



**ATHENS INSTITUTE**

# **Abstract Book**

**12<sup>th</sup> Annual International Conference on  
Nursing  
4-9 May 2026, Athens, Greece**

**Edited by  
Ingrid Brenner & Olga Gkounta**

2026



Abstracts  
12<sup>th</sup> Annual International  
Conference on Nursing  
4-9 May 2026, Athens, Greece

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## Preface

This book includes the abstracts of all the papers presented at the 12<sup>th</sup> Annual International Conference on Nursing (4-9 May 2026), organized by the Athens Institute.

A full conference program can be found before the relevant abstracts. In accordance with Athens Institute's Publication Policy, the papers presented during this conference will be considered for inclusion in one of Athens Institute's many publications only after a blind peer review process.

The purpose of this abstract book is to provide members of Athens Institute and other academics around the world with a resource through which they can discover colleagues and additional research relevant to their own work. This purpose is in congruence with the overall mission of the association. Athens Institute was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world can meet to exchange ideas on their research and consider the future developments of their fields of study.

To facilitate the communication, a references section includes all the abstract books published as part of this conference (Table 1). I invite the readers to access these abstract books –these are available for free– and compare how the themes of the conference have evolved over the years. According to Athens Institute's mission, the presenters in these conferences are coming from many different countries, presenting various topics.

**Table 1.** *Publication of Books of Abstracts of Proceedings, 2015-2026*

Year	Papers	Countries	References
2026	27	19	Brenner and Gkounta (2026)
2025	28	15	<a href="#">Chamley and Gkounta (2025)</a>
2024	32	15	<a href="#">Chamley and Gkounta (2024)</a>
2023	31	16	<a href="#">Hughes and Gkounta (2023)</a>
2022	21	11	<a href="#">Boutsioli and Gkounta (2022)</a>
2021	19	8	<a href="#">Papanikos (2021)</a>
2020	22	12	<a href="#">Papanikos (2020)</a>
2019	34	14	<a href="#">Papanikos (2019)</a>
2018	52	15	<a href="#">Papanikos (2018)</a>
2017	63	19	<a href="#">Papanikos (2017)</a>
2016	55	18	<a href="#">Papanikos (2016)</a>
2015	116	23	<a href="#">Papanikos (2015)</a>

It is our hope that through Athens Institute's conferences and publications, Athens will become a place where academics and researchers from all over the world can regularly meet to discuss the developments of their disciplines and present their work. Since 1995, Athens Institute has organized more than 400 international conferences and has published over 200 books. Academically, the institute is organized into 7 divisions and 37 units. Each unit organizes at least one annual conference and undertakes various small and large research projects.

For each of these events, the involvement of multiple parties is crucial. I would like to thank all the participants, the members of the organizing and academic committees, and most importantly the administration staff of the Athens Institute for putting this conference and its subsequent publications together. Specific individuals are listed after the Editors' Note.

**Gregory T. Papanikos**  
**President**

## **Editors' Note**

These abstracts provide a vital means to the dissemination of scholarly inquiry in the field of Nursing. The breadth and depth of research approaches and topics represented in this book underscores the diversity of the conference.

Athens Institute's mission is to bring together academics from all corners of the world in order to engage with each other, brainstorm, exchange ideas, be inspired by one another, and once they are back in their institutions and countries to implement what they have acquired. The 12th Annual International Conference on Nursing accomplished this goal by bringing together academics and scholars from 19 different countries (Albania, Canada, China, Bulgaria, Denmark, Finland, Germany, Jordan, Kosovo, Libya, Macau, Norway, Saudi Arabia, Singapore, Spain, Sri Lanka, Switzerland, Türkiye, USA), which brought in the conference the perspectives of many different country approaches and realities in the field.

Publishing this book can help that spirit of engaged scholarship continue into the future. With our joint efforts, the next editions of this conference will be even better. We hope that this abstract book as a whole will be both of interest and of value to the reading audience.

**Ingrid Brenner & Olga Gkounta**  
**Editors**

**12<sup>th</sup> Annual International Conference on Nursing, 4-9 May  
2026, Athens, Greece**

**Organizing & Scientific Committee**

All Athens Institute's conferences are organized by the Academic Council. This conference has been organized with the assistance of the following academic members of Athens Institute.

1. Dr. Gregory T. Papanikos, President, Athens Institute.
2. Dr. George Zahariadis, Director, Health & Medical Sciences Division, Athens Institute & Associate Professor, Faculty of Medicine, Memorial University of Newfoundland, Canada.
3. Dr. Ingrid Brenner, Deputy Director, Health & Medical Sciences Division, Athens Institute & Associate Professor Trent University Canada.
4. Dr. Adel Zeglam, Deputy Director, Health & Medical Sciences Division, Athens Institute and Consultant Neurodevelopment Pediatrician & Professor of Pediatric and Child Health, Tripoli University Hospital & Faculty of Medicine Tripoli University, Libya.
5. Dr. Carol Anne Chamley, Head, Nursing Unit & Associate Professor, School of Health and Social Care, London South Bank University UK.

# FINAL CONFERENCE PROGRAM

12<sup>th</sup> Annual International Conference on Nursing,  
4-9 May 2026, Athens, Greece

## PROGRAM

Monday 4 May 2026

08:30-09:15

Registration

09:15-10:00 Opening Speech and Welcoming Remarks

Speaker: **Gregory T. Papanikos**, President, Athens Institute & Professor (Adjunct), University of Tennessee, Knoxville, USA.

10:00-11:30 Session 1

Moderator : **Ingrid Brenner**, Deputy Director, Health & Medical Sciences Division, Athens Institute & Associate Professor, Trent University, Canada.

1. **Rick Vanderlee**, Full Professor, Nipissing University, Canada.  
**Emma Vanderlee**, PhD Candidate, Queen's University, Canada.  
*Title: Curriculum Making in Nursing Education: Finding Safe Places for Reflection on a Shifting Professional Knowledge Landscape.*
2. **Najla Alharbi**, Head Nurse, King Abdullah Medical Complex-Jeddah, Saudi Arabia.  
*Title: Nurses Attitude Regarding the Effects of Utilizing Technology in Patient Care Practices in Critical Care Units.*
3. **Erika Powell**, Health Director, Under One Sky Friendship Centre and PhD Candidate, University of New Brunswick, Canada.  
*Title: Co-Creating Culturally Safe Prenatal Care for Urban Indigenous Families: A Community-Led, Two-Eyed Seeing Model with Embedded Evaluation.*
4. **Mari Salminen-Tuomaala**, Principal Lecturer, Seinäjoki University of Applied Sciences, Finland.  
*Title: Learning Telenursing Online Using Simulations-Advanced Practice Nursing Students' Experiences.*

11:30-13:30 Session 2

Moderator: **Erika Powell**, Health Director, Under One Sky Friendship Centre and PhD Candidate, University of New Brunswick, Canada.

1. **Ingrid Brenner**, Associate Professor, Trent University, Canada.  
*Title: What Happened to "Primum Non Nocere"? Care Following Sepsis Gone Wrong.*
2. **Teodora Duarte-Quilao**, Professor, Webster Geneva Campus, Switzerland.  
*Title: Feeling Isolated: A Parsesciencing Inquiry.*
3. **Selda Ildan Calim**, Associate Professor, Manisa Celal Bayar University, Türkiye.  
*Title: Development and Preliminary Evaluation of a Simulation Model for the Neonatal Resuscitation Program (NRP).*
4. **Mi Jin Doe**, Clinical Associate Professor, Binghamton University, USA.  
*Title: A Parsesciencing Inquiry on Feeling Comfortable.*
5. **Marie Giordano**, Associate Professor Emerita, College of Staten Island – CUNY, USA.  
*Title: Social Media and Burns: A Staged Informational Program for Burn Care Specialists to Support Safe and Effective Use for Burn Patients.*

13:30-14:30 Session 3 - A Symposium on "Universities at a Crossroads: Challenges and Opportunities I"

Moderator: **Gregory T. Papanikos**, President, Athens Institute & Professor (Adjunct), University of Tennessee, Knoxville, USA.

**Speakers:**

1. **Gary Comstock**, Alumni Association Distinguished Undergraduate Professor of Philosophy, North Carolina State University, USA.  
*Title: Teaching Americans to Think: One \$4 Million Bet on Civil Discourse.*
2. **Ingrid Brenner**, Associate Professor, Trent University, Canada.  
*Title: The Effect on Budget Cuts on Education.*
3. **Athena Elafros**, Associate Professor, University of Lethbridge, Canada.  
*Title: Disability at a Crossroads: Access in the University.*
4. **Claudia Mitzeliotis**, Professor, Mercy University, USA.  
*Title: Designing A Psychiatric Nurse Practitioner Master's Degree Program.*
5. **Teodora Duarte-Quilao**, Professor, Webster Geneva Campus, Switzerland.  
*Title: Unfolding the Ongoing and Unending Journey of Knowing and Beyond.*

**Interventions:**

1. **Palle Larsen**, Senior Researcher, UCL University College, Denmark.

**14:30-15:30 Lunch**

**15:30-17:30 Session 4**

**Moderator: Mahmut Kubilay Akman**, Professor, Uşak University, Türkiye.

1. **Claudia Mitzeliotis**, Professor, Mercy University, USA.  
*Title: Evaluating the Effectiveness of Multiple Family Group Therapy in Reducing Stress among Families Coping with Autism.*
2. **Adel Zeglam**, Consultant Neurodevelopment Paediatrician and Professor, University of Tripoli, Tripoli University Hospital, Libya.  
**Najah Wahra**, Pharmacist, Primary Health Care Center, Tripoli, Libya.  
*Title: The Physician's Obligations in the Performance of His Work. A Keyhole Look at the Libyan Law on Medical Liability.*
3. **Jason Hickey**, Associate Professor, University of New Brunswick, Canada.  
**Morgan Greer**, Under One Sky Friendship Center, Canada.  
*Title: The Sakələməlsowakən Family Wellness Program: An Indigenous-Led Model of Holistic Nursing and Community Care.*
4. **Athena Elafros**, Associate Professor, University of Lethbridge, Canada.  
*Title: Epilepsy as Method.*
5. **Palle Larsen**, Senior Researcher, UCL University College, Denmark.  
**Title: Sustainable Leadership and the Food Waste Paradox in Danish Nursing Homes: Balancing Ideals, Institutional Structures, and Everyday Practice.**
6. **Elias Papadopoulos**, Medical Student, Temple University, USA.  
**Simon Kanis**, Graduate Student, Georgia Institute of Technology, USA.  
*Title: Attuning a Faster R-CNN Machine Learning Model for Breast Tumor Ultrasound Imaging.*

**18:00-20:00 Session 5 - Visit Aristotle's Lyceum**

**It requires pre-booking**

**20:30-22:30 Athenian Early Evening Symposium** (Sequence of Events: Ongoing Academic Discussions, Dinner, Wine and Water, Music, Dance)

**Tuesday 5 May 2026**

**09:00-10:30 Session 6 – A Symposium on Ethics**

**Moderator: Morgan Greer**, Under One Sky Friendship Center, Canada.

1. **Edwin-Nikko Kabigting**, Associate Professor, Adelphi University, USA.  
**Teodora Duarte-Quilao**, Professor, Webster Geneva Campus, Switzerland.  
**Mi Jin Doe**, Clinical Associate Professor, Binghamton University, USA.  
*Title: A Humanbecoming Perspective on Dignity.*
2. **Gary Comstock**, Alumni Association Distinguished Undergraduate Professor, North Carolina State University, USA.  
*Title: Critical Thinking and Civil Discourse in Democratic Cultures: ThinkArguments, an Answer to the Challenge of Scaling an Online Course for Non-Students.*
3. **David Matas**, Lawyer & International Advisory Board Member, International Coalition to End Transplant Abuse in China, Canada.  
*Title: Professional Ethical Standards Addressing Organ Transplant Abuse Abroad.*
4. **Aseel Al Rashdan**, Associate Professor, Jerash University, Jordan.  
*Title: Social Diversity and Human Social Diversity in the Workplace: A Pathway to Innovation and Institutional Justice.*

**10:30-12:15 Session 7**

**Moderator: Parisa Gazerani**, Head, Pharmaceutical Unit, Athens Institute & Professor, Department of Life Sciences and Health, Oslo Metropolitan University, Norway.

1. **Hadil Alotaibi**, Associate Professor, Princess Nourah Bint Abdulrahman University, Saudi Arabia.  
*Title: Nanoparticle-Enabled Layer-by-Layer Drug-Releasing Coatings to Prevent Aseptic Loosening in Uncemented Prostheses.*
2. **Hanbin Lin**, Professor, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, China.  
**Huijuan Zhang**, Professor, Zhongshan Institute for Drug Discovery, China.  
**Na Xing**, Professor, Zhongshan Institute for Drug Discovery, China.  
**Juanyuan Huang**, Professor, Macau University of Science and Technology, Macau.  
*Title: The Protective Effect of XZL22 against Pathological Cardiac Hypertrophy and Its Underlying Mechanism.*
3. **Fernando Mihindukulasuriya Rohan**, Director of the Molecular Diagnostic Research Laboratory, Boys Town National Research Hospital, USA.  
**Wesley Tom**, Senior Research Associate, Boys Town National Research Hospital, USA.  
**Nirmalee Fernando**, Research Technician, Boys Town National Research Hospital, USA.  
**Jayantha Gunaratne**, Professor, Institute of Molecular and Cell Biology (IMCB), Agency for Science, Technology and Research (ASTAR), Singapore.  
**Nishantha Nanayakkara**, Consultant Nephrologist, National Hospital, Kandy, Sri Lanka.  
*Title: Genetic Analysis by Whole Exome Sequencing of Chronic Kidney Disease of Uncertain Etiology: A Cross-Sectional Study from Sri Lanka.*

**12:15-14:00 Session 8**

**Moderator: Palle Larsen**, Senior Researcher, UCL University College, Denmark.

1. **Parisa Gazerani**, Professor, Oslo Metropolitan University, Norway.  
**Hadis Nejati**, MSc, Pharmacist, Norway.  
*Title: ABO Blood Groups in Disease Risk and Pharmacotherapy.*
2. **Sezgin Gunes**, Professor, Ondokuz Mayıs University, Türkiye.  
**Cansu Can**, PhD Student, Ondokuz Mayıs University, Türkiye.  
**Murat Polat**, Assistant Professor, Ondokuz Mayıs University, Türkiye.  
**Hilal Ay**, Associate Professor, Ondokuz Mayıs University, Türkiye

<p><i>Title: Salivary Microbiota Composition in Parkinson's Disease: A Pilot Study Using Nanopore Full-Length 16S rRNA Sequencing.</i></p> <p>3. <b>Valentina Mincheva</b>, Head, Department of Cardiology, National Multi-profile Transport Hospital Tsar Boris III, Bulgaria. <b>Nikolina Koleva</b>, Associate Professor, National Multi-profile Transport Hospital Tsar Boris III, Bulgaria. <b>Ivan Gruev</b>, Professor, National Multi-profile Transport Hospital Tsar Boris III, Bulgaria. <i>Title: The Role of Epicardial Adipose Tissue in the Development of Heart Failure with Preserved Ejection Fraction.</i></p> <p>4. <b>Teuta Osmani Villasolli</b>, Associate Professor, University of Prishtina "Hasan Prishtina", Kosovo. <i>Title: Pharmacological Modulation of Neuropathic Pain with Adjunctive Graded Motor Imagery in Upper-Limb Complex Regional Pain Syndrome.</i></p> <p>5. <b>Marsida Duli</b>, Associate Professor, University of Medicine Tirana Albania. <b>Qamil Dika</b>, Lecturer, University of Medicine Tirana Albania. <i>Title: Hypertension in Young Age, Hypercalciuria and Renal Cysts as Initial Manifestations of Multiple Endocrine Neoplasia Type 1 (MEN1): Case Report.</i></p>
<p><b>14:00-15:00 Session 9 – A Symposium on “Universities at a Crossroads: Challenges and Opportunities II”</b> <b>Moderator: Claudia Mitzeliotis</b>, Professor, Mercy University, USA.</p>
<p><b>Speakers:</b></p> <p>1. <b>Parisa Gazerani</b>, Professor, Oslo Metropolitan University, Norway. <i>Title: Rethinking Universities in an Era of Complexity.</i></p> <p>2. <b>Palle Larsen</b>, Senior Researcher, UCL University College, Denmark. <i>Title: Navigating Complexity: Challenges and Opportunities for Universities in an AI-Driven Era.</i></p> <p>3. <b>Jose Manuel Castillo Lopez</b>, Full Professor, University of Granada, Spain. <i>Title: The Challenge that Artificial Intelligence Poses to Traditional Research and Teaching Objectives and Methods. The Perspective of Fraud.</i></p>
<p><b>Interventions:</b></p> <p>1. <b>Hans Rudolf Pfaendler</b>, Professor Ludwig-Maximilians University, Germany.</p>
<p><b>15:00-16:00 Lunch</b></p>
<p><b>16:30-19:30 Session 10</b> <b>Old and New-An Educational Urban Walk</b></p>
<p>The urban walk ticket is not included as part of your registration fee. It includes transportation costs and the cost to enter the Parthenon and the other monuments on the Acropolis Hill. The urban walk tour includes the broader area of Athens. Among other sites, it includes: Zappion, Syntagma Square, Temple of Olympian Zeus, Ancient Roman Agora and on Acropolis Hill: the Propylaea, the Temple of Athena Nike, the Erechtheion, and the Parthenon. The program of the tour may be adjusted, if there is a need beyond our control. This is a private event organized by the Athens Institute exclusively for the conference participants.</p>
<p><b>20:30-22:30</b> <b><u>An Ancient Athenian Symposium: Continuous Dialogues, Timeless Flavors</u> (featuring authentic ancient Athenian dishes, local wine, and sweet delicacies from ancient Athens)</b></p>

**Wednesday 6 May 2026**  
**An Educational Visit to Selected Islands**  
**or Nafplio & Mycenae Visit**

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**Thursday 7 May 2026**  
**Visiting the Oracle of Delphi**

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**Friday 8 May 2026**  
**Visiting the Ancient Corinth and Cape Sounion**

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**Saturday 9 May 2026**  
**11:00-13:00 - The Academic Discussion continues in the downtown open agora (close to the**  
**Aristotelian Lyceum)**

**Aseel Al Rashdan**

Associate Professor, Jerash University, Jordan

## **Social Diversity and Human Social Diversity in the Workplace: A Pathway to Innovation and Institutional Justice**

Social diversity in the workplace has become one of the most prominent modern trends adopted by forward-looking institutions seeking excellence and development. This study explores the concept of social diversity from a comprehensive perspective, encompassing differences among employees in terms of gender, age, culture, religion, physical and mental abilities, and socioeconomic backgrounds.

The study highlights the importance of diversity in fostering organizational creativity, promoting fairness and equity, and increasing efficiency and productivity. It also addresses the challenges associated with managing diversity, such as cultural biases and communication barriers, and proposes practical mechanisms to overcome them, including inclusive policies, staff training, and cultivating a respectful and open work environment.

The study concludes that achieving social diversity is not only an ethical and humanitarian imperative but also a fundamental pillar of institutional success and sustainability in an era of competitiveness and innovation.

### *Objectives*

- To define social diversity and its key dimensions in the workplace.
- To highlight the benefits of diversity on innovation and institutional justice.
- To identify challenges related to managing diverse workforces.
- To propose effective strategies for promoting inclusion and equity.
- To offer practical recommendations for building diverse and sustainable work environments.

### *Methodology*

This paper adopts a qualitative, descriptive-analytical approach. It relies on a review of existing literature, legal frameworks, and organizational reports related to social diversity in the workplace. Relevant case studies and international best practices are examined to assess the practical implications of diversity policies. The study also

analyzes challenges and strategies using a comparative perspective,  
drawing insights from various organizational and cultural contexts.

**Najla Alharbi**

Head Nurse, King Abdullah Medical Complex-Jeddah, Saudi Arabia

**Nurses Attitude Regarding the Effects of Utilizing  
Technology in Patient Care Practices in Critical Care Units**

Background: Nurses work in more technologically advanced environment, with a variety of medical technologies supporting healthcare delivery. It is important to know nurses' attitude towards using technology in critical care units to improve their practice. There have been no published studies in Saudi Arabia that have investigated the nurses' attitude toward the effects of utilizing technology in critical care units on nursing practice.

Purpose: This study aimed is to assess the nurse's attitude regarding the effects of utilizing technology in nursing care practice among critical care nurses.

Method: Quantitative descriptive research design was utilized in this study and recruited a total number of 120 nurses working in the Critical Care Units using convenience sampling technique. The Influences of Technology Questionnaire (ITQ) tool was used in the study.

Result: The result of the study showed there is no significant differences in the demographic data (age, gender, length of experiences, educational level, and working area) except the nationality the researcher found there is significant differences with score .001. There is significant different between the nationality of the respondents and their Attitude regarding the effect of utilizing technology in patient care practice in critical care nurses.

Conclusion: Further studies need to be done to understand both nurses' attitudes and the factors that contribute to these attitudes. To guide effective implementation and safe device usage in an increasingly technologically rich care environment, while still acknowledging nurses' professional identity and the need of compassionate patient care.

**Hadil Alotaibi**

Associate Professor, Princess Nourah Bint Abdulrahman University,  
Saudi Arabia

**Nanoparticle-Enabled Layer-by-Layer Drug-Releasing  
Coatings to Prevent Aseptic Loosening in Uncemented  
Prostheses**

**Introduction:** Aseptic loosening remains a leading cause of failure in uncemented prostheses and currently requires revision surgery as the only definitive treatment. Preventive strategies based on local delivery of anti-inflammatory agents from implant surfaces are promising; however, existing coating systems still show limited performance and require further optimization.

**Methods:** Titanium nanoparticles were used as a model for implant surfaces to develop a dexamethasone (DEX)-loaded coating fabricated through layer-by-layer (LbL) assembly. Drug loading and release behavior were characterized as a function of layer number. The biological activity of released DEX was evaluated by measuring inflammatory markers in human monocytes and macrophages, along with cytocompatibility assessments.

**Results:** DEX loading increased proportionally with the number of deposited layers, and the coating provided sustained drug release over several months. Released DEX significantly reduced pro-inflammatory cytokines (tumor necrosis factor- $\alpha$  and interleukin-6) in monocytes and macrophages, with anti-inflammatory efficacy comparable to that of free DEX at equivalent concentrations. No adverse effects on cell viability or morphology were observed. Furthermore, the coated surfaces were not inferior to medical-grade titanium in supporting osteoblast and fibroblast growth.

**Conclusion:** LbL-assembled DEX-loaded coatings on titanium nanoparticle model surfaces demonstrated sustained anti-inflammatory drug release, preserved cytocompatibility, and effective modulation of inflammatory responses. This platform represents a promising preventive strategy for reducing aseptic loosening in uncemented prosthetic implants.

**Ingrid Brenner**

Associate Professor, Trent University, Canada

## **What Happened to "*Primum Non Nocere*"? Care Following Sepsis Gone Wrong**

This paper explores a case study of a 94-year-old woman who presented to the emergency department with severe sepsis due to perforated diverticulitis. Sepsis is a life-threatening condition that occurs in response to an infection. When recognized and treated early, the outcome can be positive with full recovery. However, late recognition and mismanagement of the treatment of sepsis can lead to multi-organ system failure and death. There are a variety of infections that commonly induce sepsis including urinary tract infection, abscesses and even diverticulitis. Previous health history of this patient included hypertension, diabetes and heart failure. The patient in this case study was managed properly with antibiotics and fluid administration to initially treat and resolve her sepsis. What happened next was unimaginable. A cascade of events occurred over 13 months while in hospital including fluid overload, a pneumothorax, instrumental pneumonia, intubation with an eventual tracheostomy, cardiac arrest and resuscitation, a lacunar stroke, development of shingles, acquisition of *C-Difficile* infection, anemia, dehydration, an ileus, a sacral pressure sore with osteomyelitis of the coccyx and an intra-abdominal abscess that re-induced sepsis once again leading to multi-organ failure and death. Although, many of these conditions were either iatrogenic diseases or nosocomial infections, nurses played a pivotal role in the sequela of these events. "*Primum non nocere*" means "first, do no harm". As nurses, we have an obligation to "do no harm" and promote health and recovery. This paper/presentation will review the sequelae of events in this case study and aim to address the following questions: how can we recognize sepsis early? How can we minimize and prevent adverse consequences from happening during recovery in hospital from sepsis? What can we learn from this case study and lastly, what role do family members have in the care of the patient? Hopefully, by answering these questions it can be demonstrated that nurses can play an integral role in improving health care and reducing adverse events associated with sepsis.

**Gary Comstock**

Alumni Association Distinguished Undergraduate Professor, North  
Carolina State University, USA

**Critical Thinking and Civil Discourse in Democratic Cultures:  
ThinkArguments, an Answer to the Challenge of Scaling an  
Online Course for Non-Students**

A universal feature of cultures upholding human rights is respect for critical thinking and civil discourse. Here, I describe a quasi-randomized controlled experiment at North Carolina State University testing the effectiveness at scale of ThinkArguments, a low-cost online course designed to teach mass audiences these essential democratic practices.

While the protection of human rights and democracy requires critical thinking, 49% of university graduates lack proficiency in this area. This session will introduce thinkARGUMENTS, a low-cost, evidence-based online course designed to close this gap, and describe an experiment at NC State University to test its effectiveness. Preliminary results will be presented showing the course improves critical thinking test scores by nearly a full letter grade. Gains reached 16% when followed by a face-to-face course.

Participants will experience a short thinkARGUMENTS exercise, explore national data on critical thinking readiness, and discuss strategies for integrating scalable, high-impact interventions into their own programs. Takeaways include: a proven instructional model, ready-to-use exercises for teaching argument analysis, and a framework for combining online and in-person instruction to maximize student learning gains.

First-year students taking the \$25 course in a large (n=250 students) classroom improved their critical thinking test scores by almost a full letter grade. Critical thinking among NC State Honors students:

Percentage change from beginning to end of first year

No intervention - 2

Intervention 1 thinkARGUMENTS + 6

Intervention 2 thinkARGUMENTS + one face-to-face course +16

These are significant effects in an area in which it is hard to move the needle.

The session will be interactive, designed to engage participants in analyzing both the problem of underdeveloped critical thinking (CT) skills, the challenge of delivering CT instruction at scale, and the effectiveness of the thinkARGUMENTS intervention. By the end of this

session, participants will be able to:

1. Describe the worldwide gap in critical thinking proficiency among university graduates and its implications for career readiness.
2. Analyze preliminary evidence showing the effectiveness of the thinkARGUMENTS online intervention in improving students' critical thinking skills.
3. Evaluate the benefits of combining online and face-to-face instructional approaches to achieve significant learning gains in large classrooms using an online, low-cost, course.
4. Identify practical, scalable strategies they can adapt to strengthen critical thinking instruction in their own courses and institutions.

Participants will leave with:

- A proven, scalable model showing how a \$25 online intervention can significantly improve first-year students' critical thinking skills, even in large classes.
- Sample thinkARGUMENTS exercises—short, high-impact activities for analyzing and constructing arguments, ready to adapt for immediate classroom use.
- An implementation framework for blending online modules with face-to-face instruction to achieve measurable gains (between 6% and 16%) in critical thinking proficiency across diverse learning environments.

**Mi Jin Doe**

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## **A Parsesciencing Inquiry on Feeling Comfortable**

As a universal humanuniverse living experience, feeling comfortable is deeply related to living quality, creating unique and everchanging meaning for the individual. The purpose of this inquiry was to discover the discerning extant moment of the universal humanuniverse living experience of feeling comfortable. The horizon of inquiry was the humanbecoming paradigm and the mode of inquiry was Parsesciencing. The historians were 10 individuals who were 18 years of age and older, living in the community. The discerning extant moment of the universal humanuniverse living experience of feeling comfortable, the major discovery of this Parsesciencing inquiry, was: *Feeling comfortable is gratifying tranquility amid possible distress arising with varied involvements in moving with sureness-unsureness.* The unique insight of feeling comfortable emerging with Parsesciencing will contribute to understanding the universal humanuniverse living experience of feeling comfortable and the humanbecoming paradigm, ultimately expanding nursing knowledge.

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## **Feeling Isolated: A Parsesciencing Inquiry**

Background: Feeling isolated, as investigated in this paper was considered as a universal humanuniverse living experience. In all areas of life, individuals may experience being rejected, misunderstood, and excluded making them feel isolated and alone. However, several research studies from diverse disciplines have undeniably talked more of isolation, with little enunciation on the living experience of individuals, inspiring the scholar to investigate further on the universal humanuniverse living experience of feeling isolated. The significance of this inquiry is that it sheds light and offers new insights on how individuals are living with feeling isolated. This investigation aimed to discover the *discerning extant moment of the living experience of feeling isolated in light of the humanbecoming paradigm*.

Methods: Feeling isolated was investigated with Humanbecoming Parsesciencing mode of inquiry: a) *Dialoguing-engaging* is inviting the historian to engage in an unstructured dialogue with the investigator about the experience of feeling isolated, b) *Distilling-fusing* is capturing stories of central ideas from the historian's dialogue, creating essences in the historian's and investigator's languages, and fusing all the essences as the language art for each historian, and c) *Heuristic Interpreting* is moving the discovered discerning extant moment to higher core levels of abstraction of the humanbecoming paradigm. Historians were 10 English-speaking adults between 18 and 65 years old who were invited to share their experiences of feeling isolated in a dialogue with the investigator.

Results: This investigation of the universal humanuniverse living experience of feeling isolated revealed the discerning extant moment: *Feeling isolated is disheartening seclusion amid reassuring trust, as varied affiliations surfaces with pursuing new endeavors*.

Conclusions: Discoveries and emergent knowings arising with the humanbecoming mode of inquiry add novel conceptualizations and advancement in the growing knowledge of the universal humanuniverse living experiences and contribute to advancing and expanding disciplinary knowledge in nursing, more specifically in nursing science with profound understanding about the phenomena investigated. This Parsesciencing inquiry contributes to better comprehension of the universal humanuniverse living experience of feeling isolated guided by the humanbecoming paradigm.

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**Hypertension in Young Age, Hypercalciuria and Renal Cysts as Initial Manifestations of Multiple Endocrine Neoplasia Type 1 (MEN1): Case Report**

Background: Hypertension in young ages always requires evaluation for secondary causes. Multiple Endocrine Neoplasia type 1 (MEN1) is an autosomal dominant disorder characterized by tumors of the parathyroid glands, endocrine pancreas, and pituitary gland. The most common and often earliest manifestation is primary hyperparathyroidism, which may be associated with hypercalciuria and renal complications.

Case presentation: We present the case of a 26-year-old patient who was referred for evaluation of newly diagnosed arterial hypertension. Laboratory and imaging examinations revealed hypercalciuria and the presence of small cortical cysts in the kidneys. Further biochemical investigations showed persistent hypercalcemia with elevated parathyroid hormone (PTH) levels, suggesting primary hyperparathyroidism. Given the patient's young age and systemic manifestations, evaluation for hereditary endocrine syndromes was expanded. Additional examinations and genetic testing confirmed the diagnosis of MEN1.

Discussion: In MEN1, primary hyperparathyroidism occurs in over 90% of patients and is often the first clinical manifestation. Hypercalcemia and hypercalciuria can lead to renal changes, including nephrolithiasis, nephrocalcinosis, or renal cyst formation. In addition, calcium metabolic disorders can contribute to the development or worsening of arterial hypertension.

Conclusion: This case highlights the importance of investigating secondary causes of hypertension in young patients, especially when associated with calcium metabolism disorders and renal changes. Early recognition of MEN1 is essential for the diagnosis and monitoring of other tumors associated with this syndrome, as well as for genetic counseling of at-risk family members.

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## **Epilepsy as Method**

What would it look like to conduct oral histories by, for, and with epileptics in ways that center the experiences of people with epilepsy? This is the question that our six-member research collective of epileptics and academics has sought to answer. To answer this question, we reflect upon our experiences working as a disabled collective and drawing upon “disability as method” scholarship (Schalk, 2017; Mills & Sanchez, 2023) in our working practices. In line with Schalk (2017, para 1) we “understand critical disability studies as a method, an approach, a theoretical framework and perspective—not (exclusively) a study of disabled people.” In this paper, we reflect upon the practices we have adopted since we began meeting as a research circle in October 2024 for our research project *Seizures Unscripted: Oral Histories of Epilepsy in Canada and the United States*. We reflect upon how epilepsy as method is rooted in crip spacetime (Price, 2024), is collective and tentative, accessible, tenacious, and relational. We conclude by noting that epileptic experiences and knowledge have much to offer these important conversations of “disability as method.”

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**Genetic Analysis by Whole Exome Sequencing of Chronic  
Kidney Disease of Uncertain Etiology: A Cross-Sectional  
Study from Sri Lanka**

Background: Chronic kidney disease (CKD) is a growing global health challenge and currently the seventh leading risk factor for mortality. Over recent decades, a distinct form of chronic kidney disease of unknown etiology (CKDu) has emerged in tropical and subtropical regions, notably in Sri Lanka. Unlike traditional CKD, CKDu occurs in the absence of diabetes or hypertension and is pathologically defined by tubulointerstitial injury, tubular atrophy, interstitial inflammation, and progressive fibrosis. In Sri Lanka, CKDu exhibits focal geographic clustering, with a 15–20% prevalence among adults aged 30–60 years in the North Central Province and adjacent areas. While familial aggregation has been observed, genetic investigations remain limited compared with extensive environmental studies. This study aimed to identify genetic variants associated with CKDu in affected individuals from Sri Lanka's North Central Region using whole-exome sequencing (WES).

Methods: Ethical approval was obtained from the Institutional Review Board of the Boys Town National Research Hospital, Omaha, USA (IRB #22-13-F) and the Ethical Review Committee of the National Hospital, Kandy, Sri Lanka. Written informed consent was obtained from all participants. The cohort comprised 86 individuals (53 males, 33 females): 47 CKDu patients and 39 controls (27 from endemic and 12 from non-endemic regions). Clinical assessments included blood pressure, random blood glucose, and serum creatinine measurement.

Genomic DNA was extracted from peripheral blood, and WES was performed for all participants. Quality control and variant calling were conducted using the Senteion DNAScope pipeline (Senteion Inc., San Jose, CA). Variant annotation and interpretation followed ACMG guidelines in VarSeq v2.6.2 (Golden Helix Inc., Bozeman, MT), and phenotypic associations were assessed using the PhoRank algorithm based on Human Phenotype Ontology (HPO) terms.

Results: WES identified 171 unique variants across 121 genes. Analysis of variant prevalence revealed multiple genes associated with CKD onset. The most frequently affected genes included ATXN3, LFNG, PNLDC1, LINCO2456, HLA-DRB1, FIP1L1, RBMX, HTT, PSPH, KMT2C, FZD2, PLPP5, PROKR2, SOS1, and SMAD3. Variants in these genes were classified as pathogenic or likely pathogenic and exhibited predicted associations with chronic kidney disease, tubulointerstitial fibrosis, nephritis, and renal insufficiency (PhoRank  $\geq 0.48$ ). ATXN3 variants were the most prevalent overall, while LFNG and PNLDC1 variants were more frequent among CKDu patients. Multiple pathogenic or likely pathogenic variants were observed in many individuals, particularly among those affected by CKDu, indicating potential polygenic contributions to disease susceptibility.

Conclusions: This study identifies a set of genetic variants potentially contributing to CKDu susceptibility in Sri Lankan populations. These findings support a multifactorial disease model involving both genetic predisposition and environmental exposures unique to CKDu-endemic regions. The identified genes, several of which are linked to renal function and fibrotic pathways, represent promising targets for further investigation. Integrating genomic, environmental, and epidemiological approaches will be critical to elucidate CKDu pathogenesis and inform future diagnostic and preventive strategies.

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&

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## **ABO Blood Groups in Disease Risk and Pharmacotherapy**

**Introduction:** The ABO blood group system, historically central to transfusion and transplantation, is among the most widely studied human genetic polymorphisms. Beyond its established relevance in immunohematology, emerging research suggests that ABO blood groups may exert broader influences on human health by modulating susceptibility to chronic and infectious diseases, as well as interindividual variability in therapeutic response. Epidemiological studies have linked non-O blood groups to prothrombotic states, altered lipid metabolism, and immune system differences, while group O has been associated with reduced cardiovascular risk but increased bleeding tendency. These associations have raised interest in ABO typing as a simple, cost-effective biomarker with potential applications in disease risk stratification and personalized pharmacotherapy.

**Aim:** This systematic review aimed to comprehensively evaluate current evidence on the association between ABO blood groups, disease risk, and the efficacy and safety of pharmacological treatments. By synthesizing data across diverse disease categories and drug classes, the study sought to identify consistent patterns, highlight gaps in knowledge, and assess the feasibility of integrating blood type into personalized medicine strategies.

**Methods:** The review was conducted in accordance with PRISMA 2020 guidelines, with a protocol registered in PROSPERO to ensure transparency. A comprehensive search of major biomedical databases retrieved studies published up to 2024 that examined ABO blood groups in relation to disease outcomes or drug responses. Screening, eligibility assessment, and quality appraisal were performed independently by reviewers using the National Heart, Lung, and Blood Institute (NHLBI) quality assessment tool. Studies of varying design, including observational cohorts, case-control studies, and interventional trials, were included, and results were synthesized narratively due to heterogeneity in study design and outcome measures.

**Results:** The search yielded 1,173 records, of which 95 studies met the inclusion criteria following full-text review and quality assessment. Consistent epidemiological trends emerged across disease categories.

Individuals with blood group O generally showed a lower risk of cardiovascular disease, type 2 diabetes, and COVID-19, whereas non-O groups, particularly A and AB, were associated with elevated susceptibility to these conditions. Blood group A was also more frequently linked with thrombotic complications and certain cancers, while group B was associated with variable risk patterns across different populations.

Pharmacological outcomes demonstrated similarly intriguing associations. Several studies indicated that individuals with blood group O exhibited enhanced anticoagulant responses to warfarin, with implications for dosing and bleeding risk management. Reports on analgesic response suggested possible differences in opioid efficacy, although findings were inconsistent and often underpowered. Evidence regarding cancer therapeutics was heterogeneous, with some studies pointing to variable efficacy or toxicity profiles by ABO type but lacking replication in larger cohorts.

**Conclusion:** This systematic review supports the hypothesis that the ABO blood group may represent an accessible biomarker with potential relevance for both disease risk assessment and pharmacotherapy optimization. While recurring patterns suggest biological plausibility, the current body of evidence remains heterogeneous, with limitations in methodological quality, control of confounders, and consistency across populations. Future large-scale, longitudinal, and mechanistic studies are warranted to validate these associations and to clarify the underlying pathways linking ABO status with health outcomes. Ultimately, integration of blood group information into clinical decision-making could contribute to more precise prevention strategies and individualized treatment regimens within the framework of personalized medicine.

**Marie Giordano**

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## **Social Media and Burns: A Staged Informational Program for Burn Care Specialists to Support Safe and Effective Use for Burn Patients**

**Introduction:** Social Media has become a widely used platform for communication and knowledge acquisition. However, along with the beneficial aspects to those who are burned or experienced trauma, are concerns that exist as well.

**Methods:** A phenomenological study was conducted describing the meaning of social media for young adult burn survivors. Five essential themes were illuminated as: identity, connectivity, social support, privacy, and making meaning.

**Results:** An evidenced based program has been designed to enlighten and educate the burn team to effectively disseminate the pros and cons of using social media to facilitate the healing process, while addressing safety and privacy concerns.

Using a staged approach, identified concepts are introduced at appropriate times during hospitalization. Based on assessed need during the acute, convalescent and discharge phases of hospitalization, interventions related to use of social media are addressed, complementing traditional care.

An accompanying booklet entitled, "Using Social Media to Help Connect, Gain Support, and Inspire: An informational guide for burn survivors" was developed to accompany this program. It was designed to distribute during the discharge phase. It was validated by burn care experts and social media experts, earning an overall CVI of 3.9 /4. The readability level was established at 5.324.

**Conclusions:** Current trends in use of technology in health care and promotion indicate the importance of including safe and effective use of social media as part of the plan of care for burn patients. This program addresses ways to accomplish this.

**Applicability of Research to Practice:** Nurses and the burn team can participate in helping burn survivors tell their stories, and consider ways that assist them to self-identify and connect to others, using social media as a vehicle. Social media can supplement face to face connections and provide additional means for burn survivors to connect as they transition to a new normal.

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**Salivary Microbiota Composition in Parkinson's Disease:  
A Pilot Study Using Nanopore Full-Length 16S rRNA  
Sequencing**

Background: Parkinson's disease (PD) has been associated with microbial alterations along the gut-brain axis, and recent studies have extended this investigation to the oral cavity. As the gateway to the gastrointestinal tract, the oral cavity harbors bacteria that can translocate to the gut and potentially contribute to systemic inflammation and neurodegeneration. However, most oral microbiome studies in PD have employed short-read 16S sequencing, which often limits taxonomic classification to the genus level. In this pilot study, we aimed to characterize the salivary microbiota of PD patients at species-level resolution using full-length 16S nanopore sequencing.

Methods: Unstimulated saliva samples were collected from 19 PD patients and 19 controls. Full-length 16S rRNA amplicons were sequenced on the Oxford Nanopore platform and classified using the EMU algorithm against the Human Oral Microbiome Database. Alpha diversity was assessed using Chao1, Shannon, Fisher, and Inverse Simpson indices, and beta diversity using both Aitchison and Bray-Curtis distances with PERMANOVA, adjusting for age and sex as covariates. Differential abundance was evaluated using four methods (LEfSe, MaAsLin2, ANCOM-BC and ANOVA), retaining only consensus taxa.

Results: No significant differences in alpha diversity were observed between PD and control groups ( $p > 0.05$ ). Beta diversity analysis revealed a significant compositional difference between groups after adjusting for age and sex (Aitchison:  $R^2 = 0.041$ ,  $p = 0.037$ ; Bray-Curtis:  $R^2 = 0.062$ ,  $p = 0.019$ ), while neither age nor sex showed a significant effect. Six species were consistently less abundant in PD patients: *Prevotella melaninogenica*, *Peptostreptococcus stomatis*, *Lachnoanaerobaculum gingivalis*, *Hoylella nanceiensis*, *Corynebacterium durum*, and *Catonella*

*morbi*. Two species, *Streptococcus mutans* and *Veillonella sp.* HMT-917, were more abundant in the PD group.

Conclusion: These findings suggest a compositional shift in the salivary microbiota of PD patients, with full-length 16S nanopore sequencing enabling species-level resolution beyond short-read approaches. However, the small sample size and cross-sectional design limit interpretation. Moreover, because all PD patients were medicated and key oral microbiome-related confounders were not assessed, it remains unclear whether the observed changes reflect disease-related or confounding effects. Future longitudinal studies are needed to assess their potential as non-invasive biomarkers for PD.

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## **The Sakəmə̀sowakə̀n Family Wellness Program: An Indigenous-Led Model of Holistic Nursing and Community Care**

Urban Indigenous families in Canada face significant health inequities rooted in colonial legacies, systemic racism, and persistent barriers to culturally safe care. In response, Under One Sky Friendship Centre (UOS) in Fredericton, New Brunswick, developed the Sakəmə̀sowakə̀n (“feeling strong within yourself, your family, and your community”) Family Wellness Program – a comprehensive, Indigenous-led model that integrates nursing, case management, and wellness services within a culturally grounded framework.

Launched in 2021 in response to the impacts of COVID-19, the program began with Indigenous nursing outreach, Healing Spaces mental health counselling, and weekly nurse practitioner services. It has since expanded into a multi-faceted model that includes two Registered Nurses, a Jordan’s Principle Navigator, a Research and Program Facilitator, an Outreach/Community Programs Lead, four Mental Health Counsellors, and one Nurse Practitioner. Together, the team provides primary care, counselling services, crisis intervention, case management, health promotion, and community wellness initiatives, including prenatal education and the establishment of an Arctic Acres 360° Grow Dome to support food security and cultural education.

An assessment of program effectiveness was conducted in collaboration with the University of New Brunswick, using a community-based participatory action research approach to ensure Indigenous perspectives informed outcomes and indicators. Findings demonstrated that the program promoted holistic wellbeing, enhanced adherence to care, and addressed systemic and cultural barriers. Service delivery data further highlight the program’s growth and impact: in the 2021/2022 fiscal year, the program offered 544 support services; in 2022/2023, this rose to 886 services; and in 2023/2024, the program delivered 1,283 services. Data analysis for 2024/2025 is underway, with early indicators suggesting an even greater increase in demand and reach.

Looking forward, the program is set to continue expand significantly with the opening of UOS's new primary health centre in 2026, which will host primary care and birthing services five days per week. This trajectory reflects a sustainable model of Indigenous-led, community-based nursing that integrates cultural knowledge, family-oriented care, and collaborative evaluation to advance equity in health service delivery.

The Sakəlməlsowakən Family Wellness Program demonstrates how Indigenous leadership in nursing and community health can bridge service gaps, support family wellbeing, and inform broader policies on culturally safe, integrated care.

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## **Development and Preliminary Evaluation of a Simulation Model for the Neonatal Resuscitation Program (NRP)**

**Background:** Effective neonatal resuscitation is critical for reducing neonatal morbidity and mortality. However, maintaining competence in neonatal resuscitation requires ongoing training supported by structured and realistic simulation environments. Existing training approaches may be limited in providing consistent skill reinforcement, objective performance assessment, and opportunities for repeated practice under standardized conditions.

**Objective:** This study aims to develop a novel simulation model for the Neonatal Resuscitation Program (NRP) and to explore its educational applicability among neonatal healthcare professionals.

**Methods:** This study was designed as a mixed-methods, quasi-experimental study. The research was conducted in three phases. In Phase 1, a comprehensive NRP simulation scenario was developed by a multidisciplinary expert team and structured to cover essential neonatal resuscitation steps, decision points, and team-based practices. The scenario was reviewed and refined based on expert feedback. In Phase 2, the simulation model was developed and underwent functionality and performance verification processes to ensure consistency, usability, and alignment with NRP guidelines. The study population consists of 57 midwives and nurses working in a tertiary care hospital. The target sample includes 36 NRP-certified healthcare professionals with at least two years of experience. In Phase 3, data collection is ongoing. Quantitative data will be collected using structured assessment tools, while qualitative data will be obtained through focus group interviews to explore user experiences and perceptions.

**Results:** Phases 1 and 2 have been successfully completed, including scenario development, expert validation, and system implementation. Data collection is currently ongoing, and final results will be reported upon completion of the study.

**Conclusion:** The developed simulation model is expected to support neonatal resuscitation training by providing a structured, interactive, and learner-centered environment. The findings are anticipated to contribute to the advancement of simulation-based education and to inform future training practices in neonatal care.

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## **A Humanbecoming Perspective on Dignity**

There are many ethical challenges in fostering human dignity in light of the many deceptions that have arisen in healthcare situations worldwide. These challenges can be viewed in light of the ethos of Parse's humanbecoming paradigm. Dignity is the ethos of the humanbecoming paradigm with four explicit ethical tenets; reverence, awe, betrayal, and shame. The purpose of this presentation is to illuminate a deeper understanding of dignity to advance the science and art of nursing thereby upholding the integrity and worth of nursing. Reverence from the humanbecoming paradigm is the solemn regard for human presence which is recognizing the uniqueness of others. Awe is beholding the unexplainable mystery of human existence. Betrayal is a violation of human trust. Shame is humiliation with dishonoring human worth. These ethical tenets are foundational to addressing the ethical challenges faced by nurses and recipients of care globally. Reverence comes with an awareness of inherent differences that acknowledges the uniqueness of the individual. Betrayal surfaces with a shift in the trust-mistrust rhythm. Shame dishonors the worth of individuals. Awe may arise as a choice as individuals bear witness to the surprises and wonders of human existence. Professionals who live humanbecoming uphold the integrity of human dignity in honoring the inherent wisdom and desires of the individuals they serve. In this presentation, each ethical tenet is explored with relevant exemplars for the myriad ethical challenges that nurses and the recipients of care encounter in day to day living. Parse's ethical tenets offer a unique way for nurses to honor the recipients of care thereby valuing their dignity and worth.

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## **Sustainable Leadership and the Food Waste Paradox in Danish Nursing Homes: Balancing Ideals, Institutional Structures, and Everyday Practice**

Food waste has become a central challenge in Danish nursing homes, reflecting broader tensions between rising demographic pressures, sustainability goals, and the realities of daily care work. This study examines how leadership styles, organisational structures, and contextual conditions influence the ability of nursing homes to work sustainably and reduce food waste. Drawing on a mixed-methods design, combining nationwide survey data with qualitative interviews, the study provides a comprehensive analysis of how leaders navigate paradoxes between care, efficiency, and sustainability.

Quantitative results show that leaders with higher seniority, stronger educational backgrounds, and close contact with practice are significantly more successful in implementing sustainable initiatives. Relationship-oriented and change-oriented leadership styles correlate positively with holistic and critical sustainability discourses, whereas task-oriented leadership shows little or no association with sustainability efforts. Leaders who exhibit scepticism toward sustainability are markedly less engaged in implementing concrete measures. These results demonstrate that sustainability work is not merely technical or administrative but deeply linked to leadership identity, organisational culture, and the ability to engage staff meaningfully.

The qualitative findings highlight the persistent food-waste paradox: while nursing homes aim to meet complex nutritional needs and deliver person-centred care, rigid procurement systems, documentation requirements, and standardised meal production often lead to overproduction and waste. Case studies show that value-based, dialogical, and practice-near leadership fosters engagement, innovation, and reductions in food waste, whereas top-down administrative leadership models tend to face resistance and achieve limited results. Staff engagement, psychological safety, and interdisciplinary collaboration are identified as central conditions for success.

The study's theoretical framework integrates paradox theory, sustainable and regenerative leadership, and organisational perspectives on New Public Management and rationalisation. These perspectives illuminate how leaders must navigate competing demands—care vs. efficiency, rules vs. flexibility, stability vs. innovation—while building

organisational coherence and collective capacity. The findings point to the need for leadership approaches that support reflection, learning, and local adaptation rather than relying solely on standardised procedures.

Overall, the study demonstrates that sustainable leadership in eldercare requires more than technical solutions: it demands relational competence, reflective capacity, and the ability to create shared meaning around sustainability. Reducing food waste thus becomes both a practical and symbolic task—an indicator of how well organisations balance resident wellbeing with responsible resource use. The study concludes by offering recommendations for practice, including systematic competence development, digital tools for monitoring and ordering, cross-sector partnerships, and leadership models that strengthen psychological safety, interdisciplinary collaboration, and organisational learning.

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## **The Protective Effect of XZL22 against Pathological Cardiac Hypertrophy and its Underlying Mechanism**

Objective: Pathological cardiac hypertrophy can lead to interstitial and perivascular fibrosis as well as structural and functional changes in myocardial cells, resulting in cardiac remodeling. Heart failure and death may occur in severe cases. Therefore, preventing the occurrence and progression of cardiac hypertrophy is essential for the prevention of cardiovascular diseases. Through screening in Natural products, XZL22 was found to be able to inhibit cardiomyocyte hypertrophy. However, its underlying mechanisms remain unclear. Hence, this study aimed to investigate the pharmacological effects and mechanisms of XZL22 against cardiac hypertrophy.

Methods: A mouse model of cardiac hypertrophy was established *via* transverse aortic constriction (TAC) surgery. Different doses of XZL22 were administered and its effects were assessed through echocardiography (cardiac function), histopathological staining (HE and Masson), and analysis of hypertrophy/fibrosis markers (ANP, BNP, Collagen I/III) at the protein and mRNA levels *in vivo*. *In vitro*, angiotensin II (Ang II) was used to induce cardiomyocyte hypertrophy. Cell size was observed by fluorescent staining, and the expression levels of cell-related proteins and related mRNA were measured. Multiple indicators were used to evaluate the protective effects of XZL22 against cardiomyocyte hypertrophy *in vitro* and *in vivo*. Metabolomics was performed on the serum of mice in the Sham group, TAC group, and XZL22-H group. Network pharmacology was used to predict the targets of XZL22 and myocardial hypertrophy-related pathways. Finally, metabolomics and network pharmacology results were jointly analyzed, and molecular biology techniques were used for validation to explore the mechanism of action of XZL22 against cardiac hypertrophy.

Results: *In vivo*, XZL22 improved cardiac function and alleviated myocardial damage in hypertrophic mice. HE and Masson staining results showed that the cardiac pathology of hypertrophic mice was significantly improved, the levels of ANP, BNP, Collagen I and Collagen III were significantly decreased. *In vitro*, XZL22 decreased the surface area of cardiomyocytes and the levels of ANP and BNP. Metabolomics results showed that XZL22 plays a cardioprotective role, mainly by regulating the level of glycerophospholipid metabolites. The symptoms of cardiac hypertrophy in TAC mice were improved by regulating glutathione metabolism, arachidonic acid metabolism, glycine, serine and threonine metabolism. Network pharmacology suggested that XZL22 may improve symptoms of myocardial hypertrophy by regulating multiple signaling pathways including the PI3K/AKT signaling pathway, MAPK signaling pathway, and FoxO. Additional research has indicated that XZL22 could inhibit the secretion levels of inflammatory factors IL-1 $\beta$ , IL-6, TNF- $\alpha$ , and Western blot analysis found that XZL22 could decrease the cleaved-caspase3 level and Bax/Bcl-2 ratio, promote the phosphorylation of PI3K, AKT, and mTOR.

Conclusion: XZL22 exhibits significant anti-hypertrophic effects both *in vitro* and *in vivo*. Utilizing combined analysis and validation with metabolomics and network pharmacology, it is inferred that XZL22 may exert a certain anti-myocardial hypertrophy effect by activating the PI3K/AKT/mTOR pathway to regulate inflammation response and cellular apoptosis.

**David Matas**

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**Professional Ethical Standards Addressing Organ  
Transplant Abuse Abroad**

In most countries, organ transplant demand far exceeds organ donor supply. Those in need of transplants often end up waiting months and years.

China, in contrast, offers transplants on demand. Bookings for transplants can be made in advance even for vital organs - heart, liver and lungs. An independent people's tribunal concluded in 2020 that the mass killing in China of practitioners of the spiritually based set of exercises Falun Gong for their organs for transplants was certain, beyond doubt. Twelve United Nations human rights experts in 2021 found the evidence about forced organ harvesting from prisoners of conscience in China as extremely alarming, of utmost concern.

Transplant tourism into China raises ethical concerns for health professionals and institutions outside of China. Yet, professional ethical standards have, for the most part, not been adopted to address those concerns.

The Transplantation Society developed in 2006 an Ethics Committee Policy Statement on the Chinese Transplantation Program which, since October 2024, no longer appears on its website. The International Society for Heart and Lung Transplantation in 2022 developed its own ethics policy related to Chinese transplantation. These two policies relate to Chinese and foreign transplant professional interaction.

The Canadian Society of Transplantation and Canadian Society of Nephrology issued a policy statement in 2011 on Organ Trafficking and Transplant Tourism which addressed transplant tourism in the context of patient health professional interaction. Global Rights Compliance, an international legal not-for-profit in 2022 published an advisory report and guidance on mitigating human rights risks when interacting with international medical institutions and professionals in transplantation medicine.

There are only four countries in Europe - the UK, Ireland, Belgium and Italy - which have specific extra-territorial legislation addressing transplant tourism and complicity in organ transplant abuse abroad. There are nonetheless several other countries in Europe with general domestic legislation directed against organ transplant abuse which has extraterritorial effect. No country in Europe, though, has mandatory

reporting of transplant tourism by health professionals and institutions to government authorities. There has been transplant professional hesitancy in endorsing this mandatory reporting because of its adverse impact on patient professional confidentiality.

This ethical/human rights landscape relating to transplant tourism raises questions about what the proper ethical standards should be for transplant health professional and institution interaction with Chinese transplant health professionals and institutions, about health professional and institution counselling of potential transplant tourist patients into China, about medical treatment of transplant tourist patients returning from China, and about the proper transplant professional response to legislative proposals for mandatory reporting by transplant health professionals and institutions to designated government authorities on transplant tourism. The proposed presentation would address each of these questions with a European focus.

The general conclusion would be that there needs to be, for Europe, country specific ethical/ human rights standards related to each of these matters. The presentation will suggest what these standards might be.

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## **The Role of Epicardial Adipose Tissue in the Development of Heart Failure with Preserved Ejection Fraction**

Heart failure with preserved ejection fraction (HFpEF) is an increasingly prevalent clinical condition, particularly among patients with obesity, metabolic syndrome, and type 2 diabetes mellitus. Emerging evidence highlights the role of epicardial adipose tissue (EAT) as a metabolically active and pro-inflammatory organ contributing to the pathogenesis of the disease.

Epicardial adipose tissue is located between the myocardium and the visceral layer of the pericardium, without a fascial barrier, allowing direct paracrine and vasocrine interactions with the myocardium and coronary vessels. Under physiological conditions, EAT exerts protective functions; however, in obesity, both quantitative and qualitative alterations occur, including increased volume, inflammatory cell infiltration, and enhanced secretion of pro-inflammatory cytokines.

These changes promote local inflammation, oxidative stress, myocardial fibrosis, increased ventricular stiffness, and diastolic dysfunction—the central pathophysiological mechanism in HFpEF. Increased EAT volume is associated with left ventricular hypertrophy, cardiac remodeling, and elevated filling pressures. Imaging modalities enable quantitative assessment of EAT and may provide prognostic value.

In conclusion, epicardial adipose tissue is not merely an inert fat depot but an active contributor to the development of HFpEF and represents a potential therapeutic target.

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## **Evaluating the Effectiveness of Multiple Family Group Therapy in Reducing Stress among Families Coping with Autism**

Parents raising a child with Autism Spectrum Disorder (ASD) have higher levels of stress than other disabilities. Mothers raising a child with ASD reported less parenting competence, a decrease in marital satisfaction difficulty adapting compared to mothers of children coping with Down's Syndrome. Parents tend to isolate themselves, avoiding social contact with the outside world. There are limited services available for parents. A study was implemented using the psychoeducational model to help parents cope with ASD and evaluate the effectiveness of the model. Multiple Family Group Therapy (MFGT) is a psychoeducation model that has been seen as the most effective evidence-based practice in both clinical trials and community settings. The model is flexible, incorporating both illness information and strategies for coping. McFarlane and Lukens (2004) found the MFGT model to be the most effective of the evidence-based practice models in treating families coping with illnesses ranging from schizophrenia to cancer. The historical background of Multiple Family Group Therapy began with Peter Lacquer in 1977 was the first to discuss the importance of providing education. Multiple Family Group Therapy served as the intervention. McFarlane expanded on his concept framework and designed Multiple Family Group Therapy (MFGT). The study used this model with families coping with a child having ASD. Parents were enrolled in a 4-week program that met weekly. Both parents were required to attend the groups. The Parental Stress Index short form (PSI-SF) tool measured the outcome in relation to parental stress in raising a child with ASD. PSI-SF focuses on percentiles in the data analysis. It measures the Parental Stress Index in 3 domains: parental stress, parent-child difficulty interaction, and difficult child. Parents filled out the PSI-SF before beginning the group and at the end of the 4-week group session. A questionnaire was filled out at the completion of each group session. This was used to evaluate the group process. Parents who participated in the study expressed not feeling alone and enjoyed sharing and supporting one another. The education came from within the group, parents helping one another. The father stress index post-group went up in some cases. The outcome supported the use of MGFT to assist parents

with coping with raising a child with ASD. The study had its limitations.  
It is difficult to recruit families to commit to weekly sessions.

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**Pharmacological Modulation of Neuropathic Pain with  
Adjunctive Graded Motor Imagery in Upper-Limb  
Complex Regional Pain Syndrome**

Background: Complex Regional Pain Syndrome (CRPS) is a chronic neuropathic pain disorder characterized by persistent pain and functional impairment of the affected limb. Peripheral and central sensitization, together with cortical reorganization, contribute to chronic pain and motor dysfunction. Pharmacological therapy targeting neuropathic pain mechanisms remains the cornerstone of CRPS management.  $\alpha 2\delta$  calcium-channel ligands such as gabapentin and pregabalin reduce neuronal excitability by modulating voltage-gated calcium channels involved in central sensitization. Rehabilitation strategies addressing neuroplasticity, including Graded Motor Imagery (GMI), may further improve functional recovery. The objective was to assess the effects of pharmacological modulation of neuropathic pain using  $\alpha 2\delta$  calcium-channel ligands and to evaluate whether adjunctive GMI enhances clinical and functional outcomes in patients with upper-limb CRPS.

Material and methods: A prospective controlled clinical study included 24 patients with upper-limb CRPS. Patients were allocated into two groups: standard pharmacological therapy using  $\alpha 2\delta$  calcium-channel ligands (gabapentin or pregabalin) or pharmacological therapy combined with a structured GMI program consisting of laterality recognition, motor imagery, and mirror therapy. The intervention lasted six weeks. Pain intensity was assessed using the Visual Analog Scale (VAS), neuropathic pain using the DN4 questionnaire, and functional outcomes using range of motion (ROM) and the QuickDASH questionnaire at baseline and post-intervention.

Results: Both groups demonstrated reduced pain intensity after treatment. Mean VAS scores decreased from  $7.2 \pm 1.1$  to  $4.5 \pm 1.3$  in the

pharmacological therapy group and from  $7.4 \pm 1.0$  to  $4.1 \pm 1.2$  in the combined therapy group ( $p > 0.05$ ). DN4 scores improved from  $6.8 \pm 1.0$  to  $4.9 \pm 1.1$  and from  $6.9 \pm 0.9$  to  $3.8 \pm 1.0$ , respectively ( $p = 0.03$ ). Greater functional improvement was observed in the combined group, with ROM improving by 32% compared with 18% ( $p = 0.02$ ). QuickDASH scores improved from  $61.4 \pm 8.7$  to  $42.6 \pm 7.9$  and from  $63.1 \pm 9.1$  to  $31.8 \pm 7.2$ , respectively ( $p = 0.01$ ). A greater proportion of patients in the combined group achieved clinically meaningful functional improvement.

Conclusion: Targeted pharmacological modulation of neuropathic pain remains fundamental in the management of CRPS. Adjunctive Graded Motor Imagery may further enhance functional recovery and neuropathic pain improvement, supporting a multimodal treatment strategy integrating pharmacological therapy with targeted neurorehabilitation in patients with upper-limb CRPS.

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## **Attuning a Faster R-CNN Machine Learning Model for Breast Tumor Ultrasound Imaging**

**Purpose:** Breast cancer is a leading cause of death among women globally, making early detection vital. This project develops a deep learning model to detect and classify breast tumors in ultrasound images as benign or malignant, outputting a bounding box and confidence score to support clinical decision-making.

**Methods:** A Faster R-CNN was fine-tuned using ResNet18, ResNet50, and MobileNet V3 backbones on a physician-annotated breast ultrasound dataset. The ultrasound images were obtained from a publicly available dataset collected in 2018 from Baheya hospital, Cairo, Egypt, consisting of 780 images in PNG format, categorized into three classes: normal, benign, and malignant. Images were preprocessed with physician-annotated bounding boxes indicating tumor presence.

The dataset was augmented using a process of resizing to 1000x900x3 pixels, normalization, rotation, and flipping. Anchor boxes were initialized via K-means. Model architecture was adjusted by adding dropout layers, frozen batch normalization, and testing varied learning rates (lr) and weight decay (wd) values to improve performance. Performance was evaluated using mAP@0.5 and classification accuracy (ACC).

**Results:** The best MobileNet V3 configuration (lr=1e-3, wd=5e-4, 40 epochs) achieved mAP=0.88 and ACC=0.95 but started overfitting early. The best ResNet18 results were achieved with lr=1e-4 and wd=1e-4 over 40 and 70 epochs. After adjusting the model architecture with dropout layers, new anchors, or frozen Batch Normalization layers, the ResNet18 model attained ACC values between 0.78 to 0.85 and mAP@0.5 values between 0.55 to 0.58 (Table 1). The final model reached validation accuracy of 0.71 and mAP@0.5 of 0.48.

**Table 1.** *Augmenting the Dataset and Changing the Architecture of the Faster R-CNN Can Generalize Better and Provide Better Performance*

Best attempts of training Faster R-CNN with backbone ResNet18 (fine-tuned)									
	Edits: (D)ata, (A)rchitecture	lr	epo	wd	mom	AP@0.5 (Benign)	AP@0.5 (Malignant)	mAP@0.5	ACC
Augmented	D	1e-4	40	1e-4	.9	0.71	0.62	0.55	0.78
Augmented, dropouts(0.5), new anchors	D, A	1e-4	40	1e-4	.9	0.70	0.63	0.55	0.82
Augmented, dropouts (0.5)	D, A	1e-4	70	1e-4	.9	0.78	0.58	0.58	0.82
Augmented and frozen Batch Norm layer	D, A	1e-4	40	1e-4	.9	0.76	0.55	0.54	0.85

Conclusion: Faster R-CNN shows promise for breast tumor detection in ultrasound images, with dropout and frozen batch normalization improving generalization. Improved performance was achieved by adjusting the learning rate and weight decay. Future work should focus on increasing performance on small tumors, integrating an FPN model, and expanding annotated training data to improve robustness across tumor sizes and morphologies.

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**Co-Creating Culturally Safe Prenatal Care for Urban  
Indigenous Families: A Community-Led, Two-Eyed Seeing  
Model with Embedded Evaluation**

Persistent gaps in maternal and infant health outcomes in Canada reveal the urgent need for culturally safe prenatal services that reflect Indigenous knowledge and priorities. In New Brunswick, prenatal services are primarily biomedical and often experienced as culturally unsafe, contributing to mistrust and disengagement. In response to community-identified priorities and recommendations from Powell's 2023 MN thesis on the cultural safety of prenatal care in NB, Under One Sky Friendship Centre co-designed a 10-week, urban Indigenous prenatal program for off-reserve families in the Fredericton area.

Guided by Etuaptmumk/Two-Eyed Seeing, the program integrates ceremony, Indigenous teachings, kinship, and circle dialogue with evidence-based prenatal education delivered by advanced practice and community-based nurses and community co-facilitators. Practical supports (meals, transportation, childcare) reduce access barriers identified in prior research. Weekly sessions progress from early pregnancy navigation and informed decision-making to emotional wellness, birth preparation, postpartum transition, and parenting—while centring cultural continuity, self-determination, and family/community connections.

A community-based participatory research (CBPR) approach underpins program development and evaluation through a Project Advisory Committee of Elders, Knowledge Holders, nurses, doulas, and families. The mixed-methods evaluation combines: (1) quantitative measures (pre/post surveys, engagement with prenatal care, timing of visits, selected birth indicators where available); (2) qualitative methods (storytelling, participant/facilitator reflections); and (3) culturally grounded indicators (strengthened identity and connection to ceremony, trust and navigation confidence). Program data will be linked to hospital charts and participant health cards, to enable longer-term outcome

tracking and care pathways. Data stewardship follows OCAP®-aligned governance within UOS.

The pilot is delivered in two cohorts (Fall 2025; Winter 2026). Preliminary findings – anticipated by May 2026 – are expected to show increases in knowledge, confidence, cultural connection, and earlier/more consistent engagement in perinatal care, alongside qualitative evidence describing shifts in trust, advocacy, and system navigation. System-level contributions include an adaptable evaluation framework that values both clinical and cultural outcomes, empirical signals for policy/funding models that support Indigenous-led prenatal care, and a replicable blueprint for advanced practice nurse-enabled community partnerships.

This work operationalizes a model of care where Indigenous leadership and nursing collaborate to enact cultural safety in practice while producing robust, community-governed evidence.

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## **Learning Telenursing Online Using Simulations-Advanced Practice Nursing Students' Experiences**

Background: Digital competence or being able to use digital technologies and tools in academic and professional contexts has become an increasingly important component in nursing curricula (Amin et al., 2025; Mainz et al., 2024). The DigComp model created for the European Union, defines digital competence as the 'confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It is defined as a combination of knowledge, skills and attitudes' (European Union, 2018). The framework involves five key components of digital competence: information and data literacy; communication and collaboration; digital content creation; safety, and problem solving (European Union, 2025). The World Health Organization (2019) has recommended digital means for the education of healthcare professionals, especially in continued and in-service training, to complement traditional educational methods and expand access to health education cost-effectively. Simulation based education has been recognized effective in teaching and training both technical and non-technical skills. However, high-technology simulations and standardized patients are costly and require training. Online role playing simulations represent a simple, hands-on learning approach.

The purpose of this study was to describe the advanced practice nursing students' experiences of the online role-playing simulations in learning remote counseling and gaining experience of the telecommunications technology.

Methods: Data was collected from 28 advanced practice nursing students at Seinäjoki University of applied sciences in Finland in December 2025. The results are based on students' responses to open questions on their experiences of online role-play simulations, analyzed using inductive content analysis.

Results: The participants considered online role-play simulations effective; they appreciated the hands-on experience of the technology, observing the performance of other students and shared reflection. Their development proposals involved adding random ready-made roles and a wider range of technology.

Conclusion: Online role-play simulations provide a practical, cost-effective method to practice theoretical and practical competencies

required in telenursing. The students experience online role-play simulations rather authentic situations.

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## **Curriculum Making in Nursing Education: Finding Safe Places for Reflection on a Shifting Professional Knowledge Landscape**

This presentation reports a narrative inquiry into the meaning of curriculum making in nursing education as experienced across a shifting landscape of professional knowledge. The inquiry begins with a persistent tension between what 'ought to happen' in classrooms and what 'actually happens,' and explores how this tension is interpreted over time as professional roles and institutional contexts evolve. The study is grounded in Connelly and Clandinin's scholarship on professional knowledge landscapes, secret cover sacred stories, and curriculum as lived experience. It is also influenced by Dewey's account of experience and Schwab's perspective of curriculum work as a practical field that requires deliberation. This narrative research inquiry re-examines and contrasts in-class and out-of-class narratives across different times, places, and social and personal conditions.

Narrative inquiry was the research methodology used to study the classroom and curriculum experience as storied and unfolding. The research took place in a baccalaureate nursing program at a small Canadian university during a period of significant curriculum change. This narrative inquiry examines closely the gap between the planned curriculum and the curriculum as lived in classrooms. It also explores how institutional priorities, professional expectations, and personal histories shape what is taught, what is taken up, and what is left behind.

Findings reveal a clear shift from an early problem-solving approach that aimed for a prescriptive method of curriculum development to a dialectic stance that considers theory and practice as interconnected and mutually influential. Metaphors were identified to serve as analytical tools that highlight this transition, moving from flat representations to a dynamic Lego metaphor that emphasizes human agency, selective building blocks, and the significance of relationships among curriculum components. The inquiry also highlights the need for a third space: a deliberately created safe environment for reflective practice, where educators can step back from immediate tasks, examine assumptions, and craft new meanings through telling, retelling, and reliving

experiences. Curriculum making is portrayed as an ongoing process of practical deliberation that connects intentionality and strategy, relying on criteria-guided judgment rather than rigid standards.

Implications aim to assist nursing educators in creating and maintaining safe knowledge communities in which tensions are recognized, analyzed, and used effectively to inform intentional, context-aware curriculum development.

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## **The Physician's Obligations in the Performance of his Work: A Keyhole Look at the Libyan Law on Medical Liability**

Background: Patients must be able to trust doctors with their lives and well-being; to justify that trust, we as a profession have a duty to maintain a good standard of practice and care to show respect for human life. Medical liability will result from any professional error arising from the practice of a medical activity that causes harm to others and the occurrence of damage is a presumption of fault or breach of the obligation.

Aims: To have a keyhole look at the Libyan law on Medical Liability and discuss few medico-legal cases.

Methods: The National Council for the Determination of Medical Liability (NCDML) affiliated to Ministry of Health is the official body responsible for determining the extent to which medical responsibility is established. (Law number 17 of 1986). Examples of some medico legal cases will be presented where medical issues intersect with legal considerations often involving the interpretation and application of laws and regulations in the context of healthcare.

Results: The term "malpractice" within the medical community describes acts of negligence, deviation, incompetence, or professional errors that result in harm to the consumer (patient) due to actions that do not adhere to standards.

The Ministry of Health and the suppliers, manufactures, distributors and users are jointly liable for damages resulting from the use of medical tools, devices and medicines.

Conclusion: Changes in the medico-legal landscape and increased litigation have made doctors cautious about the amount, quality, and type of treatment they provide. Defensive medicine occurs when doctors order tests, procedures, visits, or avoid high-risk patients or procedures primarily to reduce their exposure to malpractice. Positive Defensive Medicine occurs when Extra tests or procedures are ordered to reduce malpractice liability. Avoiding certain patients or procedures is referred to as Negative Defensive Medicine.

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