprehensive clinical nutrition in chronic diseases involving inflammation and activation of the arachidonic acid cascade from cell membranes. She obtained the title of professor of medical and health sciences in 2022. She is the author and co-author of over 100 scientific publications with a cumulative impact factor of 280 points, over 500 citations, and a Hirsch index of 16.

**Maciej Ziętek<sup>2</sup>, Justyna Kikut<sup>1</sup>, Szczuko Małgorzata<sup>1\*</sup>**

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**Introduction of separate dietary guidelines for obese pregnant women may be necessary**

According to WHO, more than 40% of women of reproductive age are overweight and up to 15% are obese. The aim of this study was to evaluate the intake of specific nutrients and dietary components by obese and normal weight women before pregnancy and the effect of nutritional intervention. Material and methods: The study included 62 women who were 10 to 36 weeks pregnant. In the Study Group (SG) we distinguished 44 women including 29 obese women (BMI>30) and 15 overweight (BMI>25), in the Control Group (CG) we included 18 women with normal weight before pregnancy (BMI 20-25). A total of 49 women including 31 overweight and 18 from the control group attended the follow-up visit after nutrition education. Some of the women in the SG group did not attend the follow-up visit (n=7), and several women had miscarriages (n=5). Results: A high percentage of fat energy intake was demonstrated before the nutritional intervention. Fiber deficiency was observed in SG. The reference daily intake used in nutrition labelling on foods in relation to vitamin D, folate and iron has not been reached however SFA, phosphorus and sodium were consumed in excess. After education a decreased percentage of energy intake from fat was observed in favor of energy from protein in both groups. The decrease in sodium, phosphorus, and SFA and sucrose intake in both groups has been observed. Conclusions: In the present study, dietary intervention had a positive effect on reducing SFA and sucrose intake from diet. In addition, due to education, women decreased slightly the proportion of fat in the diet in favor of energy from protein. The obese women maintained a lower caloric diet (before education) than women with normal body weight in the early stages of pregnancy even though their diet was less valuable in terms of density. This is convincing to other metabolic mechanisms and may suggest the need to introduce changes in the nutritional guidelines for obese pregnant women. The level of knowledge of pregnant women concerning proper nutrition during pregnancy seems to be insufficient. Therefore, it is worth considering the introduction of nutritional education of all women in the reproductive period.

**Audience Take Away Notes**

- A multidisciplinary approach taking into account a woman's pre-pregnancy nutritional status will enable targeted assistance
- It will delay the development of chronic diseases in women (gestational diabetes, preeclampsia, macrosomia, premature birth) and their children (epigenetic changes in gene expression), which will constitute a significant burden to public health in the future
- A comprehensive approach to the problem will provide new information helpful in organizing care for obese pregnant women



## Biography

Dr. Maciej Ziętek studied at the Faculty of Medicine of the Pomeranian Medical University in Szczecin, receiving his medical degree in 1995. He worked at the Department of Pregnancy and Childbirth Pathology, successively obtaining the degrees of Doctor of Medicine in 2000 and Associate Professor of Medicine in 2022. He worked at the Department of Obstetrics in Lille, France. He obtained the title of specialist in obstetrics and gynecology in 2006, followed by the title of specialist in perinatology in 2020. His scientific achievements include more than 60 published scientific paper. Prof. Dr. Małgorzata Szczuko studied biology at the University of Szczecin, Poland, where she obtained her Master of Science degree in 2000. Due to her research interests, she completed her doctoral studies in the field of specialized nutrition in 2009. Since 2010, she has been a scientific and teaching staff member at the Pomeranian Medical University in Szczecin, where she focuses on comprehensive clinical nutrition in chronic diseases involving inflammation and activation of the arachidonic acid cascade from cell membranes. She obtained the title of professor of medical and health sciences in 2022. She is the author and co-author of over 100 scientific publications with a cumulative impact factor of 280 points, over 500 citations, and a Hirsch index of 16.



**Prof. Takako Negishi<sup>1\*</sup>, PhD, RN, Sayaka Kon<sup>2</sup>, Aki Kawamura<sup>3</sup>**

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## Cognitive function and its association with frailty after the cessation of senior citizen classes for the elderly in the community in Japan

Community older people had to discontinue social activities due to the COVID-19 epidemic. The study investigated changes in cognitive function and frailty due to the cessation of activities in the senior citizen classroom.

Cognitive function did not decline over the three-year period. Cognitive memory and executive function were associated with low nutrition and physical activity. The study showed the need to maintain exercise function and prevent low nutrition in order to maintain cognitive function and prevent frailty.

**Objectives:** To determine the impact of social activity limitations related to the COVID-19 epidemic on the association between cognitive function and frailty in the elderly community.

**Methods:** Participants 65 years and older enrolled in the Senior Citizen Classroom Program (49 participants in 2019 and 19 participants in 2022).

Prospective cohort study; questionnaires were demographics, Kihon Checklist (KCL) and cognitive function tests (group-based Matsui word memory test, Yamaguchi Kanji code conversion test and word recall test). The KCL screens older people who will need long-term care in the near future. It consists of 25 questions in seven domains: activities of daily living, fall anxiety, low nutrition, oral function, cognitive function and depressed mood. The Matsui Word Memory Test consists of <immediate replay> and <delayed replay>. The immediate replay test assesses the ability to recall the required words in a short time. Delayed playback assesses the ability to recall, after a period of time. The Yamaguchi Kanji Conversion Test assesses frontal lobe function (executive function and attention). The Word Recall Test assesses the ability to recall as many animal words as possible in one minute.

Cognitive function was scored based on the total number of responses obtained.

Descriptive statistics were analyzed using SPSS, correlation analysis and t-tests. The significance level was set at  $p < .05$ .

**Ethical considerations:** the study was approved by the ethical review committee of the affiliated university.

**Results:** Participant demographics were baseline (20 men and 29 women, mean age 69.9 years, SD 3.7) and follow-up (12 men and 7 women, mean age 73.6 years, SD 3.6). There was no significant decline in cognitive function scores between 2019 and 2022. Cognitive function was maintained. The association between KCL and cognitive function in 2019 was that low nutritional status was positively associated ( $r = .323$ ) with kanji conversion (executive dysfunction). There were weak correlations with immediate playback ( $r = .254$ ) and word recall ( $r = .226$ ). The cognitively impaired group was significantly ( $p < .05$ ) associated with stair walking and fall anxiety.

**Conclusions:** Cognitive function in the elderly was relatively well maintained after discontinuation of social activities with COVID-19. Cognitive function was correlated with low nutritional status. Decline in cognitive function was associated with frailty risk, including exercise and nutrition. Maintaining exercise and preventing low nutrition are necessary to maintain cognitive function and prevent frailty.

### **Biography**

Takako Negishi, PhD, RN, is a professor at Tokyo, Kasei University, Japan. Her research investigates ways to improve health education, dementia care and the quality of health services for older people in order to improve geriatric health.



**Dr. Aki Kawamura<sup>1\*</sup>, Takashi Obuchi<sup>2\*</sup>, Fumi Koine<sup>3</sup>, Satoshi Yago<sup>4</sup>, Takahide Omori<sup>5</sup>**

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## **Social and emotional characteristics of 1 to 2 year olds differences by age in months and gender using J-ITSEA and comparison with U.S. data**

**Introduction and Objective:** In Japan, child-rearing anxiety among caregivers and child abuse have become major social problems. Childcare support tailored to the characteristics of young children is required. This study aimed to characterize the social and emotional problems and competencies of Japanese 1 – 2-year-olds by gender and by age in months and gender, and to identify differences with young children in the United States.

**Design and Methods:**

**Research Methods:** Cross-sectional online survey.

**Participants:** 1,000 infants aged 1 to 2 years without congenital diseases and their caregivers.

**Scale:** Japanese version of the Infant-Toddler Social and Emotional Assessment (J-ITSEA), a self-administered questionnaire consisting of 170 items, 4 domains, 17 subscales, and 3 item clusters. The J-ITSEA is designed to assess social and emotional problems in 12 – 35-month-old infants.

**Data collection and analysis:** An online survey was conducted. The J-ITSEA domains, subscales, and item group mean scores were compared for gender differences, age differences, and differences between Japan and the U.S. IBM SPSS Ver. 28 was used for the statistical analysis.

**Ethical considerations:** Approval was obtained from the Ethical Review Committee of the affiliated university.

**Results:**

**Difference in mean scores between boys and girls:** Boys have higher scores on the Externalizing domain, Activity/impulsivity and Aggression/Defiance subscale. Girls have higher scores on the Internalizing domain, Separation Distress and Inhibition to Novelty subscale, Competence domain, and all Competence subscales.

**Difference in mean scores by age groups:** Compared to other age groups, 12–17 -month -olds have lower scores on the Aggression/Defiance subscale of the Externalizing Domain, the Internalizing domain, the General anxiety and Inhibition to Novelty subscales of the Internalizing domain, Eating subscale of the Dysregulation domain, Competence domain and all subscales of the Competence domain, and Social relatedness item cluster, and higher scores on the Sleep subscale of the Dysregulation domain and Atypical item cluster. 18–23-month-olds have higher score on the Separation Distress subscale of the Internalizing domain than 30 – 35-month-olds.

**Difference in mean scores between Japan and the U.S.:** U.S. boys have higher scores on the Aggression/Defiance and Peer Aggression subscales of the Externalizing domain, Sensory sensitivity subscale of the Dysregulation domain, and Competence domain and all subscales of the Competence domain. Japanese girls have higher scores on the Internalizing domain and Depression/withdrawal and Separation Distress subscales of the Internalizing domain than U.S. girls. Japanese boys have higher scores on the Depression/withdrawal and Inhibition to Novelty subscales of the Internalizing domain than the U.S. boys.

**Conclusion:** Japanese boys have problems in the externalizing domain and Japanese girls in the internalizing domain. These problems tend to increase with age in months, and their competence also increase with age in months. U.S. infants have problems in the externalizing domain and higher competence, while Japanese infants have problems in the internalizing domain.

### **Audience Take Away Notes**

- The characteristics of social-emotional and competence problems of 1-2 year olds in Japan are presented
- Comparing data from different countries can help to understand the social-emotional characteristics of 1-2 year olds
- Help to improve support for caregivers according to age and gender

### **Biography**

Dr. Aki Kawamura received her master's degree from Tokyo Medical and Dental University in 2008 and her doctorate from Tokyo Medical and Dental University in 2014. Her research interests include parent-child interaction, social and emotional problems of young children, and long-term care prevention in the elderly. She is currently an Associate Professor at Wayo Women's University.

Takashi Obuchi graduated from Ritsumeikan University, Faculty of Letters, Department of Philosophy, Department of Psychology, and completed the master's program at Chiba University Graduate School of Education. He is a clinical developmental psychologist SV. He is involved in psychological development counseling clinical work at hospitals, health centers, local governments, etc., and has been a professor (developmental psychology) in the community school education practice department at Hokkaido University of Education, Kushiro Campus since 2022. He has been engaged in research on early detection of developmental disorders such as early signs of ASD and social behavior indicators in infancy.



**Sayaka Kon<sup>1,2\*</sup>, Chieko Kato<sup>3</sup>, Yoshiomi Otsuka<sup>3</sup>, Takako Negishi<sup>4</sup>**

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## Assessment of resilience in patients with narcolepsy

**Background:** Narcolepsy is a neurological disorder characterized by excessive daytime sleepiness, leading to various difficulties (Campbell AJ, et al. 2011; Dodel R, et al. 2007). Resilience, a psychological trait that enables patients to maintain psychological well-being despite challenges, is crucial for improving quality of life in narcolepsy patients. Despite the significance of resilience in the clinical context, there is a notable deficiency in research concerning resilience among patients with narcolepsy. Furthermore, standardized methodologies for assessing resilience in this demographic have not been adequately established. Consequently, this study aims to develop and validate a methodological approach for quantifying resilience in patients with narcolepsy.

**Methods:** Eighty-nine participants aged 18–87 years were involved in this study. They completed a self-administered questionnaire including demographic and the Bidimensional Resilience Scale (BRS) developed by Hirano (2010). The BRS comprises 21 items across seven factors in two dimensions: (1) innate factors (optimism, control, sociability, vitality) and (2) acquired factors (problem-solving, self-understanding, understanding others). Each factor in the BRS has three questions, rated on a five-point Likert scale. Data were analysed using descriptive statistics and factor analyses. The number of factors was determined using the maximum-likelihood estimation with Promax rotation. A cumulative contribution ratio of 50% was set, with factor loadings of less than 0.40 being deleted. This process was repeated to refine the item.

**Results:** Thirteen items across four factors were extracted: "Positive Mindset," "Interpersonal Skills," "Understanding Others," and "Coping Skills." The overall Cronbach's alpha coefficient was 0.85. IT correlations (item-total) ranged from 0.36 to 0.74. Excluded items from the original BRS included three for "Vitality," two each for "Control" and "Self-Understanding," and one for "Understanding Others."

The number of items in the questionnaire measuring resilience in narcolepsy was reduced by eight compared with the original questionnaire; all three items were excluded from the "vitality" factor. These results suggest that external interaction is a more important factor in resilience than internal aspects, such as whether they have energy for activities or self-understanding. Psychological problems such as depression and anxiety are common in people with narcolepsy (G. Stores, 2015). Resilience can be expected to support for patients to recovery from psychological issue.

**Conclusions:** This study was conducted to investigate the metrics of resilience in Japanese patients with narcolepsy. As a result, 13 questions were extracted to measure resilience.

### Audience Take Away Notes

- Currently, there is not established methods for quantifying resilience in individuals diagnosed with narcolepsy. This research developed and validated a novel methodology for resilience measurement in this patient group



- In the future, it will be possible to verify whether resilience affects mental health and quality of life by conducting a survey using the resilience scale for narcolepsy
- Based on these results, effective approaches that contribute to the mental health and quality of life of narcolepsy patients can be proposed

### **Biography**

Sayaka Kon is an instructor at the university. She had studied nursing at Keio University (Japan) and worked as a clinical nurse at a university hospital. She completed her Master's degree in 2015 and joined Saitama Prefectural University. She enrolled in a doctoral program at the Toyo University Graduate School of Information Science. She is engaged in research in various fields including hypersomnia patient care, nursing education, and rehabilitation of the elderly.



**Dr. Michelle Thomas<sup>1\*</sup>, Prof. Carolyn Wallace<sup>1</sup>, Richard Whistance<sup>2</sup>, Tareq Waisi<sup>3</sup>**

<sup>1</sup>Faculty of Life Sciences and Education, University of South Wales, Pontypridd, South Wales, United Kingdom

<sup>2</sup>Learning Technologist, Faculty of Life Sciences and Education, United Kingdom

<sup>3</sup>Widi Software Developer, Faculty of Computing, Engineering and Science, University of South Wales, United Kingdom

## **Developing and validity testing the eFRAIT for the assessment of family resilience by public health nurses**

Family resilience can be a predictor for school readiness (Brophy 2022) and family health and well being (Walsh 2017). In Wales assessment of family resilience is intrinsic to the role of the Specialist Community Public Health Nurse -Health Visitor (SCPHN). Public health policy (Wales Government 2016) and practice in Wales however is not always straight forward. Since 2017 the Family Resilience Assessment Instrument and Tool (FRAIT) has been used by all Specialist Community Public Health Nurse Health Visitors in Wales to provide an evidence based assessment that supports decision making and referrals for support for the families that they work with.

Wales is a fairly small country with a population of 3.2 million 152583 of those are children (Stats Wales 2023) who will be assessed by SCPHN HV according to the Health Child Wales programme (Wales Government 2016). Family resilience is assessed using the Family Resilience Assessment Instrument and Tool (FRAIT) (Wallace et al 2017) which have been developed in partnership with PHNHVs. Digitalisation of health systems and health visitor records demands an electronic version of the FRAIT. Academics have worked with the Wales Institute for Digital Information (WIDI) to produce the eFRAIT a digital assessment for family resilience. The eFRAIT has been developed to work across multiple platforms to promote ease of use and integration with existing digital records.

The eFRAIT has been validity tested using the Hydra Minerva high fidelity immersive technology suite at the University of South Wales (Crago). Eighteen health visitors who regularly use the FRAIT attended the testing event and participated in a post event focus group. Initial analysis of the data indicates a positive response to the eFRAIT with the barrier to use being NHS IT systems. A pilot testing period for eFRAIT use is planned for the Spring- Autumn of 2024 in a large teaching health board. The aim is to conduct another pilot test with another health board in Autumn 2024.

There is international interest in use of the eFRAIT and it is anticipated that pilot testing in Wales will lead to a more globalized use of family resilience assessment to support family function globally.

### **Audience Take Away Notes**

- What the eFRAIT is
- How the eFRAIT can be used
- What the Hydra Minerva suite is
- How validity testing events are co-ordinated and the methodology used
- The outcomes of the post validity testing focus groups

## **Biography**

Dr. Michelle Thomas studied adult nursing at the Mid Glamorgan School of Nursing and Midwifery in 1989, she worked in general nursing from 1992-97 when she studied public health nursing at Cardiff School of Nursing and Midwifery. After graduating in 1998 she worked in Public Health Nursing until commencing as lead lecturer for public health nursing- health visiting at the University of South Wales in 2011. In 2022 Michelle graduated with a PhD that studied Family Resilience assessment and public health nurse experience of participating in a Community of Practice for Public Health Nurses in Wales.



**Dr. Małgorzata Mizgier<sup>1\*</sup>, Grazyna Jarzabek Bielecka<sup>2</sup>, Dorota Formanowicz<sup>3</sup>, Elzbieta Jodłowska Siewert<sup>5</sup>, Kinga Mruczyk<sup>5</sup>, Angelika Cisek Wozniak<sup>5</sup>, Witold Kedzia<sup>2</sup>, Justyna Opydo Szymaczek<sup>6</sup>**

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## **Dietary and physical activity habits in adolescent girls with polycystic ovary syndrome (PCOS)-HAsstudy**

The role of inappropriate lifestyle in the etiology of Polycystic Ovary Syndrome (PCOS) and its metabolic and reproductive complications has attracted much attention in recent years; however, most studies involve adult patients. Thus, the study aimed to compare dietary patterns, physical activity, metabolic, anthropometric and inflammatory markers of 14-18-year-old girls with and without PCOS ( $n = 61$  and  $n = 35$ , respectively) as well as to assess correlations between concentrations of metabolic and inflammatory markers and macronutrient intake and to identify the independent predictors of PCOS, related to diet and Physical Activity (PA). Compared to the control group, PCOS girls consumed significantly more total fat ( $p = 0.0005$ ), including both Saturated (SFA) ( $p = 0.03$ ), Monounsaturated (MUFA) ( $p = 0.0003$ ) and polyunsaturated fatty acids (PUFA) ( $p = 0.01$ ). A significantly higher percentage of PCOS patients consumed high and medium Glycemic Index (GI) foods ( $p = 0.03$ ) and represented a low level of PA, both during school and in leisure time (41.67 vs. 6.06%;  $p = 0.0001$  and 32.79 vs. 5.71%;  $p = 0.003$ , respectively). The PCOS group had also significantly higher waist circumference (WC), C-Reactive Protein (CRP) ( $p = 0.01$ ), LDL cholesterol ( $p = 0.01$ ), fasting insulin ( $p = 0.002$ ) and HOMA-IR ( $p = 0.006$ ) levels. There was an inverse correlation between fiber intake and fasting insulin, ( $p = 0.0002$ ,  $r = -0.37$ ), HOMA-IR ( $p = 0.0004$ ,  $r = -0.35$ ), WC ( $p = 0.029$ ;  $r = -0.222$ ) and a positive relationship between high and medium GI diet and insulin concentration ( $p = 0.003$ ;  $r = 0.3$ ). An increase of 10 g/day in total fat intake per day increases the probability of PCOS by 1.4 times. If the SFA or MUFA intakes increase by 10 g, the probability of PCOS increase 1.7-fold and 2.5-fold, respectively. The consumption of foods with a medium GI raises the probability of PCOS by more than 3 times, after adjusting for age. The odds ratio decreased for the moderate and high PA at school/work and in leisure time. Further research in girls with PCOS is needed to test whether low GI and dietary fatty acid reduction combined with increased PA is effective in the nonpharmacological treatment and prevention of PCOS complications. ClinicalTrial.gov Identifier: NCT04738409.

**Keywords:** Diet; Nutrition, Physical Activity, Polycystic Ovary Syndrome, Healthy Lifestyle.

## **Biography**

Dr. hab. Malgorzata Mizgier is Associate Professor at the Poznan University of Physical Education, Department of Sports Dietetics, Chair of Dietetics, Faculty of Health Sciences. She completed her Master's in Biology at Adam Mickiewicz University and Dietetics at Poznan University of Life Sciences; Ph.D. from the Department of Hygiene and Human Nutrition, Dietetics Division, at Poznan University of Life Sciences; Habilitation at Poznan University of Medical Sciences, in the field of health sciences and medical sciences. The focus of her current research includes the influence of diet and physical activity on females with Polycystic Ovary Syndrome, menstrual disorders, infertility, and pregnancy.



**Sayaka Kon<sup>1\*</sup>, Kyoko Usukura<sup>2</sup>, Fumie Tokiwa<sup>1</sup>, Toyo Kikumoto<sup>3</sup>, Yuji Koike<sup>2</sup>, Takayuki Komuro<sup>4</sup>, Meiko Watanabe<sup>4</sup>, Mitsuru Sato<sup>5</sup>**

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## How do Japanese outpatient day long-term care workers perceive independence support care?

**Background:** In Outpatient Day Long-Term Care (ODLC), a person requiring long-term care is promoted through support for daily living and functional training. However, Activities of Daily Living (ADL) are severely limited among those who require care, and their conditions range from those who have difficulty walking to those who can go out. Achieving this goal is not always easy if the goal is to lead an entire life without the help of others. This raises the question of what constitutes independent daily living. Since the concept of "independence" is not clearly defined in the Long-Term Care Insurance Law, the specific details of independence support care are also unclear. This study aimed to determine how people working at ODLC perceive independent supportive care.

**Method:** The data was collected from a self-administered, unmarked questionnaire survey by mail targeting 199 people engaged in ODLC. The questions included qualifications (some people more than one) and an image of independence support care (open-ended). The analysis used KH Coder to extract frequently occurring words and to create co-occurrence networks. The study was conducted with the approval of the affiliated university's Ethical Review Committee (no. 22043).

**Results:** A total of 150 questionnaires were collected, and 100 were analyzed. The national qualifications were as follows: 12 physical therapists, 6 occupational therapists, 10 nurses, 6 assistant nurses, 16 judo therapists, 7 social workers, one mental health worker, and 38 care workers.

In terms of the frequency of occurrences (10 or more) of commonly used words, the most frequent ones were "able," "the person," "life," "me," "function," "do," "training," "maintain," "care," "ODLC," "now," "home," "daily," "need," and "ability," in that order. "Social" and "participation" each occurred 8 times. The analysis of the co-occurrence network resulted in five subgraphs: "able to do it on their own," "living daily life at home," "training at ODLC," "ability to do," and "maintaining the present situation."

**Discussion:** Image of Independence-support care in ODLC on maintaining the ability to perform daily living. This is consistent with reports (Yama, Japanese Journal of Geriatric Therapy. 2022) that the goal of ODLC is often to maintain or improve physical function. However, independence includes multiple elements such as physical, mental, and social; physical independence is one aspect of independence. In this study, support for social participation, such as connecting with people in the community, was envisioned as independent support care, but its frequency of occurrence was low. Since social participation is affected using transportation and the presence of supporters (Utsunomiya, Japanese Journal of Gerontology. 2019), transportation support for those who need care and coordination with supporters is also essential for independence support care.



Furthermore, self-determination underlies self-independence (Shin, Shitennoji University bulletin. 2008). Nevertheless, the participants in this study did not recall that support for self-determination was a form of independence support. Therefore, ODLC workers must recognize that support for judgment, decision-making, and expressing self-decision contents are part of independence support care. Moreover, workers should support a person requiring long-term care to help them make decisions.

### **Audience Take Away Notes**

- It provides an insight into what Japanese ODLC workers consider ‘independence support care’
- They emphasize the different aspects of independence in care for older people (e.g., physical, mental, and social factors), with physical independence being one kind of independence
- There is a need for ODLC workers to recognize and incorporate a broader perspective on independent support care, such as mobility support, coordination with supporters, and decision-making support, beyond maintaining and improving physical function

### **Biography**

Sayaka Kon is a nurse instructor at the university. She had studied nursing at Keio University (Japan) and worked as a clinical nurse at a university hospital. She completed her master's degree in 2015 and joined Saitama Prefectural University. She has studied various fields, including elderly rehabilitation, nursing education, and hypersomnia patient care.



**Kamila Kholmatova<sup>1,2,3\*</sup>, Alexandra Krettek<sup>1,4,5</sup>, Irina V. Dvoryashina<sup>3</sup>, Alexander V. Kudryavtsev<sup>1,2</sup>**

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## Obesity prevalence by using six indices and their associations with hypertension, diabetes mellitus, and hypercholesterolemia in Russian adult population

**Background:** Obesity is a reversible predisposing factor for cardiovascular diseases. Amongst the various anthropometric indices, the best one to help predict cardiometabolic risk factors remains inconclusive. We therefore assessed the prevalence of obesity with six indices and compared their associations with obesity-related cardiometabolic disorders in the Russian adult population.

**Methods:** We analyzed data from the population-based cross-sectional Know Your Heart Study (n=4495, 35-69 years, 58,1% women). Age-standardized prevalence of obesity according to body mass index, waist circumference, Waist-to-Hip Ratio (WHR), Waist-to-Height Ratio (WHtR), body fat percentage and Fat Mass Index (FMI) was determined in men and women. The areas under the receiver operating characteristic curves (AUCs) were used to compare the predictive value of these indices for the presence of hypertension, hypercholesterolemia, diabetes and a combination of at least two disorders. Age-adjusted Prevalence Ratios (PRs) of cardiometabolic factors were calculated in the presence vs absence of obesity.

**Results:** The age-standardized prevalence of obesity significantly varied according to anthropometric index used; among men, from 17.2% (FMI) to 75.8% (WHtR); among women, from 23.6% (FMI) to 65.0% (WHtR). Among the six indices, WHtR had the strongest association with hypertension (AUC = 0.784; p< 0.001) as well as a combination of disorders (AUC = 0.779; p< 0.001) in women. The AUCs of WHtR were the largest compared to other indices for hypercholesterolemia in women and for hypertension, diabetes and a combination of disorders in men, although the confidence intervals of WHtR and other indices were overlapping. In both sexes, obesity defined according to all indices had closer associations with diabetes, than with hypertension and hypercholesterolemia. Obesity according to WHtR had significantly closer association with hypertension (PR 2.16) and a combination of disorders (PR 2.24) compared to other indices, but only in women.

**Conclusion:** The obesity prevalence was 17.2-75.8% in men and 23.6-65.0% in women according to FMI and WHtR, respectively. In our study, WHtR has the best predictive value for obesity. WHtR exhibited the closest association with hypertension and a combination of cardiometabolic disorders in women and was non-inferior compared to other indices in men.

### **Audience Take Away Notes**

- The audience will learn different obesity indexes, comparison of obesity prevalence using different indices and their associations with non-obesity components of metabolic syndrome (hypertension, diabetes mellitus, and hypercholesterolemia)
- Our data provide the new evidence in selecting the best index to define obesity and its relationships with non-obesity components of the metabolic syndrome. This information can be used to in the routine practice of examination of people with obesity and prevention of obesity-related consequences

### **Biography**

Kamila Kholmatova graduated as MD from the Northern state medical university (Arkhangelsk, Russia) in 2006. She passed internship in therapy and residency in cardiology. Since 2009 she works at the department of hospital medicine and endocrinology at the Northern state medical university (Arkhangelsk, Russia). She is an assistant professor and the leader of postgraduate training for cardiologists. Since 2018 she is a PhD-student at the Arctic University of Norway. She has published more than 20 research articles in national and international journals.



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## **A Literature review of the impact of rubric assessment on adult nursing practice competencies in nursing colleges**

**Purpose:** The purpose of this study is to identify trends in research on rubric evaluation in adult nursing practice at nursing colleges and factors associated with nursing practice competence through a literature review.

**Methods:** We used CiNii Articles and the web version of the Central Journal of Medicine (ver. 5) from 2012 to 2023, when the Central Council for Education published "Toward Qualitative Transformation of University Education for Building a New Future - Universities that foster lifelong learning and the ability to think independently" in 2012. A literature search was conducted using the keywords "rubric evaluation/AL and (adult/TH or adult/AL) and (nursing/TH or nursing/AL) and (clinical/field practice/TH or practice/AL)". From the 50 references obtained, 8 were selected for the purpose of this study and included in the analysis. The literature was organized by author, subject, purpose, method, and results, and similar codes were summarized and categorized.

**Results:** The results of the analysis showed that the actual ratings based on rubric assessment in adult nursing practice were as follows. 1 [building a foundation of universal nursing practice skills to be acquired in the level of academic achievement]. 2[establishing a nursing professional identity]. 3[grasping needs and acquiring nursing skills according to the situation]. 4[understanding nursing in an integrated manner and understanding collaboration to support the situation]. 5[developing accountability to understand nursing in an integrated way and to support it according to the situation]. 6[developing self-growth from the conflicts that everyone has and training to carry out the role of nursing in team medicine]. 7[developing the ability to understand nursing in an integrated way]. It was suggested that the rubric evaluation chart facilitates students' willingness to learn by objectively looking at themselves, reflecting on their actions, and learning on their own during practical training, and that it is a necessary action and concept for the foundation of practical nursing ability in basic nursing education. Furthermore, it was suggested that the extracted categories were based on the four competencies of practical nursing competence as presented by the Japan Nursing Association. Professional, ethical, and legal practice skills, clinical practice skills, and leadership and management skills. Clinical practice competence Leadership and management skills , ability to develop expertise.

**Conclusion:** The number of literatures related to nursing practice competence was very small. Future empirical studies should clarify the relationship between rubric evaluation and nursing practice competencies obtained from these literatures, including changes over time in their effects on nursing practice competencies.

### **Biography**

Aki Ibaraki completed Master's degree in Public Health Nursing at International University of Health and Welfare in 2020. After that, I entered a doctoral program and am currently enrolled. I am currently working in Adult Nursing at Tokyo Women's Medical University. I am mainly involved in education and research related to occupational nursing, preventive medicine, hospital nursing, and nursing practice skills.



**Dr. M. Marutani<sup>1\*</sup>, C. Usui<sup>2</sup>, H. Kawajiri<sup>3</sup>, Y. Takai<sup>4</sup>, Kawaguchi<sup>5</sup>**

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## Support a reason for living of persons with disabilities using the mobile phone application

Unemployment and working life conditions are huge issues for health conditions, because these deteriorate a reason for living. Though Japanese government has been struggling to improve employment conditions for job seekers with disabilities, it is still difficult to provide reasonable accommodations due to their changeable health conditions. Mobile phone applications are useful to monitor the condition of health and environment. The development of mobile phone application which will monitor the condition of health and environment must be more efficient to improve reasonable accommodations for job seekers with a variety of disabilities. The purpose of the study was to develop mobile phone application that make job seekers with disabilities' health conditions and working environment conditions visible. To attain the goal, this first report investigated the items of mobile phone application based on literature review. Qualitative and descriptive design was used for this study. Literature review was conducted with keywords "persons with disability" "assessment for employment", between 2019 to 2023 using "Ichushi Web" which was Japanese search tool for health sciences. Also, assessment tools regarding for job seekers with disabilities which have been used frequently were reviewed. The descriptions regarding assessment were selected from literature and tools respectively and integrated according to the similarities of the natures. This study was approved by ethical committee of National Institute of Public Health. 999 literatures were hit, and 79 of them were selected according to the titles and abstracts, and finally 13 literatures were selected. Also, 5 tools were selected. 354 descriptions were obtained, divided into 68 subcategories, and categorized into 33. Finally, 33 categories were classified 3 parts, namely, daily activities, health conditions, and environments. The example of categories of daily activities were "having sleep" "having meals" "dressing" "Maney management" "Communications with co-workers and family members". The instance of descriptions of "having meals" was "Can the client have lunch during lunch time at work?". The example of categories of health conditions were "feel calm" "concentration" "physical symptoms" "sense or movement conditions". The instance of descriptions of "feel calm" was "Can the client control their anxieties?" The example of categories of health environments were "barrier in home" "acceptance of family members" "accessibilities to health care" "commute conditions" "atmosphere at worksite" "physical condition at worksite". The instance of descriptions of "accessibilities to health care" was "Can the client have off to go see a doctor?" The candidate items from our study seem cover various kind of disabilities including physical, psychological, developmental, sensory disabilities. Also, they could provide supporters with implications to conduct more appropriate assessment. There, however, still were a couple of investigative issues for example, validation for job seekers with a variety of disabilities and their supporters regarding items and structure of them. This study was granted by Health and Labor Sciences Research Grant and had no conflict of interest.

### Audience Take Away Notes

- The audience will be able to use what kind of items should be monitor for job seekers with disabilities

- This will help other faculty to expand their research or teaching regarding how to improve unemployment and job insecurity, working life conditions for persons with disabilities
- This will provide public health practitioners with a practical solution to a problem regarding health inequalities by development of a mobile phone application to monitor health condition and supportive environment for job seekers with disabilities

### **Biography**

Dr. Marutani worked as public health nurse for 16 years then studied Nursing at the Chiba Graduate School of Nursing and received her PhD degree in 2006 at the same institution. She obtained the position of an Associate Professor at the Chiba prefectural university, professor at Kagoshima University, and current position.





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## **Learning from simulation: Experiences of students regarding high-invasive nursing technique of intraoral suction**

The role of nurses is expected to expand as they progressively respond to advancements in medical care and diversify their provision of health care services. As a result, they are required to have the ability and qualifications for responding to these expanding roles. Basic education for nurses aims to provide opportunities for acquisition of skills and knowledge to allow nurses to effectively respond to real-world needs. Currently, it is difficult for students to conduct highly invasive nursing procedures during on-campus exercises and clinical training. There is little research that has examined the learning of highly invasive nursing skills that cannot be conducted during clinical training. Additionally, there is a need for clarifying which nursing techniques are effective when implemented among students with consideration for comfort in learning and patient safety. In this study, we clarified the effectiveness of experiential learning of the highly invasive “intraoral suctioning” skill from both the nurse and patient perspectives. In this study, analysis was conducted using a qualitative inductive method, with learning proceeding under supervision.

**Results:** 1. For learning through the nurse experience, we extracted 138 codes, 46 subcategories, and the following four categories: difficulties in implementing multiple combined techniques, difficulties in simultaneously moving left and right hands, importance of suction operation that does not cause pain to the patient, and importance of responding to patient reactions.

2. For learning through the patient experience, we extracted 52 codes, 19 subcategories, and the following four categories: discomfort of having intraoral suctioning conducted, wishing to have the procedure conducted quickly and efficiently, feeling of fear due to lack of explanation by the nurse, and feeling of safety when spoken to by the nurse. For the nurse roles, students learned the importance of patient safety and comfort by practicing invasive and painful nursing procedures on other students; however, there were some students who focused only on the complex procedure. To better understand the patient experience, students learned not only the nursing techniques but also communication and consideration for the patients. It is important to consider educational methods that allow students to deepen their learning of techniques other than those used by nurses. Additionally, it was inferred that student learning was influenced by the order of the exercises.

### **Audience Take Away Notes**

- Examination of the learning of highly invasive nursing skills by students through practice with each other
- Examination of simulation learning that considers nursing student safety
- Examination of learning outcomes of nursing technique and experiences in clinical setting

### **Biography**

Hideko Kakinuma earned her bachelor's degree in education from Meisei University and her master's degree in nursing from Ibaraki Christian University in 2015. She is currently pursuing a doctoral degree at the International University of Health and Welfare Graduate School. She is currently a lecturer at Tohto University.

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## **Identifying symptom clusters and temporal interconnections in patients with lung tumors after CT-guided microwave ablation: A network analysis**

**Objectives:** In this study, we aimed to use a network analysis approach to explore symptom clusters and interrelationships among symptoms in patients with lung tumors who underwent (Computed Tomography CT)-guided Microwave Ablation (MWA).

**Methods:** A longitudinal study was conducted. And 196 lung tumor patients undergoing MWA were recruited and were measured at 24 hours, 48 hours, and 72 hours after MWA. The Chinese version of the MD Anderson Symptom Inventory and the Revised Lung Cancer Module were used to evaluate symptoms. Network analyses were performed to explore the symptom clusters and interrelationships among symptoms.

**Results:** Four stable symptom communities were identified within the networks. Distress, weight loss, and chest tightness were the central symptoms. Distress, and weight loss were also the most key bridge symptoms, followed by cough. Three symptom networks were temporally stable in terms of symptom centrality, global connectivity, and network structure.

**Conclusion:** Our findings identified the central symptoms, bridge symptoms, and the stability of symptom networks of patients with lung tumors after MWA. These network results will have important implications for future targeted symptom management intervention development. Future research should focus on developing precise interventions for targeting central symptoms and bridge symptoms to promote patients' health.

**Keywords:** Lung Tumors, Symptoms Management, Network Analysis, Microwave Ablation, Nursing.



**Cheng Wei Wang<sup>1\*</sup>, Hui Fei Yang<sup>2</sup>, Xin Yu An<sup>1</sup>**

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## **Experience sharing under the pandemic: Take Nansan village, Alishan township, Chiayi county, Taiwan province as an example**

**Background:** During the pandemic, Taiwan's Central epidemic Command Center announced that the country has entered the Nationwide level 3 alert, and specify the Prevention Directions, for instance check your temperature, wear a mask, and Keep a safe distance of 1.0 meters outside. And in indigenous tribes are no exception, in particular, the main active population in the tribe is still mostly elders and children on weekdays, so the relevant supporting facilities for pandemic prevention need to be strictly followed.

**Methods:** Undertake the Tribal Health Development Project of the Ministry of Health and Welfare, and take Nansan Village (Shanmei Village, Xinmei Village, Chashan Village) of Alishan Township, Chiayi County, Taiwan Province as the main tribe to promote pandemic prevention. When the pandemic was changing rapidly (June 2010–September 2011), the Tribal Health Center of Chiayi Christian Hospital also made the AZ vaccine instructions for dummies in real time, and the tribal coordinator had a walking disseminate to the tribal stores, breakfast shops, and community bases (e.g. cultural health stations, community development associations) or tribal medical units (e.g. medical stations, clinics). Furthermore, the original face-to-face visits were also replaced by telephone greetings to provide continuous care. Even though, we made home-based anti-pandemic fitness exercises, so that tribal people can continue to maintain good physical strength and muscle strength when they were quarantined at home. In addition, the latest pandemic prevention information were also promoted for units such as schools and churches. Finally, during the telemedicine, we also assisted the IDS medical team to make the leaflet and publish it on our Facebook fan page or the bulletin board, so that the residents can also receive information timely.

**Outcomes:** Through the vaccine information for dummies, a total of 11 units of the Nansan Village Tribe were promoted, reaching 300 person-times; 100 people were cared for by telephone greetings; home-based anti-pandemic exercise also reached 1,309 person-times; Anti-pandemic Propaganda to school and church were reached 415 person-times.

**Conclusion:** At the moment when the pandemic is raging, the Chiayi Christian Hospital of Tribal Health Center uses different channels and connects various units in the tribe to work together to provide the most immediate care and advocacy for the tribal people, so that the amount of service can take care of every family and everyone.

### **Audience Take Away Notes**

- You will know what pandemic prevention measures the hospital promoted in the aboriginal tribes during the pandemic
- You will know what kind of health projects we promotes in Alishan tribes
- Finally, you will also know the difficulties we encountered in the process of promoting health issues and how to solve them

## **Biography**

Manager Cheng-Wei Wang studied public health at the National Defense Medical Center, and graduated as MS in 2016. After graduated, he then worked in the Ditmanson Medical Foundation Chia-Yi Christian Hospital, and in charge of aboriginal health for two-and-half years, dementia issues for aboriginal for two years, and related community health issues for three years.



**Dr. Chen-Yuan Hsu**

Department of Nursing, Da-Yeh University/Changhua, Taiwan

## **Self-aware health of the Taiwanese older people living in the facility**

**Introduction:** The proportion of the Taiwanese older people who living in the facilities, those people has increased as the population rapidly, however, it is also resulted to this population weak with their health. The purpose of this study is to understand the self-aware health of the older people living in the facility.

**Methods:** This study uses a cross-section survey for research, based on the population of the facility in the central of Taiwan. This study uses a survey of data collection on the self-aware health. The scores from 1-5, 5 score is mean greater ssatisfied with self-aware health status, 1 score is mean lower ssatisfied with self-aware health status. Data analysis will use SPSS 22.0 for Window 2000 to answer questions.

**Results:** The study found that participants (N=40) pointed out their self-aware health at mean  $3.25 \pm 1.03$ . There are 77.5% participants who living in facility with one to three kinds of chronic diseases.

**Conclusion:** The results enable to the nursing staff to understand the self-aware health of the older people living in facility, and to expecting by this study provides the research outcomes for nursing staff to have a real understanding, to pay attention for those people on the health promotion program in the future, and resulted to improving the self-aware health for older people in living in facility.

### **Audience Take Away Notes**

- To pay attention with self-aware health of the older people living in facility
- The results enable to the nursing staff to understand the self-aware health of the older people living in facility
- This study provides the research outcomes for nursing staff to have a real understanding

### **Biography**

Dr. Chen-Yuan Hsu received PhD degree at Griffith University in Australia, 2013. Then, she works in Da-Yeh University in Taiwan.



**Yvonne Egitto<sup>1\*</sup> PT, DPT, Jill Bubel<sup>2</sup> PT, DPT, Anne Lancelotti<sup>3</sup> PT**

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## Tackling tai chi together: A model for success

The purpose of this project was to determine whether community dwelling Older Adults (OA) would show improvement in overall functional mobility after taking part in a short term (10 week) free introductory community Tai Chi program. Additionally, we hope to highlight the benefits of Physical Therapists collaborating with local municipalities who already offer programming to OA to prevent falls and improve function in order to provide service to a very underserved population. The benefits of “knowledge of results” are obvious when participants were asked if they would continue participation in community programs based on their assessments.

The data will support both the benefits of participation in a short term Tai Chi program as well as results of a survey of participants related to their perception of the importance of understanding the impact the program had in their overall functional mobility and safety as well as its impact on their decision to continue participating in this and similar programs.

### Audience Take Away Notes

- Ways in which local municipalities can partner with local practicing clinicians to provide services to underserved populations
- Ways to incorporate assessment into exercise programs
- The importance of understanding the “real” benefits of participation in community health programs (knowledge of results)
- A real-life way to defeat value induced bias and foster improved community participation

### Biography

Yvonne Egitto is a full-time faculty member in the Marist’s Doctor of Physical therapy Program teaching both the pediatric and geriatric content as well as Health Promotion and Wellness. She has been a practicing physical therapist for over 37 years. Yvonne’s Physical Therapy career has focused on working with children and young adults with variety of diagnoses. Since 2015 she has focused her career on the geriatric population. She is a Certified Exercise Expert for the Aging Adult and is working to provide collaborative health and wellness programs within her local community.





MARCH  
**21-23**

Joint Event

# Nursing & Public Health 2024

**DAY 02**  
**KEYNOTE FORUM**

## The role of AI and digital twins in sustainable public health

This presentation explores the impact of consumer technologies, wearable devices, smartphone applications and artificial intelligence in the future of public health. It introduces the concept of a personal health navigator using these technologies and shows how it can help citizens to better manage their health whilst also contributing to the future sustainability of public health services.

One of the concepts to be explored is the idea of a digital twin, an artificial human mirror image of an individual with all the vital signs accessible securely and visibly for the benefit of both individuals and appropriate health professionals. The presentation will also look at the role of digital therapeutics and how they can transform patient care, especially for chronic conditions. IT will also examine the impact of all these developments on the roles and responsibilities of healthcare professionals.

### Audience Take Away Notes

- How consumer technologies are transforming public health
- The role of lifestyle medicine in personal health management
- How artificial intelligence is being applied in digital health
- What are digital therapeutics and why they are important
- The impact on roles and responsibilities in the health sector



### David John Wortley

International Society of Digital Medicine, Lubenham, Northants, United Kingdom

### Biography

David Wortley is CEO and Founder of 360in360 Immersive Experiences and a VP of the International Society of Digital Medicine (ISDM). He is a Fellow of the Royal Society of Arts and Commerce and a global thought leader and innovator on enabling technologies for health, education and the environment. He is on the editorial board of the Digital Medicine Journal. He is an Associate Member of the Royal Society of Medicine and a Visiting Fellow at the Faculty of Health and Social Sciences at Bournemouth University.

## Wellness and healthcare management in the age of wearable technology

In this day and age, advancement in technology has become a way of life. Computer devices are no longer items that we use in our homes and places of work, carry in our bags and pockets. We can now wear those devices. There are a wide range of types of these wearable technologies that now includes implantable devices. It holds great potential in reshaping the health provision and has a positive impact on the wearer's health. We are seeing growing numbers of users actively changing their behavior for the better with the adoption of wearable devices. Integrating them in our lifestyle enhances the quality of life, improves healthcare delivery and medical education.

Wearable devices have evolved and there is an increasing interest in their application in medical settings. It can provide information on patient's behavior like blood pressure, breathing patterns and blood glucose levels. It can also generate signals detecting activity. Wrist-worn accelerometers assist in the evaluation of sleep quality in healthy subjects as well as in in-patient and ICU settings where poor sleep has been linked with adverse outcomes. There are also wearable devices that can provide information on heart rhythm. Frequent heart rate tracking as a means of enhancing routine monitoring for early detection may enable the wearer to seek medical guidance, otherwise these conditions would likely go undetected for some time. This can also be a component of an early warning system to detect clinical deterioration for patients with chronic diseases. Furthermore, it could enable detailed and near-continuous characterization of recovery following critical illness. It is a means of recording useful information and incredible amount of data.

Advancement in the area of wearable systems will continue to transform and enhance the quality of care. Responsive patient care, challenges and opportunities, and future innovations will be explored in this presentation. In the near future, *Healthcare Providers*, will inevitably care for patients with wearable technology.



**Elvessa Narvasa, RN, MSN,  
Ph.D., CCRN**

Quebec CCN, Montreal, Canada

### Biography

Elvessa Narvasa has completed Master of Science in Nursing from Montreal University, Canada. PH.D. She is the Provincial Director of Canadian Council of Cardiovascular Nurses. Served as Co- President of Quality Assurance; Team Leader for Hospital Accreditation, Founder of ICU Intermediary care. She had been selected to write the exam for Cardiovascular Certification by the Canadian Nurses Association. Furthermore, she does both in-service as well as invited nurse educator of different hospitals ICU-CCU; PACU/OR and Consultant of College Nursing Faculty. Organizing committee executive of International Society of Pituitary Surgeons; Multidisciplinary Perioperative Medicine, Montreal University. Invited speaker of Quebec Intensive Care Association as well as 2018-2019 Keynote speaker; Honourable Chief Guest of Colloquium World Nursing Conference; 2019 International RFCCN. SAARC, Critical Care Society. Chairperson, United Research Forum since 2020. Moreover, an International Virtual and Physical Conferences keynote and plenary speaker 2020 till present 2024 organized by different groups worldwide.

## Managing healthcare transformation towards personalized, preventive, predictive, participative precision medicine

For realizing pervasive and ubiquitous health and social care services, health and social care system have to undergo an organizational, methodological and technological transformation towards personalized, participative, preventive, predictive precision medicine. For designing and managing the resulting highly complex, distributed and dynamic ecosystem, we must consistently and formally represent the system and its components at the required level of granularity from the perspective of all actors from different domains including the subject of care, using different methodologies, knowledge, language and experiences. This must be done, using a system-theoretical, architecture-centered, ontology-based and policy-driven approach. Over the last 30 years, the author developed the necessary model and framework, which is meanwhile standardized as ISO 23903 Interoperability and Integration Reference Architecture. The approach has been defined as mandatory for any specification or project at ISO, CEN, IEEE, etc. addressing more than one domain. The presented approach enables design, implementation and management of any health and social care systems as well as knowledge-based communication and cooperation of all actors involved. The Keynote introduces necessary standards and methodologies for designing and managing 5P medicine ecosystems as well as practical examples.

### Audience Take Away Notes

- For managing healthcare transformation, we must integrate different actors from different domains, different standards and specifications as well as different products. The Keynote presents a meanwhile internationally standardized methodology to manage this challenge
- We must understand the healthcare ecosystem and related use cases in the specific context and from the perspective of the involved domain experts. Therefore, we have to advance from data focus to knowledge focus, solving the knowledge representation and management challenge for all domains and skill levels as well as all development process viewpoints
- The necessary foundations and principles are illustrated by practical examples



**Prof. Dr. Habil. Bernd Blobel, FACMI, FACHI, FHL7, FEFMI, FIAHSI**

Medical Faculty, University of Regensburg, 93053 Regensburg, Bavaria, Germany

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### Biography

Dr. Bernd Blobel studied Mathematics, Technical Cybernetics and Electronics, Bio-Cybernetics, Physics, Medicine and Informatics at the University of Magdeburg and other universities in the former GDR. He received his PhD in Physics with a neurophysiological study. Furthermore, he performed the Habilitation (qualification as university professor) in Medicine and Informatics. He was Head of the Institute for Biometrics and Medical Informatics at the University of Magdeburg, and thereafter Head of the Health Telematics Project Group at the Fraunhofer IIS in Erlangen. Thereafter, he acted until his retirement as Head of

the German National eHealth Competence Center at the University of Regensburg. He published more than 600 papers, published/edited many books and supervised a big number of PhD student from all around the world. He was German Representative to many SDOs such as HL7, ISO, CEN, OMG, IEEE, ASTM, SNOMED, etc., also chairing the national mirror groups. He is Fellow of several international academies. Bernd Blobel has a multi-disciplinary education, covering mathematics, physics, systems engineering, electronics, medicine, informatics and medical informatics, including habilitations in medicine and informatics. He is Fellow of most of the academies and scientific associations in the field. Before his retirement, he was Head of the German National eHealth Competence Center. He was leadingly involved in many countries health digitalization as well as electronic health record strategy. He was and is still engaged in international standardization at ISO, CEN, HL7, OMG, IEEE etc. Furthermore, he still engaged in international higher education. His extended publication list is available at <https://epub.uni-regensburg.de/view/people/Blobel=3ABernd=3A=3A.html>.



## School-age mental health impact on education

The purpose of this research presentation is to discuss school-age child mental health priorities. Researcher will provide the challenges faced by school nurses in Kentucky and the impact on children related to education and learning gaps. The aim is to engage attendees in advocating for a school nurses in every Kentucky public school all day, every day. Researcher will discuss evidence based practice stress reduction and coping strategies to optimize school-age child learning. Researcher will further discuss the roles of school nurses, such as educators, counsellors, mediators, providing mental health resources, performing health screenings, and making health referrals to optimize child health. The researcher will explain how school nurses are vital in bridging learning gaps between educators, parents, and children at an early age to improve and optimize long-term outcomes. Bridging gaps may increase school-age child school attendance and manage chronic healthcare conditions promoting health. In addition, children who attain a good education will be able to generate more societal income for future growth. Children hold the future and nurse advocacy and research is needed to bridge knowledge and application gaps to benefit long-term outcomes in Kentucky.

### Audience Take Away Notes

- Identify 3 school-age stress reduction activities to enhance learning
- Discuss how providing child stress reduction activities can bridge the gap between knowledge and application
- Describe at least 2 way that stress reduction activities and mental health resources can optimize child health outcomes



**Dr. Lisa Wallace, DNP,  
MSN, BSN, RNC-OB, NE-BC**  
Morehead State University,  
Morehead, KY, United States

### Biography

Dr. Lisa Wallace is an Assistant Professor at Morehead State University with over 32 years of experience as a Registered. She continues to work per diem as a public school health nurse and labor & delivery nurse. She completed her Doctoral of Nursing Practice degree in 2020, Master of Science in Nursing degree with a focus on Leadership/Management Track in 2009. She maintains two national certifications, Inpatient Obstetrics and Nurse Executive. Previous roles include

staff nurse, charge nurse, nurse manager, and director. Her areas of expertise include obstetrics, neonates, leadership and management, and pediatrics. She is a Basic Life Support, Advanced Cardiac Life Support, Pediatric Advanced Life Support, Advanced Life Support in Obstetrics, Neonatal Resuscitation Program Instructor, and Agency for Healthcare Research and Quality TeamSTEPPS master trainer. She has various evidence-based practice scholarly publications, and podium/poster presentations at various professional conferences. She is a member of the American Nurses Association, Kentucky Nurses Association, Association for Women's Health Obstetrics and Neonatal Nurses, the Kentucky Organization of Nurse Leaders, the National League for Nurses, and the Kentucky League for Nurses. She is the vice chair of the Northeast Chapter of KNA, serves on the Board for the KLN, and is the secretary for the Peoples Clinic in Morehead, Kentucky. In addition, she leads a variety of committees within Morehead State University. She is married to Jeff, has two wonderful children, Dalton & Emily, two step children, Jeff Jr. and Marcia with additional grandchildren. She strives for quality in everything she does and states she is walking the path which God is leading her in life to make positive change.

## Nurses' voices: Grassroots to global

The world's nurses are deeply burned-out from the strains of frontline service to the worldwide COVID pandemic—while already enduring perpetual challenges from overwhelmed health care systems. But—even as nurses are appreciated and widely trusted for this service — their public voices are rarely heard. This lack of nursing's public voice is in keeping with results of the *Woodhull Study of Nursing and the Media: Healthcare's Invisible Partner*—published in 1998 by Sigma Theta Tau International [STTI] and revisited in 2018 with the same results—a significant lack of nurses' voices—in STTI's *Journal of Nursing Scholarship*. While COVID has increased widespread nursing burnout, recent research also indicates that 'resilience' reduces burnout and the effects of burnout. One major way to build resilience is to share our voices—thoughts and ideas — and be listened to with deep respect and appreciation. This presentation introduces the breadth and 20-year history of the Nightingale Initiative for Global Health (NIGH). It will share NIGH's innovative global multi-media outreach—to prepare nurses, including students and retirees, to become empowered storytellers and engaged to share their voices—their stories of healing, resilience, and health advocacy—as thought-leaders across the global public space and to the listening ears of everyone. This outreach includes developing a substantive global training project aimed to be developed in all six Regions of the World Health Organization, collaborating with nurses, student nurses, nurse educators, retirees and related stakeholders and building teams of presenters and trainers to reach their own communities and networks, grassroots-to-global.

### Audience Take Away Notes

- Review of the impact of the COVID pandemic on nurses worldwide
- Discover the related value of bringing nurses' voices to public community, national, regional, and global arenas
- Brief introduction to the Nightingale Initiative for Global Health (NIGH), its 20-year history and global outreach
- Introduction to NIGH's innovative 'Nurses' Voices Grassroots-to-Global Campaign'
- Learn how to participate in this Campaign



**Deva-Marie Beck, PhD, RN, DTM**

Nightingale Initiative for Global Health (NIGH), Ottawa, Ontario, Canada

### Biography

Deva-Marie Beck, PhD, RN, DTM is a Canadian American nurse and award-winning Florence Nightingale scholar who has been working — for three decades — on citizen advocacy for achieving global health. She has served, since 2006, as a volunteer International Co-Director of the NGO called Nightingale Initiative for Global Health (NIGH) — traveling to 25 countries, leading NIGH's work on UN Briefings, workshops, group discussions, online updates, webinars, feature articles, photojournalism, video, keynote presentations across the world and to achieve the United Nations Economic & Social Council (UN ECOSOC) 'Special Consultative Status.' She has recently achieved the highest-level award from Toastmasters International — Distinguished Toast Master 'DTM'.



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**Virginia Prendergast, PhD, NP-C, FAAN, CNRN**

Division of Neurosciences, Barrow Neurological Institute / St. Joseph's Hospital and Medical Center, Phoenix, AZ, United States

## The science of oral health and hygiene for patients in 2024

Pneumonia is one of the top three hospital-acquired infections. Pneumonia can occur regardless of whether a patient is on mechanical ventilation, and patients with conditions such as impaired cognition and dysphagia can also develop pneumonia. Aside from oral disinfectants, basic oral care practices have changed little over the past 50 years. Foam swabs and manual brushes remain the mainstays of oral hygiene; however, the use of these tools neglects other key components oral health and hygiene. Research into oral health has demonstrated that the impact of a healthy mouth and oral microbiome extends past pneumonia to improved multisystem health and disease prevention.

Exogenous and endogenous threats to the integrity of key oral structures will be reviewed. These structures are often unknowingly overlooked, and this oversight leads to further oral disruptions, pain, and pneumonia. Furthermore, poor oral health has been identified as a contributor to disease states encountered the world over—for example, diabetes, stroke, and cognitive impairment. Research-based practices that have been successfully translated into practice will be presented. Key oral care interventions shown to reduce or prevent deterioration will also be discussed.

With increased detection and improved evidence-based oral care, it is possible to reduce the rate of hospital-acquired pneumonias. The adoption of safe and effective comprehensive oral care protocols is crucial a fundamental part of nursing care, regardless of the patient's country of origin or medical diagnosis. As nurses are the mainstay of healthcare workers at every patient's bedside, it is imperative that nurses possess a contemporary understanding of evidence-based oral care.

At the conclusion of this presentation, participants will be able to:

- Identify vital oral structures at risk for deterioration during illness and understand methods to improve oral health and hygiene.
- Outline evidence-based protocols for patient care from the intensive care unit to the residential care setting.
- Discuss broader implications of the oral-systemic health connection and opportunities for continued research.

### Biography

Virginia Prendergast, PhD, NP-C, FAAN, is internationally recognized for her work and leadership in nursing education, research, care of neurosurgical patients, and innovation. Dr. Prendergast's tenure at the Barrow Neurological Institute has spanned more than 40 years. Her passion for excellence in nursing motivated her professional growth into leadership roles, and she now serves as the Director of Advanced Practice Nursing and Evidence-based Research. Dr. Prendergast's teaching achievements and dedication to patient care have also commanded national and international recognition and awards. She has been invited as a guest lecturer to conferences and nursing schools throughout North America, China, Japan, and Europe. She has served as a mentor to graduate nurses from Sydney, Singapore, London, Copenhagen, Berlin, and Tokyo, as well as for nurses throughout North America. She has received the Nursing Spectrum national award for Excellence in Teaching and was honored for her dedication to patient care by the Phoenix Business Journal. The neurosurgical resident staff has twice honored her with the "BNI Nurse of the Year" award.





**Raj Kumar Mehta<sup>1\*</sup>, Hafizah Che Hassan<sup>1</sup>, Bishnu Bista<sup>1</sup>, Mamata Sharma Neupane<sup>2</sup>**

<sup>1</sup>Department of Nursing, Lincoln University College, Kuala Lumpur, Malaysia

<sup>2</sup>Department of Public Health and Nursing, Chitwan Medical College, Bharatpur, Nepal

## **Performance of Acute Physiology and Chronic Health Evaluation (APACHE II) severity scoring system on the outcome of critically ill patient in ICU**

**Background:** Clinical assessment of severity of illness is an essential component of medical practice to define critically ill patients, estimate their prognosis, help in clinical decision making, guide the allocation of resources, estimate the quality of care and predict the outcome of critically ill-patient in the Intensive Care Units (ICUs). Acute Physiology and Chronic Health Evaluation II (APACHE II) model is one of the widely used scoring system to quantify disease severity and hospital mortality risk in critically ill patients in ICUs in developed world and less used in developing and low middle income countries like Nepal. As it has been developed in the west and its prognostic validity remains questionable, also our patient population and facilities are different, it needs to be validated in the Nepalese context.

**Objectives:** To evaluate the performance of the Acute Physiology and Chronic Health Evaluation (APACHE II) severity scoring system in the prediction of outcome of critically ill patient in Intensive Care Units (ICUs).

**Materials and Methods:** A prospective, observational cohort study was carried out on 501 critically ill patients aged more than 18 years, of either gender, admitted to an adult Intensive Care Units (medical and surgical) of Chitwan Medical College Teaching Hospital, a tertiary care center in central part of Nepal, with hospital stay more than 24 hours. This study was carried out over twelve months from January 2022 and February 2023. The Ethical Review Board approved this study (Ref: NHRC- 2297/71/2022-PhD). The variables of APACHE II score were collected from the physiological, laboratory, and patient characteristics mentioned in the ICU scoring data sheet at 24 hours. The patients were followed up till discharge from ICU or death. The outcome measure was ICU mortality as survivor and non-survivor. The APACHE II score and predicted mortality was calculated using computer software programme. The performance of the model i.e., accuracy of the model was evaluated using discrimination and calibration respectively. Discrimination of the model was evaluated by calculating area under a Receiver Operating Characteristic (ROC) curve, whereas Calibration of model was analyzed by calculating Standardized Mortality Ratio (SMR). Logistic regression analysis was also used to find out the relationship between a dichotomous dependent variable and continues independent variable.

**Results:** There were 501 patients, and their median age was 48.96 (IQR 65- 30; Minimum 18, Maximum 86) years. Male comprised 306 (61.1%) and female comprised 195 (38.9%) of the total number of patients. Of the 501 patients, 185 (36.9%) died and 316 (63.1%) survived. Accuracy of discrimination was assessed by the area under the Receiver Operating Characteristic (ROC) curve. The area under the ROC of APACHE II score to the hospital mortality was 0.722 ( $p < .001$ ; 95% CI, .676 -.767). The calculated Standardized Mortality Ratio (SMR) for the APACHE II was 0.87. Logistic regression describes the relationship between dichotomous dependent variable and continues independent variable. The odds ratio for APACHE II was (OR = .983;  $p = < .488$ ; 95% CI, .936-1.032).



**Conclusion:** APACHE II has good discrimination and calibration as evidenced by area under curve and standardized mortality ratio. It was found that Acute Physiology and Chronic Health Evaluation (APACHE II) severity scoring systems to be of acceptable value to describe severity of illness and to estimate outcome in a group of critically ill patients. The results of this study add value and can aid critical care physicians, critical care nurses and relatives of critically ill patients in deciding on the probable outcome, quality care and management decisions.

**Keywords:** APACHE II, Critically Ill, Intensive Care Unit, Mortality, Outcome.

### **Audience Take Away Notes**

- Acute Physiology and Chronic Health Evaluation (APACHE II) severity scoring system helps in assessment of severity of illness in ICUs. Admission in ICU can be done on the basis of this severity scoring system. It helps in deciding better patient care decision in ICUs. Subject who has been diagnosed higher predicted mortality rate needs more vigilant monitoring and highly specialized nursing & medical care
- Severity scoring system helps in effective planning of care to meets the needs of critically ill patients and their families who have complex, multisystemic problems. It helps in decision making for nurse, physician and family members, provides prognosis and discharge decisions, measure overall ICU performance and can be used in clinical research
- Helps to examine and compare the quality of ICU care as reflected by patient's outcome. Optimized distribution of medical, nursing and financial recourses is of crucial importance in the delivery of health care in ICUs, particularly in the developing and low middle income countries of the world

### **Biography**

Raj Kumar Mehta studied B.Sc. (Hons.) Nursing at BPKIHS, Nepal and received his MSN (Critical Care) at AIIMS, New Delhi, India. He is a Professor and Head, Department of Critical Care Nursing, Member- Secretary, Institutional Ethical Research Committee (IERC), at Chitwan Medical College Teaching Hospital, Nepal. He has more than twenty years of nursing experience both as a practicing and teaching nursing to Undergraduate and post graduate students. His area of expertise is in critical care, scientific research methods, Nursing education and service, resource person for research and faculty development workshop, Editorial Board member/ reviewer of JCMC, NHRC, KUMJ, PUHS journal. He has published more than two dozen articles in reputed indexed journals and participated in many national-international academic conferences. He is currently pursuing PhD in Nursing (PhD Scholar) at Lincoln University, Malaysia.



**Dr. Hector Upegui<sup>1\*</sup>, MD, MSS, PM, OSHM, Sean Renner<sup>2</sup>**

<sup>1</sup>Chief Health Officer, Curam by Merative, Munich, Germany

<sup>2</sup>VP of Business Growth, Curam by Merative, London, England

## **Unveiling the six cluster model for transforming chronic disease management by bringing coordinated health and social outcomes to life**

The escalating global prevalence of chronic diseases constitutes a significant health crisis, with 60% of adults in the United States (CDC), 40% in Canada (Public Health Agency of Canada) and 30% in Europe contending with at least one chronic condition (European Chronic Diseases Alliance). By 2030, cardiovascular disease, most cancers, diabetes, and chronic respiratory diseases are projected to contribute to approximately 81% of deaths in Latin America (OECD), further highlighting the pervasive impact of these Noncommunicable Diseases (NCDs). In the South-East Asia Region, NCDs account for 62% of all deaths, while sub-Saharan Africa witnessed NCDs responsible for 37% of deaths in 2019 (WHO).

In addressing the imperative for innovative strategies to tackle this burgeoning health crisis, we advocate for a paradigm shift towards leveraging social assets at the individual, family, and community levels. Activation of these social assets proves paramount in the complex landscape of chronic diseases. Multi-disciplinary teams beyond healthcare certainly supports the bridging of different dimensions in the healthcare workflow while engaging social assets.

Over the past seven years, we have analyzed transformational initiatives across various systems worldwide. This analysis has led us to identify elements that form six distinct clusters. In this presentation, we describe the six clusters towards the activation of social assets of the individual, family and community to properly achieve person centricity through coordinated health and social outcomes (CHSO).

### **Audience Take Away Notes**

- **Promote Awareness and Understanding:** Heighten awareness and comprehension of challenges in chronic disease management and introduce transformative models as viable solutions. Our research delineates a clustering of transformative elements and proposes actionable strategies for implementation
- **Engage Healthcare Professionals:** Cultivate engagement among healthcare professionals, especially those in clinical settings with multi-disciplinary teams, by visualizing innovative service pathways
- **Advocate for Policy Considerations:** Champion the inclusion of policy considerations that recognize and endorse the significance of coordinated health and social outcomes in the domain of chronic disease management
- **Gain Insight:** Understand the challenges and solutions in chronic disease management, providing a foundation for informed decision-making
- **Enhance Practices:** Healthcare professionals can integrate innovative service pathways into their clinical settings, fostering better patient outcomes
- **Influence Policy:** Advocacy for policy considerations empowers the audience to contribute to systemic changes in the approach to chronic disease management
- List all other benefits

- o **Practical Application:** Offers practical solutions applicable to real-world challenges in healthcare settings
- o **Research and Teaching Expansion:** Provides valuable research insights that faculty can incorporate into their own research or teaching materials
- o **Streamlined Design:** Simplifies and enhances the efficiency of a designer's job by addressing complex issues in chronic disease management

### **Biography**

Hector brings three decades of experience to healthcare and social protection. His career spans medical practice, social policy-making, and operational management. Currently, he oversees global research and strategy at Cúram by Merative. Having studied medicine at University CES, holds a European Master's degree in Social Security from the Katholieke Universiteit Leuven, Belgium. He is a Postgraduate in Project Management and Postgraduate in Occupational Safety and Health Management. He is also visiting professor for the University CES, invited professor to the University of Applied Sciences in Rosenheim Germany and lecturer at the International Training Centre of the International Labour Organization (ILO).



**Mamata Sharma Neupane<sup>1\*</sup>, Hafizah Che Hassan<sup>2</sup>, Surendra Uranw<sup>3</sup>, Raj Kumar Mehta<sup>4</sup>**

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<sup>3</sup>Department of Medicine, B.P. Koirala Institute of Health Sciences, Dharan, Nepal

<sup>4</sup>Department of Critical Care Nursing, Chitwan Medical College, Bharatpur, Nepal

## Clinico-epidemiological profile of patients with COVID-19 in a tertiary care centre of central Nepal

**Introduction:** The origins of the SARS-CoV-2 virus can be traced back to December 2019 when clusters of pneumonia cases of unknown etiology were reported in Wuhan, Hubei Province, China. COVID-19 pandemic, caused by the highly contagious SARS-CoV-2 virus, has brought unprecedented challenges to global public health systems. The rapid spread of the virus within Wuhan and its subsequent global transmission led the World Health Organization (WHO).

**Objective:** The objective of the study was to assess clinico-epidemiological profile of patients with COVID-19 in a tertiary care centre of Nepal.

**Methodology:** A cohort study was conducted among patients with Covid-19 positive at Chitwan Medical College. COVID positive patients admitted in COVID ward, COVID ICU and Isolation wards of Chitwan Medical College were included in the study. Ethical approval was obtained from NHRC. Total 348 samples were included in the study by using convenient sampling technique. A self-constructed interview questionnaire along with laboratory performance was used to collect data on demographic variables, comorbidities, personal habits, and major symptoms. Data analysis was performed using SPSS version 20.0. Data was analyzed using descriptive statistics.

**Result:** The age distribution revealed a diverse representation, with young adults constituting 24.7%, middle adults 34.2%, and the elderly 41.1%. Gender-wise, males accounted for 54.0% and females 46.0%. Notably, 98.9% of participants reported being married. Symptoms included fever (81.0%), cough (75.9%), dyspnea (48.0%), and other reported manifestations. In the context of complications, 98.0%, 6.9% and 5.7% experienced respiratory complications, COVID pneumonia and renal complications respectively. In terms of outcome, 79.6% patients were discharged where as 20.4% patients encountered death.

**Conclusion:** Our study augments the understanding of COVID-19's heterogeneity within our population, offering insights that could guide targeted interventions and inform health policies.

### Audience Take Away Notes

- This study attempts to educate the general populace and all concerned authorities on the impact of the pandemic in the region
- SARS CoV2 continues to pose a threat to human race even after years of its outset in China. Observational studies from across the world have shown huge disparity in the clinic-epidemiological and laboratory features of this disease
- A knowledge about the disease presentation in each geographic area is important in planning the effective management strategies since the features are varied from place to place

## **Biography**

Mrs. Mamata Sharma Neupane is a PhD Scholar at Lincoln University, Malaysia. She graduated as Master of Public Health from Dhaka, Bangladesh. She then joined as Public Health and nursing faculty at Chitwan Medical College in Nepal. She has more than twenty years of experience in public health and nursing field. She has been engaged in teaching, guiding researches and conducting different research studies. She has obtained the position of professor at Chitwan Medical College. She has published more than two dozen research articles in different journals. Her area of expertise is reproductive and child health, epidemiology, community health nursing, resource person for faculty development workshop, editorial member of JCMC and member of Institutional Ethical Research Committee (IERC), at Chitwan Medical College Teaching Hospital, Nepal.



**Dr. P. Naveen Kumar<sup>1\*</sup>, Dr. Bryal D' Souza<sup>2</sup>**

<sup>1</sup>Department of Hospital Administration, Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Manipal, Karnataka, India

<sup>2</sup>Department of Health Innovation, Prasanna School of Public Health, Manipal Academy of Higher Education, Manipal, Karnataka, India

## Remodeling of nursing education on E-learning platform in a medical college hospital

To showcase the experiences of 335 intensive care nurses learning on digital content in a medical college hospitals, as nurses are more in number than a private small hospital and to plan training programs to large group of nurses over a year. We worked in identifying the right topics to convert classroom teaching modules into digital format and secondary objective was to identify the research gap of understanding the effectiveness of technology based electronic (E-platform) tools for Continuous Nursing Education compared to Traditional classroom training. Experimental, Case Control method study was done on nurses from intensive care areas. Half of them were given traditional classroom teaching were grouped as Control group and other half were counted as Case group. For this comparative study, we have taken one of the modules being taught in the tertiary care hospital – on Blood Transfusion Practices. For case group, 4 videos were made with nurse trainers of hospital, size of 50 MB each with content on blood transfusion practices in wards and intensive care units, signs and symptoms related to adverse blood transfusion reactions and adverse blood transfusion reaction reporting process for enhancing patient safety. Each video running for 20 minutes, circulated on mobile numbers of nurses.

We are using the Routine Blood Transfusion Knowledge Questionnaire (RBTQ) which was formed based on the British Committee for Standards of Hematology's guidelines. The mean scores achieved in Control group during pre-test was 18 and the Experimental group was 22. These mean scores had improved to 22 marks in Control group (11.8% increase) and 28 marks in experimental group (17.7% increase). On comparing both the groups, the experimental group had significantly higher scores than the control group in terms of knowledge and awareness of occupational safety. It was also seen that 76% of the nurses in the experimental group had visited the website with only around 60% actually completing the online course. It was later discussed that adding a chat box or a way to discuss will clarify doubts of participants would be of help and encourage higher completion rates.

### Audience Take Away Notes

- We have prepared training content on medico-legal documentation awareness by nurses, family nurses training on domiciliary care, home care services. We can share that with the audience. Designing the online content is not easy
- Classroom trainings adds to training costs to organisation and paid leave provision to employees. This can be absorbed with digital training. Nurses from busy areas of hospitals will prefer viewing the content at their leisure pace. But, constant follow ups by trainers is required to keep their pace in learning. We can share all these experiences with the audience
- Nurses will accept this type of training if local nursing councils or regulatory bodies accept it. We approached the local chapters of nursing associations and they are in process of approving it



## **Biography**

Dr. Naveen Kumar is currently working as Professor& Head of Department of Hospital Administration in Kasturba Medical College, Manipal. He has received a “distinguished alumni award” of Manipal University. He has served in many prestigious institutions of national repute in last 20 years, like Nizam’s Institute of Medical Sciences (NIMS), Hyderabad, IIHMR, Bangalore, ICICI Prudential Health Insurance. He has 30 Journal publications to his credit in national and international journals Pubmed & Scopus Indexed journals, and has presented 10 papers in International conferences like Association of Health Literacy in Malaysia, Research conference in Nepal, and chaired sessions on of Indian Public Health Association Conference in AIIMS, Jodhpur, Health Insurance Colloquium at SOC, Manipal.



**Dr. Rushvini Ambihaipahan**

NHS, United Kingdom

## Accessing health information during the COVID-19 pandemic: The experience of NHS maternity service users

**Background:** The COVID-19 pandemic caused various disruptions to NHS maternity services in England. Changes were made to antenatal and postnatal care and the way that information was shared with maternity service users during these times. Fewer face-to-face appointments, increased virtual appointments and changes in guidance about the suitability of the COVID-19 vaccine without appropriate information sharing and evidence caused concern.

**Methods:** This study took a blended inductive-deductive approach to secondary data analysis using a population subset of 16 from a wider study that sought to understand the impact of COVID-19 on maternity services in England. Participants of this study were aged 28–44 and gave birth using NHS maternity services in England. The data were collected and coded using Rapid Analysis Procedure sheets, which generated key themes, which are used here to structure the results.

**Results:** Four main themes were generated from the analysis: 1) service restrictions to antenatal and postnatal appointments 2) access to information and changes to antenatal and postnatal care 3) inconsistencies in the implementation of government and NHS policy and 4) limited information about COVID-19 vaccine provided by NHS trusts and hesitancy in vaccine acceptance.

**Conclusion:** Participants experienced poor communication that affected their understanding of maternity service changes and there was limited general and maternal health information provided. Vaccine information was also inadequate, and participants expressed a desire for clearer guidance. The UK Government, Royal College of Obstetricians and Gynaecologists, and NHS must collaborate with maternity service users to ensure that there are evidence-based guidelines and policies that can be understood and standardised across all NHS maternity trusts.

### Biography

Dr. Rushvini Ambihaipahan, MBBS, MRCPCH, MSC, PgCert (Child Health) is a Paediatric Registrar working in London. She specialises in managing unwell children and young people in the acute hospital setting as well as in the community. Her main interests include the social determinants of health affecting children and young people and the care of children who are looked after and children seeking asylum.



**Kelly Cremer<sup>1\*</sup>, Lena Schroeder Chaidron<sup>1</sup>, Julie Frere<sup>2</sup>, Olga Chatzis<sup>3</sup>, Benoit Kabamba<sup>4,5</sup>, Florence Renard<sup>6</sup>, Mathilde De Keukeleire<sup>1</sup>, Ricardo De Mendonca<sup>7</sup>, Dimitri Van der Linden<sup>3,4</sup>, Annie Robert<sup>1</sup>**

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## Children and workers well-being french-speaking primary schools during the COVID-19 pandemic in Belgium

**Background:** During the COVID-19 pandemic, a significant number of measures were taken worldwide to limit the transmission of SARS-CoV-2, and in many ways, changed human life. All these measures had harmful consequences and impacted the well-being of many people. Children were one of the most vulnerable groups. We conducted the present study to assess children's and staff's well-being in Belgian French-speaking primary schools during the COVID-19 pandemic.

**Methods:** A 37-question questionnaire for each child based on the Revised Children's Manifest Anxiety Scale (RCMAS), and a 14-question questionnaire for each staff based on the Hospital Anxiety and Depression (HAD) scale was undertaken in order to assess the well-being. Multiple logistic regressions were performed to assess the relationship between RCMAS or HAD and other explanatory variables. Staff reported their perception of their current life and their future life in 5 years on a Visual Analogue Scale.

**Results:** A total of 231 children and 221 staff in 11 primary schools completed the well-being questionnaire between January and May 2021. 53% (122/231) of children had symptoms of anxiety. Girls reported more anxiety symptoms ( $\geq 10$ : 59%; Adj OR = 2.25; 95% CI [1.28; 4.03]) than boys. 52% (120/231) of children had a definite state of social desirability. The youngest children (6 - 7 years) were more likely to have social desirability ( $\geq 5$ : 71%; Adj OR = 3.44; 95% CI [1.53; 8.09]) than the oldest (10 - 12 years). Children who did not practice outdoor/street activities were more likely to have social desirability ( $\geq 5$ : 60%; Adj OR = 2.59; 95% CI [1.38; 4.99]). Children were more likely to have social desirability in schools with a higher local incidence of SARS-CoV-2 ( $\geq 5$ : 64%; Adj OR = 2.15; 95% CI [1.13; 4.17]). Children were more likely to have social desirability in schools with a lower socioeconomic status ( $\geq 5$ : 72%; Adj OR = 2.74; 95% CI [1.23; 6.37]). 16% (35/221) of staff had a definite state of anxiety. Staff working in larger schools reported less anxiety ( $\geq 11$ : 10% Adj OR = 0.34; 95% CI [0.15; 0.77]). Staff reported lower scores for the perceived life in general during the pandemic than the perceived life in 5 years ( $r = +0.35$ ).

**Conclusion:** Our results showed that the well-being of children was impacted during the COVID-19 pandemic. Special attention must be focused on the most vulnerable groups, as the consequences can be catastrophic in the long term.

### **Audience Take Away Notes**

- The COVID-19 pandemic affected and is still affecting most countries worldwide. The well-being is an important aspect to consider as future consequences can have a major impact on children
- Focusing on children's well-being and helping to improve it can prevent many problems in the future
- Integrating well-being into preventive measures for future pandemics could limit their consequences
- It is important to evaluate and document children's well-being after the COVID-19 pandemic in order to assess if the decrease in well-being maintains and set up interventions in order to limit consequences later in life

### **Biography**

Miss. Kelly Cremer is a nurse and studied Public Health at the UCLouvain University, Belgium and graduated in 2019. In 2020, she then joined the research group of Prof. Annie Robert at the Department of Epidemiology and Biostatistics, Institut de Recherche Expérimentale et Clinique, UCLouvain in Belgium. She published 3 research articles in SCI (E) journals.



**Fadzai Chikwava<sup>1,2\*</sup>, Reinie Cordier<sup>3,1,4</sup>, Anna Ferrante<sup>5</sup>, Melissa O'Donnell<sup>6,7</sup>**

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<sup>7</sup>Telethon Kids Institute, University of Western Australia, Nedlands, Western Australia, Australia

## Using linked administrative data to examine mental health outcomes among young people transitioning from out-of-home care in Australia

**Background:** There is overwhelming evidence that young people who have been in Out-of-Home Care (OHC) have poor long-term outcomes in many areas, including mental health. The study is invaluable in developing strategies and policies for young people with a history of trauma and abuse.

**Aims:** This study aimed to describe the most prevalent mental disorders of young people in Western Australia transitioning from OHC compared to young people with Child Protection contact (CP contact) and those in the general population with no Child Protection contact (No CP contact). In addition, factors associated with any mental health diagnosis were assessed for the whole population.

**Methods:** The study utilised linked health, child protection, education, and justice datasets from WA's Social Investment Data Resource (SIDR). The SIDR is a population-level database of linked administrative records provided by various WA government agencies. The linked datasets were from a birth cohort of young people between 1993–2008. Three groups were identified within the birth cohort for the analysis: OHC ( $n = 6,526$ ), CP Contact ( $n = 78,095$ ), and No CP contact ( $n = 329,645$ ). Descriptive statistics of each cohort are presented for the mental health variables. Univariate and multivariate Cox regression analyses were conducted, and Hazard Ratios (HR) were calculated for each cohort to investigate the risk of children and young people having mental health contact, accounting for different follow-up periods.

**Results:** Young people in OHC had a period prevalence of 32% of any mental health disorder compared to a period prevalence of 21% for those with CP contact and 7% with No CP Contact. The most prevalent mental health disorders among OHC were stress-related disorders (21%), psychological development (16%), self-harm (9%), and mood disorders (5%). Young people in OHC had more than three times increased risk ( $HR: 3.95 [3.62–4.30]$ ) of a mental health diagnosis compared to those with No CP, while those with a CP Contact had over two times increased risk ( $HR: 2.41 [2.30–2.53]$ ) of a mental health diagnosis compared to those with No CP. A higher risk of mental health diagnosis was determined among females, Indigenous young people in remote areas, young people with higher levels of disadvantage, those with substance misuse disorders, maternal/paternal mental health, and previous experience of housing instability.

**Conclusion:** Our findings were consistent with previous studies; however, our study determined the prevalence, variability, and risk factors of mental health disorders among young people transitioning from OHC. Further research is required to determine the mental health trajectories for these three population groups. Understanding the experiences of young people in these three heterogeneous groups is crucial to inform policies and practices that support young people going through different developmental stages.

### **Audience Take Away Notes**

- The study provides a strong evidence base of the poor mental health outcomes experienced by young people transitioning from out-of-home care compared to peers in the general population of Australia
- The findings could be useful in identifying sub-groups of populations of young people at risk of mental health and factors associated with mental health. Flexible models of care should be offered to this heterogeneous group of young people with multiple and complex health and social needs
- Future research should determine longitudinally the mental health trajectories for the sub-groups of these young people

### **Biography**

Ms. Fadzai Chikwava is a well experienced research professional with over 15 years of experience working in public health. She is currently working at the Mental Health Commission as a Senior Monitoring and Evaluation Analyst. She has worked in Eastern and Sub-Saharan Africa and Saudi Arabia. She is a proven research professional with exceptional research, evaluation, and advanced statistical analytical skills. Her interests are linked data analysis, research on mental health and resilience and using research to inform programs and policy. Fadzai hold a Master's degree in Medical Statistics, and she is currently studying for her PhD at Curtin University.





**Dr. Lilian Wong, MD, MPH, FAAP**

General Pediatrics, Sanford Children's (Sanford Health) Bemidji, Minnesota, United States

## Primary care pediatrics: The answer to the world's health problems

**P**Primary Care Pediatrics is critical to, and directly impacts population health goals. Obesity in early childhood that continues into the early teens is associated with increased risk of Type II Diabetes in adulthood. High blood pressure in adolescence is associated with early-onset adult hypertension. Half of adult mental illness begins in the teenage years. Early childhood developmental competence not only directly impacts educational success but also is a key determinant of future health and well-being. With all this evidence, is healthcare funding, public health initiatives and preventative care moving upstream to the young?

Primary Care Pediatrics is different from "Specialty" Pediatrics, which as a "specialty", by default, is sickness-focused or hospital-based. Primary Care Pediatrics, while also including sick care, provides preventative care, anticipatory guidance and a medical home. It is first-contact, comprehensive care. Continuity of care and coordination of care are its other attributes. Its goals and foundation are a Public Health one, while its practice overlaps with "Specialty" Pediatrics and Family Medicine. This talk looks at how evidence-based Primary Care Pediatrics practice achieves the well-being of infants, children, adolescents in physical, psychosocial, and mental health – so that they may achieve their highest possible potential as adults. This is foundational to building a healthy nation.

To ensure appropriate, current and evidence-based care delivery, clinicians who provide child and adolescent primary care must be clinically and academically trained in Primary Care Pediatrics, ideally by clinicians who have likewise been trained. This talk raises for thoughtful consideration obstacles that have to be overcome, for transformation of child and adolescent health care delivery. Indeed, with rapidly aging populations in many First World nations and the double burden of disease in developing nations, the focus of many nations is that of sickness care especially in the elderly because of the consequent escalating healthcare costs. In addition, establishing expensive specialty and sub-specialty services are often the focus of not only for-profit health organizations, but even not-for-profit institutions. Not only that, physician compensation for Pediatrics and Primary Care is among the lowest across the different fields in Medicine. Then there is the old adage that change takes time. But Gabriela Mistral (1889-1957) said it best: "Many things we need can wait. The child cannot. Now is the time his bones are being formed, his blood is being made, his mind is being developed. To him we cannot say tomorrow, his name is TODAY".

### Audience Take Away Notes

- Appreciate the difference in child, adolescent care delivery by Primary Care Pediatrics-trained clinicians
- Recognize that pediatric care ranges from mental to physical to social health
- Understand the components and importance of well baby/child/adolescent checks
- Recognize the difference between developmental surveillance and developmental screening in detecting early childhood behavioral-developmental concerns

- Appreciate some of the obstacles but also some of the opportunities presented in any healthcare transformation

### **Biography**

Dr. Wong was a recipient of the prestigious ASEAN scholarship awarded by the Singapore government to foreign nationals of South-East Asian nations. She completed most of her education in Singapore, where she also attended medical school. Upon graduation, she first trained and worked in Public Health and Healthcare Management. She then left for America where she trained at Virginia-Tech Carilion School of Medicine and Johns Hopkins School of Medicine. She is both a US-Board certified General Pediatrician and Singapore-Board certified Public Health physician. She is a passionate advocate for the transformation of pediatric health services. Dr. Wong returned to America in 2023 and currently works in a rural underserved community.



**Laraib Saleem<sup>1\*</sup>, Suraiya Jabeen<sup>2</sup>, Lauren Zajac<sup>3</sup>, Charmaine Francis<sup>4</sup>, Cappy Collins<sup>3,5</sup>**

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## **The prevalence of areca nut among rural communities in Karachi, Pakistan: A community-based cross-sectional study**

**Background:** The seed of the areca palm is chewed recreationally by approximately 600 million people globally. Chewing areca is strongly associated with oral cancers. In Karachi, Pakistan, the practice is common, with one study reporting 34.3% to 50% use of areca nut products and areca nut mixed with tobacco products in a squatter settlement. In Pakistan, oral cancers are second only to breast cancer in prevalence. Oral cancers are highly preventable; the high prevalence represents an unmet public health need. Further, local prevalence statistics are needed to inform successful prevention interventions to target the most vulnerable populations.

**Methods:** We enrolled 760 participants among the rural population of Karachi, Pakistan, between December 2021 and February 2022. This cross-sectional study assessed the prevalence of self-reported areca nut use, prevalence of self-reported oral cancers, and awareness of adverse health effects stratified by age, gender, and ethnicity.

**Results:** 74% of the overall study population were areca nut users. There were significant associations with oral cancer based on gender, and non-significant differences with ethnicity. The rate of daily areca nut consumption among adults was 76.5% (males 87%, females 53%), and among children (male and female, ages 5-13 years) was 60%. By age, the highest rate was among 18-34 year-olds at 89%; the lowest was among children at 60% and people 65 years and older at 62%. Among ethnic groups, the Sindhi population had the highest rate of areca nut consumption (79%); Balochis the lowest (55%). The overall self-reported oral cancers among the study population were 10.3%. Among areca nut users, 12.2% had self-reported oral cancers compared to 6.6% among non-areca nut users. The self-reported cancer prevalence was higher among females (17.5%) than males (9%). The overall awareness rate regarding adverse health impacts among the study population was 11%.

**Discussion & Conclusion:** Areca nut use appears to be common in this rural population, with an overall prevalence higher than the national reported rate. There appears to be a positive correlation between areca nut consumption and self-reported oral cancers. There is room to improve population awareness of adverse health impacts. Gender, age, and ethnic distinctions suggest where to focus public health efforts.

**Keywords:** Areca Nut, Oral Cancer, Rural Community, Addictive Substance.

### **Biography**

Laraib Saleem studied Environmental Science at University of Karachi, Pakistan and graduated with Bachelors and Master of Science in 2019. He worked on the research project under the supervision of Dr. Suraiya Jabeen on food insecurity, and heavy metal toxicity at University of Karachi. Laraib was accepted as an Masters in Public Health candidate at the Icahn School of Medicine at Mount Sinai in 2020 with specialization in Environmental Health Science. He was working on a research manuscript under the supervision of Dr. Cappy Collins and Dr. Lauren Zajac at Mount Sinai

and graduated in June 2023. Laraib has worked on different global public health research projects (both in academia/sustaining health professional. He is currently working as a Community Health Liaison in Asthma Pediatrics and Adults Facility at the New York City Health and Hospitals. This is his first research article to be published in the academic journal.



**Dr. Qiong Li<sup>1,2\*</sup>, Xiaobing Shen<sup>1,2</sup>**

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## Development and validation of a diagnostic nomogram to predict high altitude pulmonary edema

**Background:** High Altitude Pulmonary Edema (HAPE) are one of the clinical manifestations of Acute Mountain Sickness (AMS). A fatal risk of HAPE has been contribute to a lack of prediction and delayed treatment. This study aimed to establish an effective diagnostic nomogram for HAPE patients.

**Methods:** A total of 1,255 Han Chinese were included in the study on the Qinghai Tibet Plateau above 3,000 m. They were classified as suffering from severe HAPE or not. The sample was divided in to training and testing datasets by time. The LASSO algorithms applied to formative predictors associated with HAPE based on Akaike's normalization criteria, and established the diagnostic nomogram for HAPE using multivariable logistic regression analysis. This diagnostic nomogram was assessed by the training and testing datasets. The C-statistic and the Hosmer-Lemeshow test were used to assess model performance.  $P < 0.05$  was considered to indicate statistical significance.

**Results:** The predictive factors including gender, Body mass index (BMI), systolic blood pressure, mean arterial pressure (MAP), white blood cell count (WBC), the percentage of lymphocytes, hematocrit, mean corpuscular volume (MCV), mean corpuscular hemoglobin concentration (MCHC), the platelet count (PC), and mean platelet volume (MPV) were contained in the nomogram. In the training data set ( $n = 854$ ), the C-statistic for predicting the probability of HAPE was 0.786. The C-statistic was 0.817 in testing datasetdata set ( $n = 391$ ). The nomogram was well calibrated, with a brier score of 0.176 ( $P = 0.3248$ ) in the testing data set. The confusion matrix was also summarized, and the accuracy was 71.99 and 74.94% in the training and testing dataset, respectively. The nomogram both performed well in terms of discrimination and calibration. Moreover, decision curve were also beneficial for HAPE patients.

**Conclusion:** The present study has proposed an effective nomogram with potential application in facilitating the individualized prediction of High altitude pulmonary edema.

### Audience Take Away Notes

- The application of this nomogram promotes the individualized prediction of high altitude pulmonary edema in the prevention and treatment of high altitude diseases
- Our study simplifies the diagnostic process of high altitude pulmonary edema
- Provide new ideas for establishing disease prediction models for other researchers

### Biography

Dr. Qiong Li is studing Epidemiology and Health Statistics at the Southeast University, Nanjing, China. She joined the research group of Prof. Shen at the Southeast University. She received her master degree in 2018 at the LanZhou University, LanZhou, China. She has published 2 research articles in SCI (E) journals.



**John Francis Abitong Paraoan, R.N., M.A.N., Ph.D**

NTUC Health Chai Chee Nursing Home, Singapore

## Residents' environment safety for fall prevention in a long-term care facility

Fall is one of the remarkable safety concerns in later life. Researchers have determined the age-related changes that contribute to the high incidence of falls like reduced visual capacity (Eliopoulos, 2013; Touchy, 2015), problems differentiating shades of the same color (Fillit, Rockwood and Young, 2016), cataracts (Malone, 2014), poor vision at night and in dimly lit areas (Sorrentino and Remmert, 2012). They also found that less foot and toe lift during stepping (Judge, 2017), an altered center of gravity leading to balance being lost more easily, slower responses (Gerdin, 2015) and urinary frequency (Wold, 2015). And, they've discovered too, that medications particularly those that can cause dizziness (Stern 2015), drowsiness, orthostatic hypertension, and incontinence, such as antihypertensive (Karch, 2017), sedatives (Laguna, 2017), antipsychotics and diuretics (Potter and Perry, 2016).

This study aimed to determine the residents' environment safety for fall prevention in a long-term care facility as perceived by external stakeholders in terms of access and circulation, orientation, signage, surface treatment, equipment and furniture, toilet and bathroom, bed-based bathroom, and bedroom.

**Based on the findings, the following conclusions were drawn:**

1. Majority of the respondents belong to 21-39 age group, female, college graduate, single and from National Capital Region.
2. The respondents' disagreed to some extent as regards the overall environment safety in G.R.A.C.E.S. which means "low extent." *The Environmental Theory of Florence Nightingale* states that environment plays a vital role on the health of an individual that can be achieved by having adequate ventilation and controlled light and noise (Alligood, 2017), the *21 Nursing Problems Theory of Faye Abdellah* (Wayne, 2014) stresses the need to promote safety through prevention of accident, injury, or other trauma and finally the theory of *Abraham Maslow's Hierarchy of Needs* (2013) emphasizes that the second level in the hierarchy is safety and security of environment; however, in G.R.A.C.E.S. the environment has a low extent of safety. As a result, the residents are not secured.

**On the basis of the findings and conclusions, the following recommendations were made:**

1. That environmental safety must be practiced, incorporated and maintained. As to nurses, they should be responsible and ensure in the safe and effective delivery of older care; protect older from risk, danger or injury; comply with the policy guidelines on the standards of care for older persons in all healthcare settings of the Department of Health Administrative Order 2017-0001. In addition, nurses should possess keen awareness of the safety skills and abilities which is crucial in the health maintenance and protection of the older persons.
2. That a similar study on safety of a long-term facility be made but should include and focus on a larger sample of respondents, if possible to include older residents from other facilities and compare results



as well as to target and subject family members of an older persons not yet admitted in a long-term facility.

### **Audience Take Away Notes**

- For them to know the extent of environment safety in a long term facility situated in the Philippines
- For them to know what are the existing nursing theories concerning environment safety for the older persons
- For them to know what recommended strategies can be done to promote a safe environment for older persons

### **Biography**

John Francis Abitong Paraoan is a registered nurse. He served as a Clinical Instructor at NWU from 2008 - 2015. He was a nurse supervisor at MMMH & MC from 2015 – 2021. In 2017, he was awarded as the Class Valedictorian, Best in Clinical, Best in Research, and Leadership when he attended the Geriatric and Gerontology Nursing. In 2021, he went to Singapore and worked as a Staff Nurse at NTUC Health Chai Chee Nursing Home. In 2022, he received Service Excellence Award. In July 10, 2023, he finished his Doctor of Philosophy in CSU.



**Anise N. Happi\*, Olusola A. Ogunsanya, Ayotunde E. Sijuwola, Femi Mudasiru Saibu, Kazeem Akano, Akeemat Ayinla, Cecilia Nwofoke, Richard Olumide Daodu, Oluwatobi Abel Adedokuna, John Fadele, Obineche Tobias Elias, Kehinde Ebenezer Ogundana, Omolola Zaheedat Lawal Ademola Adelabu, Iguosadolo Nosamiefan, Johnson Okolie, Zahra Parker, Melanie McCauley, Kara Lombardi, Leigh Anne Eller, Erica Broach, Petra Prins, Edyth Parker, BradyPage, Jonathan L. Heeney, Kayvon Modjarrad, Natalie D. Collins, Sandhya Vasan, Christian T. Happi**

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## **Genomic epidemiology analysis of lassa virus from infected small rodents suggests bidirectional movement of the virus across human and animals**

**L**assa Fever (LF) is a viral haemorrhagic fever that continues to pose a persistent public health threat in Nigeria and almost all West African countries. LASV circulation is maintained in the environment by several rodent reservoirs. Studies on the genomic characterization of the LASV in the rodent reservoir have been carried out with only a few rodent LASV sequences available in the GenBank. This leaves a huge gap necessary for understanding transmission, diversity and development of countermeasures. We sampled 1189 small rodents from two LF endemic states in southern Nigeria (Ondo and Ebonyi) and tested for LASV using RT-qPCR. We recorded an overall 61.6% positivity. Ondo State had a significantly higher LASV rodents compared to Ebonyi State. In Ebonyi State, LASV PCR Ct values were significantly higher than in Ondo State suggesting host resistance in Ebonyi than Ondo. We also measured and compared rodent immune response to LASV in 269 small rodents using the ReLASV® Lassa NP and Pf- GP-specific IgM and IgG ELISA and obtained an overall 45% seropositivity. While the IgM and IgG were both measured in almost all rodents tested positive, indicating failure in Ig class switch, IgM antibody response against the LASV NP and Pf-GP detection was significantly higher compared with IgG NP and GP in both states. Using Nextera XT metagenomic sequencing protocol, we produced 53 partial and full length genomes from rodents sampled which clustered within sub-lineage 2g. Additionally, we found that our sequences from Ondo were interspersed across ten well-supported phylogenetic clusters and two singletons in the subtree annotated as sub-lineage 2g. Our sequences from Ebonyi State (2019 - 2020) were closely related to sequences sampled in Owo (2019 - 2022) in Sub-lineage 2g across both segments, despite a greater physical distance. We also looked at the diversity of the virus among rodent samples in two states in Southern Nigeria about 900 km apart. Additionally, using phylogeography we suggested the free movement of the virus across states in Nigeria and across human and various animal taxa, suggestive of anthrozo and zoonthropozoonotic transmission. LASV sequences generated from this study reveals that LASV lineages variation is based on location and not host. This is essential for pandemic preparedness, further research, and development of countermeasures against Lassa Fever outbreaks.

**Importance:** We present the highest number of LASV whole genomes from small rodent reservoirs ever recorded and the first detection of LASV sublineage 2g in Ebonyi State. In this study the isolates collected from rodents are interspersed with previous isolates collected from both rodent and non-rodent hosts with probable free inter-hosts transmission of the virus. Consequently, it may be a potential pandemic threat. It is interesting to note that this study found IgM and IgG co-circulating in rodents and IgM antibody responses to be significantly higher than the IgG responses in rats and mice, suggesting persistent and active immune responses and failure of immunoglobulin class switch. Genomic data from this study reveals that LASV sub-lineage is a function of location but not host, inferring that countermeasures and diagnosis may need to consider the location of the virus origin and not one-size fits all.

## **Biography**

Dr. Anise Happi studied Veterinary pathology at the University of Ibadan and graduated with PhD in Veterinary clinical Pathology in 2010. She joined the University of Ibadan, Veterinary Pathology as a lecturer the same year till 2020. She then joined the research group of Prof. Christian Happi at the African Centre of Excellence for Genomics of Infectious Diseases (ACEGID), Redeemer's University, Ede, Nigeria. After Joining ACEGID in 2021, she started the Zoonotic Research and Surveillance/One Health unit. She obtained the position of Research Professor at the Redeemer's University. She has published more than 30 research articles in international journals.

**Edwin Oh**

University of Nevada Las Vegas, United States

**Functional characterization of multidrug-resistant *Candida auris* wastewater isolates from the largest outbreak in the United States**

From 2022 to 2023, the United States faced its largest outbreak of *Candida auris* infections in Las Vegas, Nevada. In response, our multi-disciplinary team, including engineers, geneticists, and epidemiologists, utilized wastewater and public health tools, initially developed during the COVID-19 pandemic, to track the spread of the pathogen across 42 nursing homes and hospitals. We established wastewater sampling protocols and DNA sequencing techniques, enabling the detection and sequencing of *C. auris* DNA, including drug resistance mutations. This approach identified Clade I and III lineages, uncovering novel mutation patterns across different facilities. We also refined methods to accurately culture *C. auris* from wastewater, overcoming traditional challenges in distinguishing *Candida* species. Through these techniques, we analyzed over 500 wastewater isolates using whole genome sequencing and MALDI-TOF mass spectrometry, alongside antibiotic susceptibility testing via the Etest method. Our genome-wide studies revealed significant SNPs in *FKS1*, *ERG11*, and other novel sites linked to antifungal resistance. We then cultured 40 distinct sub-lineages of *C. auris* from Clade I and III in two environments – YPD at 37°C and SSDB with fluconazole at 42°C. RNA sequencing and data-independent acquisition proteomics revealed a perturbation in ribosomal and cell cycle networks. Our study not only sheds light on the dynamics of the *C. auris* outbreak in Southern Nevada but also illustrates the potential of wastewater monitoring to enhance clinical data, offering deeper insights into pathogen evolution and resistance.



**Mei Ling Chu\*, RN, Master, I Ching, Evita Hou, RN, Ph.D**

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## **Analysis of Taiwan's policies on the psychological well-being of lung cancer patients: A literature review**

**Background:** In 2019, the global death toll from lung cancer was 204,260 individuals. Lung cancer accounted for 13,861 deaths among males and 6,565 deaths among females, making it one of the deadliest cancers among malignant tumors (Ji et al., 2023).

Depression is one of the common accompanying symptoms in lung cancer patients, which can increase the risk of suicide. The prevalence of depressive symptoms in lung cancer patients is 43.77% (Xing et al., 2023).

Patients with advanced stage (III-IV) cancer often experience severe psychological distress and a decreased quality of life due to their illness and the potential for death. Additionally, they need to communicate about their illness with their children, maintaining their role as good parents while experiencing emotional concerns during interactions with their children. This leads to a decrease in parenting efficiency. Moreover, spouses of patients who are jointly raising children are also susceptible to a lower quality of life and higher psychological symptoms such as depression.

Therefore, it is necessary to clarify domestic and international policies related to the mental health of cancer patients and adolescents under 18 years of age, in order to further improve the phenomenon of parental estrangement between lung cancer patients and their children.

**Methods:** Regarding the issue of psychological well-being in lung cancer patients, a literature search will be conducted using key terms and synonyms, including "lung cancer patients" and "mental health," across five major databases (CINAHL, Medline via EBSCOhost, PubMed, PsycARTICLES, Airtiti library).

**Results:** After reviewing foreign policies, it is found that compared to domestic strategies, the advantages are:

1. The multidisciplinary nature of psycho-oncology teams, which consist of professionals from various fields, allows for interventions in families, communities, and schools to assist cancer patients and adolescents with psychological issues.
2. Remote psychological health services interventions can address psychological issues in other family members (spouses, children) of cancer patients.

**Conclusions:** In the aspect of policy analysis, it has been found that lung cancer patients experience severe psychological issues, and psychological problems in children and adolescents are also common. Currently, Taiwan lacks specific policies or plans for addressing psychological issues in children and adolescents. Therefore, referencing strategies for cancer patient psychological well-being from the United States, the United Kingdom, Japan, and Singapore, it is observed that enhancing the diversification of psychological counseling services and implementing remote psychological health services to assist in multiple counseling sessions between cancer patients and children can yield a higher cost-benefit ratio for cancer psychological health.

### **Audience Take Away Notes**

- Utilizing a literature review to understand the current status of policy formulation regarding the psychological well-being of lung cancer patients in Taiwan
- Using policy arguments and foreign policy schemes, it is found that diversifying psychological counseling services and implementing remote psychological health services can improve the psychological well-being of lung cancer patients and enhance parent-child interaction with adolescents
- Utilizing remote psychological health services increases the utilization rates among lung cancer patients and adolescents, consequently reducing depression

### **Biography**

Mei Ling, Chu is a doctoral candidate at National Yang Ming Chiao Tung University, researching the psychosocial well-being of cancer patients. She currently works as a nurse at National Taiwan University Hospital. She has published three articles in domestic public health journals and the National Taiwan University Nursing Journal.





**Prof. Itumeleng Gladys Msiza, Thanyani Gladys Lumadi\***

Department of Health Studies, University of South Africa, Tshwane, Gauteng Province, South Africa

## **Facility managers experiences of mentorship at a district in gauteng province, South Africa**

The researcher conducted the research study to explore how facility managers experience mentorship in a primary health care facility. A qualitative exploratory and descriptive research design was employed to achieve the study objectives. A non-probability purposive sampling method was used to select eleven facility managers from three subdistricts and pre-tested semi structured interview guide was used to interview them. Content analysis method was used to analyse the data, resulting into four themes.

### **Audience Take Away Notes**

- The audience will learn how the process was followed and be able to apply in their own research
- The audience will learn mentorship experiences of facility managers including barriers to mentorship and how mentoring can be improved
- In this research gaps such as lack of formal mentoring and lack of human resources were identified
- This presentation can help the audience in their respective jobs as mentoring is an important aspect in most health settings, either clinical or teaching. The recommendations made can assist other health professionals to improve mentoring in their respective settings

### **Biography**

Prof. Lumadi obtained her BA Cur in 1995 and honours in 1997. She further studied public health at the Pretoria University, South Africa and graduated for MPH masters in 2006. She joined the Department of Health Studies of the University of South Africa in 2009. She received her PhD degree in 2014 at the same institution. She was promoted to senior lecturer and after 2 years to associate professor. She has published 7 research articles in peer reviewed journals. She has supervised 9 masters students and 4 doctoral students to completion.



**Dr. Kathryn Tennant**

Research and Knowledge Centre, Te Whatu Ora - Waitemata, Auckland, New Zealand,  
Faculty of Medical and Health Sciences, Waipapa Taumata Rau - University of Auckland, Auckland, New Zealand

## **What is the experience of nurses undertaking research activity whilst in paid employment? An interpretive descriptive study**

The importance of research and evidence-based practice in delivering high-quality patient care is widely recognised. Research is pivotal in improving community health, as emphasised in the Waitemata District Health Board (WDHB) Research Strategy (2021). The New Zealand Health Research Strategy (2017) emphasised the significance of support and research education in fostering a dynamic research environment. Therefore, to enhance nursing research capacity and capability, it is crucial to provide effective support for nurses engaged in research activities.

This interpretive descriptive study explored the experiences of nurses conducting research while being employed. By exploring these experiences, the study aimed to build research capacity and capability among nurses by providing recommendations for developing support systems. Semi-structured interviews were undertaken with six registered nurses who had completed research activities within the previous five years. Following a reflexive thematic analysis approach (Braun & Clarke, 2022), five themes were developed that provide valuable insights into the participants' experience of undertaking research activity whilst employed.

**Adult Learning Theory Vs. Lack Of Methodological Support:** Nurses encountered a tension between adult learning principles and the absence of adequate methodological guidance. This underscores the need for comprehensive training and guidance to empower nurses in their research pursuits.

**Role Conflict:** Balancing research responsibilities with clinical duties created challenges related to time management and role conflict. This issue highlights the need for recognising and addressing the dual role of nurses as both healthcare providers and researchers. Participants also experienced a conflict between their professional and personal roles.

**'Little Pockets of Research':** Participants often felt isolated in their research endeavours due to a lack of workplace awareness and support for research. Enhancing academic awareness and fostering a collaborative research culture is crucial for overcoming this isolation.

**'It Just Sits on a Shelf Getting Dusty':** This theme reflects a gap between research completion and practical application. Bridging this gap is essential to ensure that research is disseminated, translated and integrated into practice and has a tangible impact on patient care.

**'The Process Grows You':** Engaging in research enhances participants' professional growth and self-concept. Recognising and celebrating these personal and professional advancements can make nurses feel valued and motivated as researchers.

The data analysis highlights the challenges nurses encounter while conducting research while being employed. Nurses' engagement in research should be driven by a sense of purpose, knowing that their efforts can directly influence patient care and outcomes. Moreover, nurses' contributions as both healthcare providers and researchers should be acknowledged and appreciated.

In conclusion, this study provides valuable insights into nurses' experiences conducting research activities while employed. By addressing the challenges identified and implementing the recommendations provided, the research support infrastructure can be enhanced, fostering a more robust research culture within healthcare organisations. Ultimately, such improvements will contribute to the advancement of nursing research and positively impact patient care and community health.

### **Audience Take Away Notes**

The audience will gain an appreciation of the challenges nurses face when conducting research within their employment context; an understanding of the need for providing effective support for nurses engaged in research activities to enhance nursing research capacity and capability; and practical recommendations for building research capability and capacity within their own organisations. These include:

- Reviewing and supporting relationships between academic work and the practice role
- Identifying research within job descriptions, with allocated time to undertake research
- Providing research fellowships
- Creating and supporting a clinical academic pathway
- Promoting research networks
- Recognising and promoting the visibility and availability of physical research support
- Encouraging, promoting, and supporting research dissemination

Creating a research culture in nursing requires leadership, education and training, involvement in the research process, organisational culture, and collaboration and partnerships. By promoting a research culture, nurses can advance the profession and improve patient outcomes

### **Biography**

Dr. Tennant is an experienced senior nurse, researcher and lecturer in the UK and NZ, with a unique blend of skills, knowledge and leadership due to her experience as a Royal Navy senior nursing officer, senior nurse in critical care, and senior lecturer including Masters level critical care module leader and undergraduate dissertation supervisor. She has a strong academic and research background having completed a Doctorate in Education, two Post Graduate Certificates, and a Masters degree, along with FHEA.



**Wendy Blair<sup>1\*</sup>, Prof. Ashley Kable<sup>2</sup>, Dr. Helen Courtney Pratt<sup>3</sup>,  
Dr. Evan Doran<sup>4</sup>**

<sup>1</sup>New Zealand Nurses Organization, New Zealand

<sup>2</sup>University of Newcastle, Australia

<sup>3</sup>University of Tasmania, Australia

<sup>4</sup>University of Sydney, Australia

## Nurse recognition and response to unsafe practice by their peers

**Introduction:** Internationally, nursing regulatory bodies have introduced practice standards in an attempt to manage unsafe practice. Despite this, unsafe practices still occur and the identification and management of them remains an issue for the nursing profession. Few studies have sought to identify how unsafe practice is recognised and responded to by nurses. Nurses' recognition and response to unsafe practice by their peers is crucial to the improvement of patient outcomes and safety. Nurses need to be aware of behaviours, cues and factors that indicate unsafe practice so that they can prevent harm to patients by implementing interventions that stop practices that breach the safety boundary.

**Aim:** This study aimed to identify the behaviours and cues that registered nurses recognised as indicating unsafe practice, the factors perceived to influence the occurrence of unsafe practice, and the actions and responses made by nurses when they encountered unsafe practice. Organisational policies and processes for reporting and prevention of unsafe practice, and the prevalence of unsafe practice amongst New Zealand Registered Nurses were explored.

**Methodology:** This study used a sequential explanatory mixed method design underpinned by Critical Realism. The study consisted of three phases, in phase one qualitative interviews were used to gather preliminary data to develop the Phase two cross-sectional survey instrument and interview questions for phase three. A qualitative descriptive approach was used to analyse qualitative data. Quantitative data were analysed using SAS v9.4.

**Results:** Sixty-six percent of nurses in this study reported working with a colleague they felt was practicing unsafely in the previous 12 months. Nurses in this study identified a range of behaviours, cues, contributing factors and responses to unsafe practice. Organisational issues perceived to contribute to the occurrence of unsafe practice were also identified. Themes of uncertainty, sensing unsafe practice and disrupted professionalism emerged from the qualitative data.

**Conclusion:** Recognising and responding to unsafe practice was described by participants to be fraught with uncertainty. Participants reported being uncertain about what constituted unsafe practice and what level of evidence was required before they could take action. The reported rate of unsafe practice was higher in this study than in other international research. Understanding the challenges faced by nurses is key to understanding how unsafe practice can be further addressed in clinical practice. This presentation outlines key findings and learning from this study.

### Audience Take Away Notes

- Behaviours and cues identified in this study should alert clinicians and managers to the potential for unsafe practice
- The perceived contributing factors identified are areas that clinicians and managers could focus on to support safe practice

- Early recognition and intervention should aim to intervene to support the nurse to improve their standard of practice and reduce the risk of harm to patients

### **Biography**

Wendy Blair is a New Zealand Trained Registered Nurse, she completed her PhD in 2021 through the University of Newcastle, Australia. She is a closet practice developer and as such firmly believe in the need for person centred approaches to nursing care, management and education. She believe it is critical to understand the context practice occurs within and the impact of that on safety for patients and staff. She has worked in a variety of different nursing contexts including medical/surgical, critical care, clinical and tertiary education, and as a Professional Nursing Advisor. Her current role is Competency Advisor for the New Zealand Nurses Organisation (NZNO).



**Dr. Gihane Endrawes**

Western Sydney University, Sydney, Australia

## **Mental health nursing: Care and caring!**

Caring is widely considered to be central to Health Care Professionals (HCPs) and a reason for choosing mental health as a career. HCPs' practice is guided by law and codes of ethics. There is a major ethical debate around legal rights versus moral rights, where an action can be legally justified but morally or ethically wrong. On daily basis, mental HCPs are faced with the need for ethical decision-making, however, at times power and control is used with patients. This paper will discuss a number of ethical issues which may involve both caring and controlling actions. This includes: involuntary admission, administration of medication, and use of seclusion. Related to these issues, is the violation of patient's autonomy and right of self-determination. Although the Mental Health Act calls for providing care in the least-restrictive environment and consumer-focused practice, however, patient's freedom is always at risk when it comes to involuntary admission. The paper raises important ethical questions: If the use of power and control is needed, how and when it can be used? Can such paternalistic actions be ethically justified? Can this power be used therapeutically and in a caring manner, to empower patients, resulting in a win-win situation? What are the ethical and professional boundaries guiding our caring role? How can we maintain the caring, therapeutic, trusting and respectful relationship with clients? Other questions arise in relation to use of medication, especially use of PRN: when and how much to give? When to use restraints and seclusion?

*Are we Caring or Controlling!*

### **Audience Take Away Notes**

- This paper will discuss ethical issues and challenges facing mental health nursing in providing care for people with lived experience. The paper will highlight and inform mental health staff on the appropriate use of power and clinical decision-making. It allows clinician to challenge their current practice and attitudes towards coercive measures used when providing care to people with lived experience. This will encourage clinician to reflect on current practices, with the aim to improve it

### **Biography**

Dr. Gihane has more than 20 years of experience in mental health nursing practice and education. She worked as a Transcultural Mental Health Clinical Nurse Consultant, during which, she coordinated a number of projects addressing consumers' care and satisfaction. She won 2 nursing achievement awards due to her contribution to mental health nursing. Her PhD was on the 'lived experience of caring for a relative with mental illness'. At her current role as lecturer at Western Sydney University, Australia she coordinated a number of under-graduate and post-graduate units and is involved in the development and review of curriculum. Her role also includes supervision of higher degree research students and her research interests are in the area of mental health, transcultural nursing, evidence-based practice and nursing education which are reflected in her publications.





**April Martin\*, David Lindsay, Colin Holmes, Karen Yates**

College of Healthcare Sciences, James Cook University, Townsville, Queensland, Australia

## **How is the electronic medical record changing registered nurses' practices when caring for patients?**

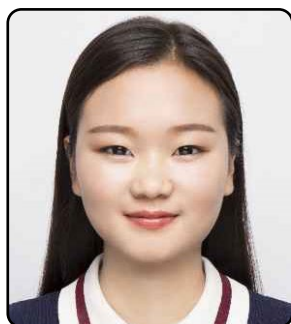
Worldwide, healthcare services have been adopting Electronic Medical Records (EMRs) and Person-Centred Care (PCC) (Institute of Medicine [IOM] 2001, 2012). Separately, the EMR and PCC are said to improve the safety and quality of healthcare (Australian Commission on Safety and Quality in Healthcare [ACSQHC], 2018; World Health Organization [WHO], 2023). Australia was initially slow to adopt EMRS and PCC compared to other developed countries; however, the implementation rate has steadily risen over the past decade in both public and private healthcare services (ACSQHC, 2021). There is evidence of tensions between using the EMR and nurses' endeavours to implement PCC. As nurses are the potential major users of EMRs and have professional requirements to provide person-centred care, it is imperative to identify how the EMR influences their provision of PCC. This research explores nurses' practices while using EMRs when caring for patients. Using Yin's (2018) single holistic case study design, multiple data sources will be accessed to explore the phenomenon and construct validity. Currently, semi-structured interviews are being held with voluntary nurse participants to gain their perspectives on using the EMR while providing PCC. Other data will include their workplace's value and philosophy statements and the primary researcher's notes and reflections. Data will be analysed using Fairclough's (2015) Critical Discourse Analysis (CDA), which will be used to (1) describe the written or spoken text, (2) interpret the relationship between the text and interaction, and (3) explain the relationship between the interaction and wider social and organisational contexts.

### **Audience Take Away Notes**

- The challenges that Australian nurses have during EMR implementation
- These challenges can potentially impact the safety and quality of healthcare
- Understanding Australian nurses' challenges may help inform healthcare organizations and government agencies to improve system designs
- It is also important that future research seek nurses' perspectives on the EMR during their provision of PCC

### **Biography**

April Martin studied nursing at Indian River State College in Ft. Pierce, Florida, before obtaining a BSN from South University in West Palm Beach, Florida. She immigrated to Australia in 2009. April received a Graduate Certificate in Critical Care from La Trobe University in Melbourne, Victoria, in 2011 and a Master of Nursing in Clinical Education from James Cook University in Townsville, Queensland, in 2015. April has continued her studies at James Cook University and is currently a PhD Candidate completing her doctoral studies.



**Zhang Yanjun\*, Shan Yan**

School of Nursing and Health, Zhengzhou University, Zhengzhou, Henan province, China

## **Analysis of the correlation and influencing factors between the perceived risk of cardiovascular disease and the objective estimation of risk in patients with chronic kidney disease**

**Objective:** To explore the correlation between the perceived risk of cardiovascular disease incidence and the objective estimation of risk in patients with chronic kidney disease, and to provide a basis for the development of targeted intervention countermeasures.

**Methods:** 256 cases of chronic kidney disease patients attending the nephrology department of a tertiary-level hospital in Zhengzhou City from March to June 2023 were selected as the survey object, and the general information questionnaire, cardiovascular disease risk attitude and belief scale and Framingham risk assessment model were used for data collection, IBM SPSS Statistics 21.0 software was used to build the database, multiple linear regression was used to analyze the factors affecting patients' risk perception.

**Results:** 240 valid questionnaires were collected, and the recovery rate of valid questionnaires was 93.75%. Framingham risk assessment score was used for objective risk assessment, and the 10-year objective risk of CVD in chronic kidney disease patients was calculated as 160 cases (66.6%) with low risk, 31 cases (12.9%) with intermediate risk, and 49 cases (20.4%) with high risk. The results of the CVD risk perception showed that 144 cases (60.0%) with low risk, 71 cases (29.6%) with intermediate risk, and 25 cases (10.4%). It can be seen that the perceived CVD risk was consistent with the calculated 10-year CVD risk in 103 cases (42.9%), underestimated in 62 cases (25.8%), and overestimated in 75 cases (31.3%). Multiple linear regression analysis showed that gender, age, marital status, and per capita monthly household income were influential factors in attitudes and beliefs about CVD risk in patients with chronic kidney disease.

**Conclusion:** Underestimation and overestimation of risk perception are prevalent, and healthcare professionals should focus on those whose risk perception is inconsistent with objective risk and develop targeted intervention strategies for individual risk characteristics.

### **Audience Take Away Notes**

- Understanding the perceived risk of cardiovascular disease in patients with chronic kidney disease in Henan, China
- To understand whether patients with chronic kidney disease are able to accurately perceive their level of risk through a comparison of objectively estimated risk and risk perception
- To remind healthcare professionals involved in chronic kidney disease to focus on those whose risk perception is inconsistent with objective risk and to develop targeted intervention strategies for individual risk profiles

## **Biography**

Yanjuan Zhang studied Nursing at Zhengzhou University. She's currently working on her master's degree, and is passionate about improving the health of patients with chronic diseases. Her master's research topic is cardiovascular disease risk perception in patients with chronic kidney disease, based on the results of previous cross-sectional studies and qualitative studies, to construct intervention programs to help patients with chronic kidney disease correctly identify the risk of cardiovascular disease and delay the disease process in patients with chronic kidney disease.



**Yixuan Sun\*, Enshe Jiang, Jie Kou**

Henan University, China

## **Formation factors and countermeasures of sleep disorders in ICU nurses**

**D**ue to the particularity of hospital environment and medical work, nurses are often required to work 24 hours in shifts to ensure the continuous high-quality nursing and treatment work. In this environment, clinical nurses are often prone to decreased sleep quality, shortened sleep time and/or excessive sleepiness due to the conflict between work and circadian rhythm system. Sleep disorders even occur, thus affecting the quality of care, and the occurrence of sleep disorders will affect the physical and mental health and safety of nurses to varying degrees, including dizziness, headache, fatigue and sleepiness, gastrointestinal dysfunction, and will also promote the increase of individual anxiety, depression and other negative emotions, at the same time, Sleep disorders also increase the risk of cardiovascular diseases such as diabetes, cancer and high blood pressure. Among them, due to the particularity of ICU nursing work, the occurrence of sleep disorders is more obvious in the group of nurses, so the sleep problems of ICU nurses should be paid attention to by the nurse group and relevant managers. This paper summarized the factors and hazards of sleep disorders in ICU nurses and related intervention measures, in order to provide reference for improving the sleep quality of clinical shift nurses and nursing managers' management of clinical nurses.

### **Audience Take Away Notes**

- To review the effect of shift work on sleep quality in ICU nurses
- Suggestions were made for improving the sleep status of clinical shift nurses at individual and institutional levels
- Encourage ICU nurses to improve their personal sleep quality by adopting healthier living and sleeping habits
- Managers can further explore more scientific and feasible scheduling plans according to the influence of nursing staff's sleep conditions through this study

### **Biography**

Yixuan Sun, a master's student. She is studying nursing at the School of Nursing and Health at Henan University in China and will receive her master's degree in 2025.



**Xinxin Li\*, Yanfei Liu, Jiajia Zhang, Xinying Song, Weihong Zhang**

College of Nursing and Health, Zhengzhou University, Zhengzhou, Henan, China

## **Analysis of the influencing factors related to exercise adherence in community elderly patients with coronary heart disease: Based on self-determination theory**

**Background:** Clinical study shows physical activity in elderly heart patients remains below guideline recommendations. Motivation to exercise is an important factor in maintaining high exercise adherence in older adults. Self-Determination Theory (SDT) emphasizes the dynamic role of the self in the motivational process and suggests that satisfying an individual's basic psychological needs will promote a shift towards more autonomous forms of motivation. This study will explore the factors and pathways associated with exercise adherence in elderly community-dwelling patients with coronary heart disease from the perspective of exercise psychology, based on self-determination theory.

**Methods:** 207 community-dwelling elderly patients with coronary heart disease will be investigate by a cross-sectional study. Guided by Self-Determination Theory, the General Information Questionnaire, Exercise Adherence Questionnaire, Basic Psychological Needs Satisfaction Scale, Exercise Behavioral Regulation Scale, and Revised Attitude Towards Control Scale were used to conduct the survey.

**Results:** The exercise adherence score of 207 community-dwelling elderly patients with coronary artery disease was ( $24.02 \pm 5.74$ ). Patients' basic psychological needs, exercise motivation, and perceived control were positively correlated with exercise adherence ( $r=0.580, 0.684, 0.587$ ; all  $P<0.01$ ). Basic psychological needs had a direct positive predictive effect on exercise motivation and exercise adherence ( $\beta=0.615, 0.257$ ; all  $P<0.01$ ). Multiple linear regression analysis showed that monthly income, exercise frequency, basic psychological needs, exercise motivation, and perceived control were the main influencing factors of exercise adherence ( $P < 0.05$ ) which together explaining 61.7% of the total variance.

**Conclusions:** Monthly income, frequency of exercise, basic psychological needs, exercise motivation, and perceived control predict exercise adherence. Healthcare professionals should strengthen psychological interventions for elderly patients with coronary artery disease in the community to improve the satisfaction of their basic psychological needs and to promote the formation of their autonomic exercise motivation, which will in turn improve the exercise adherence of the patients.

### **Audience Take Away Notes**

- Researchers can develop interventions to improve exercise adherence based on modifiable influences
- Guided by self-determination theory and from the perspective of exercise psychology, this study analyzed the causes of poor exercise compliance in elderly patients with coronary heart disease and provided new ideas for solving the problem of poor exercise compliance
- Other scholars can use this study as a basis for developing measures based on self-determination theory to improve the exercise compliance of elderly patients with coronary heart disease in the community

## **Biography**

Xinxin Li, a master's student, is studying nursing at the College of Nursing and Health at Zhengzhou University in China and will receive her master's degree in 2024. She joined Prof. Weihong Zhang's research group and has participated in several research projects in her research group.





**Dr. K.M. Jolly (Sr. Josline)\*, Molly Babu**

Mar Sleevea College of Nursing, Palai, Cherpunkal, Kottayam, India

## **Psychosocial problems and coping strategies of preadolescent girls with early onset of puberty in selected rural and urban schools**

**Introduction:** Puberty, the biological transition to reproductive maturity is considered as an exemplary marker of transition from childhood to adolescence. Although puberty is a natural event, early puberty poses a risk for number of psychosocial problems in preadolescent girls. Coping strategies may act as mediators of stress that may support or inhibit positive adolescent adaptation.

**Objective:** The present study was undertaken to identify and compare the psychosocial problems and coping strategies of preadolescent girls with early onset of puberty in rural and urban schools and to develop and evaluate an information booklet for the management of psychosocial problems.

**Method:** A descriptive comparative-correlational survey design was adopted for the study. The sample consisted 300 preadolescent girls (rural-150 and urban-150), in the first phase and 30 in the second phase, aged between 10-12 years with early onset of puberty, studying in fifth, sixth and seventh standard of eight selected schools of two randomly selected educational district of Kottayam revenue district in Kerala. Purposive sampling technique was used to elect the subjects. Self-reported psychosocial assessment scale was used to assess the psychosocial problems, coping strategies were assessed by using Children's Coping Strategies Checklist-Revision1 (CCSC-R1) and Opinionnaire was used to assess the acceptability and utility of information booklet on management of psychosocial problems of early onset of puberty.

**Results:** Findings of study revealed that 19.66% of the preadolescent girls in rural school had mild psychosocial problems and 1.33% had moderate problems. Whereas 12.33% of urban subjects had mild problems and only 0.33% had moderate problems. There was a significant difference in the mean score of the psychosocial problems of preadolescent girls in rural and urban schools ( $t=2.836$ ,  $p<0.01$ ). A significant difference was seen in the mean scores of anxieties ( $t=3.058$ ,  $p<0.01$ ) and depression ( $t=3.824$ ,  $p<0.001$ ) among the rural and urban girls. Active coping strategies ( $t=2.847$ ), avoidance strategies ( $t=2.554$ ,  $p<0.01$ ) and support seeking strategies ( $t=1.949$ ,  $p<0.05$ ) were significantly differ in rural and urban girls. Girls from rural schools were using more active and avoidance coping strategies whereas urban girls used more support seeking strategies. A positive relationship was found between psychosocial problems of preadolescent girls with early onset of puberty and different dimensions of coping strategies such as active, distraction, avoidance and support seeking strategies ( $p<0.001$ ). Majority of the preadolescent girls with mild-moderate problems were in the age of less than 11 years (57.1%). Religion was significantly associated with psychosocial problems of subjects in urban schools ( $p<0.01$ ).

**Conclusion:** Preadolescent girls with early onset of puberty from both rural and urban schools were affected with mild to moderate psychosocial problems and the girls who attained puberty less than 11 years had higher incidence of psychosocial problems. Anxiety and depression were significantly higher among rural girls. The girls were using both productive and non-productive coping strategies when encountered with a problem. A positive correlation was found between psychosocial problems and different dimensions of coping strategies.

**Keywords:** Early Onset of Puberty, Menarche, Preadolescent Girl, Psychosocial Problems, Coping Strategies.

### **Audience Take Away Notes**

- The speed and extent of developmental changes create psychosocial problems and pressure on the coping ability of an individual. Use of inappropriate coping strategies to manage psychosocial problems may have a negative impact on mental health of adolescent girls
- Early recognition, enough understanding, counseling, life skill training and teaching of positive coping skills, which include problem solving strategies can help the girls to cope up with the stressors of early pubertal changes in a better way
- Nurses working with adolescent girls should consider the mental health needs of early maturing girls
- The findings would help the nurses/health personnel in clinical settings and school health services, to detect the psychosocial problems of preadolescent girls with early puberty and also can teach them about how to cope up with stressors in a healthy and adaptive manner
- Nurses can educate parents and teachers regarding the impact of early puberty in girls and how they can help the girls to adjust with the changes of puberty and modify the behavior
- Organize and conduct need based community outreach services for improving psychosocial health and coping strategies of preadolescent girls with early puberty in schools and health centers
- Yes, this research that other faculty could use to expand their research or teaching
- Yes, this provide a practical solution to a problem that could simplify or make a designer's job more efficient
- Yes, it will improve the accuracy of a design, or provide new information to assist in a design problem
- List all other benefits
  - o Study is done in two phase to identify the extent of psychosocial problems and coping strategies and based on the findings, the information booklet was prepared
  - o An experimental study can be conducted to evaluate the effectiveness of an information booklet on management of psychosocial problems and coping strategies used for each problem

### **Biography**

K.M. Jolly is an Associate professor, Obstetrics and gynecological Nursing Department, Mar Sleeva College of Nursing, Kerala, India since 2009. She earned her Bachelor of Science in Nursing and Master's degree from St. John's National Academy of Health Sciences under Rajiv Gandhi University of Health sciences, Bangalore, and Ph.D in Nursing under National Consortium for PhD in Nursing by Indian Nursing Council under Rajiv Gandhi University of Health sciences, Bangalore. She began her nursing career as a medical nurse and transition in to the paediatric ICU setting in St. John's Medical College Hospital and lecturer in St. John's college of Nursing Bangalore. She has published her research findings in international journals.



**Dr. Mary Anbarasi Johnson**

Professor and Head, CMC Vellore Dr. MGR Medical University, India

## Disaster management in pediatric nursing department

**D**isaster is a situation or event which overwhelms local capacity, necessitating a request to national or international level for external assistance (Centre for Research on the Epidemiology of Disasters). Historically disaster is recorded with the deluge during Noah's period. The Crimean war saw the first disaster nurse named Florence Nightingale. Disaster management involves both natural and manmade which statistically is on the rise. Disaster management is a complex event which involves multidisciplinary approach both at community as well as the Hospital.

The pediatric nurse has to play an active role in the disaster management. In 2006 International Council of Nurses (ICN) emphasized that Disaster preparedness, including risk assessment and multi-disciplinary management strategies at all system levels, is critical to the delivery of effective responses to the short, medium, and long-term health needs of a disaster-stricken population. In 2009 ICN framework focused on building nursing capacity through disaster nursing competencies such as Triage, Hazard Vulnerability assessment, Incident Commander, Prevention and mitigation, Coordination, Crisis communication etc.

Every pediatric set up needs to have a disaster team and the nurses need to be trained for the disaster management. The role of the disaster nurse needs to be clearly stated and every member in the team needs to have a clear job description. There can be unforeseen disasters and readiness is essential to manage at any given time. Its generally observed that the nurses role has been mostly confined to rehabilitation, assessment and assisting the health care team.

In the pediatric department we have an active disaster team and the team co-ordination is very smooth. We conduct disaster drills periodically in our department. Department Safety Advisor (DSA) was initiated. 80 % of the DSA's are nurses who play a key role in disaster prevention and mitigation. Apart from this the nurses also perform Hazard Vulnerability assessment both at community as well as the hospital. Yet instead of looking at Disaster Nurse as a single entity it becomes imperative to focus on the dictum that "Every Nurse is a Disaster Nurse". As like CPR being mandated for all nurses, it should become that all nurses should also be certified in disaster nursing competencies.

Today in Asia there is no structured training program for disaster nursing. Dr. MGR Medical University of Tamil Nadu has become the first university in India to make it mandatory that all the final year nursing students should have undergone 2 days training in Disaster Nursing. The past 2 years have seen that all the graduating nurses are disaster trained, making it important to build disaster nurse database for Tamil Nadu.

In the pediatric set up we feel that we need to grow much more in this field. We have Mr. Ravi kumar who had been our disaster team co-ordinator for the institution who envisioned the following

1. Disaster Management (Nursing) Training center in India which should offer structured short time (4-5 days) Disaster Nursing certification competency based workshop.

2. Disaster Nurse database for Tamil Nadu.
3. Research in Disaster Nursing.
4. Trained Disaster nurse to develop are silent community by offering training to public as well as school safety.

Thus in nutshell the focus of Disaster Nurse is to be

- Certified.
- Play pivotal role in disaster mitigation, prevention and management both at Pre Hospital as well as In Hospital and community.

Every nurse seated here should consider safety aspects in our country and in the event of a disaster, are we competent to manage the disaster along with the team.

Let's be proactive as pediatric nurses to see the visions come true so that we can ensure safety in the hospital setup as well in the community.

### **Biography**

Dr. Mary Anbarasi Johnson working as a professor and Head in pediatric nursing department, CMC Vellore. I worked as Clinical Nurse Specialist in PICU for a year and as Assistant Professor in USA for two years. I also worked in administration in nursing, in Saudi Arabia Defence Sector. CMC gave me opportunity to be Master trainer for International Projects like GFATM, IMNCI at national level as well national projects like ICMR Infection control, Child Sexual Abuse Protection, OSCE by Dr. MGR Medical university as well Diabetic Educators programme etc. It also gave me opportunity to be examiner or paper setter for various levels of nursing students for 6 universities and inspector for Dr. MGR Medical University. I am very much interested in reviewing articles. I have published in 70 national, international journals and presented in around 30 national and international conferences. I have also contributed for 5 book chapters and published a book. The Saudi Kamismushayt Defense Hospital gave me opportunity to complete "Lean Six Sigma -Academy Europe, green, yellow and black belt for which I am deeply indebted to them as well for the learning about nursing administration in defense sector through Doctor Jessie Chetty (DON). I have served in CMC Vellore as addl. Deputy Nursing Superintendent for staff training and quality assurance, NABH accreditation as well in CMC Institutional research board as a member for a term of 4 years. I am reviewer or editorial member or advisory member in more than 70 international journals. I am also a recipient of President's Gold medal for standing first in the university for Bsc. N programme. I am certified for green yellow and black belt for six sigma course. I have received award by the International NGO "INSO". I am also member of the SAS society. I give all thanks to Lord Jesus Christ who is the reason for my living. I am indebted to my family, teachers and friends for their encouragement and support particularly to CMC Vellore as well Kamis Mushayt Armed Forces Hospital, Southern Region ), CON & institutions in US which have mentored me.



**Varalakshmi Manchana**

School of Medical Sciences, University of Hyderabad, Hyderabad, Telangana, India

## **Gait and cognition interlink with fall risk in older population: Mind-body connections for fall risk prevention**

Recent evidence from epidemiological and clinical studies shows that gait and cognition are inter-related in older adults. Alteration in gait speed and balance is closely linked with cognitive functions such as attention, working memory, executive function, which is associated with falls, dementia, and disability in older adults. Cognitive disturbances facilitate to predict risk for falls, and progression of dementia. Exploring the link between gait and cognitive functions is essential to develop preventive strategies for early diagnosis, intervention and rehabilitation in the ageing population. A cross sectional correlation study among adults (N=270), aged 40-90 years, examined functional health through functional assessment parameters such as Timed Up and Go test (TUG), 6MWT and cognition by Montreal Cognitive Assessment (MoCA) used for the assessment of the cognitive capabilities to verify interconnections of gait, cognition and fall risk. Findings showed a positive association between the Gait and Cognition. TUG showed positive association with MoCA, Pearson chi<sup>2</sup> value of 85.8248 and p value of 0.000 ( $p < 0.001$ ) and 6MWT also showed positive association with MoCA, Pearson chi<sup>2</sup> value of 128.911 and p value of 0.000 ( $p < 0.05$ ). Gait and cognitive functions are interrelated and declined physical cognitive functions increase fall risk injury and related disability in older adults. Establishing relationship between early gait and cognitive changes may assist in estimating increased fall risk and progression of dementia, thus to develop evidence based strategies such as dual task interventions in older adults.

**Keywords:** Gait Variability, Balance, Mild Cognitive Impairment, Ageing, and Dual Task Interventions.

### **Audience Take Away Notes**

- Growing challenges of Global Ageing and Fall risk and associated interconnections with cognitive functions will help the audience to learn and provoked thought processes on solutions for Healthy Ageing
- World population is steeply rising. The societies require understanding and accepting the demographic transitions and adopt the life style and psycho-social resources for promoting cognition and physical health
- Identifying Mind-Body interlink in fall risk enable to develop strategies for Fall risk prevention in Ageing population

### **Biography**

Varalakshmi Manchana Have done Doctor of Philosophy (Ph.D. in Nursing), With 17 years of teaching experience, with research focus on Translational research in Healthy Ageing, Socio behavioural Health in NCDs, Adolescent health, Health care ethics, Child injuries and Women's Health with Gender dimensions. Closely contribute to Nursing and Public health teaching & Research with innovative & interdisciplinary approach. Interested in Simulation based learning to enhance life skills among learners. *Believe in lifelong learning and Value based education.*



**Prof. Dr. Gülbu Tanrıverdi**

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## Why is thinking sociologically important for nursing

Sociology is known as, 'Mother of all social sciences'. Sociology is the youngest of all social sciences. The history of sociology is as old as society. Systematic studies of society started long back in Greece (427–347 BC). Plato and his disciple Aristotle (384–322) laid foundation for systematic study. Sociology as a Science It emerged as a special discipline among the social sciences, considered as sciences of society. The concept was first developed by «Emile Durkheim» as it uses scientific methods, investigation, and different bodies of knowledge (Neeraja, 2005). Sociology is the science of human relationships. It studies man as a social animal. It deals with human groups, and tracks the evolution of customs and behavioural patterns that are handed down from generation to generation through personal contacts. The primary goal of sociology in nursing is promotion of health and prevention of illness and injury (Clement, 2015). From all the definitions of sociology, we can list out the following views:

- The sociology is science of society
- It studies the social relationships
- It is the study of social life
- It is the study of human behavior in group situation
- It deals with social actions
- It studies social systems (Neeraja, 2005).

Sociology emphasizes the unequal distribution of power and its impact on social life, exploring the dynamic and evolving nature of society across cultures and environments. The sociological imagination requires looking beyond personal perspectives, considering how broader social forces influence individual beliefs. Social structures can constrain behaviors, exemplified by disparities in opportunities based on factors such as social class and gender (Willis, & Elmer, 2007). Introduction to sociology courses commonly highlight three major themes as hallmarks of the discipline of sociology:

1. The Sociological Perspective
2. Social Inequality
3. Social Institutions.

Let's review sociology's three major themes briefly and show their relevance for understanding health and illness (Barkan, 2023). Nursing's professionalization has been greatly influenced by sociology, as advanced health systems demand professionals cognizant of community and public health's significance. These professionals should be adept at collaborating within multidisciplinary teams that mirror the diversity of the societies they serve. The sociological viewpoint encourages enhanced communication, comprehensive approaches, and championing for patients. Health profession students delving into sociology often explore the social factors influencing health and illness. This encompasses social interactionism related to stigma and labeling, social constructivism regarding body awareness and mental health, and occasionally, the



sociology of professions. (Taylor, Brosnan, Webb, 2022). The assertion that Sharp's multi-paradigmatic nature of sociology lacks relevance in guiding nurses is met with counterarguments. Additionally, challenging the characterization of the nursing role merely as instrumental, the contention is made that providing holistic care necessitates a more contemplative approach. Lastly, disputing the interpretation of Cooke's perspective as a narrow political view, it is argued to be untenable (Porter, 1996). The models formulated in nursing have been shaped by the insights from both social and biological sciences, aiming to elevate the standards of nursing care. In the late 1970s, Cox demonstrated how sociology could significantly contribute to helping nurses fulfill their essential objectives in patient care.

#### **Sociology's relevance in nursing spans across four key areas:**

- Examining the consequences of evolving patterns of illness, dependency, and death.
- Exploring social and cultural disparities in perceptions of and responses to pain and illness.
- Conducting organizational analyses, with a particular emphasis on the crucial role of nurse-patient communication.
- Assessing the impact of sociological studies on human relations within the nursing context.

These focal points underscore the multifaceted role of sociology in nursing, providing valuable perspectives that contribute to a more comprehensive understanding of healthcare dynamics and, ultimately, contribute to the enhancement of nursing practices and patient outcomes (Pinikahana, 2003). The relation between sociology and nursing covers a couple of important aspects which help nurses integrate key sociological theories to their practice. Probably the most important topics you need to understand when relating sociology to nursing is the difference between “sociology in nursing” and “sociology of nursing”. If you are already able to understand the two, you will understand that the relationship between your disciplines is targeted toward the use of sociology to nursing theory and practice. Nurses who’ve a good knowledge of “sociology in nursing” theory are frequently in a stronger position to know the requirements of their patients and just how to best accommodate individual needs from the social perspective. However, nursing managers who have a very good understanding with the “sociology of nursing” are more effective in attending factors that impact staff morale and also the efficient allocation of nursing staff (Dowling, 2006). The role of sociology in nursing continues to cast new light on many aspects of health and illness. Over the last 20 years, nursing practice has seen sociological theory become a valuable clinical tool, both in the diagnosis and prognosis of a wide range of illnesses and long-term conditions. In literature, it had recommended adopt and embed a robust sociological approach withinof professional practice (Handsley, & Stocks, 2009). The role of sociology in nursing has been debated, particularly in the 1990s. Cooke suggested that nursing, focused on the biomedical model, marginalized sociology. Sharp had argued that nursing should prioritize practical knowledge over theoretical understanding, dismissing the value of sociology. Porter had defended sociology, emphasizing its role in understanding social determinants of health. Porter also had contested Sharp's claim of sociology being fragmented. Additionally, Mulholland had criticized the holistic BPS approach, suggesting that sociology should not only be integral to nurse education but also a distinct discipline (Matthews 2015).

Sociology has played a key role in the professionalization of nursing. Because health systems in advanced economies require health professionals who are aware of the importance of community and public health and capable of working in multiprofessional teams that reflect the diversity of the societies to which they belong (Taylor, Brosnan, Webb, 2022).

#### **Scope of sociology applies in this following areas:**

- Hospitals.
- Community Health Centres.

- Hospice Care.
- Industries.
- Jails.
- Counselling Centres.
- Geriatric Homes.
- Orphanages.
- Palliative Centres.
- Juvenile Homes.
- Mental Health Centres.
- Rehabilitation Centres (Clement 2015).

The relationship between nursing and sociology has been extensively debated for more than two decades (Aranda, Law, 2007). Previous debates reflect a number of concerns, all of which suggest sociology is problematic for, and has an uneasy relationship with nursing (Allen, 2001).

#### **Uses of sociology in nursing:**

- Sociology is a very useful science, especially for the nursing profession.
- It helps the nurses know the cultures and social lives of their patients.
- Nurses work not only within the hospitals, but also outside.
- In programmes, such as public health, industrial health, school health, and military nursing, nurses have to work in very close proximity with different sections of the society.
- Usually, it is the nurse who acts as a key person in the hospital scenario. The knowledge of sociology helps her maintain a congenial relationship between different personnel at different levels.

The study of sociology helps nurses identify the psycho-social problems of patients, which helps improve the quality of treatment. The study of sociology is important for nurses due to the following reasons:

- Sociology helps understand those forces and pressures which affect patients adversely.
- It helps the nurses understand the behaviour, conflicts, interpersonal relationships, hierarchy, groups, adaptation, and so on, of different people working in hospitals or health institutions.
- Through sociology, the nurse gets information about the socio-cultural life of the patient. This is important for the planning and implementation of the treatment (Clement, 2015).

Sociology provides theoretical and conceptual frameworks which offer student nurses the opportunity to develop the intellectual skills necessary to achieve these requirements. Meaningfully embedding sociology during curriculum design will help to ensure the future nurse is able to interrogate and challenge the social influences and inequalities which impact upon the health and well-being of the people and communities they care for (Molesworth, Lewitt, 2019). Transformations in societal norms and illness patterns have prompted shifts in nursing practices and nurse education. Sociology plays a pivotal role in broadening nurses' comprehension of patients' needs within the framework of their social environment (Lane, 1996). Understanding humans is possible by focusing on their actions. When sociology focuses on the experiences people have in their lives, we actually see the events and phenomena that form the basis of sociological knowledge. These experiences can be lived by everyone and are accessible to everyone. Sociology facilitates understanding of the diversity of social circumstances associated with health and illness for nurses. Sociological knowledge, being an important component of nursing knowledge, helps in the emergence of meanings. Sociology provides nurses with specific intellectual theoretical knowledge

and practical skills for problem solving. In a study conducted by a sociologist in Turkey during the 2002-2003 academic year with nursing students, some commonly adopted views among nursing candidates:

- Nursing and sociology are centered around humans.
- In nursing, the basic focus is not the 'patient', but the human.
- A nurse should know the society she lives in as much as the health field.
- Every event affecting society directly/indirectly affects human health.
- Differences in social environments affect health/disease situations.
- Every society's perspective on health/disease is different, and sociology reveals the dimensions and reasons for these differences.
- Sociology is necessary to understand humans and develop empathy, and can be used in the profession.
- In the nursing profession, sociological knowledge provides a social perspective.

Sociology helps nurses to look at professional events, people, and life from a more logical, more conscious, and more scientific perspective [Nazlı, 2002].

Sociology provides an in-depth insight into the recipients of nursing care and the contextual elements influencing nursing practices. Incorporating sociology into nursing can seamlessly become a component of a broader 'transcultural' nursing paradigm, which has garnered widespread acknowledgment on a global scale. This integration allows for a more comprehensive understanding of the diverse backgrounds and environments shaping the experiences of those receiving nursing care (Cooke, 1993). Over the past two decades, there has been a concerted debate concerning the usefulness of teaching sociology in nursing schools and whether the subject is pertinent to the pre-registration nursing curriculum. On the one hand, it has been argued that learning sociology may increase awareness on and sensitivity to the social realities of healthcare users and therefore would enhance the effectiveness of the care provided by nurses. On the other hand, claims on an alleged inapplicability of social theory in nurses' core occupational activity – on the grounds of sociology's heterogeneous range of epistemological and methodological stances – have raised issues of its actual suitability and value (Coch et al. 2016). Findings from a focus group study revealed that students perceive the inclusion of sociology in the nursing curriculum as 'disruptive.' In response, students had employed various coping mechanisms, such as compartmentalizing and segmenting knowledge. They had recognized the privileged status gained through experiential learning bridging the gap between theory and practice (Edgley et al. 2009). While the incorporation of sociology into nursing education may have sparked debates with differing opinions on its merits and drawbacks, there's no need to rehash the fundamentals of these extensively discussed deliberations. Suffice it to state that the evolving focus of medicine, marked by heightened social interaction, both reactively and proactively, has unmistakably positioned sociology as a vital component in pre-registration nursing curricula. In light of these changes, sociology should be regarded as an indispensable element at all stages of pre-registration programs, serving both as an independent capacity and as a central focus within integrated modules. This approach ought to be seamlessly integrated into all pre-registration nursing curricula, fostering a more consistent and coherent interaction between nursing students and sociology. This integration aims to provide a perspective on how sociology and sociological theory can enrich the understanding of nursing as a social activity and the inherently social nature of health service consumers and nursing care, offering both theoretical and practical insights (McPherson, 2008).

### The significance of sociology for nurses lies in its ability to:

- Facilitate nurses' comprehension of the detrimental forces and pressures affecting patients.
- Aid nurses in grasping the dynamics of behaviors, conflicts, interpersonal relationships, hierarchies, groups, and adaptations among diverse individuals in hospital settings.
- Enable nurses, through the lens of sociology, to gain insights into the sociocultural aspects of patients' lives.

Sociology equips nursing students with theoretical and conceptual frameworks, fostering the development of intellectual abilities essential for meeting professional demands. Integrating sociology into curriculum design in a meaningful way enables upcoming nurses to critically examine and confront the social factors and disparities influencing the health and well-being of the individuals and communities under their care (Molesworth, & Lewitt, 2019). Cooke's article posited that nursing and sociology hold opposing perspectives, as nursing's concentration on individuals clashes with sociology's emphasis on broader social issues. But nursing researches have to accord significance to social structures without forsaking its focus on individuals. An approach conducive to broadening nursing's epistemological boundaries is critical realist ethnography, which operates under the assumption that the interaction between social structures and individual actors is a mutually influential, two-way process (Porter, & Ryan, 1996).

### Sociology's relevance in nursing spans across four key areas:

- In the late 1970s, Cox demonstrated how sociology could significantly contribute to helping nurses fulfill their essential objectives in patient care.
- Examining the consequences of evolving patterns of illness, dependency, and death.
- Exploring social and cultural disparities in perceptions of and responses to pain and illness.
- Conducting organizational analyses, with a particular emphasis on the crucial role of nurse-patient communication.
- Assessing the impact of sociological studies on human relations within the nursing context (Pinikahana, 2003).
- These focal points underscore the multifaceted role of sociology in nursing, providing valuable perspectives that contribute to a more comprehensive understanding of healthcare dynamics and, ultimately, contribute to the enhancement of nursing practices and patient outcomes (Pinikahana, 2003).

**Sociology in nursing education:** The affiliation between nursing and sociology is well-established, yet it is a partnership marked by a lack of harmony. Some within the sociological community show disregard for nursing scholarship, and revealing one's nursing identity in social scientific circles can indeed elicit skepticism. The crux of nursing's dynamic with sociology lies in the profession's drive to regulate and advance its knowledge base. Historically reliant on doctors for education and training, nurses have tirelessly sought to establish distinct epistemological boundaries from the field of medicine. In the early 1990s, nursing literature witnessed a spirited discourse on the merits of incorporating sociology into nursing curricula. Despite the potential benefits they offer each other, nursing and sociology find themselves as uneasy companions (Allen 2001). In the past two decades, a heated discussion has unfolded regarding the merits of incorporating sociology into nursing school curricula and its relevance to pre-registration nursing programs. Advocates argue that learning sociology could heighten awareness and sensitivity to the social realities faced by health service users, thereby enhancing the quality of care administered by nurses. Conversely, detractors contend that the diverse epistemological and methodological positions within sociology's heterogeneous nature render social theory unsuitable for the fundamental professional tasks of nurses, sparking concerns about the genuine appropriateness and value of sociology in nursing

education (Koch, & Ayala, 2016). Findings from a focus group study revealed that students perceive the inclusion of sociology in the nursing curriculum as 'disruptive' (Edgley et al. 2009). Findings from a focus group study revealed that students perceive the inclusion of sociology in the nursing curriculum as 'disruptive.' In response, students had employed various coping mechanisms, such as compartmentalizing and segmenting knowledge. They had recognized the privileged status gained through experiential learning bridging the gap between theory and practice (Edgley et al., 2009). Nursing, viewed as a social construct, serves as a framework for delivering essential skills, although not exclusive to the profession, prompting a focus on the nurse-patient relationship as central to nursing practice, paralleling the influence of sociology on its development. Peplau's Interpersonal Relations Model of Nursing, first published in the USA in 1952, suggests a mutual nurse-patient relationship where both parties strive to become comfortable with each other and work together to understand their reciprocal reactions (Dowling 2006).

### **Suggestions:**

- Every nurse should possess an awareness of how behavior, culture, socioeconomic status, and various contextual factors within the care setting can influence health, illness, health outcomes, and public health priorities.
- This understanding should be integrated into the planning and delivery of care.
- All nurses should also understand how behavior, culture, socioeconomic, and other factors in the care setting and location can impact health, illness, health outcomes, and public health priorities, and take this into account when planning and delivering care.

### **Biography**

Prof. Dr. Gülbu Tanrıverdi, who completed her undergraduate education in Nursing with a first degree at Atatürk University School of Nursing, completed her master's and doctorate degrees in the Department of Public Health Nursing at the Health Sciences Institute of the same university. Tanrıverdi, who became a professor in 2017, carries out scientific and social studies in the field of health and nursing focusing on culture and society. Tanrıverdi has pioneered many studies in Turkey in the field of Intercultural Nursing; He has edited and authored many books on approaches to different cultures; has given cultural competence development courses; chaired congresses and symposiums in the field of intercultural nursing; founded and chaired the intercultural nursing association; developed the first model in Turkey in the field of intercultural nursing; He has given many seminars, conducted dissertations and given trainings to improve cultural competence. In his original book, Tanrıverdi explained how to develop a culturally competent approach in nursing and organized numerous workshops to improve cultural competence. Tanrıverdi teaches Public Health Nursing, Intercultural Nursing and Research Writing Skills. He also created the conceptual framework of the Interfaith course in a nursing program for the first time in Turkey and gave this course at the undergraduate level. Tanrıverdi has been working for the society for 30 years, together with her students.



### **Paraskevi Theofilou**

General Hospital of Thoracic Diseases SOTIRIA, Athens, Greece

Hellenic Open University, Patras, Greece

## **Sociodemographic and occupational variables influencing fatigue and social support among nurses in the emergency department: A cross-sectional study in Greece**

The aim of the present study is the investigation of the levels of fatigue and social support in nursing staff working in the Emergency Department of General Hospitals in the broader area of Athens. Moreover, the impact of demographic and occupational factors on fatigue and social support was examined. This is a quantitative cross-sectional study including 62 nurses who completed the Fatigue Assessment Scale (FAS) and the Multidimensional Scale of Perceived Social Support (MSPSS). Based on the results, males presented higher score of mental fatigue compared to females ( $p=0,015$ ) while nurses with master or PhD degree appeared to have more support from their family in comparison to those with lower educational level ( $p=0,040$ ). Further, the results demonstrated a statistically significant and negative correlation between working hours per week and the perceived social support from friends ( $r= -0,302$ ,  $p=0,021$ ) as well as the total social support ( $r= -0,296$ ,  $p=0,024$ ). The findings show that there is a strong effect of demographic and occupational factors on fatigue and social support among nurses.

### **Biography**

Paraskevi Theofilou is a Post Doc Researcher (2016-2018, University of Peloponnese, Department of Nursing, Sparta, Greece) Ph.D. in Health Psychology (Panteion University of Social and Political Sciences, Department of Psychology, Athens, Greece) Ph.D. in Personnel Management (University of Peloponnese, Department of Nursing, Tripoli, Greece) M.Sc. Health Services Management (Frederick University, School of Health Sciences and School of Law and Business Administration, Cyprus) M.Sc. Social exclusion, minorities and gender (Panteion University of Social and Political Sciences, Department of Sociology, Athens, Greece) Social Administration - Management of Health Services (National School of Public Administration, Athens, Greece) B.Sc. in Psychology (Panteion University of Social and Political Sciences, Department of Psychology, Athens, Greece) B.Sc. in Social Work (Technological Educational Institute of Athens, Athens, Greece).





**Sofica Bistriceanu, MD, PhD**

Academic Medical Unit–CMI, Romania

## **Professional conduct in daily work ensures a successful personal and social life**

**E**ach individual selects a field of study according to their intellectual capabilities, preferences, and ability to fulfil the duties required in their chosen profession.

Attaining expertise in a particular discipline, skills in handling data in practice, and best communication with partners ensure an individual's successful personal, professional, and social life.

Continuous instruction with updated information in a dynamic, competitive, and dominant digital world where info about everything fast circulates is required.

Scientific info delivered in practice when and where necessary supposes dexterities in data management and aptitudes in transferring information of interest to customers. If the results of this process enchant the consumers, an increase in return on investment will be accounted for, providing a prosperous individual life.

Building trustworthy, respectful, and merciful relationships with partners facilitates business continuity and development, enhances personal career and financial stability, and guarantees knowledge advancement quickly on hand when needed.

The education gap drives practice inefficiency and a poor personal and social life generating various disorders at the individual and community levels. Evidence in clinical practice has shown that improper communication in the affair can lead to depression, hypertension, type 2 diabetes, and even brain haemorrhage in exposed, mainly vulnerable individuals.

It is important to address the lack of instruction about interpersonal skills in both professional and personal settings.

### **Audience Take Away Notes**

- Will recognize professionalism as a core element for the improvement of personal, professional, and social life
- Will identify key components defining professionalism: getting hold of expertise in a chosen domain, abilities in knowledge delivery when and where necessary, communication skills with collaborators, building an honest relationship with partners, and personal conduct in daily work aligned with social norms
- Will consider the interdependence between the components of professionalism for a successful career
- Will identify the unprofessionalism's effects in their practice
- Will apply a model for the improvement of professionalism in their community

## Biography

Sofica Bistriceanu, MD, Ph.D., graduated from Iasi University in Romania and family medicine research at Maastricht University. She joined the European, American, and Asian Primary Care Research Group, American Academy on Communication in Healthcare, APTR, IHI, NICHQ, EPCCS, EURACT, and WONCA Meetings. With over 90 research studies shared internationally, she has been recognized with numerous awards. Dr. Sofica Bistriceanu is a member of the Academy for Professionalism in Health Care, serves on the Editorial Review Board for The Journal of Patient Experience (JPX), and is an Associate Editor for PriMera Scientific Publication. She represents the Academic Medical Unit-CMI, NT, ROU. Additionally, she is the author of seven volumes of poetry published by Chronica, Iasi Publishing House, and Time, Iasi Publishing House.



**Adriana Souza Szpalher<sup>1\*</sup>, Tassia Christinne Dos Santos Salles<sup>2</sup>, Priscilla Alfradique De Souza<sup>3</sup>**

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<sup>3</sup>Department of Medical-Surgical Nursing, Federal University of the state of Rio de Janeiro (UNIRIO), Rio de Janeiro, Brazil

## **Use of diapers and perception of the nursing team in hospitalized older people: Mixed methods study**

**A**ging is a natural phenomenon characterized by a progressive decline in physiological integrity, resulting in the deterioration of cognitive and physical function. In this sense, changes in urinary function may occur, including in a hospital environment, and have repercussions on social, environmental, and psychological spheres in individuals. However, there are no mixed studies on the indication of using diapers in the older individuals in medical clinics. In this study, 68 older people and 24 nursing professionals participated in the study and responded to semi-structured instruments with open questions and the AUFA scale. Our results suggest that the adoption of diapers is done through empiricism on the part of the nursing team, and by decision on the part of the older people and caregivers. Furthermore, data collection showed that some of the team's recommendations for applying diapers are not based on the AUFA instrument. Triangulation revealed convergences and divergences from data analysis. Based on the results, we suggest action by managers in continuing education, in addition to encouraging individualized and humanized care, to prevent frailties in the older and promote higher quality hospital discharge.

### **Audience Take Away Notes**

- Prescribing the use of diapers is a nursing care that is rarely discussed with professionals, with few issues being discussed in institutions, nor are there any health updates on the topic
- The speeches show an encouragement to use diapers even among older people without indication, understanding that this act protects the older patients from hospital accidents such as falls and that, as there is a reduced team, the application of diapers optimizes the work process and puts less burden on the team
- The results provide a broad view of the hospital scenario, highlighting the importance of incorporating scientific evidence into clinical practice through assertive decision-making, seeking benefits for the older people at a time of dependence on health services, as well as public health policies
- The results will provide reflection for nurses and students, in which reflective points were exposed such as cost-effectiveness, the work process, and the preferences of patients and family members. Thus, the results point to the need to offer professional training to raise awareness about the indication of using diapers in hospitalized older people, paying attention to potential health risks related to such technology
- All other benefits
- We highlight the need to value other types of technologies in the hospital environment stands out, such as dialogue with care, guidance for hospitalized older people, encouragement of the use of devices

for urinary support, educational programs, and that allow, thus, less cold care and based on scientific evidence. Therefore, nurses' actions through health education are essential to clarify what it means to be incontinent and the main causes, mitigating their doubts

- o The application of assessment tools such as the AUFA scale to indicate the use of diapers by adults can be an important contribution to the prevention of diseases such as diaper rash, skin lesions and motivation for the older individuals not to travel to the bathroom and develop a physical disability and motor due to less mobility in the hospital environment

## **Biography**

Adriana Souza Szpalher is Bachelor of Nursing. Academic master's degree in nursing (UNIRIO). She was a Scholarship in an Intensive Care Unit through a competition (Brazil) and Resident student in Clinical and General Surgical Nursing (UNIRIO). She has experience in Home Care, Intensive Care, Medical Clinic, Orthopedics, Risk Classification and Emergency. She studies nursing diagnosis, geriatrics and insomnia. She was a nursing volunteer between 2008 and 2009 at Lar de Socorro Espiritual Bezerra de Menezes (Brazil), providing care to people with physical and neurological disabilities. Currently she is a PhD student in Gerontology and Geriatrics (University of Aveiro / University of Porto - Portugal).

## **Joanna Koch**

La Leche League, Switzerland

### **The greatest gift we can give our children**

**T**his is without doubt our breast milk. It needs no heating, requires no sterilised water or bottles, no watching the clock, no panic when the formula runs out. There is always enough supply, at the right temperature going from the mother's body into the baby's body. What could be more ideal!

Sadly many doubt that a breast is capable of feeding another human, there can be problems, criticisms and feelings of doubt. Many believe that formula is superior and breastfeeding is not suited to today's fast life. Too often it is shrouded in disbelief and lack of information.

Yet breast milk is the ideal food for a baby, with a perfect blend of nutrients, combined with antibody substances to counter infections, and it lays down the optimal foundation for the baby's life. It can ward off cancer also in the mother, prevent obesity, diabetes, allergies and many other health problems in later life. And it gives the young baby innumerable other health benefits. It creates optimal development of the mouth, ears, eyes and jaw, and is said to encourage greater intellectual growth.

Apart from breast milk, the act of breastfeeding creates an unbelievable bond between mother and child, lasting well on into life. And it shares breastfeeding hormones with the father or partner and they become more understanding and protective.

So why not give your baby the greatest gift not only at Christmas but always – and it will outlast all the other gifts and will stay with your baby all his or her life.

The First 1000 Days of Life:

Breastmilk gives babies the essential nutrients for their first 1000 Days of Life – Conception to the end of the 2nd birthday. Compared to other mammals, human babies are born extremely immature. They are completely dependent on their mothers for milk, comfort and warmth – which means – Warmth in the arms of mother – food from her breasts – and security in the knowledge of her presence.

The Formula Milk Industry does not recognise these First 1000 Days of Life – although WHO and UNICEF state that Breastfeeding is the centrepiece of the 1000 Day concept. Sadly, the Industry encourages health professionals, hospitals, midwives and nurses etc to use formula milk – offering them contributions, donations and so on. Formula Milk manufacture does not recognise that this has a disastrous global negative effect on manufacturing, processing, transport, vast waste, plastic pollution, and even the destruction of trees and more.

La Leche League is very happy to help with breastfeeding – this is why this organisation started in the USA back in the 50ies.

### **Biography**

Joanna Koch was born and brought up in the UK and in 1960 married a German and came to live in Switzerland. In 1973 we were given Swiss Nationality. Since 1975 we live in Kilchberg, which is next door to Zurich. 1966 our first daughter was born, the second daughter in 1969 and our son in 1975. All three were breastfed and just after the first daughter was born, I learnt about La Leche League here in Switzerland. Then I joined La Leche League and became an Advisor. We held meetings in our house every month to help and encourage mothers with their babies and show them the best way and how to breastfeed. We started "Family Matters" back in the 90ies which was a small booklet and then became

an email. It helped so many mothers and families. I still represent La Leche League Switzerland. La Leche League International started back in the 1950ies in Chicago and is now all over the world – helping breastfeeding in most countries. I am connected with WHO and the UN, helped to start the Alliance for Health Promotion in 2015, and am a member of the NGO CSW Association with its head office in Geneva and connected with the UN, and I also represent Solar Cookers International. Many families need help, so we do our best.

Breastfeeding saves our world!





**Tonya F. Boyd, DNP, MSN, RN, GNP-BC**

Nursing Administration, Care New England, Providence, RI, United States

## **Implementation of a screening process for identifying polypharmacy in patients 65 and older in the emergency room**

As individuals age, they are more likely to have two or more chronic health conditions requiring prescribing of multiple medications to manage those conditions. Polypharmacy, or the presence of five or more medications, and inappropriate prescribing of drugs are primary health concerns among older populations. Polypharmacy increases the risk of Adverse Drug Reactions (ADEs), which contribute to falls with injuries, causing increased Emergency Room (ER) visits. Therefore, the project aimed to implement a polypharmacy screening process for patients 65 and older presenting to the emergency room. Kurt Lewin's Three-Step Change Theory and the Iowa Method of Evidence-Based Practices guided the theoretical and conceptual frameworks for the project. The quality improvement project incorporated a standard process whereby emergency room nurses were cued to screen patients 65 and older for polypharmacy. A newly created mandatory documentation field in the Electronic Health Record (EHR) prompted nursing staff to confirm patients aged 65 and older, which required completion of the medication history field in the EHR to assess for polypharmacy. As a result of the interventions, polypharmacy was identified in 69% (n=78) of 112 patients 65 and older records in a deidentified report between July 2023 and August 2023. A comparison of pre-intervention data from a previous report of 172 patient records of those 65 and older between June 2023 and July 2023 showed 19% (n=32.68) completion of the medication history section and identification of polypharmacy. Implementing a standard process for emergency room nurses to screen for polypharmacy in patients 65 and older proved successful. The project aimed to add to the nursing literature regarding the importance of screening for polypharmacy in older adults presenting to the emergency room, as the literature is limited in nursing's role in this setting. The project's findings supported the need to implement standards of practice for emergency room nurses when conducting a comprehensive medication history and identifying polypharmacy in patients 65 and older.

**Keywords:** Polypharmacy, Potentially Inappropriate Medications, Older Adults, Polypharmacy Screening, Adverse Drug Events.

### **Audience Take Away Notes**

- Emergency room nursing staff and their leadership team learn how to incorporate evidence-based screening processes into their current workflows and protocols to help identify polypharmacy in patients 65 and older presenting to the emergency room
- Screening for polypharmacy in patients 65 and older presenting to the emergency room will help with early identification of this issue and provide an opportunity to deprescribe potentially inappropriate medications, thereby decreasing adverse drug events that contribute to increased emergency room visits. Identifying polypharmacy in patients 65 and older through screening provides an opportunity to simplify medication regimens, which can reduce healthcare spending for older populations and enhance the quality of life for older adults

## **Biography**

Dr. Tonya F. Boyd studied Nursing at Aspen University and graduated with a DNP degree in 2023. She received her MSN at the University of Massachusetts, Boston in 1998 and became board certified as both an Adult and Geriatric Nurse Practitioner in 1998. Tonya held numerous roles as an advanced practice registered nurse working in critical care, community health and geriatrics, along with several leadership and executive leadership positions in education, quality and nursing professional development.



**Dr. Kara R. De La Fosse, Ed. D, MSN, BSN, PHN, RN, BS.Ed, Rachel Schickling, RN, MSN, PHN**

School of Nursing, Minnesota State University, Mankato, Minnesota, United States



## **Disrespect prevalent in undergraduate nursing students: A conceptualization model explaining the etiology**

**Background:** Incivility in undergraduate nursing programs has been exemplified since the onset of the global pandemic. The nursing profession relies strongly on teamwork and unity. Incivility impedes learning and negatively impacts the teaching and learning environment for both students and faculty. Student civility and conduct behaviors are established prior to entrance into undergraduate nursing programs. To promote a community of professionalism, current beliefs about incivility must be addressed and mitigated early in nursing programs to uphold standards and expectations. There is little tolerance for incivility in professional nursing practice, necessitating the importance of understanding the root causes of nursing student behaviors before effective interventions can be implemented.

**Aim:** To provide a globally accepted conceptualized model to undergraduate nursing faculty that provides insight into the causative factors of incivility in nursing programs.

**Methods:** A systematic review of the literature was conducted to determine the prevalence of models that explains causative factors of uncivil actions by undergraduate nursing students. To date, no model exists that accounts for the biological, psychological, and sociological factors that impacts civil behavior in the classroom.

**Results:** Causes of incivility has influences in the biological, psychological, and sociological domains, and each must be considered as it relates to the whole person, because external experiences impact internal (i.e., classroom) behaviors. The Conceptualization Model of Incivility Etiology in Undergraduate Nursing Students was created to explain causative factors of incivility in undergraduate nursing students. The model's foundational concepts derive from Bandura's Social Cognitive Theory and Clark's Civility Index.

**Conclusions:** For the first time a holistic account of biological, psychosocial, and sociological causes of incivility has been identified. Non-academic influences are now accounted for when understanding causes of uncivil behavior in undergraduate nursing students. Now that causes of incivility are understood within this context, faculty will be able to implement interventions to mitigate incivility more effectively.

### **Audience Take Away Notes**

- The learner will be able to identify incivility behaviors in undergraduate nursing programs
- The learner will understand how uncivil behavior is derived from biological, psychological, and sociological factors
- The learner will be able to apply concepts from The Conceptualization Model of Incivility Etiology in Undergraduate Nursing Students when devising policies and procedures to foster a culture of professionalism
- Researchers can expand on this topic and complete pre and post studies to identify behavior changes from implementation of the model

## **Biography**

Dr. Kara R. De La Fosse Ed.D, MSN, BSN, PHN, RN, BS.Ed is an assistant professor of nursing at Minnesota State University, Mankato. She also serves as the director of the Nurse Aide Program at the university. Her research interest focuses on pedagogical approaches promoting success with online instruction and faculty mentorship for student success. She is passionate about education and promotes self-actualization in students. She earned a doctorate in education from Winona State University.

Rachel Schickling, RN, MSN, PHN is an adjunct instructor at Minnesota State University, Mankato. She has served as a clinical instructor, course faculty, and tutor at the university. Her research interests focus on improving healthcare access and monitoring for underserved populations; and advancing the effectiveness of nursing education. She is currently enrolled in a doctoral PhD program.



**Sheila T. Warnock**

Share The Caregiving Inc. a program of the National Center for Civic Innovation (501c3), United States

## **You care for the patient. Who cares for the family caregiver?**

**S**hare The Care™ (STC) is a unique evidence-informed community-based approach to family caregiving that empowers family members, friends, relatives, co-workers, and neighbors on how to form a “caregiving family” to help someone they know by pooling their talents, time, and resources to assist a friend or loved one facing a health, aging or medical crisis. The model prevents caregiver burnout while offering group members profound inner rewards.

The grassroots model is helping to transform healthcare throughout the United States and Canada. STC helps patients and caregivers without adding to the ever-increasing cost of health insurance and home healthcare. The model prevents isolation and depression while it builds a sense of community and shared purpose within networks of friends, neighborhoods, and faith communities. STC recipients, families and caregivers alike experience solace, support and even joy in the midst of difficult and sometimes, tragic life circumstances.

Sheila Warnock and the late Cappy Capossela, developed the model in New York City in the 1980's, along with ten other women, as they cared for a mutual terminally-ill friend over a three-and-a-half year period. Susan was a divorced, working mom with two young daughters and a diagnosis of a rare cancer. Following Susan's death, requests poured in from others seeking advice and guidance. Meetings were held to teach others their unique systems for sharing responsibilities to avoid burnout and work as a cohesive team.

During these sessions, Sheila was struck by the transformation she witnessed when these frightened friends were given a plan of action and inspired her to co-author, along with the late Capossela, *Share The Care: How to Organize a Group to Care for Someone Who Is Seriously Ill* published in 1995 by Simon & Schuster Fireside books. It attracted great media interest and spread, often by word of mouth, throughout the US, and later 21 other countries.

In 2002, it was used to support Capossela who died of a brain tumor. This experience led Warnock to abandon her creative career to focus all her attention on bringing the model out to an even wider audience.

Founded by Warnock in 2003, the STC non-profit organization was founded to help improve the ‘quality of life’ of anyone who needs support—and to reduce the stress, depression, isolation and economic hardship of their caregivers.” Warnock updated the book cited by the *Library Journal* as “One of the Best Consumer Health Books of 2004”, built a website, and in an effort to reach more caregivers developed a professional educational training program for social workers, nurses, hospice and hospital personnel including clergy. She has led trainings throughout the US and SW Ontario. Through storytelling, keynotes and workshops Sheila has personally reached many thousands of health professionals and caregivers. By encouraging use of the model by other programs, Sheila has helped millions who could not possibly be reached and supported by just one organization.

The training is accredited by the Northeast Multi-State Division, RN Continuing Education Unit for 6 hours of continuing education credits.

### **Audience Take Away Notes**

- Broaden their view of healthcare to include the holistic (social, psychological, economical) model Share The Care™
- Describe how this evidence-informed model can be applied across the full life cycle as well as for diverse populations and challenges
- Identify ways the model can impact not only their organization, but also add value to their patient's experience

### **Biography**

Sheila T. Warnock, Founder & CEO of ShareTheCaregiving Inc. and co-author of Share The Care, never planned to be a pioneer in reinventing caregiving for the 21st century. Starting in 1984 she experienced a series of personal caregiving experiences, and by 2003 made the decision to abandon her advertising career to establish a non-profit. Sheila teaches a grassroots model/philosophy known as Share The Care™ that not only provides a compassionate solution for all involved and also offers a proven option for a growing global crisis. Sheila has been the recipient of numerous caregiving awards most recently a Purpose Prize Fellow.





**Ashley Weichert, MSN, BSN, RN, FCN**

Aspen University, United States

## **Development and implementation of an evidence-based protocol to increase nurses' initiation of virtual patient observation**

**Introduction:** Virtual Patient Observation (VPO) was a technology initiated in a hospital in September of 2022. Upon developing a policy surrounding VPO, there was a lack of a nursing protocol to guide nursing judgment toward VPO. The hospital, specifically one unit, was still experiencing patient falls, as with the under-utilization of this new technology even months after VPO. This promulgated the notion that clinical nurses may not be able to decipher how the technology could be aptly applied without a protocol to guide nursing judgment.

**Design:** This was a quality improvement project focusing on developing and implementing a protocol for nurses to initiate VPO orders for patients at risk for falls. The nursing problem under investigation was the underutilization of VPO.

**Methods:** This project was studied using pre and post-implementation data of the VPO protocol, using descriptive statistics.

**Results:** The significant findings were that developing and implementing an evidence-based protocol did not increase nurses' initiation of VPO. Due to the data and evidence henceforth that VPO is still underutilized, the VPO policy and perhaps additional education should be analyzed and discussed surrounding these unusual findings. These findings could mean that the problem either lies in a fault of the policy, a lack of education, or a lack of knowledge on the part of the clinical nurse who has the capacity to order VPO for safer patient care.

**Keywords:** Virtual Patient Observation, Patient Fall.

### **Biography**

Ashley Clark-Weichert has been a nurse for 19 years. Starting at her first job in the Intensive Care Unit at Georgetown University Hospital while on the Journey to Magnet Recognition, she got involved in shared governance, serving as a Magnet Champion, Unit-Based Council Chair, and Charge Nurse Leader. She grew over the years in her clinical experience and went back to school at George Mason University for a Masters in Nursing Education and was awarded a grant at the National Institutes of Health in Cancer Genomic Research through the National Human Genome Research Institute and National Cancer Institute. This was her first foray into nursing research. Ashley went to Yale University to pursue a doctorate in philosophy of nursing and qualified. She has multiple national and international presentations in the field of nursing genetics and genomics. She has also widely published in metabolomics in African Americans and authored a text book chapter. Ashley has now completed her DNP in nursing at Aspen University in January 2024. She currently works at Lee Health with her initial love of shared governance principles bringing the Magnet Journey to Cape Coral Hospital. She resides in Florida with her husband, two girls, and a newborn baby girl.



**Shanita Reynolds, MSN, RN, CMSRN, NPD-BC, NE-BC**

Garnet Health MC- Catskill, United States

## **Implementing a CAM program on inpatient units to reduce anxiety, stress and improve the patient experience**

**Objective:** This project presents data on the implementation of Complementary and Alternative Modalities (CAM) to help hospital inpatients manage their anxiety and stress in a small community hospital in the United States.

**Method:** The data being shared was obtained from the completion of a pre & post- intervention survey that was completed by a total of 50 participants across two medical/telemetry and mother-baby units. Surveys were completed both before and after receiving CAM therapy. CAM therapy modalities offered included Aroma Therapy, Music Therapy, and Light Massage.

**Results:** Of the 50 participants, a total of 82% reported that they felt some level of stress/anxiety related to their hospitalization. Of the 82%, who received CAM therapy, 100% of the participants reported that the intervention did help reduce their feelings of stress/anxiety.

Additionally, 92% of participants who received CAM therapy shared that the intervention did have a positive impact on their patient experience, while only 8% shared that there was no significant impact since everyone caring for them had been kind.

**Conclusions:** Complementary and alternative modalities are useful nursing interventions that can be utilized to help reduce patients' stress and anxiety, improve the overall patient experience, and lead to improved patient outcomes.

CAM initiatives play an important role in supporting the patients' healing processes, enhancing their overall care experience, and improving clinical outcomes. These findings highlight how crucial it is to adopt a thorough and coordinated patient-centered approach that can lead to more desirable outcomes for hospitalized patients. By offering CAM therapies, nurses can create an environment that allows patients to relax, and reduce stress and anxiety, which is an essential part of promoting the healing process.

**Keywords:** CAM Therapy, Anxiety, Stress, Inpatient, Complementary, Alternative.

### **Biography**

Shanita Reynolds, DNP, RN, NE-BC, NPD-BC, CMSRN, Administrator of Nursing Professional Development for the Garnet Health System, has been a nurse for fourteen years. Dr. Reynolds earned her BSN from Herbert H. Lehman College in 2010, and her MSN, as Clinical Nurse Leader from Sacred Heart University in 2015—both with high honors. She completed her Doctor of Nursing Practice at Aspen University in 2023. Her previous roles in nursing include Telemetry Nurse at Vassar Brothers Medical Center, interim Nurse Manager, and Clinical Supervisor at Montefiore Mount Vernon. In 2017, she joined Garnet Health as the Nursing Director of the Progressive Care Unit where she successfully led several performance improvement initiatives and greatly improved employee engagement. She later joined the surgical Services team as Nursing Director for the Post Anesthesia Care Unit--overseeing operations across the campus. Her units earned the highest employee engagement scores two years in a row. In 2022, she was nominated as the 1199 Nurse Leader of Distinction by her staff. Dr. Reynolds is a transformational leader who demonstrates her doctoral

skills by helping to standardize the operations of two campuses through her passion and commitment for excellence in patient care, staff engagement, and clinical outcomes. Shanita has been an active member of the organization's Nursing Shared Governance shared decision-making model, and has served as the Nurse Leader Advisor on the Progressive Care, Ortho/Surgical/Rehab, and Ambulatory/Procedural Councils. Currently, Shanita is the Administrative Nursing Sponsor for the Shared Governance Nursing Congress. In addition, Shanita serves as an Assistant Professor at SUNY Orange where she takes pride in helping to grow successful nurses of the future. When she is not working, Shanita enjoys time with her husband and two children. Shanita is spiritual, fun-loving, generous, and appreciates fine things—she loves to shop! She also loves working out with weights to maintain a healthy body, and believes in alternative methods for self-care. In fact, her passion for these modalities propelled her to make such positive changes for her patients and staff by expanding the caring arts modalities (CAM) program.



**Angel C. Pannell, DNP, MBA, RN, CPHQ, CPPS, NE-BC**

Quality Department, Allegheny Health Network, Pittsburgh, PA, United States

## Decreasing the incidences of inpatient falls with structured, purposeful rounding

Patients who fell incurred injuries and lost reimbursement ensued at the host hospital. Hence, the project aimed to implement Structured, Purposeful Rounding (SPR) to decrease falls in two medical-surgical units. John Kotter's Eight-Steps of Change Model and the Iowa Method of Evidence-Based Practices supplied the theoretical and conceptual frameworks for the project. The quality improvement project incorporated SPR to decrease falls. In addition to conducting SPR, the team documented the rounds in the Epic electronic Health Record (HER). Due to the Stay with Me program, the staff remained within arms reach during ambulation. As a result of the interventions, Five-North's falls per patient day rate was 0.86 in July and zero in August. Correspondingly, Six-North's was 0.85 in July and 4.07 in August. One Behavioral Health (BH) patient skewed the data by intentionally lowering to the floor to avert discharge. Despite the two falls, there were no other falls on Six-North, and patient safety improved. Thus, Six-North would have zero falls. Five and Six-North's current fall rates were the lowest for 2023. Integrating SPR proved successful. Although the staff was initially apprehensive, they adapted to the new protocols. At its conclusion, the team engaged in rounding more willingly. The project aimed to add to the literature regarding Structured, Purposeful Rounding (SPR) because the literature supporting its effectiveness is limited and not regarded as rigorous. SPR is valuable and will extend to all network hospitals upon revision.

**Keywords:** Falls, Patient Falls, Purposeful Hourly Rounding, Structured Rounding, Intentional Rounding.

### Audience Take Away Notes

- Direct care staff and their leadership team learn how to incorporate structured, purposeful rounding into their current protocols to decrease the incidences of inpatient falls
- Structured purposeful rounding decreases the amount of call bells. Patient satisfaction/patient engagement scores increase with structured, purposeful rounding. Direct care staff has additional time to focus on other priority needs. Publicly-reported data is better with structured, purposeful rounding. Other faculty could use structured, purposeful rounding to expand their research and teaching. Structured purposeful rounding provides a practical solution to falls, which decreases the amount of time spent documenting, sending patients for testing, and discussing falls with physicians and family members. By adding structure to hourly rounding, less falls occur, and hospitals do not lose funding related to adverse events. Finally, by conducting structured purposeful rounding, sitters may be reduced and decrease costs

### Biography

Dr. Angel Pannell studied Nursing at Aspen University and graduated as a DNP in 2023. She joined the executive team at Select Specialty Hospital, a long-term acute care hospital. She received her MSN at Waynesburg University in 2013, along with an MBA in 2014. Angel held numerous leadership and executive positions in Healthcare Quality. Education and national certifications were important, she holds certifications in Healthcare Quality, Patient Safety and Executive Nursing.



**Judi Carpenter, DNP, MSN, RN**

Intermountain Health, Salt Lake City, UT United States

## Nurse utilization in the backcountry

**Background:** Few published studies on civilian Helicopter Emergency Medical Services (HEMS) hoist programs exist. This study provides a demographic analysis of hoist rescue operations performed by the only FAA Part 135 hoist-approved civilian HEMS operator in the United States.

**Methods:** All persons hoisted between May 29, 2001, and May 28, 2011, were retrospectively analyzed.

**Results:** Over a 10-year period, 212 of 214 victims were hoisted. The most common indications were fall injuries (38%) and being stranded (21%). Victim demographics showed an average age of  $35 \pm 17$  years, predominantly male (79%), often associated with trauma (66%), with a majority (68%) of all victims requiring subsequent transport to a hospital by ground ambulance (24%) or flown by Life Flight (44%). Hoists occurred most often in the afternoon ( $14:07 \pm 3:47$  hours), during the weekend (53%), in the months of May-September (71%), at an altitude of  $7,488 \pm 1487$  feet, with the seat harness (39%) being the most common mode of victim extraction. Hoist insertion of Search and Rescue (SAR) personnel occurred infrequently (5%).

**Conclusion:** Progressive nursing is expanding beyond the hospital setting, especially in the context of remote and austere areas where outdoor recreation is on the rise. Search and Rescue (SAR) agencies, fire services and park rangers play a crucial role in ensuring the safety of individuals in these settings. Becoming a flight hoist operator is a unique and valuable skill that can make a significant difference in these situations. The results from this demographic study on hoist operations can provide important demographic information for HEMS contemplating backcountry hoist operations and programs that interface with SAR agencies.

### Biography

Ms. Judi Carpenter graduated from the University of Utah with her BSN in 1986, completed her MS in 1990 and her DNP in 2010 at the same university. She is currently a flight nurse for Intermountain Health and has been flying for over 33 years. She completed the first hoist flight in 2001 and has presented at national Air Transport Conferences and State EMS symposiums. Her career path reflects a strong commitment to nursing, continuous education and leadership in the transport operations and contributes to the field through speaking engagements and publications.





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**LCDR Devin N. Thomas, DHSc, MPH, CHES**

Health Promotion Specialist, US Public Health Service, Washington, DC, Adjunct Professor, Theatre Arts, Bowie State University, Bowie, MD, United States

## **Applied theatre arts as a tool to increase depression literacy in adolescents: Lessons learned from a mixed-method pilot study**

Adolescent depression has increased sharply over the past decade, exacerbated by the effects of the COVID-19 pandemic (Thapar, et al. 2022, Branje & Morris, 2021; Golberstein et al., 2020). Depression literacy can be used as a tool to mitigate the consequences of depression (Beaudry, et al 2019). Low depression literacy causes hesitancy in seeking help for depressive symptoms due to the stigma associated with mental illness (Zhong, et al, 2021). This delay exacerbates the effects of depression and further impede the quality of life of the depressed (Curran, et. Al, 2023). Depression literacy is a protective factor that must be utilized to develop interventions for adolescents.

Involvement in extracurricular activities can lead to lower rates of depression and other negative mental health states (LaForge-Mackenzie, et al., 2022; Bernasco et al., 2021; Magson et al., 2020, Steiner, et., al, 2019). Adolescents who participated in theatre arts as an extra-curricular activity reported increased levels of self-esteem, self-confidence, belonging, and lower rates of risky behaviors (Quek et al., 2021; Fancourt, 2019).

Moreover, involvement in theatre arts can reduce health-related stigma (Bernasco et al., 2021). The Unified Theory of Behavior highlights the importance of mental health literacy and therefore postulates that knowledge, skills, and abilities are important precursors to behavioral change and must be integrated into the design of interventions (Hart et al., 2014).

Previous studies have used educational campaigns to increase depression literacy but did not employ novel or creative strategies to do so (Johns Hopkins Medicine, 2018; Beaudry et al., 2019). Applied theatre arts and arts integration have been used for a myriad of academic and public health topics such as mathematics (Jeronimo, 2019), science (Madden, et al., 2022), history (Anderson, 2017), and nutrition and healthy eating (Tympa, et al., 2019), sexual and reproductive health (Kaiser Permanente Educational Theatre, 2018) and among vulnerable populations (Theatre Lab, 2019). Scant attentions have been paid to the prospects of applying theatre arts to increase depression literacy as a function of decreasing depression in adolescents. The current talk discusses the lessons learned from using applied theatre arts in this fashion.

### **Audience Take Away Notes**

- Describe lessons learned from a mixed-methods pilot study using theatre arts as a delivery tool for depression literacy
- Describe the benefits of using novel strategies in intervention development.
- Describe future use-case of novel interventions for health and social justice
- Describe protective factors (and motivations) for positive mental health outcomes in adolescents

## Biography

LCDR Devin Nikki Thomas is a Health Promotion Specialist in the US Public Health Service, stationed at the CDC and has been deployed for several public health crises. She is a graduate of Hampton University (BA), Emory University (MPH), and Radford University where she obtained her Doctorate in Health Science (DHSc). Dr. Thomas is also an actress, writer, and director for both screen and stage. She and can be seen on “We Own this City” (HBO), “Sinking Spring” (Apple+), “Revenge Prank” (MTV) and “The Color of STEM” (HBCUGo TV) as the host of the 2nd season. Her blended expertise applies the power of theatre arts and scripted media to effect positive change in both public health and social justice.



### **Brinda Balachandran, MN, RN, CCRN, NSWOCC**

Advanced Practice Nurse Educator

Practice Based Education-Collaborative Academic Practice, Toronto

Rehabilitation Institute, University Health Network, Toronto- Ontario- Canada

## **The nursing orientation passport: Development, implementation and evaluation of a nursing new hire onboarding tool**

University Health Network (UHN) is one of Canada's leading health care and medical research organization. The scope of research and complexity of cases at UHN has made a national and international source for discovery, education and patient care. UHN is comprised of four hospitals including Toronto Rehabilitation Institute (TRI). TRI is the largest rehabilitation hospital in Canada. The interdisciplinary teams, including nursing at TRI are dedicated to helping patients recover from injury, illness, or age-related conditions and are passionate about improving the health and well-being of patients and their families.

Within a large and advanced organization like UHN-TRI, the hospital continuously hires a large number of nurses year-round. The Advanced Practice Nurse Educators (APNE) for the specific programs provide support during the new hire's orientation as well as ongoing support post-orientation. Following the COVID-19 pandemic, despite the APNEs support, newly hired nurses were often found to leave their position, which is at great cost to the organization and patient care. In response to these findings, TRI APNEs collectively decided to develop, implement and evaluate a nursing new hire orientation onboarding tool, "The Nursing Orientation Passport" in 2021 to provide direction, focus and support to new hires.

The tool highlights an onboarding pathway, a milestone toolkit (focusing week to week objectives, activities and resources), a detailed 6-week schedule (discussing corporate orientation content and unit orientation), required e-learning, scheduled meetings with APNE and unit leadership, feedback forms to be completed by the new hire and preceptor and off boarding sign offs for end of orientation and end of probation periods.

The utilization of the passport commences from week 1 of corporate orientation. The passport is provided to the newly hired nurse by the APNE who explain the purpose, related processes, and times. The weekly APNE touch points are completed together with the documentation from the Nursing Orientation Passport. The guidance of the APNE in addition to the tool is set to provide direction, support and clarity for the new hire.

Following a retrospective evaluation of the passport in Fall 2023, qualitative and quantitative findings suggest a satisfactory compliance in completion of the passport, increase length of stay in position, positive professional development and positive feedback of the onboarding tool.

### **Audience Take Away Notes**

Though the onboarding tool was designed in 2021, it has been continuously updated with the most recent version finalized on Dec 2023. From 2021 to present date new hires have been utilizing the passport as an onboarding pathway tool and as an initiation process for their professional development. Retrospective findings highlighted the following:

- Satisfactory compliance in completion of the passport

- Increase length of stay in the new hire position
- Positive professional development
- Positive feedback of the onboarding tool. Most new hires stated that “he/she would recommend the usage of the passport for future new hires as supportive onboarding tool”

The presentation of this onboarding tool to the international audience would enhance further understanding of the standardized onboarding tool, increase knowledge on how to sustain new hire’s length of stay in the position (particularly new graduates) as well as gain understanding on how to provide support for nursing’s professional development with this supplemental document

### **Biography**

Brinda completed her Bachelor of Science in Nursing degree at the Toronto Metropolitan University (TMU). She then completed a post-grad in Geriatric Mental Health and Addiction, Cardiology Care and Critical Care Nursing. Brinda then joined the Nurses Specialized in Wound, Ostomy and Continence Canada (NSWOCC) to complete her certificate. Most recently Brinda completed her Masters of Nursing Degree at Athabasca University (Canada) with a focus on leadership and education. Brinda worked in the capacity of a NSWOCC practitioner at Trillium Health Partners (THP-Canada). Brinda is an experienced critical care nurse, worked at multiple ICUs in the Toronto Canada. She was also involved in transitioning patients into post-acute areas as a regional care coordinator with the Home and Community Care Support Services in the THP Cardiac Transitions and Community Care. Another highlight in Brinda’s nursing career includes her role in planning, facilitating and monitoring of organizational practices at Etobicoke General (Toronto Canada) during accreditation for Accreditation Canada. Most recently, Brinda holds the position of an Advance Practice Nurse Educator (APNE) in University Health Network (UHN), at the Toronto Rehabilitation Institute in which her portfolio focuses on transitional care units and complex continuing care.



**Vikrithin Kumaran<sup>1\*</sup>, Laura Hutchins<sup>2</sup>, MD**

<sup>1</sup>University of Arkansas at Little Rock (UALR) / Pulaski Academy, Little Rock, Arkansas, United States

<sup>2</sup>Professor Emeritus, University of Arkansas, Department of Internal medicine, Little Rock, AR, United States

## **Role of remote glucose monitoring device and community health worker in uninsured hispanic population in United States**

**Introduction:** Hispanic population in the United States of America who are ineligible for, government health coverage, have one of the highest rates of diabetes. Lack of insurance predisposes them to poor screening and lack of treatment that could lead to complications. A grant allowed a 6-month remote monitoring program with cellular data transmission to a central web-based data aggregation site (held by a company called Ejenta). We did a retrospective review of the role of a remote glucose monitoring program in the uninsured Hispanic population seen in a free clinic in Little Rock, AR, USA.

**Methods:** We did a chart review of consecutive patients with diabetes seen at the free clinic who had received the Remote Monitoring Device (RMD) and had both pre- and post-lab values (Hb1Ac and or Blood glucose). The RMD was obtained from a grant and a community health worker who was bilingual was involved in follow up of these patients after the delivery of the device to reinforce compliance. After the completion of the cellular data aggregation component, the patients were allowed to keep the devices. Lab values such as HbA1c and blood glucose were collected both pre and post device delivery. A Pearson's correlation coefficient was used to calculate the relation between the HBA1C improvement and duration of device use.

**Results:** 55 patients were identified as having diabetes and who had HbA1c checked both pre and post device delivery. 53 were on oral hypoglycemic agents and 21 were on both oral hypoglycemics and insulin therapy. The prevalence of concurrent DM, Hyperlipemia (HLN) and Hypertension (HTN), DM+HLN and DM+HTN were 27 (49%), 46 (84%) and 45 (82%) respectively. Only 5 patients had DM alone. The median time for A1c measurement pre and post device delivery were 69 and 66 days respectively. The Pearson's coefficient for the relation between the HBA1C improvement and duration of device use was weakly positive with  $r = 0.30$  with a  $P = 0.02$ .

**Conclusion:** There seems to be a weak correlation for the duration of the device use to the improvement in HbA1c and we plan to have updated data with more follow up time and health worker intervention for the final poster. We also plan to analyze the social determinants of glucose monitoring and treatment with the community health worker intervention in this minority population.

### **Audience Take Away Notes**

- Utility of remote monitoring program for diabetes in minority population
- Utility of community health worker with bilingual capabilities to help with compliance to monitoring and treatment
- Social determinants of diabetes monitoring and treatment
- Practical solutions in diabetes monitoring in minority population



## **Biography**

Vikrithin (Vik) Kumaran, Student of Advanced Placement in Biology, Dual Program of University of Arkansas at Little Rock (UALR) and Pulaski Academy, Little Rock, Arkansas, USA. Vik also serves as a counsellor at Camp Aldersgate, Little Rock, which is a year-round program for children with special needs and medical diagnoses. Vik is a teen board member in Arkansas fine arts museum, Little Rock, AR. Vik is a District Science fair winner and came second in regional Science fair, Arkansas, USA. He is also a Broadcom master's science fair select and won the Model UN district level in Arab league 2023.



**Maisha Ahmed\*, Lissette Delgado Cruzata**

Science Department, John Jay College of Criminal Justice, The City University of New York, New York, United States

## **Anti-abortion legislature's impact on public health: The case of access to the anti-rheumatic drug methotrexate**

After the US Supreme Court's decision to overturn *Roe vs Wade* in June 2022, which protected the constitutional right to abortions in the United States, some US states restricted access to abortions by criminalizing providers, regulating abortion procedures, and prohibiting abortive medications. It has become clear that the impact of these legislations goes beyond abortion, and one clear example of the reach the overturn had in the public's health is related to reducing access to drugs used to treat rheumatic and musculoskeletal diseases. These disorders are diseases that affect the joints, bones, muscles, and connective tissues in the body and result in pain, swelling, and deformities that reduce the quality of life. One of the most common drugs to treat these disorders is methotrexate. Studies show that methotrexate can induce abortions, which puts it under the abortive medications umbrella. Data suggests that abortion restrictions are impacting methotrexate access. We conducted a mixed-methods study using social media (SoMe) to understand the experiences of people with rheumatic diseases after the abortion ban. We performed two data collection trials on the first anniversary of the overturn for six weeks using key terms "methotrexate" and "methotrexate and abortion". We retrieved X (formerly Twitter) posts using Keyhole software. 1,526 posts including "methotrexate" mainly (41.1%) from US users were collected, and adding "abortion" as a keyword narrowed the number of posts to 103, also from a majority of US users (78.3%). Most users were female (76.2%). Texas was the state with the largest number of posts in both trials (12.9% and 16.1%), this is not surprising as Texas is one of the fourteen states that implemented anti-abortion legislation directly banning the use of abortion-inducing medications including methotrexate. The term "methotrexate" reached 6 million unique users with over 7 million impressions, and when "abortion" was added it reached over 164,000 unique users with more than 200,000 impressions. These showed the relevance of the topic on a SoMe platform such as X. We conducted a content analysis of the posts using Leximancer software, which revealed a high association between methotrexate and abortion-related topics through concept mapping. We used this information to identify three main themes in the posts: (1) Denial of Methotrexate; (2) Denial of Methotrexate Treatment for Women; and (3) Methotrexate as part of Reproductive Healthcare. The qualitative analysis showed a year after the ban there is more concern around the access to methotrexate. Our results highlighted that abortion legislation has endangered access to this drug, posing a significant threat to the health of people with rheumatic disorders. It also highlighted healthcare inequities for women of reproductive age as they are likely to lose access to their treatment due to scrutiny from abortion restrictions and enforcers. By understanding the impact the legal overturn of protections for abortion access has had on those suffering from rheumatic and musculoskeletal diseases, we can begin to fully realize the full implications this legal decision has had outside of reproductive healthcare.

### **Audience Take Away Notes**

- This work will discuss the public health impact of legislation around abortion restrictions for non-reproductive health outcomes
- We will show methodology using social media analysis to better understand health outcomes
- This work will also explore the use of AI tools such as Keyhole and Leximancer in the analysis of information to gain a real-time understanding of public health experiences

### **Biography**

Maisha Ahmed studies Cell & Molecular Biology at John Jay College of Criminal Justice, in the City University of New York, and plans to graduate in the spring of 2024. At John Jay, she is part of John Jay's PRISM Undergraduate Research Program (URP) and the Honors Program. She is also passionate about reproductive health and healthcare and plans to pursue graduate studies in the biomedical sciences after graduation.



**Anna Podgorski<sup>1\*</sup>, RN, BSN, SCRN, Christine Chen<sup>2</sup>, RN, BSN**

<sup>1</sup>Neuro-Intermediate Care Unit, Queen's Medical Center, Honolulu, Hawaii, United States

<sup>2</sup>Quality and Patient Safety, Queen's Medical Center, Honolulu, HI, United States

## Decreasing pressure injuries on a neuro-intermediate care unit by increasing static waffle overlay usage

**Background:** The development of a pressure injury can have detrimental health effects on patients. Around 60,000 patients die every year worldwide due to complications secondary to pressure injuries (Borojeny, et al., 2020). From July 2022 - Sept 2022, baseline hospital data showed there were 10 unit-acquired pressure injuries on the neuro-intermediate care unit. During this same period, baseline compliance of placing a static overlay mattress under all admitted patients with a Braden score of 18 and less was 39.45%. The process of obtaining a static overlay required the unit's registered nurses to place an order from the central supply division, then wait for the product to be hand-delivered. This led to delays in care.

**Interventions:** For 2 weeks, from the end of August to the beginning of September 2022, staff were educated in appropriate usage of the static overlay. This included creating a unit process identifying that the responsibility of the admitting primary nurse includes ensuring all patients with Braden scores 18 and under would have a static overlay in place by end of shift. The static overlay acquisition process was also changed. Previously the product was ordered via the electronic medical chart and then hand-delivered by central supply division. In order to improve workflow efficiency and limit delays the static overlay was stocked in the unit's product-dispensing cabinet.

**Outcomes:** Usage of the static overlay mattress improved to 85.61%. Post-intervention data showed that between Oct-December 2022 there was 1 unit-acquired pressure injury, a 90% improvement.

**Implications:** Pressure injuries cost an average of \$10,708 per incidence (Padula & Delarmente, 2019). With a decrease in pressure injuries from 10 to 1, the potential cost-savings to the unit was \$96, 372.

**Applications to Other Settings:** The static overlay used is a single-use only product. This product fits a single twin-size bed. As this is a patient charged item, this product is discharged with the patient to their home, rehab centers, and/or skilled nursing facilities. The intervention implemented supports the continuity of a patient's care and with the intent of protecting patients' skin throughout their healthcare journey.

### Audience Take Away Notes

- Learners will recognize the effectiveness of a static overlay mattress in decreasing pressure injuries
- Learners will understand average the cost of a pressure injury and the implications it can have on patients
- The project could be expanded on by other facilities to evaluate the effectiveness of static overlays on other patient populations
- This project provides a cost-effective and practical solution to a hospital-acquired problem

## **Biography**

Anna Podgorski, RN, BSN, SCRNP obtained her Bachelor of Science in Nursing from Central Connecticut State University. She has had three years of oncology nursing experience and five years of combined neuroscience intensive care and intermediate care nursing. She has presented the results of quality improvement projects at multiple nursing conferences throughout the United States.



**Cindy (Yixin) Chen**

Department of Communication Studies, Sam Houston State University,  
United States

## How do religiosity, political ideology, and consuming fox news influence belief in health misinformation

**Background:** Misinformation, particularly concerning health and wellness, poses a significant threat to public health (van der Linden, 2022). Medical experts caution that embracing such misinformation can have deadly consequences (Gisoni et al., 2022). Religiosity and conservative political ideology have been found to make individuals more susceptible to misinformation (Druckman et al., 2021; Garrett & Bond, 2021). Additionally, the consumption of conservative media, particularly Fox News, has been linked to stronger beliefs in misinformation (Stecula & Pickup, 2021; Ash et al., 2023; Yang & Bennett, 2021). Unfortunately, there are few comprehensive studies examining the collective impact of religiosity, conservative politics, and exposure to conservative media on beliefs in health misinformation. Thus, the following research hypotheses are proposed: H1: A. Higher religiosity, B. More conservative political ideology, and C. Consuming Fox News content (both TV and online) are positively associated with beliefs in health misinformation.

**Method:** This study used the American National Election Studies (ANES, 2021) 2020 Time Series dataset, a sample comprising U.S. citizens aged 18 or older living in the United States (N = 8,280). Key variables measured in the study are: Religiosity; Political ideology; Consumption of seven Fox TV programs: (1) Hannity, (2) Tucker Carlson Tonight, (3) The Five, (4) The Ingraham Angle, (5) The Story with Martha MacCallum, (6) Special Report with Bret Baier, and (7) Fox & Friends; Fox News website visits; Beliefs in two specific health claims that are misinformation. Demographic variables (age, sex, ethnicity, education, marital status) were also measured.

**Results:** Two logistic regressions were conducted separately to predict belief in each of the two claims, while controlling demographic variables. Findings revealed that (1) Stronger religiosity and more conservative politics are associated with a higher likelihood to believe misinformation that “childhood vaccines cause autism;” consumption of Fox content did not contribute to this belief; (2) Three factors (stronger religiosity, more conservative politics, and regular Fox website use) are associated with a higher likelihood to believe misinformation that “the anti-malarial drug hydroxychloroquine is a safe and effective treatment for COVID-19.”

**Conclusion:** The study revealed the significant and positive impacts of religiosity, conservative political views, and regular exposure to the Fox News website on the acceptance of health misinformation.

### Audience Take Away Notes

- Public health campaigns should be designed to counter health misinformation, tailoring messages to resonate with individuals with stronger religiosity and conservative politics
- The influence of Fox News on public health perceptions underscores the need for greater media literacy and critical information consumption



- Media organizations must be held accountable for disseminating misinformation
- A collaborative approach involving religious institutions, political leaders, media organizations, and public health agencies is crucial to debunk health misinformation

### **Biography**

Dr. Cindy (Yixin) Chen is an Associate Professor in the Department of Communication Studies at Sam Houston State University in Huntsville, Texas. She holds a Ph.D. in communication from the University at Buffalo. As a health and risk communication researcher, Dr. Chen studies how interpersonal and mediated communication processes influence cognition and emotion. She is also interested in the impact of cognition and emotion on health decision-making, health/risk behaviors, and well-being. Her works have appeared in communication, public health, and substance use journals. Her research on binge drinking among college students has been featured on National Public Radio.



**Dr. Mohd Hafiz Che Ismail<sup>1\*</sup>, Nor Azwany Yaacob<sup>1</sup>, Anis Kausar Ghazali<sup>2</sup>**

<sup>1</sup>Department of Community Medicine, School of Medical Sciences, Universiti Sains Malaysia, Kubang Kerian, 16150 Kelantan, Malaysia

<sup>2</sup>Biostatistics and Research Methodology Unit, School of Medical Sciences, Universiti Sains Malaysia, Kubang Kerian, 16150 Kelantan, Malaysia

## Development and validation of a questionnaire on context-relevant malaria preventive knowledge

Over the years, Malaysia has made significant progress in reducing malaria cases, including achieving zero local transmission in 2018. However, imported cases pose ongoing risks, especially in states like Kelantan with suitable ecosystems and cross-border population movements. Assessing local knowledge is vital for targeted education to achieve and sustain elimination. Although questionnaires assessing malaria knowledge exist, most of them were developed in settings with active transmission, or lack of rigorous validation processes. This study aimed to develop and validate a questionnaire that evaluates the knowledge of malaria prevention among local communities in Kelantan. The initial draft of the questionnaire was established from a literature review and expert input via the Nominal Group Technique, a semi-quantitative/qualitative method. Further validation was done by experts and local communities through content and face validity. Further validation involved administering the questionnaire to 300 adults in Jeli district, Kelantan, and was analysed through two-parameter logistic Item Response Theory (2-PL IRT). The initial questionnaire drafted consists of 79 items in seven domains. After modifications, the questionnaire demonstrated excellent content validity indices of 0.99 for S-CVI/Ave and 0.92 for S-CVI/UA. Face validity indices were 1.0 for S-FVI/Ave and 0.99 for S-FVI/UA. After the removal of items using 2-PL IRT, most of the items had appropriate difficulty and discrimination estimates. All domains displayed good model fit. Information gained across ability levels ranged from 90.6% to 97.3% for the domains. The reliability was greater than 0.6. The final questionnaire consists of 53 items in seven domains. In conclusion, rigorous mixed-methods development and validation processes resulted in a robust, context-appropriate 53-item, 7-domain questionnaire with strong psychometric properties to assess malaria prevention knowledge, thus aiding Malaysia's elimination goal amidst ongoing reintroduction risks.

**Keywords:** Malaria, Knowledge, Validation, Item Response Theory, Nominal Group Technique.

### Audience Take Away Notes

- This study provides a framework for developing and validating context-specific questionnaires, which can be applied to other research areas beyond malaria prevention. Researchers and public health practitioners can adapt and expand upon this methodology to create reliable and valid tools for assessing knowledge, attitudes, or practices related to other public health issues or diseases
- The validated questionnaire offers a practical solution for assessing malaria prevention knowledge. This can simplify the process of identifying knowledge gaps and designing targeted interventions, making the work of public health practitioners more efficient and effective
- By using this questionnaire, health authorities can obtain accurate and reliable data on the current state of malaria prevention knowledge in the population. This can improve the accuracy of situation analyses, needs assessments, and program planning, ultimately leading to more informed decision-making and resource allocation
- The insights gained from using the questionnaire can provide policymakers with evidence-based

information to guide decision-making processes related to resource allocation, strategy development, and priority setting in the context of malaria elimination efforts in Malaysia

- The methodology and findings of this study can be used to advocate for greater investment in malaria elimination efforts, as well as in health education and community engagement initiatives, by demonstrating the importance of understanding and addressing knowledge gaps to achieve public health goals

### **Biography**

Dr. Mohd Hafiz bin Che Ismail is a medical doctor who graduated with an MBBCH degree in Medicine from Cardiff University, UK in 2012. He further pursued a Master of Public Health in 2021 from Universiti Sains Malaysia and is currently a final year doctoral student in Public Health (Epidemiology and Biostatistics) at the same university. Dr. Mohd Hafiz has extensive experience in malaria control, having worked for a total of five years in the District Health Offices of Keningau, Sabah and Kuala Krai, Kelantan.



**Zhuoxia Li<sup>1\*</sup>, Cuiling Zhang<sup>2</sup>, Jiaqi Chen<sup>3</sup>, Rongxin Du<sup>4</sup>, Xiaohong Zhang<sup>5</sup>**

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<sup>2</sup>Department of Digestive Oncology, Shanxi Bethune Hospital, Shanxi Academy of Medical Sciences, Tongji Shanxi Hospital, Third Hospital of Shanxi Medical University, Taiyuan, Shanxi, China

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## **The current status of nurses' psychological experience as second victims in restoring the event after a patient safety incident in China: A mixed study**

**Purpose:** The objective of this study is to gain insight into the psychological experience and present condition of nurses who serve as second victims in the process of restoring the sequence of events. Additionally, this research aims to investigate the effects of restoring the sequence of events on these second victims, and to propose recommendations and justifications for supporting them.

**Methods:** An exploratory mixed research method was adopted to understand the emotional experience of the second victim when restoring the passage of the incident through qualitative research, and 14 nurses with the experience of the second victim were selected for semi-structured interviews using purposive sampling according to the maximum difference sampling strategy. Through quantitative research, we explored the negative psychology and support needs of the second victims when they revert to the incident, and a self-developed questionnaire was used to survey 3,394 nurses with experiences of the second victims in 11 tertiary hospitals in Shanxi Province.

**Results:** In the qualitative part of the study, the emotional experience of the second victim's reversionary event passage after a patient safety incident could be categorized into 3 themes: negative psychological experience, simplification/glorification of the event passage, and expectation and growth. In the quantitative part of the study, guilt and self-blame accounted for the highest percentage of negative emotions after a patient safety incident, 63.20% of the nurses believed that the reduction of the incident passage led to the exacerbation of negative psychology, and shame was the most common negative emotion resulting from the reduction of the incident passage.

**Conclusion:** Following a patient safety incident, nursing administrators and institutions should consider the adverse psychological impact on the second victim, prioritize the second victim's needs and skills during the incident's restoration, create a positive safety culture, and reduce the likelihood of secondary victimization of second victims due to mismanagement.

### **Audience Take Away Notes**

- The emotional experience of the second victim's reversionary event passage after a patient safety incident could be categorized into 3 themes: negative psychological experience, simplification/glorification of the event passage, and expectation and growth
- Guilt and self-blame accounted for the highest percentage of negative emotions after a patient safety incident
- Following a patient safety incident, nursing administrators and institutions should consider the adverse psychological impact on the second victim, prioritize the second victim's needs and skills during the incident's restoration, create a positive safety culture, and reduce the likelihood of secondary victimization of second victims due to mismanagement

### **Biography**

Zhuoxia Li studied Nursing at the Shanxi Medical University, and graduated as MS in 2020. Subsequently, she joined Shanxi Bethune Hospital.



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## The lived experience of a nurse transitioning from a clinical setting to an academic environment

The transition from nursing practice to academia is a challenging experience. Nurse educators new to the academic setting often experience role conflict and reality shock as they leave a clinically-oriented setting to academia. The purpose of this qualitative study was to describe and provide a deeper understanding of the previously unexplored experience of nurses transitioning from clinical settings to academic environments. A purposive sample of seven nurse educators described their experience and the narrative data from these interviews was analyzed using Colaizzi's methodology. The findings revealed that the nurse's 'innate desire for teaching' was the main impetus for transitioning to an academic role. Three major themes central to the lived experiences of neophyte nurse educators were identified. The three themes gleaned from this phenomenological study included: (1) struggling with the challenges in academia, (2) adjusting to the new role, and (3) balancing clinical background with academic responsibilities. The results of this study indicate there is a need for extensive graduate preparation for the academic role. Moreover, the study revealed a dire need for: 1) well-designed and long-term peer mentoring support, 2) allocation of resources to support newly-hired faculty, and 3) a formal evaluation system of novice nurse educators.

### Audience Take Away Notes

- Revision of the Faculty Mentorship Program
- Reinforce a consistent utilization of guidelines and criteria for candidate peer evaluations
- Strategies to maintain faculty clinical practice and balance it with the teaching load
- Allocate resources to assist neophyte faculty for the new role



### Dr. Ismat Mikky

Department of Nursing,  
Bloomfield College of Montclair  
State University/Bloomfield New  
Jersey, United States

### Biography

Dr. Mikky received his doctoral degree in nursing from the University of Connecticut (UConn) in 2006. His Master degree in Nursing Education from the University of Hartford was funded by the Fulbright scholarship. He had completed special studies in cardiovascular nursing at Emory University and the program was funded by the United States Information Agency (USIA). Over the past 23 years of experience, since he had earned his BSN degree from Bethlehem University (Palestine) in 1991, he had assumed different nursing positions in various clinical and academic institutions; nationally

and internationally. He received the "Carolyn Ladd Widmer Research" Award in acknowledgement of excellence in 2006. His areas of expertise include: nursing education, adult health nursing, cardiovascular nursing, and long-term care. The area of his research interest is focused on the construct of "empowerment among clients with chronic health conditions". His scholarly work includes: conference presentations, research studies published in nursing journals, and three chapters in a handbook on transcultural nursing. Currently, he has been working as a tenured full professor in the FRANCES M. McLAUGHLIN DIVISION OF NURSING at Bloomfield College of Montclair State University since 2009., Dr. Mikky has been appointed as the chairperson of the aforementioned program from July 2021-July 2023. He reviews manuscripts for four nursing Journals: Journal of Nursing Measurement, International Journal of Nursing Studies, Geriatric Nursing, International Journals of Health Planning and Management.

## Therapeutic potential of diet and exercise in the treatment of obese and lean young women with polycystic ovary syndrome

**P**olycystic Ovary Syndrome (PCOS) is the most common endocrine disorder among women of reproductive age. The symptoms of PCOS include but are not limited to irregular menses, biochemical and/or clinical hyperandrogenism, polycystic ovaries on ultrasound. PCOS is also characterized by insulin resistance, especially in obese women. And the majority of women with PCOS are either overweight or obese.

However, lean women and adolescent girls may also be affected by PCOS. Considering the rise in childhood obesity, PCOS and its metabolic and reproductive consequences represent a public health challenge.

The focus of the presentation will be related to current research findings. These findings suggests a therapeutic potential of lifestyle modification on improved hormonal and metabolic profile, and reduced inflammation and oxidative stress, both in obese and lean young women with PCOS.



### Malgorzata Mizgier

Department of Sports Dietetics,  
Chair of Dietetics, Faculty  
of Health Sciences Poznan  
University of Physical Education,  
Poland

### Biography

Dr. hab. Malgorzata Mizgier is Associate Professor at the Poznan University of Physical Education, Department of Sports Dietetics, Chair of Dietetics, Faculty of Health Sciences. She completed her Master's in Biology at Adam Mickiewicz University and Dietetics at Poznan University of Life Sciences; Ph.D. from the Department of Hygiene and Human Nutrition, Dietetics Division, at Poznan University of Life Sciences; Habilitation at Poznan University of Medical Sciences, in the field of health sciences and medical sciences. The focus of her current research includes the influence of diet and physical activity on females with Polycystic Ovary Syndrome, menstrual disorders, infertility, and pregnancy.

## Medicine & technology: A 21st century Gordian knot

**The Practice of Medicine Faces Two Disruptions Today:** 1. Advances in biotechnology enable genes to be edited and immune cells to be harnessed to treat the untreatable and to bring advanced cancer and chronic disease into remission.

2. Digital and information technology usher in an age of precision, that leverages on genomic, molecular, clinical, environmental and lifestyle data to predict disease outcomes and guide treatment. All these take place on a background of ageing populations, rising prevalence of non-communicable diseases, and increasing patient expectations and demands.

While technology offers compelling propositions to the clinician, it has the potential to fuel a vortex of spiralling healthcare costs. In seeking sustainable solutions, we need to define what really works, ask hard questions as to what makes a real-world difference to the patient and whether it makes sense for the health system. We need to return to the fundamental principle of doing no harm if we can't do good, and to avoid the temptation of embracing the latest innovations seeking new applications. Case studies will be drawn from Singapore's approach to technology adoption in public healthcare institutions. The important role patients play in making decisions that impact their own health will also be discussed.

### Audience Take Away Notes

- Overview of key technology developments that may impact the practice of medicine
- Appreciation of challenges to technology adoption and implementation in healthcare
- Sharing of Singapore's approach to advanced therapeutics and medical innovation, using the examples of precision medicine, artificial intelligence, cell and gene therapy



### Benjamin Seet

National Healthcare Group,  
Group Chief Research Officer,  
Singapore

### Biography

Ben Seet is Deputy Group CEO and Group Chief Research Officer of National Healthcare Group in Singapore, and Adjunct Professor with Lee Kong Chian School of Medicine, Nanyang Technological University. He was formerly Executive Director of the Biomedical Research Council, Agency for Science, Technology and Research, and has held senior leadership appointments in the Singapore Armed Forces and United Nations. A public health physician by training, he serves on the board or steering committee of a number of research institutions and organisations in both the public and private sectors.

## Effective natural remedies against COVID-19 virus and long COVID syndrome

Natural remedies exist that are able to damage or even destroy viruses. Known are for example: Cystus-incanus and the Capeland Pelargonium (Pelargonium sidoides). A second problem are the spike proteins that occupy ACE-2 receptors in the organism, especially in the heart and brain. A third problem is the antibodies to mRNA that occur via shedding even in nonvaccinated individuals and cause e.g. autoaggressive mitochondriopathy.

We have developed a herbal mixture against a) viruses, and b) spike proteins. It contains extracts from: Dandelion leaves, Citrus peels, Licorice roots, Pine needles, Pomegranate peels, and Red kitchen onions. These ingredients achieve the listed goals. For the Long Covid Syndrome, the autoaggressive processes are in the center. For this we have developed the so-called "Jesus remedy", which contains as ingredients extracts of frankincense and myrrh as well as colloidal gold. We have had the best experience with both mixtures.

In the case of myocardial or pericardial infestation the most effective drug is Strophanthin (in the form of 3mg enteric-coated capsules, g-Strophanthin = Ouabain). If the brain is affected, Huperzine A (Lycopodium extract) has proven most effective.



**Manfred Doepp**

HolisticCenter, Switzerland

### Biography

Manfred Doepp born in Bad Berleburg/Germany. Medical studies in Munich and Giessen, exams and doctorate in 1971. Scientific assistant at the clinical centre of the Justus Liebig University at Giessen until 1978. Senior physician for nuclear medicine at the clinical centre in Hanau until 1985. Founder of the "International Institute for Experiential Medicine" [www.iifeh.de](http://www.iifeh.de); Founder of the "Diagnostic Centre for Mineral Analysis and Spectroscopy DCMS". From 2011 to 2018 Head Physician of the Quantisana Health Centre for Holistic Diagnostics and Therapy in CH 9404 Rorschacherberg. Since 2018 Head of the HolisticCenter in CH 9030 Abtwil. Many oral and written publications in the field of complementary and energy medicine. Many videos on Youtube, Google and complementary portals. Reviewer of international journals. Co-founder and Deputy President of DGEIM (German Society for Energetic and Information Medicine).

## Trends in food intolerances formulations

Food intolerances are food-related diseases, widely spread in modern societies. The continually increasing of gluten-related disorders/diseases creates the necessity of functional food products, tailored-made for this particular food intolerance [Gobetti, 2018]. From 2013 to 2015, the global gluten-free industry has a growth of 136% [Intel, 2015, Norelle and Reilly, 2016], reaching \$11 billion in 2015 [Foschia et al., 2016]. The food technologies need to change not only the food formulation but also the industrial processing routine in order to create valuable commercial allergenic-free products. The food intolerances could include some food allergies symptoms but the immune-mediated reaction make the medical differences between the two different diagnosis. The foods tailored for specific intolerances should be compliant with the international regulations regarding the maximum content of the intolerance triggering-compound. The global nutritional regulation and the food certification process need to be harmonized in the benefit of consumers and food industry global trading success (Vintila, 2021).

### Audience Take Away Notes

- Best practices in food intolerances formulations
- Food science solutions for allergenic components replacements
- Certification for food intolerances formulations



### Asst. Prof. Vintila Iuliana

Department of Food Science,  
Food Engineering and Applied  
Biotechnology, University  
"Dunarea de Jos" Galati, Romania

### Biography

Vintila Iuliana is actually Associate Professor, PhD in Food Science and Engineering. She is author of 23 books and book chapters in international and national publishing houses (Elsevier, Wiley, Lambert), first author and co-author for 14 articles in ISI journals and relevant

ISI proceedings, 110 BDI scientific papers indexed in recognized international databases, articles presented in national & international conferences and published articles reviews. Also, she is member of prestigious international organization such European Federation of Food Science and Technology (2009), Co-Chair (since 2013) and Chair (since 2022) of Nutrition WG in Global Harmonization Initiative, International Society of Food Engineering (2010), Balkan Environmental Association (2008), Global Environmental Standard (GES) Community of Interest (2011), European Academy for Education and Social Research (2012). She act as international projects Expert for European Science Foundation, Eurostar Program, EC « Expert area in the Participant Portal » and « Connecting Europe Facility », Horizon Europe Program, EU TAIEX, COST, EACEA, Erasmus Mundus (2010). She is Guest Associate Editor and Research Topic Editor for "Frontiers in food science and technology", Regional Editor "Advance Journal of Food Science and Technology", Academic Editor European Journal of Nutrition & Food Safety, Editorial Board Member SciEdTech, Editorial Board Member African Journal of Water Conservation and Sustainability, Editorial Board Member International Scholar Journals, EC Nutrition, etc.



## Application of dietary fibres from selected vegetables for health-conscious consumers

High intake of refined carbohydrates with low consumption of Dietary Fibres (DFs), particularly from vegetables and has increased the risk of CVD, diabetes and other illnesses. The prevalence of chronic diseases is increasingly skyrocketing with the number of diabetic individuals expected to rise from 180 million in 2010 to 368 million in 2030. This is the main cause of morbidity and mortality all over the world because it can lead to problems in health and affect the quality of life. The purpose of this study is to investigate the effects of incorporation of selected vegetation in improving DFs content and lowering Glycemic Index (GI) values in foods. The GI was determined according to WHO/FAO 1998's protocols as outlined by Brouns (2005). A low GI diet is beneficial to reduce the risks and complications of different health conditions such as diabetes. Mechanistically, the DF enhances glycemic response by raising the rate of absorption of glucose in the small intestine, thereby lowering the GI value. Our research reveals that incorporation of agricultural by-products/materials from banana (over-ripe banana), oyster mushroom and cornlettes in a few baked-based products such as cookies, pasta, cakes, muffins and flatbread are successfully formulated and scientifically proven in improving nutritional composition and DF content while lowering the GI values. A low GI diet will make us feel full for a longer duration while minimizing overeating at the same time. Besides, the Scanning Electron Microscopic (SEM) observation reveals that the damaged cornlettes starch reduces starch hydrolysis, thus slowly raises blood glucose. Also, the ethyl acetate fraction of cornlettes was possessed higher antioxidant and scavenging capacities followed by other fractions in the antioxidant assay tested. Being physically active and eating a sufficient amount of DF from fruits and vegetables are vital in reducing the risks of having diabetes, maintaining the health status and sustaining quality of life and societal well-being.

### Audience Take Away Notes

- The audience will be able to apply or practice the use of any locally available agricultural by-products from fungi, fruits and vegetables for the development of nutritious and low glycemic index foods in their diet
- The audience should be able to identify various types of cheap available raw materials in the food products they want to develop
- The audience shall explore the possible joint research and innovations with relevant food companies to joint develop food that is not only healthy but also exhibits therapeutic benefits
- Any agencies or NGOs are also may use this knowledge and findings to promote and convince the communities to increase their daily



**Prof. Wan Rosli Wan Ishak<sup>1</sup>,  
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<sup>2</sup>Department of Applied Statistics and Operations Research, School of Mathematical Sciences, Universiti Sains Malaysia, Main Campus, 11800 Minden, Penang

### Biography

Wan Rosli Wan Ishak is a professor of Nutrition Program at the School of Health Sciences (SHS), Universiti Sains Malaysia (USM), Health Campus, Kota Bharu, Kelantan, Malaysia. Currently, he is a Dean of SHS of USM. His research theme emphasizes more on the utilization of natural agricultural by-products into popularly consume processed foods. Various low Glycemic Index (GI) based on these agricultural by-products has been developed. Wan Rosli has been appointed as Junior Faculty Member from SEAMEO-TROPED RCCN, Indonesia in the Training of Leadership for Nutritionists in Jakarta Indonesia. He was selected among Top 10 Innovators for SYMBIOSIS project funded by Malaysian Technology Development of Malaysia (MTDC) to facilitate the commercialization of

intake of dietary fibres from fruits and vegetables for the reduction of the prevalence of non-communicable diseases especially diabetes

functional and health cookies from oyster mushroom (Nutri-Mush® Cookies). He has published more than 120 articles in various indexed journals.



## Neuroimaging by evaluation nerverenovate and neuroplasticity of acupuncture in children with cerebral palsy

**Objective:** To investigate the effect of and Acupuncture on brain plasticity and motor development in children with cerebral palsy. Investigate effect on mechanism of apoptosis of brain nerve cells, regulating the expression of neurotrophic factors, promoting the remodeling of nerve synaptic structure and motor development in young rats with cerebral palsy. Two: To evaluate the effect and mechanism of acupuncture on cerebral palsy. Three: The nerve repair effect of acupuncture on cerebral palsy.

**Methods:** In this study, 146 cases of brain injury and 1078 cases of cerebral palsy were included by randomized controlled study with ICF Gross motor function measure, Peabody fine motor function, Gesell, muscle tension, joint activity, activity of daily living transcranial doppler,, skull B ultrasound, Brain Nuclear Magnetic Resonance Imaging MRI, Positron Emission Tomography SPECT, Diffusion tensor tractography evaluation method.

**Results:** The recovery rate of extracellular space (92.3%) was significantly higher than that of the control group (70.8%) ( $P < 0.05$ ), Transcranial Doppler, TCD total efficiency (79.3%) was significantly higher than that in the control group (51.8%) ( $P < 0.05$ ). Acupuncture to promoting the development of neurological and cognitive movement under 6 months children, effectively reduce the neurological sequelae. The total effective rate of the children with cerebral palsy was 87% in the acupuncture group, which was significantly higher than that of the control group ( $P < 0.01$ ). The total effective rate of Brain MRI was 59.55% in the acupuncture group and 13.25% higher than that in the control group ( $P < 0.01$ ). The total effective rate was 91.3% in the 1 year follow-up group, which was significantly higher than that in the control group ( $P < 0.01$ ). the FA value of white matter fiber bundle was significantly higher than that of acupuncture at 60 times ( $P < 0.05$ ). The recovery rate of ultrasonous brain injury (86.7%) in acupuncture group was significantly higher than that in control group (64.4%) ( $P < 0.05$ ). The recovery rate of brain SPECT in acupuncture group was 96.4%, which was significantly higher than that in the control group ( $P < 0.01$ ).

**Conclusion:** Acupuncture rehabilitation not only promote the development of white matter and gray matter in children with cerebral palsy, but also promote the brain function of children with cerebral palsy

remodeling and compensation, and promote social adaptation, language and other cognitive function development, children with cerebral palsy movement and Fine motor function development and recovery, improve the children's self-care ability.

**Keywords:** Cerebral Palsy, Acupuncture, Nerve Repair, Remodeling, Motor Function.



### Zhenhuan Liu

Nanhai Maternity and Children Hospital Affiliated to Guangzhou University of Chinese Medicine, China

### Biography

Zhenhuan LIU professor of pediatrics, Pediatric acupuncturist Ph.D. tutor. He has been engaged in pediatric clinical and child rehabilitation for 40 years. Led the rehabilitation team to treat more than 40,000 cases of children with intellectual disability, cerebral palsy and autism from China and more than 20 countries, More than 26800 childrens deformity returned to school and society and became self-sufficient. The rehabilitation effect ranks the international advanced level. Vice-chairman of Rehabilitation professional committe children with cerebral palsy, World Federation of Chinese Medicine Societies. Visiting Professor of Chinese University of Hong Kong in recent 10 years. He is most famous pediatric neurological and rehabilitation specialists in integrated traditional Chinese and Western medicine in China. He has edited 10 books. He has published 268 papers in international and Chinese medical journals.

## Unlocking the mysteries: Exploring the impact of long COVID (PASC) on youth through innovative school neuropsychological assessment strategies

This presentation, titled "Unlocking the Mysteries: Exploring the Impact of Long COVID (PASC) on Youth through Innovative School Neuropsychological Assessment Strategies," seeks to highlight the complex challenges arising from Long COVID within the youth demographic. With a focus on the long-term cognitive and psychological implications of Post-Acute Sequelae of SARS-CoV-2 (PASC), the session introduces a paradigm employing a school neuropsychological assessment battery. The focus will encompass the review of Long COVID's distinctive symptoms and potential adversities in young individuals. Emphasizing the pivotal role of neuropsychological assessment, the presentation underscores the importance of these innovative strategies in comprehensively gauging the multifaceted impact of Long COVID on the cognitive and psychological well-being of students and patients. By providing insights into state-of-the-art assessment tools and implementation strategies, the presentation aims to empower educators and healthcare providers to seamlessly integrate these advancements into their practices. Furthermore, the discussion extends to issues of accessibility and inclusivity, ensuring that the benefits of these cutting-edge assessment methods are extended to diverse student populations. Through the exploration of a case study, the presentation will reveal a neuropsychological assessment battery that can facilitate timely interventions and tailored support for a student/patient grappling with Long COVID-related cognitive challenges. This session seeks to inspire collaboration between educators and healthcare providers, advocating for a holistic and interdisciplinary approach to addressing the nuanced impacts of Long COVID on youth. Ultimately, the presentation underscores a commitment to equipping educators and healthcare professionals with the necessary tools and knowledge to navigate the landscape of Long COVID and its implications for the cognitive well-being of youth.

**Objectives:** Understanding Long COVID in Youth to increase about the complexities young individuals face with Long COVID. Recognizing the role of a neuropsychological assessment with a better understanding of the multifaceted implications for the cognitive and psychological well-being of students and patients. Empowering professionals with assessment tools/strategies by introduced state-of-the-art assessment tools to seamlessly integrate advancements in neuropsychological assessment into their practices for more effective support. Promoting accessibility and inclusivity to make these innovative tools accessible to a broad range of students and patients, fostering inclusivity in the



**Dr. Ann Marie Leonard-Zabel**

Department of Psychology  
(Department Coordinator), Curry  
College, Milton, Massachusetts,  
USA President and Owner of  
NEALAC Clinic, Cape Cod,  
Massachusetts, United States

### Biography

Dr. Ann Marie Leonard-Zabel is a Full Professor of Psychology and Department Coordinator at Curry College in Massachusetts, USA. She received awards from Curry College involving Person of the Year, Excellence in Teaching, Excellence in Research, Excellence in Partnership Collaboration, Woman of Inspiration, and an invited two-time presenter at the Curry Authors event. She is a frequent speaker and keynote at national and international conferences involving School Psychology, School Neuropsychology, Disability Analysis, Homeland Security, Violence-Aggression, Forensic Examining, Autism, Trauma, A-D/HD, COVID-19/Long COVID and Post COVID-19 conditions among children and youth, Ethics, and Addictions. In addition, she owns a private international practice specializing in evaluations, consultation, and in-service trainings for neuro-behavioral learning disabilities, neuro-developmental disorders, emotional-behavioral

assessment process. Inspiring collaboration between educators and healthcare professionals advocating for an interdisciplinary approach to address the particular impacts of Long COVID on youth via a case study.

disorders, forensic examiner evaluations and substance use/abuse disorders. For the past 17 years, she has served as a clinical supervisor/clinical instructor for the School Neuropsychology Institute training psychologists in School Neuropsychology. Dr. Leonard-Zabel has published chapters and training programs in the areas of Autism, Mental Health, Learning Disabilities, Telepractice Therapy, Diversity-Equity-Inclusion, as well as chapters in Ethics, TBI, Addictions, and Forensics. Dr. Leonard-Zabel is a Board of Director for the Learning Disabilities Worldwide Congress and is one of a group of Global Goodwill Ambassadors-USA for the Global Goodwill Ambassador Foundation (GGAF) focusing on the UN SDG 3 - Good Health and Well-Being (strengthen the prevention, assessment and treatment of substance use disorder) and SDG 4 - Quality Education (disabilities and human rights) and SDG 16 - Promote Peaceful and Inclusive Societies (decrease violence and abuse of children and youth). Dr. Leonard-Zabel is currently developing a course to bring global awareness on the topic "The Hijacked Brain-Adolescent Addiction" for the Global Goodwill Ambassador Foundation (GGAF) Learning Institute. She received the Lifetime Achievement award in School Neuropsychology and the Distinguished Lifetime Career Achievement award from the American Board of Disability Analysts.

## It's okay for healthcare providers to say "I'm not okay."

The emotional, psychological and physical toll on clinicians is a significant aspect of their work while caring for patients amid high-stress situations. This problem affects clinicians regardless of background, race, gender, religious affiliation, years of clinical practice or areas of clinical practice. It affects clinicians at the bedside, those in leadership, physicians, nurse practitioners, educators and yes, even nursing and medical students. Peer Support reduces clinician burnout by providing safe platforms for clinicians to connect and share experiences. This, in turn, optimizes patient care and improves patient outcomes.

Global nursing shortages intensify with clinician burnout, causing anxiety, compassion fatigue, and Post-Traumatic Stress Disorder. This can be attributed to a noticeable trend in our current patient population: they are becoming sicker with more co-morbidities. This increased complexity places them at a higher risk for adverse patient outcomes to occur. Healthcare providers caring for these patients bear the burden of not only caring for higher acuity patients, but in struggling to cope with the detrimental effects when something goes wrong. Evidence supports the premise that adverse patient outcomes impact clinician's physical, emotional, and psychological well-being.

The COVID pandemic has only served to both highlight and significantly increase those negative effects such as burnout, anxiety, compassion fatigue, and PTSD that has continued long past the end of the pandemic. In 2016, Johns Hopkins declared that medical errors were the third leading cause of death in the US. If each medical error involves one or more HCPs, almost half of clinicians could be negatively impacted by an Adverse Event (AE) in their career. Dr. Albert Wu coined the term "second victim" to describe the trauma experienced by HCPs when an unanticipated event occurs, which can result in psychological and physical distress.

The definition soon expanded to include those involved in medical errors and other unanticipated events involving patient injury leading to psychological trauma, feelings of personal responsibility, or questioning of their clinical abilities. The extent of trauma depends on the degree of patient harm, type of event, age of the patient, and investigative process. Although each HCP may experience an unanticipated event, the people involved in or witnessing adverse events can experience disruption in their professional and personal lives. This suffering can affect their quality of life, work performance, and how they provide care to other patients, placing subsequent patients at risk for increased medical errors as HCPs become less confident in their ability to provide care.

There are few people HCPs can turn to for emotional or spiritual support after an adverse patient event. Reasons include patient privacy concerns, the stigma of weakness associated with seeking help, and many laypeople



**Elaine Webb, MSN, RNC-OB**

Women's Services, Houston  
Methodist Willowbrook Hospital,  
Houston, Texas, United States

### Biography

Elaine Webb, MSN, RNC-OB practices nursing at Houston Methodist Willowbrook Hospital in Texas, a Magnet/Level III Maternal Designation facility where she has worked for the last 18 years. She has been a nurse for over 29 years, the last 23 specializing in high-risk Labor and Delivery, Antepartum, and Maternal/Newborn care. She is an adjunct clinical instructor for the Louise Herrington School of Nursing Baylor University and Texas A&M School of Nursing. She has presented on peer support in various venues over the last 3 years. She was published in the Journal of Nursing Education and Practice in March 2023.

do not understand the experience. When coping with a traumatic AE, most instinctively turn to their peers who genuinely understand. This confidante could be a nurse or other HCP they know and trust. This sharing of events with their peers allows healing to begin. To this end, receiving just-in-time support from a peer knowledgeable regarding the second victim phenomenon and emotional support would be beneficial.

After almost three decades of experiencing adverse patient events and attempting to cope with the detrimental effects it caused both personally and to peers, it became a mission and passion to help clinicians thrive instead of just survive. The intent is to help clinicians overcome adverse events, become resilient, and flourish in their professions.

Being a nurse educator has only intensified the passion to ensure nurses continue in our noble profession. Nursing students experience their own unique stressors on their journey to becoming nurses. Those stressors, if not addressed, only intensify and are compounded once they enter the nursing workforce. Many do not feel prepared or are “blindsided” by the reality of what is expected of the nursing profession caring for patients at the bedside. The end result is that many new nurses are leaving the profession, compounding the global nursing shortage.

Ample literature exists for peer support effectiveness in cost-benefit analysis, employee retention and resiliency. Implementing evidence-based strategies like Peer Support is vital for optimizing health and wellness by providing timely intervention in a safe environment enabling staff to express emotions openly, providing coping strategies, building resilience and reducing mental health stigmas.

This program stemmed from a pre-survey in L&D (n=44) in 2019, where 37 staff experienced adverse events impacting performance, with lasting effects for 30. The initiative began with pre-data from Labor and Delivery, garnering support from the hospital CNO. Nurses, trained after a “train-the-trainer” course, launched a successful pilot in Women’s Services (4 units) in 2019. Expansion to the oncology unit and chaplains occurred in 2020, utilizing encounter forms for data. Peer Support training expansion to the ED, IMU, and ICU began pre COVID but faced challenges during the pandemic. With backing from the Interdisciplinary Shared Governance Staff Experience Council and the Peer Support Steering Committee, a 2024 revitalization plan includes using the SVEST tool for pre-/post-data and collaborating with RISE (Johns Hopkins) for training, sustainability and implementation of PRAISE UP both at Houston Methodist Willowbrook Hospital and the entire Houston Methodist System.

Providing real-time emotional support following an adverse event has been associated with enhanced emotional wellbeing and recovery of second victims. Unfortunately, other than employee assistance programs and chaplain referrals, many HCPs do not have access to real-time emotional support after an unanticipated event.

Evidence advocates prioritizing clinical health and wellness for professional development. Peer Support, an evidence-based beacon of hope, empowers clinicians to enhance themselves and contribute to improved patient safety and outcomes.

### **Audience Take Away Notes**

- Understand the Second Victim phenomenon and the detrimental effects of adverse patient events for HCPs
- Review statistic/data regarding detrimental effects of AE on HCPs
- Describe stages of recovery/trajectory of Second Victims
- Evaluate the positive impact of peer support on HCPs health and well-being
- Describe process of implanting Peer Support Program in a Hospital System
- Discuss various coping strategies available for clinicians



## The future is now for precision genomic addiction medicine as a frontline modality for inducing dopamine homeostasis in reward deficiency syndrome

In this genomic era of addiction medicine, ideal treatment planning begins with genetic screening to determine neurogenetic antecedents of Reward Deficiency Syndrome (RDS) phenotype. Patients suffering from endotype addictions and mental disorders share the common underlying neurobiology of dopamine dysfunction.

### Audience Take Away Notes

- The audience will learn about the advancements in molecular biology which have changed the addiction recovery landscape
- The audience will learn how to distinguish genetics from genomics, and be taught why these are important to addiction medicine, behavioral health and psychology
- Practitioners will receive a brief introduction to Reward Deficiency Syndrome psychoeducation, which is continuing education in genomic medicine
- Case study research of the effectiveness of Precision Genomic Addiction Medicine, as compared to traditional treatment is well received



Elizabeth Gilley\*, PhDc, Abdalla Bowirrat, Ashim Gupta, John Giordano, Catherine Dennen, Eric Braverman, Rajendra Badgaiyan, Thomas McLaughlin, David Baron, Kenneth Blum

The Elle Foundation,  
Unites States

### Biography

Elizabeth Dale Gilley earned a corporate paralegal degree in 1979, a Bachelor of Science in Business Administration, from Wake Forest University in 1983. She earned a Masters in General Psychology in 2017 and a Post Masters Certificate with a specialty in addictions, in 2019, from NorthCentral University. She is currently PhD candidate in Psychology at National University. Her research focus is on screening for genetic and neurobiological biomarkers of mental disorder. She created Reward Deficiency Syndrome Psychoeducation therapy, the RDS treatment plan model, RDS Solution Focused Brief Intervention therapy, and the RDS Severity of Symptom scale, to facilitate integrating precision genomic medicine into the traditional treatment industry. She has published in peer review consistently since 2017. She is a frequent keynote and/or scientific committee member for global conferences. In 1995, she incorporated the Elle Foundation, a private nonprofit to help stop the cycle of addiction. She recently opened two divisions: Elle Research and Elle Resource.

## Investigation into the vascular contributors to dementia and the associated treatments

As the average lifespan has increased, memory disorders have become a more pressing public health concern. However, dementia in the elderly population is often neglected in light of other health priorities. Therefore, expanding the knowledge surrounding the pathology of dementia will allow more informed decision-making regarding treatment within elderly and older-adult populations. An important emerging avenue in dementia research is understanding the vascular contributors to dementia. In this article, we summarize potential causes of vascular cognitive impairment like stroke, microinfraction, hypertension, atherosclerosis, blood-brain-barrier dysfunction, and cerebral amyloid angiopathy. Also, we address treatments that target these vascular impairments that also show promising results in reducing patient's risk for and experience of dementia.



**Brandon Lucke Wold MD,  
PhD, MCTS**

University of Florida,  
United States

### Biography

Brandon Lucke-Wold was born and raised in Colorado Springs, CO. He graduated magna cum laude with a BS in Neuroscience and distinction in honors from Baylor University. He completed his MD/PhD, Master's in Clinical and Translational Research, and the Global Health Track at West Virginia University School of Medicine. His research focus was on traumatic brain injury, neurosurgical simulation, and stroke. At West Virginia University, he also served as a health coach for the Diabetes Prevention and Management program in Morgantown and Charleston, WV, which significantly improved health outcomes for participants. In addition to his research and public health projects, he is a co-founder of the biotechnology company Wright-Wold Scientific, the pharmaceutical company CTE cure, and was a science advocate on Capitol Hill through the Washington Fellow's program. He has also served as president of the WVU chapters for the American Association of Pharmaceutical Scientists, Neurosurgery Interest group, and Erlenmeyer Initiative Entrepreneur group. In addition, he has served as vice president for the graduate student neuroscience interest group, Nu Rho Psi Honor Society, and medical students for global health. He was an active member of the Gold Humanism Honor Society and Alpha Omega Alpha Honor Society. He is currently a member of the UF House Staff Council, Positive Culture Committee, Quality Improvement Committee, Board of Directors Alachua County Medical Society, and Accreditation Requirements Review Committee. He is married to Noelle Lucke-Wold and has two children. As a family, they enjoy running with their dogs, rock climbing, and traveling. In his spare time, Brandon frequently runs half marathons and 10ks together with his wife. Brandon also enjoys reading, playing piano, discussing philosophy, and playing chess. He is currently a Pgy5 neurosurgery resident at University of Florida with pursuing endovascular enfolded training and was awarded the Dempsey Cerebrovascular Research Fellowship.



## Overall number one priority in public and global health: Prioritization

Financial and human resources are limited in public and global health. Therefore, to maximize their utilization and for best ROI, prioritization is indispensable. The author proposes (a) a model, and (b) solutions with guidelines. They include:

- (a) An emergency department process with its criteria.
- (b) Examples of concrete situations with diseases like HIV/AIDS and tetanus and their respective control costs. He also makes the comparison of prevention vs cure. He proposes solutions with the #1 priority, three values, one need, one urgency, two sub-priorities, one must, three strategies, and he makes six suggestions.

He concludes his presentation with food for thought and a vision.

### Audience Take Away Notes

- The need to prioritize global and public health
- How to frame issues to prioritize
- Guidelines on how to prioritize in global and public health
- The need for drastic change in public and global health
- Food for thought and a vision



### Yann A. Meunier

Former Director, International Corporate Affairs & Business Development, Stanford Hospital and Clinics, United States

### Biography

Yann A. Meunier, MD is a Global Health Expert and Pioneer based in Silicon Valley, California. He has a multifaceted background in healthcare provision, business, academia, and research. He has worked as a Chief Medical Officer,

Physician, Health Promotion Manager, CEO, C-suite Executive, Director of International Corporate Affairs and Business Development, Mentor, Professor, Assistant Professor, Adjunct Assistant Professor, and Healthcare Consultant in various countries and settings worldwide. He is an Honorary Member of the Brazilian National Academy of Medicine, an Associate Member of the Academy of Medicine, Singapore, a Fellow of the Australasian College of Tropical Medicine, a Fellow of the American College of Healthcare Trustees, and a Member of the International Academy of Fellows and Associates, Royal College of Physicians and Surgeons, Canada. He has published many books, articles, posts, blogs, webinars, videos, conducted seminars on global and public health topics and created a podcast series called "Reinventing Global Health." He is passionate about improving health outcomes and reducing health disparities around the world. Overall, Dr. Meunier offers a unique perspective on global health including specific insights giving him the ability to frame and tackle very challenging healthcare issues successfully. He thinks out of the box because he is out of the box.

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**SPEAKERS**



**Dr. Michelle Thomas\*, Prof. Carolyn Wallace**

Faculty of Life Sciences and Education, University of South Wales, Pontypridd, South Wales, United Kingdom

## **Establishing a public health nursing community of practice to support family resilience in Wales**

Family resilience can be a predictor for school readiness (Brophy 2022) and family health and well being (Walsh 2017). Assessment of family resilience is intrinsic to the role of the Public Health Nurse -Health Visitor policy (Wales Government 2016) and practice in Wales however is not always straight forward. Following development of an assessment tool for Public Health Nurses a community of practice for Public Health Nurse - Health Visitors (PHNHV) in Wales was established to provide a solution focused and supportive environment for health visitors to share their experience and support practice development when assessing and supporting the development of family resilience with the families that they work with. Communities of practice in education are not new however, research about communities of practice in health is limited. This research conducted through Group Concept Mapping identified the positive experiences of public health nurses who participate in a community of practice and identifies the key characteristics of a successful community of practice.

Wales is a fairly small country with a population of 3.2 million 152583 of those are children (Stats Wales 2023) who will be assessed by PHNHV according to the Health Child Wales programme (Wales Government 2016). Family resilience is assessed using the Family Resilience Assessment Instrument and Tool (FRAIT) (Wallace et al 2017) which have been developed in partnership with PHNHVs. Barriers to use of the tool were identified and in 2019 an all Wales community of practice for PHNHV was established using Wenger's principles for communities of practice (1998). Many of the participants have been involved in the development, pilot testing and validity testing of the FRAIT and support the education of PHNHV students. Initially meetings were held face to face and in different venues across Wales to enable attendance, since the COVID 19 pandemic meetings have moved to Microsoft Teams and are held 3 monthly for 2 hours. All notes from meetings are accessible to all PHNHVs via the FRAIT website. Current membership of the community of practice is 35 PHNHVs representing all 7 health boards in Wales.

In 2021 group concept mapping research was used to establish health visitor experiences of participating in the community of practice for FRAIT Wales (Thomas 2021). Key findings were that the environment was educational, supportive and provided a network for professionals to voice opinions and receive support. Establishing a community of practice of PHNHV also provides a pool of practitioners who participate in further research addressing family resilience and development of evidence based validity tested assessment tools.

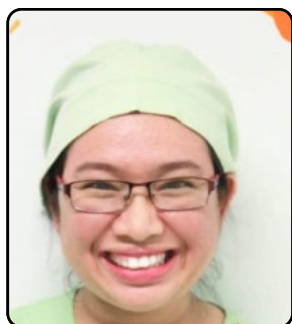
### **Audience Take Away Notes**

- What a community of practice is
- The purpose of a community of practice
- How a community of practice can be facilitated
- How barriers to success can be negated

- How a solution focused approach addresses problems in a constructive and proactive manner
- How group concept mapping can be used in research

### **Biography**

Dr. Michelle Thomas studied adult nursing at the Mid Glamorgan School of Nursing and Midwifery in 1989, she worked in general nursing from 1992-97 when she studied public health nursing at Cardiff School of Nursing and Midwifery. After graduating in 1998 she worked in Public Health Nursing until commencing as lead lecturer for public health nursing- health visiting at the University of South Wales in 2011. In 2022 Michelle graduated with a PhD that studied Family Resilience assessment and public health nurse experience of participating in a Community of Practice for Public Health Nurses in Wales.



**Narisa Ajonsre\*, RN, M.Sc., Auengporn Pituksung, RN, M.M., Akarin Nimmannit, M.D., Ranistha Ratanarat, M.D., Wisansaya Kampukhiaw, RN, B.N.S., Patcharee Butsankot RN, M.N.S., Mayura Vattanapongpisan, RN, M.Sc.**

Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

## **Effect of Low-Dose Heparinized Saline (LDHS) on arterial line patency in patients with severe COVID-19 disease**

**Purpose:** This research was to find an approach to reduce or prevent obstruction and prolong the useful life of the arterial pressure measurement tape of COVID-19 patients by studying the efficacy of Low Dose Heparin in 0.9% Normal Saline (LDHS) on the use of arterial pressure transducers in patients with COVID-19 in intensive care units.

**Design:** Randomized controlled trial.

**Methods:** The participants consisted of 61 critically ill COVID-19 patients aged over 18 years admitted to the ICU were randomly divided into experimental groups (n=31) and control groups (n=30). The experimental group (Group A) received 2 units of heparin per 1 ml of 0.9% normal saline. The control group (Group B) received 0.9% NSS as usual. Both groups received intravenous pressure at 400 mm Hg. Comparative analysis of the proportion of the Arterial line that is usable and the complications between groups were tested using Pearson's chi-square. Line viability was compared using Kaplan-Meier survival analysis and the log rank test.

**Main Findings:** Using 2 units of heparin in 1 ml of 0.9 %NSS to lubricate the arterial pressure line was as effective as using 0.9% NSS in preventing blockage of the arterial pressure line. Average use was 6.7 days vs. 5.2 days (p-value = 0.66), with no differences in baseline characteristics between groups such as age (67.8 vs 63.7, p = 0.33), BMI (22.9 vs. 23.2, p = 0.55) had underlying disease (71% vs. 83.3% p = 0.55).

**Conclusion and Recommendations:** The study findings can be incorporated into clinical practice guidelines to guide healthcare providers in optimal treatment of arterial lines in critically ill patients. On the basis of this research, low-dose heparin in 0.9% Normal Saline Solution (NSS) and maintaining a pressure of 400 mmHg could be recommended. Healthcare professionals, particularly nurses who often manage these lines, should be educated and trained on the updated practice guidelines. This includes regular evaluation of the function, position and site of the arterial line, ensuring the integrity of the dressing, and maintaining the pressure of the pressure bag at 400mmHg.

### **Audience Take Away Notes**

- The findings of this research will enable viewers to understand the reasons behind the malfunction of arterial lines used for blood pressure measurement
- This study presents guidelines for the continuous and prolonged care of arterial lines in patients, consolidating them into a preliminary care flow chart for managing patients with arterial lines. It also includes guidelines for addressing issues such as blockages or failure to measure blood pressure accurately within the arterial lines
- This approach is suitable for nurses responsible for managing patients with arterial lines. It provides an easily understandable framework for resolving arising issues and preventing potential risks, especially benefiting less-experienced nurses in caring for patients with arterial lines

## **Biography**

Narisa Ajonsre, a nurse caring for post-cardiac surgery patients in critical unit at Siriraj Hospital, Faculty of Medicine, Mahidol University Thailand. I graduated with a Bachelor of Nursing in year 2000 and completed my Master of Science at Chulalongkorn University in the year 2006. Currently, I have experience in writing articles related to post-cardiac surgery patient care published in various journals in Thailand. I am interested in research on this subject matter, but my language is not good. I try to overcome the language barrier as a researcher, aiming to share experiences and knowledge with the global nursing community.





**Hua Tiantian<sup>1\*</sup>, Gao Yuan<sup>2</sup>, Zhang Ruyang<sup>2</sup>, Wei Yongyue<sup>2</sup>, Chen Feng<sup>1</sup>**

<sup>1</sup>Department of Epidemiology and Health Statistics, School of Public Health, Southeast University, Nanjing, China

<sup>2</sup>Department of Biostatistics, School of Public Health, Nanjing Medical University, Nanjing, China

## **Orr and PFS as surrogate endpoints in clinical trials for NSCLC patients: Difference exists in the strength of surrogacy in various trial settings**

**Objective:** This study aims to systematically validate the performance of surrogate endpoints in phase II and III clinical trials for NSCLC patients under various trial settings.

**Methods:** A literature search retrieved all registered phase II and III trials of NSCLC patients in which OS, with at least one of ORR and PFS, were reported. Associations between surrogate and true endpoints were assessed on two levels. On the arm level, three pairs of correlations, i.e., ORR vs. median OS, ORR vs. median PFS, and median PFS vs. median OS, were analysed using Spearman's rho. On the trial level, similarly, three pairs of correlations, i.e.,  $\Delta$ ORR vs. HR of OS,  $\Delta$ ORR vs. HR of PFS, and HR of PFS vs. HR of OS, were analysed using Spearman's rho and weighted linear regression model respectively. Finally, sensitivity analyses were performed to explore surrogacy under various trial settings.

**Results:** At arm level, three pairs of correlations are all high (Spearman's rho= 0.700, 0.831, 0.755, respectively). At trial level, there is a low correlation between  $\Delta$ ORR and HR of OS, a high correlation between  $\Delta$ ORR and HR of PFS and a moderate correlation between HR of PFS and HR of OS (Spearman's rho=0.462, 0.764, 0.584, respectively). In the sensitivity analysis, we find correlations between surrogate and true endpoints vary by different trial settings. It is noteworthy that the strength of surrogacy of these intermediate endpoints in targeted therapy is greater than that in immunotherapy.

**Conclusion:** We suggest that in phase II and III trials of targeted therapy and immunotherapy for NSCLC patients: 1) ORR lacks validity for the surrogacy of OS, excluding in first-line therapy, and 2) ORR may be an appropriate surrogate endpoint for PFS, and 3) PFS may be considered a modest surrogacy for OS, with better performance in first-line therapy trials.

### **Audience Take Away Notes**

- The detailed criteria for evaluating surrogate endpoint in oncology clinical trials
- How the strength of surrogacy differs under various trial settings
- ORR is proved to be lack of validity for the surrogacy of OS in targeted therapy and immunotherapy
- This work offers sufficient evidence to clinical researchers on choosing appropriate surrogate endpoints for their own studies according to their respective trial conditions

### **Biography**

Miss. Hua studied Health Statistics at Southeast University, China and received her MS degree in 2020. She then joined the research group of Prof. Chen. Her main research area is “statistical methodology and study design in clinical trials”. She has published 5 research articles in SCI (E) journals, and participated in 2 scientific projects funded by National Natural Science Foundation of China. She also contributed to the publication of 2 books.





**Chin-Lan Yang<sup>1\*</sup>, Ching-Yi Chang<sup>2</sup>**

<sup>1</sup>Department of the Nursing, National Taipei University of Nursing and Health Sciences, Taipei, Taiwan, Department of the Nursing, Hsin Sheng Junior College of Medical Care and Management, Taoyuan, Taiwan

<sup>2</sup>School of Nursing, College of Nursing, Taipei Medical University, Taipei, Taiwan

## Lived experiences of teenagers with pregnancy stress in Taiwan

**Background and Objectives:** Early pregnancy and unintended pregnancy can cause a variety of stressors for teenagers, which are influenced by the teenager's age, culture, socialization, and support. This study aimed to explore the life stress experienced by pregnant teenagers during the transition to motherhood under Taiwan's health care and education policies. Anticipated to provide healthy self-care for pregnant teenagers to reduce stress during pregnancy, improve the health of pregnant teenagers and their fetuses, and serve as a guideline for the health caregivers.

**Methods:** This study used qualitative methods with data collection of intent sampling and semi-structured interviews. Data saturation was achieved after interviewing 11 pregnant teenagers. Interviews were audio-recorded and transcribed verbatim, and narratives were analyzed by Colaizzi's method (1978). In the interests of rigor, Lincoln and Guba (1985) proposed criteria: accuracy, inference, reliability, and verifiability were adopted as measures of the study's validity.

**Results:** The findings include four themes and eleven sub-themes.

1. Role Strain: Insecurity as a wife and lack of confidence as a mother.
2. Body-initiated Anxiety: Fear of unintended pregnancy, anger about changes in appearance, physical fatigue, and anxiety about pregnancy complications may cause fetal damage.
3. Social Pressure: Insufficient family support, educational challenges, and lack of peer relationships.
4. S Support System: Social worker intervention, universal health insurance policy, educational environment. Among them, teenagers are more concerned about their appearance during pregnancy than adult women and are particularly angry about maternal obesity. In addition, even though Taiwan's universal health insurance policy has significantly reduced medical expenditures for pregnant teenagers, all teenagers are unintended pregnancies, and most of them come from low-income families. Therefore, they need more pregnancy self-care knowledge and financial support to ease the stress of pregnancy.

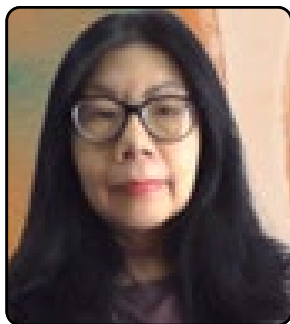
**Conclusions:** Although Taiwan's universal health insurance policy has significantly reduced out-of-pocket payments to improve teenagers' health care during prenatal and delivery. Pregnant teenagers still suffer from physical fatigue, psychological anxiety, and social pressure, such as anxiety about raising children and a lack of financial confidence and loneliness. Support remains vital for teenagers, including support from partners, family, and intervention systems and practical help adjusting to new roles and responsibilities.

### Audience Take Away Notes

- Understand the stress experienced by pregnant adolescents in Taiwan during the transition to motherhood
- Instruct caregivers to help pregnant teens relieve stress
- Pregnant teens need more support to improve their own health and that of their fetus

## **Biography**

Chin-Lan Yang was born in Taoyuan, Taiwan, in 1970. She has been a lecturer in the Department of Nursing at the Hsin Sheng Junior College of Medical Care and Management, Taiwan, for over two decades. She is a Ph.D. candidate in the Department of Nursing at the National Taipei University of Nursing and Health Sciences, Taiwan. She has published three research articles in SSCI/SCI(E) journals.



**Dr. Sri Idaiani<sup>1\*</sup>, Irmansyah<sup>2</sup>, Dwidjo Susilo<sup>3</sup>**

<sup>1</sup>Research Centre for Preclinical and Clinical Medicine, National Research and Innovation Agency, Indonesia

<sup>2</sup>Research Centre for Public Health and Nutrition, National Research and Innovation Agency, Indonesia

<sup>3</sup>Departement of Public Policy and Management, Faculty of Social and Political Sciences, Universitas Gadjah Mada

## **Psychiatric disorders frequently referred from first-level health facilities: An analysis of sample data from the Indonesian BPJS (social security agency) on health in 2015-2020**

**B** BPJS on Health in Indonesia has been operating for more than 5 years, accompanied by policies related to disease and the competence of doctors serving on the front line called first-level health facilities (fasilitas kesehatan tingkat pertama - FKTP). These policies are designed to enhance the utilization of FKTP and diminish the need for hospital referrals. However not much has been revealed about their on-site implementation. This research aims to see the availability of FKTP to treat psychiatric disorders by looking at the higher percentage of referral cases to health services in hospitals. The secondary data used was obtained from the BPJS Health data portal generally accessible. The unit of analysis is psychiatric case visits to FKTP in 2015-2020. The number of visits analyzed was 21553 visits. Data analysis used univariable, bivariable, and multivariable analysis with a significance level set at  $p < 0.005$  with the STATA 17 version statistical program. The dependent variable is a referral to a hospital, while the independent variables are the type of primary care facility, psychiatric diagnosis, and participant segmentation. The diagnoses chosen for analysis focus on dementia, insomnia, somatoform, depression, mixed anxiety depression, and schizophrenia given these five disorders that are frequently found in health facilities in Indonesia. The results of the analysis showed that the psychiatric disorders in association with referral were dementia with adj odds ratio ((adj OR) = 3,911, 95%CI 2,170-7.046,  $p=0.001$ ); depression (adj OR = 2,066.95%CI 1,737-2,457,  $p=0.001$ ) and mixed anxiety depression disorder (adj OR = 1,526, 95%CI 1,333-1,747,  $p=0.001$ ). More patients were referred from independent private clinics (adj OR = 3,150, 95%CI 2,847-3,486,  $p=0.001$ ) and doctors' practices (adj OR = 1,894, 95%CI 1,719-2,087,  $p=0.001$ ). Doctors had not fully implemented the referral system policy set by the government in which depression should be treated in primary facilities, while somatoforms that should be referred do not appear to be associated with the referral. The results of this research can be used to improve policies regarding the doctors' competence level in handling psychiatric cases.

**Keywords:** Psychiatric Disorder, Private Clinic, Referral, Competency.

### **Audience Take Away Notes**

- The results of this study describe the implementation of psychiatric patient referrals in correlation with National Health Insurance policy
- The capacity of first-level health facilities to manage patients with psychiatric disorders varies, especially between government-owned health centers, private clinics and independent doctor's practices. Private clinics and independent doctor's practices tend to refer more patients to hospitals. The full implementation of the referral policy was not achieved
- The results of this research may be used to improve health system policies

## **Biography**

Dr. Sri Idaiani has been a researcher at the National Research and Innovation Agency Indonesia since 2022. Before that, she worked for the Ministry of Health Republic of Indonesia as a researcher from 2004 to 2022. Her educational background is medical doctor, psychiatrist and PhD in Epidemiology. As a researcher, she published more than 50 research articles in both international and national journals. She graduated as a medical doctor in 1993 and then finished her psychiatry specialization in 2003. Before that she worked for a Primary Health Care Centre. Now she focuses on research especially mental health, psychiatry and epidemiology. She gets funding from Global Health Research Group on Sustainable Treatment for Anxiety and Depression (GHG STAND) in Indonesia to attend the 3rd IPHC Conference 2024.



**Weiying Zhang<sup>1\*</sup>, Ying Zhu<sup>2</sup>**

<sup>1</sup>Department of Nursing, Shanghai East Hospital, School of Medicine, Tongji University, Shanghai, China

<sup>2</sup>School of Nursing, Soochow University, Suzhou, China

## Construction of a thirst management program for ICU postoperative patients fasting from food and drink and its application

**Background:** The high incidence of thirst in postoperative ICU patients who fast from food and drink can cause much harm. Existing studies on thirst were large and rich in evidence. However, nurses often intervene with thirsty patients based on experience, which lacks scientific validity and comprehensiveness.

**Objective:** To construct a thirst management program for ICU postoperative patients who fast from food and drink through evidence-based and Delphi Expert Correspondence, and to explore its application effect. It can provide scientific and effective guidance for nurses to carry out the clinical practice of thirst management.

**Methods:** Practice guidelines, expert consensus, evidence summaries, recommended practices, and systematic reviews related to thirst were retrieved based on the "6S" pyramid model of evidence. Two researchers independently conducted literature screening, quality assessment, and evidence synthesis. Eighteen experts were invited to conduct two rounds of expert correspondence from May to June 2023. The best evidence was modified to form a formal program based on expert opinion. A before-after controlled trial was used, in which surgical patients admitted to the comprehensive ICU of a tertiary hospital in Shanghai from July to August 2023 were selected as the control group, and from September to October 2023 as the intervention group. The patients in the control group used routine care such as swabs dipped in water and spraying when they were thirsty; the intervention group utilized the thirst management program. The primary outcome was the Perioperative Thirst Discomfort Scale (PTDS), and the secondary outcomes were the Modified Beck Oral Assessment Scale (MBOAS), patient satisfaction, and nurse workload. The PTDS and MBOAS were measured from the time when the patients were admitted to the ICU and measured every 2 hours. Satisfaction was measured when patients were discharged from the ICU, and nurse workload was compared by frequency of intervention.

**Results:** A total of 18 articles were included in the literature search to extract 25 pieces of best evidence. The effective return rate of the questionnaire for both rounds of expert correspondence was 100%, and the authority coefficient was 0.92. The coefficients of variation for the importance and actionability scores after the second round of expert correspondence were 0.05~0.23 and 0.06~0.24, and the coefficients of Kendall's concordance were 0.166 and 0.154 ( $P < 0.001$ ). The final program consisted of 5 primary entries (pre-preparation, identification assessment, preoperative palliative strategies, postoperative interventions, and outcome evaluation) and 23 secondary entries. The invalid sample size of 6 cases in the implementation of the program. A total of 68 cases in the control group and 66 cases in the intervention group. Repeated measures ANOVA showed statistically significant differences in PTDS and MBOAS between the two groups. Patient satisfaction was better in the intervention group than in the control group, and nurse workload decreased compared with the control group ( $P < 0.05$ ).

**Conclusions:** The thirst management program for ICU postoperative patients constructed based on the evidence in this study is scientific, comprehensive, and effective. The application of this program can

effectively improve patients thirst, oral condition, and satisfaction, and reduce nurses workload.

### **Audience Take Away Notes**

- ICU nurses can scientifically intervene with postoperative fasting patients based on the thirst management program constructed in the study
- Adopting a scientific thirst management program can reduce the frequency of nurse interventions and decrease workload
- Thirst management is currently under-recognized by nurses and needs to be included in the training curriculum

### **Biography**

Dr. Weiying Zhang studied nursing at the Second Military Medical University (SMMU), China. After graduation, she worked as an ICU nurse and then head nurse for 14 years in the ICU. She graduated as MS in SMMU in 2004, and received her PhD degree in 2014 at the same university. She is now the director of nursing department of Shanghai East Hospital, School of Medicine, Tongji University, Shanghai, China and chairman of Intensive Care Committee of Shanghai Nursing Association. She has published more than 120 research articles in Chinese journals and 9 in SCI(E) journals.



**Kuan Ya Ting**

College of Nursing, National Yang-Ming Chiao Tung University, Taipei City, Taiwan

## The use of health information technology in postoperative care for women: A scoping review

**Background:** Increasing cesarean section rates is a global trend. From 2004 to 2021, the cesarean section rate in the United States increased from 29.1% to 32.1%. During the same period, Taiwan's cesarean section rate ranged from 33.1% to 37.9%. The shortened duration of postoperative hospital stays and absence of opportunities to receive support from healthcare professionals have negative implications for the occurrence of surgical site infections in patients. The incidence of surgical site infection ranges from 3% to 15%, with maternal mortality rates reaching up to 3%. Health information technologies could potentially improve the postoperative management of wounds. Patients who have undergone cesarean section prefer to use health information technology, especially those that provide reliable information, identify and track complications, and surgical outcomes. This scoping review aims to evaluate the current status and use of health information technologies interventions designed to provide postoperative wound management in cesarean section.

**Methods:** This scoping review was conducted by the PRISMA statement (Extension for Scoping Review) and follows the framework of Arskey and O'Malley.

**Results:** The use of health information technologies in the cesarean section is mainly oriented towards the development and evaluation of applications to improve image-based monitoring of surgical site infections, decrease surgical site infection rate from informed decision-making, and provide reliable post-discharge surveillance tools.

**Conclusions:** Study findings health information technologies are an efficient and cost-effective platform for surgical site infection surveillance of cesarean section. Health information technologies can have a positive impact both on patient engagement in postoperative wound management and on the communication between patients and health professionals, increasing the quality of care.

**Keywords:** Health Information Technology, Caesarean Section, Surgical Site Infection.

### Audience Take Away Notes

- The utilization of health information technology can significantly enhance patient engagement in postoperative wound management
- Health information technology allows us to personalize patient care, and improve image-based postoperative follow-up in wound care
- Health information technology provides a technological advancement that facilitates remote care while reducing its costs

### Biography

Kuan Ya Ting is a Ph.D. candidate at National Yang-Ming Chiao Tung University, studying Health Information Technology and Maternal Health. She served as a clinical lecturer at a national university. She has published an article on this topic in a well-known international journal.





**Waruntorn Jongrungrotsakul\*, Chawapornpan Chanprasit, Thanee Kaewthummanukul**

Faculty of Nursing, Chiang Mai University, Chiang Mai province, Thailand

## **Occupational health problems among taxi drivers in Chiang Mai province, Thailand**

**T**his descriptive study was designed to examine occupational health problems among taxi drivers. The study sample were 350 Taxi Drivers in Chiang Mai province, Northern part of Thailand. Data collection was conducted using both an interview form, which was assured the quality, and focus group discussions. Data analysis was performed using descriptive statistics and content analysis.

The main results reflected the congruence between quantitative and qualitative information. The significant occupational health hazards in working environment included ergonomic hazards: repetitive posture (94.3%), twist body position (90.9%), flexion/extension of neck and twist hand position (89.7%); chemical hazards: dust (94.2%), air pollution (93.6%); physical hazards: noise (90.9%), heat (89.4%), vibration (86.3%); and psychosocial hazard: income insecurity (80.9%) and rush work (64.2%). Unsafe working condition was mentioned as curved road (78.5%) and slippery road surface (78.2%). Regarding health status related to risk, it was found that the most common ailments possibly related to exposure of occupational health hazards included body pain (94.8%), heat exhaustion (71.2%), and stress (67.9%). Work- related injuries during the past three months was only 6.7 percent, which was minor injuries. Concern lifestyle pattern, it was found that the sample had inappropriate lifestyle pattern. Aspects of each lifestyle that were inappropriate included physical activity (85.5%), and eating behaviors (64.2%).

This study results indicate that occupational and environmental health professions should recognize the importance of both environmental and health surveillance. Enhancing disseminating information regarding safety at work and health risk should be encouraged to reduce occupational illnesses or injuries related to work among taxi drivers.

### **Biography**

Waruntorn Jongrungrotsakul, RN, Ph.D., Assistant Professor, Instructor at Public Health Nursing Department, Faculty of Nursing, Chiang Mai University, Thailand. She teaches nursing students in the Undergraduates of Community health nursing and Master program of occupational health nursing. She has several years of research experience as a specialist nurse, in occupational health nursing. Her research of interest is workplace health promotion, worker health assessment, and informal sector.



**Hai Ping Yu<sup>1\*</sup>, Yi Li Gao<sup>2</sup>, Lei Yang<sup>3</sup>, Xiao Yan Ma<sup>4</sup>**

<sup>1</sup>Department of Nursing, East Hospital Affiliated to Tongji University, Shanghai, China

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<sup>4</sup>Intensive care Unit of Dongfang Hospital Affiliated to Tongji University, Shanghai, China

## **A survey on cognition and attitude of teamwork in pre-practice period of nursing students in higher vocational colleges and an analysis of influencing factors**

**Purpose:** To investigate the current status of cognitive and attitudinal cooperation among vocational nursing students who are about to enter clinical internships, and to analyze influencing factors. This study aims to provide a reference for developing policies to enhance the cooperation capabilities of intern nursing student teams for vocational nursing schools and internship hospitals, with the goal of conducting training courses related to teamwork to help improve the cognitive and attitudinal aspects of teamwork for nursing students in the early stage of clinical practice, while also promoting patient safety.

**Method:** Using cluster sampling, 207 nursing students about to enter clinical internships from two vocational nursing schools in Shanghai were selected as the research subjects, and a Chinese version of the questionnaire on teamwork cognition and attitude was used to conduct the survey on this group of nursing students.

**Results:** The scores for cognitive and attitudinal cooperation of the 207 nursing students were (141.08±17.18) and (119.36±16.06) respectively, and there was a significant positive correlation between cognitive and attitudinal cooperation ( $P<0.01$ ). Differences in cognitive and attitudinal cooperation scores among vocational nursing student teams based on different genders, ages, positions, and internship experiences were statistically significant ( $P<0.05$ ), while internship experience had no effect on the cognitive and attitudinal cooperation of vocational nursing student teams. The results of Pearson correlation analysis showed a significant positive correlation between cognitive and attitudinal cooperation ( $r=0.654$ ,  $P<0.01$ ), and significant positive correlations were found between the various dimensions of cognitive cooperation and attitudinal cooperation ( $P<0.01$ ).

**Conclusion:** The cognitive and attitudinal cooperation of vocational nursing student teams are at a moderate level, and nursing school and internship hospital managers should focus on building team culture and explore the application of targeted teamwork training to enhance their levels of cognitive and attitudinal cooperation.

### **Audience Take Away Notes**

- What is the current status of teamwork cooperation among nursing students in the early stage of internships?
- What are the potential influencing factors that may affect teamwork cooperation among nursing students?
- How can nursing schools and internship units improve the teamwork cooperation capabilities of nursing students?
- What measures could be taken?

## **Biography**

Dr. Hai Ping Yu, graduated from Shanghai Tongji University School of Medicine in 2020, has been engaged in nursing management, nursing education, emergency and critical care nursing, and general foreign-related nursing work for a long time. Currently, she is the deputy director of the Nursing Department of East Hospital Affiliated to Shanghai Tongji University, and the master tutor of Tongji University. The first medical team training course authorized by AHRQ in the United States, TeamSTEPPS taught the instructor, and actively trained the instructor of TEAMSTEPPS course. Participated in 3 projects (including a national nature project) as the main person in charge, and published more than 30 papers in core journals (including 7 SCI papers, cumulative IF=21 points) as the first and corresponding author.



**Dr Balakrishna Shetty<sup>1\*</sup>, Dhruva B Shetty<sup>2</sup>**

<sup>1</sup>Pro Chancellor, Malla Reddy University, India

<sup>2</sup>ESI Hospitals, India

## **Yoga, pranayama and naturopathy in daily life as protection from upper respiratory tract infections**

**V**iral infections like SARS, MERS, Covid, Omicron and various mutant forms are going to harm mankind time to time, for which we may not have definitive treatment. But we do have two defensive management modalities: 1. Avoid progression of disease, lung damage, other serious complications. 2. Enhance the immunity to fight viral infection.

### **The methods are**

- Prevent airborne virus from entering the mucosal surfaces of the body (T Zone).
- Expel the Virus lodged in the mucosal surfaces, especially Nasopharynx.
- Prevent the virus in the mucosal surfaces from penetrating deeper tissues.
- Enhance the Vital Capacity of the lungs.
- Enhance the immunity to fight the virus infection.

Increasing lung capacity to maintain the oxygen saturation is also an important factor. This can be done with various pranayama, such as: a. Simhasana or Lion Pose (forceful expiration through mouth along with protruding the tongue); b. Kapalabhati (forceful expiration through nostrils by contracting the abdominal muscles), both will drive microorganisms out through the mouth and nose. C. Bhastrika (Deep inhalation with complete chest expansion). During usual respiration the air volume is 500 ml where as in deep inspiration and expiration pranayama it increases up to 4500 ml. These will strengthen and enhance the vital capacity of lungs, act like positive pressure ventilation.

The role of smearing the nose with coconut oil as defensive coat, Hot water gargling, steam inhalation to reduce viral load in the nasopharynx, Nasya, Abhyangana, intermittent fasting also will be discussed.

### **Biography**

Dr Balakrishna Shetty is Vice Chancellor of Medical University at the age of 49, Sri Siddhartha University, Bangalore, India and now Pro Chancellor. Completed MBBS and MD Radiology with distinction in many subjects. Obtained advanced Radiology Fellowships from University of Texan and Baylor college of Medicine, Houston Texas. After that worked in many International hospitals like MD Anderson, Yale University, Texas Children, and Cleveland Clinic. Special Invitee in meetings of World Health Organization, Consortium of Universities for Global Health, Washington DC and University College, London. Reviewer for many International Journals and Founder of the Journal of Action Research for Social Development. He is a member of Covid Task Force, Karnataka India. Did extensive work during the second wave of Covid 19 in India, more than 200 thousand RT-PCR tests, 300 online home consultations, and Multiple educative talks in YouTube and social media.



**Dr. Ashish Sinha<sup>1\*</sup>, Divyansh Vaibhav<sup>2</sup>**

<sup>1</sup>Department of Community Medicine, Pt JNM Medical

College Raipur/Ayush University Chhattisgarh, Raipur, Chhattisgarh, India

<sup>2</sup>Department, Organisation, Address, City, Country

## **Impact of health seeking behavior on pulmonary TB care in Raipur district of Chhattisgarh province India: Community based study**

**Introduction:** Patients with undiagnosed pulmonary TB predominantly act as reservoirs for Transmission and will result in 10-15 of the secondary infections in 1-5 Yrs. Health seeking behavior plays important role in early diagnosis and prompt treatment in TB care. Identification of factors influencing health seeking behavior about TB care could liable to intervene for better programmatic impact and overall outcome.

**Material and Methods:** This cross sectional study conducted by including 262 Pulmonary TB Pt during Nov 2020 – Oct 2022. In-depth interviews done among randomly selected study subjects. After informed consent we assessed patient's experiences and documented their journey from initial symptoms until they reached public health facility using predesigned pretested questionnaire.

**Results:** Out of all covered through interview 262 study participants, 198 (78.57%) respondents were index cases rest were caretakers (21.42%). Mean age of study participants was  $36.7 \pm 16$ . 87% belong to the backward class and 56% were from rural areas. 25.39% were illiterate, approximately half (46%) of them were laborers. Current study reveals that cough>2wks (55.6%) and evening rise of temperature (32.1%) as first symptoms perceived by the study participants followed by chest pain and loss of appetite. Majority 97.2% of study participants didn't know earlier sign & symptoms of TB of them 91.7% didn't aware which health care facility to be access for the same and very few (14.3%) had a fear perception about TB. 85% had accustomed to visit private Health facilities for common illnesses. While for current illness (i.e. TB) 32% got appropriate referral on 1st contact followed by 55%, 71.4%, 81.82% and 100% in subsequent health facility contacts (i.e. 2nd 3rd, 4th and 5th) for TB care. Waiting of access to access TB care at Public health facility was observed for 31 days ( $31 \pm 45$ days) and 57 days ( $\pm 60$ days) for getting access and for diagnosis respectively. Male, self-medication, ignorant to classical symptoms of TB were significant determinant for health seeking behavior in study area. participants who contacted private health facility, not aware of signs and symptoms of TB were 4 times at higher risk, adopted self-medication were 3 times, more than two consultations were 12-13 times higher risk of experiencing waiting time ( $\geq 30$ days) for diagnosis (Odds ratio 3.056, 4.086 and 14.617 respectively [ $p$ -value  $\leq 0.05$ ]). Study participants who were residing in a rural area, middle & lower socio-economic class and visited private health facility first, were significant predictors for increase waiting time ( $\geq 30$ days) for diagnosis in study area. aOR 2.176[95% CI (1.017- 4.659)]. aOR2.627 [95% CI (1.114-6.196)].

**Conclusions and Discussion:** Study reveals poor health-seeking behavior among study subjects due to ignorance of the sign and symptoms of pulmonary TB, more than two consultations, seeking care from a private health facility and not getting appropriate referral from formal as well as informal health facilities in study area.. The common determinants were self-medication, illiteracy, middle and lower-class status and ignorance about classic signs and symptoms. Keywords: Health seeking behavior, Public health facility, Impact, Pulmonary TB, Short Description of what will be discussed during the presentation.

### **Audience Take Away Notes**

- The audience could learn about the Implementation research findings of TB care
- Audience also learn about the field realities of access TB care in the field for better public health planning and management and empowering Pt and also to policy makers and stakeholders. Since this research is well designed based on scientific methodological tool helps the researchers for future research in the field of TB care and programmatic management to achieve larger objectives

### **Biography**

Dr. Ashis Sinha is working as Associate Professor in Pt JNM Medical College Raipur Chhattisgarh, India. He is also holding a position of Director Medical in Sickle cell institute. He has Worked in World Health Organization, national AIDS Control Organization as Epidemiologist and a Senior Resident in SPHPGIMER Chandigarh. He has 25 Original articles in National and international Journal and presented research paper in 3 International conferences.





**Dr. Gihane Endrawes**

Western Sydney University, Australia

## **Cultural factors affecting the mental health of immigrant women**

Women's mental health is identified as one of the top five research priorities worldwide. There is an increasing concern about stresses faced by women and how these may adversely affect their health. International studies confirm gender difference and gender inequalities. For example, 70% of people living in poverty are women, 2/3 of adult illiterate people who are over 15 years of age are women. Marriage for men is a protective factor but is associated with more mental health problems for women. The risk of women developing depression and other mood disorders was found to be as twice that of men. This risk is even higher among immigrant women due to cultural factors and issues related to immigration. Migration can be a risk factor for suicide. The suicide rates for immigrants are higher when compared to those of the population in their countries of origin, particularly among immigrant women. The paper aims to explore a range of mental health issues experienced by women with specific attention to the role of culture. Women are a diverse group with specific mental health needs across the lifespan. Therefore, this paper will address mental health issues of adult, adolescent and elderly women. The following recommendations will be explored in more details: the need for more specialised services that target specific age groups, focusing on health promotion, health education, early detection, and early intervention for those women who are at risk of mental health problems. More efforts towards the empowerment of women are also needed which includes building their self-confidence, informing and educating them of their legal rights, increasing domestic violence refuges, how to access information and support services when needed, addressing the injustice and inequalities they are currently facing and, increasing the number of bi-lingual staff and culturally sensitive services.

### **Biography**

Dr. Gihane has more than 20 years experience in mental health nursing and education. She worked as a Transcultural Mental Health Clinical Nurse Consultant, she coordinated a number of projects addressing consumers' care and satisfaction. She won 2 nursing achievement awards due to her contribution to mental health nursing. Her PhD was on the 'lived experience of caring for a relative with mental illness'. At her current role as lecturer at Western Sydney University, Australia. She coordinated a number of under-graduate and post-graduate units and is involved in the development and review of curriculum. Her role also includes supervision of higher degree research students and her research interests are in the area of mental health, transcultural nursing, evidence-based practice and nursing education which are reflected in her publications.



**Dr. Gihane Endrawes**

Lecturer, University of Western Sydney, Australia

## **A cultural exploration of caring for a loved one with mental illness**

Caring for a relative with mental illness can be overwhelming and distressing. Carers' distress level increases as the illness progresses and becomes chronic. Research evidence suggests that carers are at a risk of developing mental health problems such as anxiety and depression due to stressors associated with caregiving. This risk is even higher among caregivers who come from Cultural and Linguistic Diverse Backgrounds (CALD) due to stressors associated with immigration, settlement issues, loss of social support and social status, language barrier, lack of understanding of the health care system, lack of awareness of support services available to them in the community, lack of culturally sensitive services and lack of trust, stigma and discrimination. This paper presents the findings of a phenomenological study examining the caregiving experience with emphasis on cultural needs of CALD carers, in an attempt to identify ways of helping them cope better with the caregiving role. Subjective and objective burden as experienced by carers will be discussed, focusing on stigma, shame, guilt, loneliness, social isolation, disruption in relationship, experiences with mental health services. Factors impacting on the level of burden; such as carers' age, gender, and the diagnosis of the person who is cared for will also be highlighted. Carers experience various losses and sacrifices in their role of caregiving. This presentation will explore the physical, psychological, financial, social and spiritual needs of carers as well as discussing strategies carers use to survive the experience. Recommendations for practice, research and education will also be provided. It is recommended that health care professionals work effectively with carers by providing adequate and appropriate information on the nature of mental illness, practical information on how to manage the person with mental illness, the support services available to them in the community, fostering hope and spirituality in carers and being culturally sensitive.

### **Biography**

Gihane has more than 20 years experience in mental health nursing and education. She worked as a Transcultural Mental Health Clinical Nurse Consultant, she coordinated a number of projects addressing consumers' care and satisfaction. She won 2 nursing achievement awards due to her contribution to mental health nursing. Her PhD was on the 'lived experience of caring for a relative with mental illness'. At her current role as lecturer at Western Sydney University, Australia. She coordinated a number of under-graduate and post-graduate units and is involved in the development and review of curriculum. Her role also includes supervision of higher degree research students and her research interests are in the area of mental health, transcultural nursing, evidence-based practice and nursing education which are reflected in her publications.



**Nagato Katsura, MD, PhD**

Department of Disaster and Emergency Medicine, Kobe University Graduate School of Medicine, Kusunoki chyou, Chyuohku, Kobe, Hyogo, Japan

## **Which procedure is the best for drainage to ease nausea and vomiting due to pylorus obstruction with advanced gastric cancer: The comparison among Naso-Gastric(NG) tube, Percutaneous Endoscopic Gastrostomy(PEG), and Percutaneous Transesophageal Gastrotubing(PTEG)**

PTEG is the excellent and elaborate procedure for both administration way of nutrition and drainage for gastrointestinal obstruction as a palliative care, however, as for now, have not been spread around the world widely. Some reasons prevent on-site doctors from performing operations of PTEG, for example, 1. The procedure of PTEG might be more difficult than that of PEG, 2. The criteria of the indication for PTEG might be stricter than those for PEG, or 3. Clinical cost for PTEG might be higher than that of PEG. All of them can be said misunderstanding. Regarding for 1. Using rupture free balloon (RFB catheter), this technique is proved as safe as, or safer than PEG. Regarding for 2. For instance, hypoalbuminemia is a contraindication for PEG, however, PTEG can be performed under such malnutritional condition.

We think it is very important to dispel these misunderstandings from now on. Firstly, naso-gastric tube, in merit, does not need any surgical procedure so with no surgical complication. However, patients cannot avoid discomfort feelings in their nasal and laryngeal parts, and what is the worse, its placement for long period leads to occur aspiration pneumonia. ESPEN guide line also said if period of naso-gastric tube placement is going to reach over four weeks, PEG should be planed.

Secondly, PEG is a better procedure from the point of patients' discomfortable feeling. However, from the point of effectiveness of drainage, PEG was validated to be poor than that of PTEG in this research. As you know, PEG is placed in anterior wall of stomach. When patients lie in bed on supine position, PEG cannot drainage until the stomach become to be full with large amount of fluid. Before almost full stomach, little fluid is drained from PEG, so patients have likely vomited and aspirated some fluid from stomach to their lung unfortunately.

To the contrary, PTEG is placed at the fundic position, on the posterior side of stomach, so before their stomach becomes full, drainage will start naturally. Fig.1 shows enough dose of drainage from Day 1. As the result, aspiration pneumonia won't occur. From this point, naso-gastric tube also could drainage enough from Day 1, however, Table 1 showed the same occurrence rate with PEG, 50.0%. We speculate naso-gastric tube in the throat causes the difficulty of swallowing adequately.

For above these reasons, we select PTEG to get rid of the pain of severe patients with bowel obstruction due to advanced cancer. This time, we have investigated about the best procedure as a palliative care method for the severe patients with gastroenteral obstruction due to advanced cancer, compared with nasa-gastric tube, PEG, and PTEG. As shown in results, PTEG might be validated the most excellent tool for drainage to placate their discomfort of terminal malignant patients.

### **Audience Take Away Notes**

- To know new procedure of effective palliative method for terminal cancer patients
- To know alternative nutritional way instead of N-G tube and PEG
- To learn why such differences of the results would happen among each procedure

### **Biography**

Nagato Katsura now belonging to Kobe University Graduate School of Medicine Department of Disaster and Emergency Medicine, MD., PhD. of Kyoto University Graduate School of Medicine, Department of Gastroenterol Surgery. PhD theme; human hepatocyte culture for using artificial liver. Current research field is Nutritinal treatment to accelerate for shortening hospital stay after major surgery with maintaining skeletal muscle mass. Please see reference; Katsura N, Yamashita M, Ishihara T. Extracellular water to total body water ratio may mediate the association between phase angle and mortality in patients with cancer cachexia: A single-center, retrospective study. Clin Nutr ESPEN 2021;46 :193-199.



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## **Effects of a blended face-to-face and ehealth lifestyle intervention on physical activity, diet, and health outcomes in Hong Kong community-dwelling older adults: A randomized controlled trial**

**Background:** Aging people are vulnerable population suffering from various Noncommunicable Diseases (NCDs), while sufficient Physical Activity (PA) and healthy diet are closely related to decreasing the risk of suffering from NCDs. The blended approach combining the face-to-face and eHealth interventions might optimize the intervention effects on lifestyle behaviors initiation and maintenance. This study aimed to apply blended intervention to promote PA, diet, and health outcomes among Hong Kong community-dwelling older adults.

**Method:** This study adopted a 10-week three-arm randomized controlled trial, comprising a face-to-face and eHealth blended intervention group, a stand-alone face-to-face intervention group, and a control group. The participants in blended intervention group received (1) one 60-minute face-to-face session for PA and one 60-minute face-to-face session for diet per week; (2) a web-based behavior change promotion intervention with one session for PA and one session for diet in each week. The participants in face-to-face intervention group received the same face-to-face sessions in blended group. A control condition received biweekly telephone call. The outcome variables included Moderate-to-Vigorous Physical Activity (MVPA; minutes/week), Fruit and Vegetable Intake (FVI; portions/day), meat, fish, egg, and alternatives (MFEA; taels/day), social-cognitive factors of behavior change (self-efficacy, plan, social support, action control), physical health outcomes (blood pressure, glycosylated hemoglobin, lipid, physical fitness), mental health outcomes (depression, loneliness) and Health-Related Quality of Life (HRQoL). Data collection was implemented at pre-test, post-test after the 10-week intervention, 3-month follow-up test. Generalized Linear Mixed Model (GLMM) was applied for data analysis.

**Result:** The intervention finding revealed that there were significant interaction effects (time x group) on diet behavior (FVI and MFEA), PA self-efficacy, PA plan, PA action control, MFEA action control, and lower body strength. No significant interaction effect (time x group) was found on MVPA, social-cognitive factors (except PA self-efficacy, PA plan, PA action control, MFEA action control), physical health outcomes (except lower body strength), mental health outcomes (depression and loneliness), and HRQoL.

**Conclusion:** The findings demonstrated that the blended lifestyle intervention can make some promotions on lifestyle behavior changes and health outcomes.

**Keywords:** Physical Activity, Diet, Blended Intervention, Older Adults, Health Promotion.

### **Audience Take Away Notes**

- New insight of how to deal with the health problems of the elderly in an aging population
- Innovative intervention strategy combining face-to-face and eHealth among the elderly
- The combination of electronic technology and elderly health

## **Biography**

Miss. Min Yang studied Applied Psychology at Wuhan Sport University, China and graduated as MS in 2020. Then she began to study Health and Exercise Psychology at the Hong Kong Baptist University, Hong Kong SAR. She joined the research group of Dr. Yanping Duan at the Hong Kong Baptist University, Hong Kong SAR. The research team expertise on health behavior promotion and public health among aging population.



**Sari Narulita<sup>1\*</sup>, Dr. Doreen Sumpat<sup>2</sup>**

<sup>1</sup>Faculty Nursing and Midwifery, Binawan University, Jakarta, Indonesia

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## Effectiveness of intervention for orthostatic hypotension among psychiatric patients in mental hospitals

**Introduction:** Orthostatic hypotension is a sudden drop in blood pressure when changing position. Treatment of psychiatric patients with antipsychotics has the potential to cause orthostatic hypotension and the risk of falls. The risk of falls is an indicator of the quality of hospital services as a guarantee of patient safety. Psychiatric patients need to have the same safety and treatment rights as patients in general. The various potential changes in behavior in psychiatric patients make it possible for all orthostatic management hypotension measures to be given so that nurses can carry out analyses regarding interventions based on appropriate research results.

**Purpose:** This study to determine the effectiveness of intervention management for orthostatic hypotension in psychiatric patients.

**Design:** Experiment with Pre-test-Post-test Control Group Design.

**Methods:** Participants in this study were psychiatric inpatients on antipsychotic therapy, aged over 18 years. The first stage is screening to identify patients who experience orthostatic hypotension. Sample measurements used comparative proportion analysis with a total of 45 participants for each group providing intervention for five days. Group A was the control group, Group B received the intervention of providing 2 liters of adequate fluids/24 hours and received leg exercise intervention, Group C received the intervention of leg exercises only and Group D received 2 liters of adequate fluids/24 hours only. Test the analysis using the Regression Analysis.

**Conclusion and Recommendations:** The outcome of this research was the management of orthostatic hypotension clients in psychiatric mental services. Health professionals in psychiatric hospital services need to observe the incidence of orthostatic hypotension in patients given antipsychotics because orthostatic hypotension can have an impact on the risk of falls. Nurses need to increase their awareness of the importance of carrying out standard operational processes for measuring fall risk correctly.

### Audience Take Away Notes

- The results of this study will enable nurses in psychiatric services to understand and realize the importance of observing the incidence of orthostatic hypotension
- This study presents the management of patients with orthostatic hypotension in psychiatric services and knowing the effectiveness of the interventions provided and application in nursing services
- Professional care for orthostatic hypotension patients can reduce the risk of falls in psychiatric care and will improve the quality indicators of hospital services



## **Biography**

Sari Narulita, nurse with a specialization in community and mental health nursing, Assistant Professors, Faculty of Nursing and Midwifery, Binawan University. I graduated with a Bachelor of Nursing degree in 2001 University of Indonesia and completed a Master of Science in 2012 and am currently studying program doctoral at the Faculty of Medicine and Health Science, University of Malaysia Sabah. I have experience writing books, and articles related to mental health care and occupational health nursing. I am interested in researching this subject. I continue to try to improve myself, especially my language skills so that I can be part of the development of global health science and research.



**Dr. Mary Anbarasi Johnson**

Professor and Head, Pediatric Nursing Department, College of Nursing CMC Vellore

## Non surgical pain management in children

**N**on-surgical pain management in children is a crucial aspect of pediatric care, often requiring a tailored approach due to developmental considerations and the need for specialized care. It's a known phenomenon that pain is underestimated in children both surgical and nonsurgical pain. In this article the author explains about the non surgical pain management among children. Its important that adequate measures are taken to relieve pain in patients in a non surgical unit. Various techniques are available and especially with trends in pain management nurses need to empower themselves to be well equipped in this so that children will not have painful memories of hospitalization. Non-surgical pain in children refers to pain experienced by children that does not require surgical intervention for treatment. This type of pain can result from various causes, such as injuries, illnesses, medical procedures, or chronic conditions. Non-surgical pain management in children focuses on relieving pain through methods other than surgery, such as medications, physical therapy, psychological interventions, and alternative therapies. The goal of non-surgical pain management is to alleviate pain, improve quality of life, and promote healing and recovery in children.

### Biography

Dr. Mary Anbarasi Johnson working as a professor and Head in pediatric nursing department, CMC Vellore. I worked as Clinical Nurse Specialist in PICU for a year and as Assit Professor in USA for two years. I also worked in administration in nursing, in Saudi Arabia Defence Sector. CMC gave me opportunity to be Master trainer for International Projects like GFATM, IMNCI at national level aswell national projects like ICMR Infection control, Child Sexual Abuse Protection, OSCE by Dr. MGR Medical university as well Diabetic Educators programme etc. It also gave me opportunity to be examiner or paper setter for various levels of nursing students for 6 universities and inspector for Dr. MGR Medical University. I am very much interested in reviewing articles. I have published in 70 national, international journals and presented in around 30 national and international conferences. I have also contributed for 5 book chapters and published a book. The Saudi Kamismushayt Defense Hospital gave me opportunity to complete "Lean Six Sigma -Academy Europe, green, yellow and black belt for which I am deeply indepted to them aswell for the learning about nursing administration in defense sector through Doctor Jessie Chetty (DON). I have served in CMC Vellore as addl. Deputy Nurisng Superintendent for staff training and quality assurance, NABH accreditation as well in CMC Institutional research board as a member for a term of 4 years. I am reviewer or editorial member or advisory member in more than 70 international journals. I am also a recieipient of President's Gold medal for standing first in the university for Bsc. N programme. I am certified for green yellow and black belt for six sigma course. I have received award by the International NGO "INSO". I am also member of the SAS society. I give all thanks to Lord Jesus Christ who is the reason for my living. I am indepented to my family, teachers and friends for their encouragement and support particularly to CMC Vellore aswell Kamis Mushayt Armed Forces Hospital, Southern Region ), CON & institutions in US which have mentored me.



**Nidhi Bhatnagar, Associate Prof, Dr. Irena Mandal\*, Junior Resident, Mongjam Meghachandra Singh, Director Prof, Vibha Swaroop, Senior Resident**

Department of Community Medicine, Maulana Azad Medical College, New Delhi, India

## **An inquiry into physicians' mindsets: Attitude and perceptions of technology-enabled mental health care for supporting occupational mental health and well-being among doctors in India**

**Background:** Globally, the mental healthcare delivery system is neglected and plagued by fundamental shortcomings and does not match the needs and demands of the community. Mental illness is projected to have a global economic impact of \$6 trillion by 2030. The recent pandemic has brought into focus the long stressful work hours in healthcare and with the advent of technology-enabled mental health care, doctors qualify as an ideal study group to understand their acceptability, attitude and perceptions of digital mediums to support their own mental health and well-being.

**Objectives:** To study the attitude and perceptions of technology-enabled care for mental health and well-being among doctors in an Indian setting.

**Methods:** A qualitative study was conducted in 20 doctors of Community Medicine linked to the Department of Community Medicine, Maulana Azad Medical College, New Delhi. Study subjects were selected based on purposive divergent sampling to ensure richness in the data collection. All the study participants were subjected to in Depth interview using standard topic guide after written informed consent. All the interviews were audio recorded in local language and thereafter transcribed and translated in English for analysis in NVIVO. Based on the coding done, thematic content analysis was done with an exploratory perspective to understand the felt need of mental health and wellbeing among doctors and their attitude and perception towards technology in support.

**Results:** Following four main themes were derived from the codes generated; Attitude and Perceptions towards mental health and well-being, Attitude and Perceptions towards use of technology for mental health and wellbeing, Role of personal and professional life in mental health and wellbeing and Coping mechanisms adopted for mental health and wellbeing.

**Conclusion:** The importance of mental health and wellbeing was accepted by all the doctors and the stressful nature of the profession was cited as an important reason for supporting the mental health and wellbeing of doctors. There is a lack of policies and of support at professional workplaces to support mental health and wellbeing of doctors. Study participants accepted the potential of technology in improving mental health and wellbeing however the lack of personal touch in rendering care was reported. Overall, there is very limited use of technology for mental health and wellbeing by doctors.

**Keywords:** Occupational Mental Health, Technology, Doctors.

### **Audience Take Away Notes**

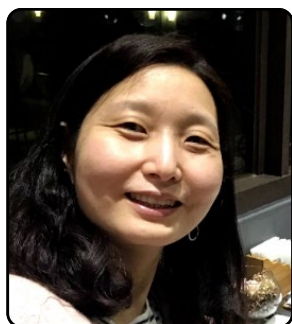
- In this qualitative study employing in-depth interviews, the audience will gain valuable insights into the attitudes and perceptions of doctors specialising in community medicine and public health in India
- The findings illuminate the nuanced perspectives these healthcare professionals hold towards utilising technological interventions for their mental well-being. The apps with meditation, yoga and mental

health services was found to be of great use to professionals in their busy lives

- The audience, comprising policymakers, mental health practitioners, educators, and technology developers, can leverage these findings to enhance mental health strategies tailored to the specific needs of healthcare professionals in this sector
- This research provides a practical roadmap for improving mental health support strategies, influencing policymaking, guiding educational curricula, and informing the development of technology solutions tailored to the unique needs of doctors in community medicine and public health in Delhi, India
- This knowledge is crucial for crafting interventions that resonate with the unique challenges faced by these professionals in Delhi, ultimately contributing to a more effective and contextually relevant mental health support system

### **Biography**

Dr. Irena Mandal studied MBBS at Maulana Azad Medical College & Lok Nayak Hospital, New Delhi and graduated in 2020. She is currently pursuing her Postgraduate MD degree in Community Medicine at the same institution.



**Dr. Hwa Young Chae<sup>1\*</sup>, Kate Emily Causey<sup>2</sup>, Sahar Banijamali<sup>3</sup>**

<sup>1</sup>Department of Research Insights and Innovation, SEIU 775 Benefits Group, Seattle, WA, Senior Quantitative Researcher, United States

<sup>2</sup>Manager of Quantitative Research, United States

<sup>3</sup>Director of Research Insights and Innovation, United States

## **Factors associated with technology self-efficacy in long-term-care workforce in WA, USA**

**Purpose:** As digital health has been dramatically growing since the COVID-19 pandemic, healthcare workforces' capability to access and use technology tools matters to provide better service for their clients. This study aims to examine factors on technology self-efficacy for the long-term-care workforce, especially Home Care Aides (HCAs) working in Washington State, United States. HCAs are essential healthcare professionals who assist older adults and people with disabilities or chronic illnesses and are in high demand due to the increasing aging population in the United States. Examining factors affecting technology self-efficacy in this workforce would help develop policies to improve their workforce success as well as efficient service delivery for their clients.

**Methods:** The self-reported survey was conducted online, by phone call, and by mail, provided in four languages (English, Spanish, Russian, and Vietnamese). A regression was conducted to examine associated factors of technology self-efficacy.

**Results:** The technology self-efficacy was significantly higher for the English proficient group compared to Limited English groups; younger age; Bachelor's degrees and Advanced degrees compared to high school graduates; men compared to women; those with higher annual income of \$30,000 compared to those with an annual income of less than \$29,999; those who reported themselves as White compared to non-White; Asian compared to non-Asian; Native Hawaiian and Pacific Islander (NHPI) compared to non-NHPI; and Hispanic/Latino compared to non-Hispanic/Latino.

**Conclusion:** Socio-cultural factors including education, income, age, race/ethnicity, and English proficiency are significantly associated with technology self-efficacy. These findings suggest that social inclusion and cultural competency could play a pivotal role in developing digital programs and services for long-term-care workers, and that some social identity groups could benefit from additional support in accessing online services such as training or other online benefits.

### **Audience Take Away Notes**

- Understanding long-term-care workforce's technology self-efficacy that could be critical to workforce development
- Providing insights to study technology self-efficacy for other healthcare professionals for effective workforce development
- Providing insights to improve workforce development in long-term care settings

## **Biography**

Dr. Chae graduated with a Ph.D. in Consumer Science at the Seoul National University, South Korea, working at a business strategy consulting firm, Crevate to help companies invent new business products by examining consumers' behaviors and attitudes. After obtaining a Master of Public Health, Social and Behavioral Sciences at the University of Washington, United States, she worked as a research consultant for the University of Washington and Fred Hutchinson Cancer Center. She works at SEIU 775 Benefits Groups as a Senior Quantitative Researcher to help improve the long-term care workforce's training, wellbeing, and retirement.



**Summya Khatoon**

MPH, School of Public Health, Boston University, Boston, MA, United States

## Gas vs. Electric stoves: Evaluating the impact of cooking practices on particulate matter and total volatile organic compounds in home kitchens

Our daily cooking routine, from the stove we use to how we prepare our meals, significantly affects the air we breathe at home. This study investigated how electric and gas stoves compare when it comes to indoor air quality, focusing on frying and boiling. The research employs real-time monitoring using Awair Element monitors to assess concentrations of Particulate Matter (PM) and Total Volatile Organic Compounds (TVOCs) during cooking sessions. The study carefully considers various cooking methods, pot sizes, and meat types, ensuring a comprehensive evaluation of emissions.

The findings highlight the critical role of both stove type and cooking conditions in determining IAQ. There does not appear to be strong differences between the conditions in cooking emissions between gas and electric stoves. Gas stoves consistently emitted slightly higher levels of harmful pollutants, while electric stoves showed potential concerns related to PM<sub>2.5</sub> emissions during frying. Proper ventilation emerged as a critical mitigation strategy, effectively reducing overall emissions with varying impacts on PM<sub>2.5</sub> depending on the stove type and cooking method.

This study underscores the importance of considering both stove type and cooking conditions when optimizing IAQ in residential kitchens. While electric stoves may be preferable for reducing overall pollutant emissions, proper ventilation is crucial for both stove types, especially during high-temperature cooking activities like frying. Further research is necessary to elucidate the factors influencing PM<sub>2.5</sub> emissions from electric stoves and refine ventilation strategies for both stove types to ensure healthier indoor environments. Despite some study limitations, the research contributes valuable insights for individuals, researchers, and policymakers seeking to enhance indoor air quality and public health.

**Keywords:** IAQ, Electric Stove, Gas Stove, TVOC, PM<sub>2.5</sub>, Frying, Boiling.

### Biography

Summya Khatoon studied Healthcare Administration at Dow University of Health Sciences, Pakistan. She is currently pursuing a Master's in Public Health with a concentration in Environmental Health from Boston University School of Public Health. She recently joined Dr. Junenette L Peters' research team, where she investigates aircraft noise exposures, and is concurrently collaborating with Dr. Wendy J. Heiger-Bernays and her research team to study PFAS health risks. She has a profound passion for understanding the intricate interplay between our surroundings, environmental noise, built environment factors, and their impact on individuals. She is fascinated by the potential of data to transform environmental health. She delves into the possibilities of sensor networks and citizen science initiatives, envisioning data-driven strategies such as real-time air quality alerts, targeted interventions for areas with high noise pollution, and interactive maps that encourage residents toward healthier choices like cycling paths and parks. In her eyes, data holds the key to fostering communities that not only flourish but also prioritize the well-being of all individuals by mitigating environmental health risks.





### **Dr. Jaason Geerts**

Vice-President, Research and Leadership Development, The Canadian College of Health Leaders, Ottawa, Ontario, Canada

## **Becoming A Leadership Organization (ALO)©**

The COVID-19 pandemic has highlighted unequivocally the importance of effective leaders and leadership around the world at all levels of organizations. And yet, many workplaces provide little to no leadership development for their people and the few programs that are offered are usually exclusive to those in positional roles. To succeed in the evolving global context, leadership integration across organizations is needed urgently. Research confirms that effective leadership is linked to improved outcomes at the individual level, such as engagement, job satisfaction, and performance, as well as at the team/department and organizational levels in terms of retention and performance.

Building on the concept of a learning organization, the Vice-President of Research and Leadership Development at the Canadian College of Health Leaders (CCHL), Dr. Jaason Geerts, has coined the term “A Leadership Organization (ALO)” to refer to a situation where leadership and various forms of leadership development are embedded in the organizational culture and all staff (including positional leaders) are actively involved.

This interactive workshop is designed for Human Resources and Organizational Development professionals and leaders interested in strategies to advance their workplace towards the goal of becoming a leadership organization.

The session is informed by CCHL's ongoing work as one of the largest providers of healthcare leadership development in Canada, as well as the by two most recent published systematic literature reviews of medical leadership development, authored by Dr. Geerts.

Participants will leave with a clear understanding of the key features of a leadership organization, customized strategies and priorities that they can apply in their workplace to become one, and important first and future implementation steps.

### **Audience Take Away Notes**

- Participants will develop an understanding of the key characteristics of a leadership organization
- They will have an opportunity to self-assess their own organization's level of leadership integration, as well as priority gaps
- They will consider evidence-informed strategies for deeper leadership integration and identify priorities at their workplace
- They will also engage with international colleagues, develop their network, and have the opportunity to collaborate in the future

## **Biography**

Dr. Jaason Geerts is the Vice-President of Research and Leadership Development at the Canadian College of Health Leaders (CCHL) and a former Honorary Visiting Fellow at The Bayes Business School, University of London in the UK. Jaason completed his PhD at the University of Cambridge on leadership for professionals after a teaching degree and two Master's from the University of Toronto and Cambridge respectively. Jaason is also a program director and instructor at the Telfer School of Management (University of Ottawa) and the Schulich School of Business (York University, Toronto).



**Dr. Joachim Kapalanga**

Department of Paediatrics, Schulich School of Medicine, Western University,  
London, Ontario, Canada

## A global public health perspective on neurodevelopmental disorders

Neurodevelopmental Disorders (NDD) are complex disorders that affect brain development and function, and are caused by an interplay of genetic, epigenetic and ecogenetic factors. Common neurodevelopmental disorders include Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD), Intellectual Disability (ID), schizophrenia (SZ), Bipolar Disorder (BD), Fragile X Syndrome (FXS), Fetal Alcohol Spectrum Disorder (FASD), Epileptic Seizure Disorder (ES), and Cerebral Palsy (CP). These disorders show considerable phenotypic overlap and many present with comorbidities. The phenotypic overlap has led to advancing the hypothesis that certain NDD such as FXS, FASD, ID, ASD, ADHD, schizophrenia, and bipolar disorder lie on a neurodevelopmental continuum. Symptoms vary in severity from individual to individual and also temporally in the same individual. Symptoms of NDD can manifest during infancy, childhood and youth years, and can last into adulthood. NDD disorders affect both sexes, all racial and ethnic groups and occur in all regions of the world. While the overall prevalence of NDD is not known with exactitude, in most regions of the world the overall prevalence could be as high as 10 -15%, for the commonest NDD. NDD are mostly diagnosed by clinical criteria, few are diagnosed by specific laboratory tests or brain imaging. NDD are a challenge to diagnose, manage, treat and prevent even in the most advanced regions of the world, let alone in 'resource limited' countries. Management almost universally involves a combination of behavioral, cognitive, psychosocial, and pharmacological therapies. Additionally, home, school and recreational community strategies and interventions are an integral part of treatment. Because of the complexity and challenges of diagnosis and management, and combined high prevalence, NDD can impose significant hardships and suffering to individuals and families and cause considerable societal disease burden and public health system costs. Because of the burden imposed on society by NDD. The brain and hence NDD have been an area of intense research in recent years. Brain institutes, neurodevelopmental research and neuropsychiatric research centres have mushroomed in preeminent institutions around the world, with the sole purpose of studying the biology, genetics, sociopathology, public health and medical aspects of NDD.

### Audience Take Away Notes

- At the end of this presentation the audience will learn about
- The common NDD and their prevalence in populations globally
- The complexity of NDD and the challenges of diagnosis, management, and prevention
- The hardships and suffering, NDD can cause to individuals and families
- The disease burden and cost NDD impose on society and public health systems
- Current research efforts to understand NDD
- At the end of the presentation the audience will be able to appreciate the high prevalence, complexity, and societal burden of NDD. This will help the audience to advocate for, and advance research on NDD

- At the end of the presentation health care providers, in the audience will be able to have a better understanding of NDD, their diagnosis, management and prevention. NDD researchers in the audience will potentially, be able to pursue other directions of their research

### **Biography**

Dr. Joachim Kapalanga is a Physician-Scientist and Educator who was educated at Yale University, the State University of New York, Queens's University, and the University of Guelph. He has multiple current posts, including Professor (Adjunct) of Paediatrics at the Schulich School of Medicine and Dentistry and the Southwestern Ontario Academic Health Network - Knowledge Translation Group, in Canada. Dr. Kapalanga's current scholarly and research pursuits are in the epigenetics of neurodevelopmental disorders and exploration of shared endophenotypes in neurobehavioral disorders. He is a member of multiple international scientific and professional organizations. He has published extensively.

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