

**The 2<sup>nd</sup> International Nursing Research Conference on  
“Future Nursing Research and Innovation for Sustainable Global Health”  
to Commemorate the 125<sup>th</sup> Anniversary of the Birth of HRH Princess  
Srinagarindra**

**Jointly Organized by WANS, TNMC & NAT**

**2 - 4 December 2025  
The Miracle Grand Convention Hotel, Bangkok, Thailand**

**Abstracts of Conference Speakers**

**Day 1**

**2 December 2025**

## **Keynote 1: Global Health Challenges and Health System Strengthening**

Professor Dr. Suttipong Wacharasindhu  
*School of Global Health, Faculty of Medicine*  
*Chulalongkorn University, Thailand*

Time: 10.30 - 11.00 a.m.

Room: Grand Ballroom

### **Abstract**

This session aims to help nurses build the knowledge and skills needed to take part in global health work and also introduce important global health challenges, such as infectious diseases, maternal and child health issues, non-communicable diseases, and mental health problems. Participants will also learn about global trends that affect healthcare systems and health professional education. The goal is to support nurses in understanding these issues so they can plan and provide better care, as well as contribute to improving their organizations. We also promote continuous learning and mentorship to strengthen clinical skills, improve patient outcomes, and encourage a supportive and effective working environment. This presentation hopes to motivate nurses to take active roles in improving health at both local and global levels.

## **Plenary Session 1: Contributions of Nursing Research and Innovation to Global Health**

Professor. Dr. Adelais Markaki

*University of Alabama at Birmingham, School of Nursing, U.S.A.*

Time: 11.00 - 12.00 p.m.

Online

### **Abstract**

Today's global health challenges underscore the need for understanding and managing change in a non-traditional linear model world. To determine strategies for nursing research and innovation in global health, two conceptual lenses - the VUCA (Volatility, Uncertainty, Complexity, Ambiguity) and BANI (Brittle, Anxious, Nonlinear, Incomprehensible) frameworks - are considered. While both frameworks share the same goal, they differ in emphasis, scope and approach.

The VUCA model has been used in nursing to describe and navigate modern healthcare challenges (i.e. talent management and staff retention, addressing the pandemic's impact, developing resilient leadership). Similarly, the BANI model has been mostly applied in global health, public health, medicine, and health education. Nursing is beginning to apply BANI in the areas of education (i.e. curriculum design, simulation-based learning) and leadership (addressing anxiety and burnout, strategic workforce planning, organizational resilience, ethical decision-making) to understand the brittleness of systems and manage change. Competency-based nursing education in the BANI era requires adaptability & agility, emotional resilience, digital & technological literacy, interdisciplinary collaboration, and ethical & reflective practice. Likewise, leadership strategies for nurse managers require sensemaking, empathy & emotional awareness, decentralized decision-making, and resilience building.

As global health challenges become more volatile, models like VUCA and BANI are increasingly important. Over the last 15 years, nurses have made significant contributions to the United Nations' 2030 Agenda for Sustainable Development through targeted research and innovation in these areas: infectious disease control, management of non-communicable chronic diseases, disaster management and public health emergency, and addressing health disparities in rural care, elderly care, and mental health. Furthermore, there is ample evidence of contributions to health system strengthening with emphasis on health workforce development, leadership for policy development, digital health technology, and collaborative interprofessional research. Future directions for nursing research and innovation in the areas of artificial intelligence, genomics, precision health, and entrepreneurship should be viewed as critical opportunities and challenges. Using the VUCA and BANI frameworks for dealing with these mega-trends, in addition to the other well-established global health challenges, will allow nurse scientists, educators, and practitioners to bridge the nursing science and art with technology and compassion for global health.

## **Plenary Session 1: Contributions of Nursing Research and Innovation to Global Health**

Assistant Professor Dr. Thitipong Tankumpuan  
*Faculty of Nursing, Mahidol University, Thailand*

Time: 11.00 - 12.00 p.m.

Room: Grand Ballroom

### **Abstract**

Global health efforts require targeted, resilient, and equitable solutions, particularly within the dynamic landscape of Low-to-Middle Income Countries (LMICs) in Asia, where profound health disparities persist. This presentation offers a counter-narrative to High-Income Country perspectives by framing nursing's contribution not merely as clinical care, but as a critical driver for systems-level change, rooted in local evidence.

The session will explore how nursing research must move beyond traditional biomedical models to investigate and directly address the complex upstream Social Determinants of Health (SDH) such as rapid urbanization, climate vulnerability, income inequality, and cultural barriers that shape health outcomes in this diverse region. We will highlight the necessity of developing context-specific, frugal innovations in nursing practice, including simple, high-impact digital health tools and nurse-led models for Primary Health Care (PHC) that maximize impact despite resource constraints.

Crucially, the sustainability of the global health agenda rests on the resilience of its workforce. Citing the International Council of Nurses' economic mandate that "Caring for nurses strengthens economies," this presentation will analyze cutting-edge nursing research focused on workforce retention and resilience. This includes studies evaluating the effectiveness of mentorship programs and analyzing the true economic cost-benefit of investing in adequate staffing and professional quality of life, which is essential to mitigating the ongoing issue of health worker migration from LMICs.

Ultimately, nursing research and innovation originating from the Asian region provide the necessary evidence and actionable mechanisms to ensure global health progress is not just advanced efficiently, but is also fundamentally equitable, accessible, and resilient for the most vulnerable populations.

# Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health

## Room 1: Randomized Controlled Trials

Associate Professor Dr. Piyanee Klainin-Yobas  
*Alice Lee Centre for Nursing Studies, Yong Loo Lin School of Medicine,  
National University of Singapore*

Time: 1.00 - 2.30 p.m.

Room: Grand A

### Abstract

#### **Efficacy of a Symptom Self-Management Program Delivered Via Virtual Reality Device on Inpatients Post-Acute Myocardial Infarction: A Pilot Randomised Controlled Trial**

**Background:** Rehabilitation programs for individuals recovering from acute myocardial infarction (AMI) should address psychosocial factors, including stress, anxiety, and depression. The researchers developed a symptom self-management intervention designed to help post-AMI patients recognize and regulate psychological symptoms. This research aimed to test the efficacy of the newly developed program on stress, anxiety, depression, perceived relaxation, knowledge and satisfaction.

**Methods:** A randomized controlled trial was conducted at a tertiary hospital in Singapore, comparing two delivery modalities: face-to-face and virtual reality-based formats. Eligible participants were inpatients with stable post-AMI status, aged 21–65 years, and able to communicate in English. Participants were randomized into three arms: IManage-VR, IManage-FF, or a control group. The IManage-VR and IManage-FF groups received two one-hour sessions of the intervention delivered via a virtual reality device and face-to-face instruction, respectively, while the control group received standard care only. Outcomes were measured using self-reported questionnaires and physiological markers. Statistical analyses included ANCOVA and repeated-measure ANOVA.

**Results:** A total of 90 inpatients were enrolled, with 30 participants assigned to each group. Participants in the IManage-VR arm reported significantly greater knowledge, periphery skin temperature, and perceived relaxation than those in the control group. Likewise, participants in the IManage-FF arm demonstrated significantly higher knowledge, periphery skin temperature, perceived relaxation than the control group. Nearly all participants were satisfied or very satisfied with both programs and positive comments were provided. However, there were no significant differences in outcomes between the IManage-VR and IManage-FF groups.

**Conclusion:** This is the first study to examine the symptom self-management programs on patients post-AMI at a tertiary hospital in Singapore. Apparently, it is feasible to conduct the two-session interventions at the cardiac care unit (CCU) in the study hospital. Findings suggested that the program delivered via the SONY headset (IManage-VR) and traditional face-to-face approach (IManage-FF) had the potential to improve objective stress (as measured by peripheral skin temperature), perceived relaxations, knowledge and satisfaction.

**Keywords:** Symptom self-management program, Anxiety, Depression, Relaxation, Stress, Virtual reality device

**Research Grant:** This research was supported by the Ministry of Health, Health Service Research New Investigator Grant, Singapore [Grant NO. HSRNIG12NOV005].

# **Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health**

## **Room 1: Randomized Controlled Trials**

Professor Dr. Ratsiri Thato

*Faculty of Nursing, Chulalongkorn University, Thailand*

Time: 1.00 - 2.30 p.m.

Room: Grand A

### **Abstract**

Randomized Controlled Trials (RCTs) stand as the gold standard in healthcare research, offering a rigorous framework for evaluating intervention effectiveness. Randomization appears as the cornerstone of RCT design, requiring sophisticated strategies to minimize bias and ensure equitable group allocation. Researchers must navigate complex allocation strategies—from simple randomization to advanced approaches like block and stratified randomization—to minimize selection bias and ensure equitable group assignment. Key design principles demand not just technical precision but also a clear demonstration of research significance and potential for transformative practice or policy changes. Methodological integrity encompasses multiple dimensions: robust sample size calculation, blinding techniques, standardized intervention protocols, and comprehensive outcome measurement. Researchers must simultaneously address internal validity (precise effect measurement) and external validity (generalizability), carefully defining participant selection criteria and reflecting realistic clinical conditions. Ethical considerations are paramount, requiring careful attention to informed consent, institutional review board approvals, and participant safety. Equally critical are transparent data management, appropriate statistical analyses, and adherence to reporting standards like CONSORT. The ultimate objective exceeds technical execution: to generate high-quality, generalizable scientific evidence that can meaningfully advance healthcare understanding, challenge existing paradigms, and potentially revolutionize clinical interventions.

## **Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health**

### **Room 2: Mixed methods research**

Associate Professor Dr. Sarah A. Stoddard

*School of Nursing & Health Behavior and Health Education,  
School of Public Health Research, University of Michigan, U.S.A.*

Time: 1.00 - 2.30 p.m.

Online

### **Abstract**

Mixed methods research offers powerful tools for addressing complex questions in nursing and global health by combining the strengths of quantitative and qualitative approaches. This workshop introduces the foundational principles of mixed methods research and demonstrates how to integrate data collection and analysis within a single study. Participants will learn how mixed methods can uncover both the 'what' (quantitative) and the 'why' (qualitative) in global health and nursing research, including its application in intervention research. We will cover core characteristics of rigorous mixed methods studies, including design approaches, integration strategies, and interpretation and reporting of results. The session will also address common challenges and benefits of using mixed methods in nursing and global health research. By the end of the workshop, participants will be able to design a mixed methods study, from frame research questions to integrating findings, relevant to their own program of research.



## **Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health**

### **Room 2: Mixed methods research**

Associate Professor Dr. Arpaporn Powwattana  
*Department of Public Health Nursing, Faculty of Public Health,  
Mahidol University, Thailand*

Time: 1.00 - 2.30 p.m.

Room: Grand B

### **Abstract**

In a world driven by data, sometimes the answer to the question “Why use mixed method research (MMR)?” (as opposed to just quantitative) is not obvious behind the whirl of numbers and projections. This session explains “How?” and not just the “What?” leads to the insight a firm needs to beat the competition, a persuasive answer to the question “Why use MMR in the first place?” We will take a look at the benefits of MMR and see how the holistic research approach gives better insight into nursing conditions. Beginning with when to use MMR to tackling complex research questions, no matter if the goal is to explore a challenging issue, broaden the scope of insights or dig deeper into data, the aim is to use the right combination of methods throughout entire research process to make well-rounded, informed decisions. MMR is an information-gathering practice whose hallmark is collecting and combining qualitative and quantitative data and bridging the gap between data and decision-making. A variety of types and common techniques used in MMR will be uncovered in different contexts, such as the underserved population, elders with multiple diseases, or digital analytics enhanced by community-dwelling people. Common pitfalls often encountered by researchers involve the intention to gather both qualitative and quantitative data without clearly delineating the interrelationship between these data types and how this contributes to the enhancement of research quality, along with issues pertaining to triangulation and validation, and the execution of effective MMR. These shortcomings detract from MMR will be manifest with strategies to overcome guided with examples. Contemporary trends and challenges in MMR, such as the application of multiple methods, methodologies, approaches, theoretical or paradigmatic frameworks, and the synthesis of findings from diverse components, will be extensively discussed to ensure the application of intricate designs aimed at addressing the multifaceted problems besetting society, which has garnered significant attention in recent times due to the myriad elements that coalesce within a given framework to tackle such issues.

## **Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health**

### **Room 3: Qualitative research**

Professor Dr. Wen-Yu Hu

*School of Nursing, National Taiwan University, Taipei, Taiwan*

Time: 1.00 - 2.30 p.m.

Room: Venus

### **Scope of Content**

Updated nursing research on qualitative methodology in the context of global health; key challenges, including common pitfalls and strategies to enhance reliability and validity; the evolving roles of technology in research design and data collection; and future directions for advancing the field.

# **Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health**

## **Room 3: Qualitative research**

Associate Professor Dr. Karnsunaphat Balthip  
*Faculty of Nursing, Prince of Songkla University, Thailand*

Time: 1.00 - 2.30 p.m.

Room: Venus

### **Abstract**

The global health landscape confronts multifaceted challenges, including an aging population, mental health concerns, the rise of non-communicable diseases, the emergence of infectious diseases, and disparities in health access, necessitating a new body of knowledge tailored to these intricate issues.

Qualitative research is significant in nursing as it adeptly captures the depth and richness of lived experiences, elucidates the answers to how and why questions to comprehend human behaviors, decision-making, meaning-making, and purpose in the enhancement of life, as well as the interconnections between conditions, actions, and consequences, alongside the socioeconomic and cultural contexts of health and well-being, which are vital for holistic care and a culturally responsive healthcare system. Consequently, it is notable that qualitative research is vital in developing a novel nursing model or theory to discuss the increasing global health challenges. For example, the theory of “Living life with wisdom for oneself and others,” which is developed through grounded theory research methodology and participatory action research, is crucial to explain the process of purpose in life enhancement of Thai adolescents.

Despite the significant value of qualitative research involving methodological and cultural influences, the researcher serves as the key in the research process. Therefore, it is essential that the researcher maintains methodological rigor and holds to established standards, such as the Consolidated Criteria for Reporting Qualitative Research (COREQ), to ensure trustworthiness entire the studies.

In conclusion, notwithstanding specific considerations regarding qualitative research, nurses should play a pivotal role in the context of global health challenges and be acknowledged as essential professionals in employing qualitative research to enhance comprehension of patients lived experiences and cultural contexts, to develop innovative models and theories from nursing practice, and to advance health and well-being while improving the healthcare system.

# **Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health**

## **Room 4: Implementation research**

Associate Professor Dr. Craig Lockwood  
*University of Adelaide, Australia*

Time: 1.00 - 2.30 p.m.

Online

### **Abstract**

Implementation research includes both the discovery of what works, for who, in which circumstances, in traditional terms, this is thought of as aligned with randomised controlled trials or hybrid effectiveness studies with a focus on the effectiveness of the intervention or practice, and on the implementation mechanism of action. Such methods are important, expensive, and inaccessible in the absence of expertise and external funding.

Another perspective is to consider implementation science as inclusive of the use of evidence informed implementation strategies in combination with knowledge related to leadership, culture change and organisational transformation. This second approach is critical to long terms sustainability of evidence-based practice, and has widespread applicability for the future of nursing as a workforce and as agents for change. This approach is driven by health system strategic priorities and can contribute to global strategy while seamlessly integrating with the organisation and delivery of care.

This talk presents firstly the strategic longer-term opportunity for nurses as a global force for good in implementation science within an evidence-based organisational framework, then revisits the important evidence which demonstrates implementation science fundamentals, and links both of these to methods which can be routinely used in quality improvement by clinical teams.

## **Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health**

### **Room 4: Implementation research**

Assistant Professor Dr. Pikul Phornphibul

*Faculty of Nursing, Panyapiwat Institute of Management, Thailand*

Time: 1.00 - 2.30 p.m.

Room: Grand C

### **Abstract**

In the rapidly evolving healthcare landscape, the integration of evidence-based practices into clinical nursing practice is vital for enhancing patient outcomes. Implementation science and implementation research offer systematic approaches to bridge the gap between research findings and routine nursing care. This presentation explores the foundational concepts of implementation science, emphasizing its role in understanding and overcoming barriers to adopting innovative practices. By examining key frameworks such as the Consolidated Framework for Implementation Research (CFIR) and the RE-AIM model, we illustrate how structured strategies can facilitate the successful translation of evidence into nursing practice. The discussion highlights recent advances and practical applications of implementation research in nursing settings, demonstrating its potential to improve care quality, safety, and patient satisfaction. Ultimately, embracing implementation science signifies a significant step forward in advancing nursing outcomes through sustainable and contextually tailored interventions. This presentation aims to inspire nurses, researchers, and policymakers to leverage implementation science as a transformative tool for healthcare excellence.

Keywords: Implementation Science, Research Translation, Implementation Research

# **Concurrent Special Topic 1: Challenges in Nursing Research Methodology Toward Global Health**

## **Room 4: Implementation research**

APN Ratanaporn Jerawatana  
*Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand*

Time: 1.00 - 2.30 p.m.

Room: Grand C

### **Abstract**

#### **From Evidence to Action: An Advanced Practice Nurse's Experience in Implementation Research for Diabetes Care**

Advanced Practice Nurses (APNs) play a crucial role in bridging the gap between evidence and practice to enhance the quality of nursing care and improve patient outcomes. This presentation highlights implementation research initiatives led by an APN in diabetes care, demonstrating how Evidence-Based Practice (EBP) has been systematically applied to achieve sustainable impacts at clinical, organizational, and policy levels.

In Thailand, the Nursing and Midwifery Council defines nine core competencies for APNs, among which Evidence-Based Practice serves as the foundation for quality improvement. Guided by this competency, an APN initiated the development of a Clinical Nursing Practice Guideline (CNPG) to address the gap between research and practice. This development represents a collaborative, multidisciplinary effort aimed at improving the quality of diabetes care. Using the AGREE II framework, a CNPG for hypoglycemia management was developed and implemented through the PDCA quality improvement process and evaluated using implementation research. The findings revealed that the CNPG effectively improved blood glucose control among hypoglycemic patients. This CNPG was subsequently adopted as a hospital "Work Instruction (WI)," ensuring safe and consistent care.

Another initiative involved the development of a Diabetes Self-Management Education and Support (DSMES) program that transformed traditional lecture-based education into an interactive, evidence-based, and patient-centered model. The program resulted in a mean reduction of 1.3% in HbA1c, significant improvements in patients' knowledge and self-care behaviors, and reduced medication costs saving approximately 3,258 THB (100 USD) per person per year. These outcomes contributed to the national adoption of DSMES as a core domain in Thailand's National Diabetes Clinic Standards.

The implementation cycle led by APNs does not end at the clinical level. Research generated from these initiatives, including a meta-analysis on the effectiveness of DSMES programs in Thailand, revealed policy gaps at the national level. This experience enabled APNs to contribute to national policy development, influencing the establishment of national standards for diabetes clinics and ensuring the inclusion of DSMES as a key domain. This illustrates the full trajectory of the APN role from applying evidence, to generating new knowledge, and ultimately, to shaping national health policy.