4th INTERNATIONAL CONFERENCE ON

FUTURE OF PREVENTIVE MEDICINE & PUBLIC HEALTH

MARCH 18-19

2024

Amsterdam, Netherlands

FUTURE OF PMPH 2024

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DAY 1
MARCH 18, 2024

Scientific Program

| 07:45-08:25 | **Registrations** |
| 08:25-08:30 | **Opening Ceremony** |

Moderator: Maria Isabel Roldos, *Lehman College and CUNY Institute for Health Equity (CIHE), USA*

Topics: Preventive Medicine | Public Health and Healthcare | Midwifery | Healthcare Innovations | Patient Safety | Digital Health | Primary Care | Occupational Health and Safety | COVID 19 | Nursing | Internal Medicine | Family Medicine | Women's Health | Psychology and Psychiatric Disorders | Preventive Medicine and Chronic Diseases | Pharmaceuticals | Telemedicine | Artificial Intelligence in Healthcare

Distinguished Speaker Talks

| Session Chair | **Hassan M. Heshmati,** *Endocrinology Metabolism Consulting, LLC, USA* |
| Session Chair | **Joyce Felicia Vaghela,** *St. Stephen's Hospital, India* |

08:30-08:50	**Title: Examining community determinants of health using needs assessments to improve public health decisions** **Wendy Wolfersteig,** *Arizona State University, USA*
08:50-09:10	**Title: Preventive strategies to reduce the health risks of endocrine-disrupting chemicals** **Hassan M. Heshmati,** *Endocrinology Metabolism Consulting, LLC, USA*
09:10-09:30	**Title: How to foster health by fostering happiness** **Ruut Veenhoven,** *Erasmus University Rotterdam, Netherlands*
09:30-09:50	**Title: Radiation-induced gastrointestinal (GI) syndrome as a function of age** **Adriana Haimovitz-Friedman,** *Memorial Sloan Kettering Cancer Center, USA*
09:50-10:10	**Title: Last Aid International: Fostering public engagement in palliative care and end-of-life topics** **Erika Zelko,** *University Maribor, Slovenia & Johannes Kepler University Linz, Austria*

10:10-10:30	Title: Going Global: Bringing artificial intelligence education to a Global audience Jordan Perchik, *University of Alabama at Birmingham, USA*

Group Photo 10:30-10:40

Refreshment Break 10:40-10:55

10:55-11:15	Title: Impact of the affordable care act on participation in the supplemental nutrition assistance program among low-income older Medicare beneficiaries Hyunmin Kim, *The University of Southern Mississippi, USA*
11:15-11:35	Title: Wellness together Canada: Digital implementation of the stepped care 2.0© model for population mental health Maggie Inrig, *Stepped Care Solutions, Canada*
11:35-11:55	Title: Disparities in violent fatal injury among racial and ethnic minorities, 2009–2019: A portfolio analyses Maria Isabel Roldos, *Lehman College and CUNY Institute for Health Equity (CIHE), USA*
11:55-12:15	Title: The impact of SARS-CoV-2 infection and the anti-COVID vaccine on the menstrual cycle, among female students at the Faculty of Nursing Yllka Stramarko, *University of Vlore "Ismail Qemali", Albania*
12:15-12:35	Title: Self-management, a challenge in coping with rheumatoid arthritis: Case report Glodiana Sinanaj, *University of Vlore "Ismail Qemali", Albania*
12:35-12:55	Title: Pitfalls of recreational drug use when travelling Marian Sujak, *Landesklinikum Baden-Mödling, Austria*

Group Photo 12:55-13:05

Lunch Break 13:05-13:50

Session Chair	Hassan M. Heshmati, *Endocrinology Metabolism Consulting, LLC, USA*
Session Chair	Joyce Felicia Vaghela, *St. Stephen's Hospital, India*

Time	Session
13:50-14:10	**Title: A whole new world of healing: Exploring medical hypnotherapy for pediatric patients** **Vanessa B. Bastek,** *Klinikum Region Hannover Psychiatrie Wunstorf, Germany*
14:10-14:30	**Title: Workplace ostracism in healthcare and it's association with job satisfaction, stress and perceived health** **Sirpa M. Manninen,** *University of Eastern Finland, Finland*
14:30-14:50	**Title: Role of top flat magnetic stimulation for urinary incontinence as a debilitating condition of pelvic floor dysfunction: An observational evaluation of Latin American population** **Antonio Posada Dominguez,** *Centro Hospitalario La Concepcion, Mexico*
14:50-15:10	**Title: Convalescent plasma a treatment option for pandemics in low-and Middle- income countries; The use of Hemoclear Filter as prepared readiness** **Rosita Bihariesingh-Sanchit,** *Academic Hospital Paramaribo, Suriname*
15:10-15:30	**Title: One Health through the integration of wildlife management, veterinary medicine, and data science** **Brenda J. Hanley,** *Wildlife Health Lab, Cornell University, USA*
15:30-15:50	**Title: Modulation of histamine neuronal activity by Thyrotropin-Releasing Hormone neurons: Self-inputs or neighboring ones?** **Edith Sánchez-Jaramillo,** *Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, México*
15:50-16:10	**Title: The level of Vitamin D in the staff of the Faculty of Health, University of Vlore, Albania- The role of educational training- A case-control study** **Jerina Jaho,** *University of Vlore "Ismail Qemali", Albania*
16:10-16:30	**Title: Medicines and supplements taken by people with multiple chronic conditions, and the evaluation of the association between age, gender, and the other variables** **Brunilda Subashi,** *University of Vlore "Ismail Qemali", Albania*

Refreshment Break 16:30-16:45

Time	Session
16:45-17:05	**Title: Cow's Milk Protein Allergy (CMPA) - Case report** **Irini Rapushi,** *University of Vlore "Ismail Qemali", Albania*

17:05-17:25	**Title: Self-care practices of type 2 diabetic patients and Albanian questionnaire validation - Translating research into practice** **Fatjona Kamberi,** *University of Vlore "Ismail Qemali", Albania*
17:25-17:45	**Title: Investigating the Impact of the exhibition of digital models of legacy anatomy collections on society and the possible value conflicts in the future** **Banu Buruk,** *TOBB Economy and Technology University, Turkey*
17:45-18:05	**Title: Comparative evaluation of the inhibitory effect of *Lactobacillus rhamnosus* on Halitosis-causing bacteria: An *In vitro* Microbiological Study** **Aishwarya Patil and Sarika Shetty,** *MGM Dental College and Hospital, India*
18:05-18:25	**Title: A general model of infection dynamics** **Giuseppe Carbone,** *Polytechnic University of Bari, Italy*
18:25-18:45	**Title: Diabetes discourse: Analyzing prevention and treatment in academic research and social media** **Fereshteh Didegah,** *Karolinska Institutet, Sweden*
18:45-19:05	**Title: Impact of the COVID-19 Pandemic on public hospitals in the United States** **Will Ross,** *Washington University School of Medicine, USA*
19:05-19:15	**Title: *Campylobacter* spp.in the Estonian meat production chain** **Triin Tedersoo,** *Estonian University of Life Sciences, Estonia*

Panel Discussion

End of Day 1

DAY 2
MARCH 19, 2024

Scientific
Program

07:45-08:25	Registrations

08:25-08:30	Introduction

Moderator: Maria Isabel Roldos, *Lehman College and CUNY Institute for Health Equity (CIHE), USA*

Topics: Preventive Medicine | Public Health and Healthcare | Midwifery | Healthcare Innovations | Patient Safety | Digital Health | Primary Care | Occupational Health and Safety | COVID 19 | Nursing | Internal Medicine | Family Medicine | Women's Health | Psychology and Psychiatric Disorders | Preventive Medicine and Chronic Diseases | Pharmaceuticals | Telemedicine | Artificial Intelligence in Healthcare

Distinguished Speaker Talks

Session Chair	Wendy Wolfersteig, *Arizona State University, USA*

Session Chair	Jih-Huah Wu, *Ming Chuan University, Taiwan*

08:30-08:50	**Title: EmpowerSafe: Building boundaries and confidence - A sexual abuse prevention program for young minds with intellectual abilities** **Natasha Jojo,** *University of Canberra, Australia*

08:50-09:10	**Title: The combination of laser acupuncture and face diagnosis will play an important role in preventive medicine and public health** **Jih-Huah Wu,** *Ming Chuan University, Taiwan*

09:10-09:30	**Title: Genetic profiling of sodium channel in painful and painless diabetic and idiopathic small fiber neuropathy** **Maurice Sopacua,** *Maastricht University Medical Centre, Netherlands*

09:30-09:50	**Title: Towards home-based diabetic foot ulcer monitoring: A systematic review** **Arturas Kairys,** *Kaunas University of Technology, Lithuania*

09:50-10:10	**Title: Evolving Partnership: A Japan-lead pandemic-resilient training model for clinical research professionals in resources limited settings** **Muchanga Sifa Marie Joelle,** *National Center for Global Health and Medicine, Japan*

10:10-10:30	**Title: CSF and venous blood flow from childhood to adulthood studied by real-time phase-contrast MRI** **Prativa Sahoo,** *University Medical Center Göttingen, Germany*

Group Photo 10:30-10:40

Refreshment Break 10:40-10:55

10:55-11:15	**Title: The meniscus, a useless remnant of evolution or an essential part of the knee joint? And highly essential to prevent early osteoarthritis?** **Diederick Bernard Wouters,** *ETZ Hospital, Netherlands*
11:15-11:35	**Title: Ketamine as the main analgesic agent during analgesia-based sedation for elective colonoscopy- A randomized, double-blind, control study** **Mirza Kovacevic,** *Cantonal Hospital, Zenica, Bosnia and Herzegovina*
11:35-11:55	**Title: Socio-Demographics of Initial Substance Use Exposure and Its Relation to Progression in Saudi Arabia: Implications for Practice** **Alaa Nabil Mahsoon,** *King Abdulaziz University, Saudi Arabia*
11:55-12:15	**Title: Diabetes in School - A Practical Example** **Nicola Sommer,** *University of Teacher Education Salzburg, Austria*
12:15-12:35	**Title: Screen time behavior among school-aged children** **Yin Hui,** *Peking University, China*
12:35-12:55	**Title: How can we promote vaccination of the mass population? -Lessons from the COVID-19 vaccination defaults** **Mira Namba,** *Keio University, Japan*

Group Photo 12:55-13:05

Lunch Break 13:05-13:50

Session Chair	**Wendy Wolfersteig,** *Arizona State University, USA*
Session Chair	**Jih-Huah Wu,** *Ming Chuan University, Taiwan*
13:50-14:10	**Title: Quercetin as a Dietary Supplementary Flavonoid Alleviates the Oxidative Stress Induced by Lead Toxicity in Male Wistar Rats** **Mohammed Musa Yahya Alzahrani,** *Department of Biology, College of Science, Imam Mohammad Ibn Saud Islamic University (IMSIU), Riyadh 11623, Saudi Arabia*

Time	
14:10-14:30	**Title: Factors associated with prolonged viral shedding of SARS-CoV-2 Omicron variant infection in Shanghai: A multicenter retrospective observational study** **Wenbin Liu,** *Shanghai Jiao Tong University School of Medicine, China*
14:30-14:50	**Title: Preventing harm from purely Symptomatic Treatment: A case study of fatigue** **Christopher Langston,** *Albert Einstein College of Medicine, USA*
14:50-15:10	**Title: Inflammatory profile and phase angle analysis by bioelectrical impedance in elderly people with Chronic Kidney Disease** **Isaura Romero Peixoto,** *Federal University of Pernambuco, Brazil*
15:10-15:30	**Title: Maternal stress and perceived nurse support among mothers of premature infants in the neonatal intensive care unit of a tertiary hospital in Qatar** **John Paul Ben Silang,** *Women's Wellness and Research Center- Hamad Medical Corporation, Qatar*
15:30-15:50	**Title: Long-term follow-up of multidrug resistant tuberculosis patients of Delhi, who had received DOTS Plus treatment along with home care and counselling** **Joyce Felicia Vaghela,** *St. Stephen's Hospital, India*
15:50-16:10	**Title: Case series analysis of chronic venous Insufficiency, to determine associated Arthrosis and Static Foot Deformity** **Roy Varghese,** *Silverline Hospital, India*
16:10-16:30	**Title: Prevalence of NCD risk factors, Health-promotive behaviors, and Associated factors among Nursing students in two selected Schools of Nursing in Western Province, Sri Lanka** **Sudath Warnakulasuriya,** *Faculty of Nursing, University of Colombo, Sri Lanka*

Refreshment Break 16:30-16:45

Time	
16:45-17:05	**Title: Comparative investigation of hand and foot reaction ability between the basketball and handball players** **Laishram Thambal Singh,** *Department of Physical Education and Sports Science, Manipur University, India*
17:05-17:25	**Title: Navigating the landscape of concept-supported XAI: Challenges, innovations, and future directions** **Zahra Shams Khoozani,** *Universiti Malaya, Malaysia*

17:25-17:45	**Title: A cohort study to assess substantial Impact of Chronic Diseases on Cancer risk and its management** **Aayushi Vashi,** *Parul University, India*
17:45-17:55	**Title: Prevention of falling in postmenopausal women with osteoporosis during functional reaching-Transporting task** **Marzieh Hatami,** *Tarbiat Modares University, Iran*
17:55-18:05	**Title: Understanding variants of uncertain significance in Germline Genetic Diagnostic Testing** **Piper Nicolosi,** *Invitae, USA*
18:05-18:15	**Title: Antidepressant effects of the aqueous lyophilisate of the leaves of** *Malvaviscus arboreus* **Dill. Ex Cav. against epilepsy-associated depression in rats** **Maxwell Blesdel ADASSI,** *University of Maroua, Cameroon*
18:15-18:25	**Title: State-of-the-art in synthetic data generation for healthcare: Advancements, challenges, and future prospects** **Vinh Bui,** *Southern Cross University, Australia*
18:25-18:35	**Title: Meditation: Well-being and health** **Agustín de la Herrán Gascón,** *Autonomous University of Madrid, Spain*
18:35-18:45	**Title: Breaking barriers: Understanding transphobia, resilience, and psychological distress in the Transgender community of Israel** **Mally Shechory,** *Ariel University, Israel*
18:45-18:55	**Title: Campylobacter infections: Is it a neglected entity?** **Kundoly Velayudhan Suseela,** *Amala Institute of Medical Sciences, India*
18:55-19:05	**Title: Enhancing job quality experiences for Intimate Partner Violence (IPV) survivors** **Laura Kauzlarich,** *Northwest Missouri State University, USA*
19:05-19:15	**Title: Climate-sensitive infectious diseases in the Mekong Delta Region: From scientific evidence to preventive practices** **Dung Phung,** *The University of Queensland, Australia*

Panel Discussion

End of Day 2

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PEERS ALLEY
M E D I A

BOOKMARK YOUR DATES

5TH INTERNATIONAL CONFERENCE ON
FUTURE OF PREVENTIVE MEDICINE & PUBLIC HEALTH

March 2025 | London, UK

https://healthcare.peersalleyconferences.com/

FUTURE OF PMPH 2024

DISTINGUISHED SPEAKER TALKS

DAY 1

4th International Conference on

Future of Preventive Medicine & Public Health

**March 18-19, 2024
Amsterdam, Netherlands**

FUTURE OF PMPH 2024

Examining community determinants of health using needs assessments to improve public health decisions

Wendy Wolfersteig

Southwest Interdisciplinary Research Center, Arizona State University, USA

Scope and Objective: This presentation synthesizes findings from five needs assessment projects that collected qualitative focus group data and survey data and provided recommendations to improve community health. Public health decisions are made using multiple factors related to physical and mental health as well as considering community determinants that include social, economic, and access to care factors. Many public health jurisdictions use a community health needs assessment process to bring together multiple types of quantitative, qualitative, primary and secondary data to help make evidence-based decisions. As a community-based researcher at Arizona State University, I participate with state and county health departments, hospitals and health care organizations in collecting and analyzing data, and providing recommendations for improvement of health.

Results: Findings from these needs assessments have shown how patients often have limited access to health-care including tele-health; how patients get health information and who they believe are trusted messengers; the importance of addressing issues including mental health, housing, food, and transportation; concerns around the role of culture and equity being understood by health care providers; and strengths and barriers in living a healthy life.

Discussion: These findings have guided decision-makers to improve their health strategies. For example, the need for culturally appropriate services, health materials, and messaging led to trainings for providers on working with diverse population groups (e.g., by ethnicity, gender), as well as to using 'people who look like me' when developing flyers, webinars, radio ads, and social media posts directed to specific groups. Based on needs around community determinants including housing and food, policy makers brought together organizations that address services and developed partnerships within health care and community settings so information is more broadly available; indeed, the role for community organizations such as religious groups and local agencies has been expanded to help meet these needs.

Biography

Dr. Wendy L. Wolfersteig serves as Director of Evaluation and Partner Contracts at the Southwest Interdisciplinary Research Center (SIRC) at Arizona State University, and a research associate professor in the School of Social Work. For over 20 years, her work in substance abuse prevention and evaluation in Arizona has focused on the use of effective evidence-based strategies and data-driven decision-making. She leads her team in working collaboratively with state, county, city and local agency and coalition partners to design and perform evaluations, provide trainings and disseminate findings aimed at preventing, reducing and eliminating health disparities. Her community based participatory research addresses health effects stemming from risk and protective factors as well as from social determinants of health. Dr. Wolfersteig serves as a member of the Governor's Arizona Program Inventory Workgroup and is a member of the City of Phoenix, Fast-Track Cities Initiative Ad-Hoc Committee.

Preventive strategies to reduce the health risks of endocrine-disrupting chemicals

Hassan M. Heshmati

Endocrinology Metabolism Consulting, LLC,
Hassan Heshmati and Valerie Shaw Endocrine Research, USA

Endocrine-disrupting chemicals (EDCs) are a heterogeneous group of exogenous chemicals or chemical mixtures that interfere with the action of hormones. EDCs are mainly man-made chemicals. According to the Endocrine Disruption Exchange, there are approximately 1,000 chemicals considered as EDCs. The EDCs are present in a variety of products including dust, soil, water, food, cosmetics, soaps, shampoos, toothpastes, plastic containers, toys, nicotine, and fertilizers (non-exhaustive list) and humans are regularly exposed to hundreds of them. The *in utero* or lifetime exposure to EDCs can be a significant component of the environmental origin of several medical conditions including diabetes, obesity, nonalcoholic fatty liver disease, infertility, dermatitis, and several cancers (non-exhaustive list). Exposure to EDCs during critical windows of embryonic/fetal development (e.g., Weeks 4-8) can induce transgenerational inheritance of increased disease risk. EDCs represent a threat for human health and a financial burden for the society. According to a relatively recent report, the cost of EDCs-related medical disorders in the United States of America was $340 billion (2.33% of the gross domestic product), higher than in the European Union where it was $217 billion (1.28% of the gross domestic product). The promotion of public knowledge and the initiation of preventive measures can minimize the deleterious consequences of EDCs for future generations. It is particularly important to identify windows of sensitivity (e.g., embryo/fetal period) to reduce or avoid the exposure to EDCs. At the individual level, several measures can be taken (e.g., washing hands before meals, reducing processed and canned foods, limiting beverages and foods stored in plastic containers, and using organic cosmetics). At the societal level, regulatory actions limiting the most prevalent and hazardous EDCs could have significant health and economic benefits. However, countries with significant heavy chemicals industry are less open to promote greener chemicals production.

Biography

Hassan M. Heshmati, Medical Doctor, Endocrinologist, has 47 years of experience in clinical research in both Academia (University-Affiliated Hospitals, Paris, France and Mayo Foundation, Rochester, MN, USA) and Pharmaceutical/Biotech Companies (Sanofi, Malvern, PA, USA, Essentialis, Carlsbad, CA, USA, and Gelesis, Boston, MA, USA). His research activity has been related to pituitary tumor, hyperthyroidism, thyroid cancer, osteoporosis, diabetes, and obesity. He has extensive knowledge in the development of anti-obesity products. He is the author of 322 abstracts, book chapters, and articles related to Endocrinology and Metabolism. Currently, he is Consultant at Endocrinology Metabolism Consulting, LLC, Hassan Heshmati and Valerie Shaw Endocrine Research, Anthem, AZ, USA.

How to foster health by fostering happiness

Ruut Veenhoven

Erasmus University Rotterdam, Netherlands
Erasmus Happiness Economics Research Organization EHERO, Netherlands

Since the 1970s a strand of empirical research on happiness has developed, in which happiness is defined as the subjective enjoyment of one's life as a-whole and measured using self-reports. Results of that research are gathered in the World Database of Happiness which currently includes some 50.000 findings.

Some 1000 of these findings are about the relation between happiness and health, among which 30 findings on causal effects of happiness on physical health, which show that happiness protects against illness and consequently lengthens life considerably. This means that health can be fostered by fostering happiness. The aim of 'Heath for all' fits well with the pursuit of 'Greater happiness for a greater number'.

The newly developed knowledge on happiness reveals several ways to greater happiness, as recently identified in a Delhi study. *Policy strategies* deemed the most effective and feasible were: 1) investing in happiness research, 2) support of vulnerable people and 3) improving the social climate, in particular by promoting voluntary work and supporting non-profits. *Individual strategies* deemed most effective were: a) investing in social networks, b) doing meaningful things and c) caring for one's health. Further ways to greater happiness and synergy with ways to health for all are discussed.

Biography

Ruut Veenhoven (1942) studied sociology and is emeritus professor of social conditions for human happiness at Erasmus University Rotterdam in The Netherlands, where he is currently affiliated with the Erasmus Happiness Economics Research Organization. In addition, he is an extra-ordinary professor at the North-West University in South Africa, affiliated to the Optentia Research Program. Veenhoven is director of the World Database of Happiness and a founding editor of the Journal of Happiness Studies.

Veenhoven's research is mainly on subjective enjoyment of life and focuses on the effects of choice on happiness, public choice as well as private choice. Major publications are 'Conditions of happiness' (1984), 'Happy Life-expectancy' (1997) 'The four qualities of life' (2000), 'Greater happiness for a greater number: Is that possible and desirable?' (2010) and *'Informed pursuit of happiness: What we should know, do know and can get to know'* (2015). Full texts of which are available at Veenhoven's homepage https://personal.eur.nl/veenhoven.

PEERS ALLEY
M E D I A

Radiation-induced gastrointestinal (GI) syndrome as a function of age

Adriana Haimovitz-Friedman[8], Hongyan Li[1], Herman C Kucharavy[2,3], Carla Hajj[1], Liyang Zhao[4], Guoqiang Hua[1], Ryan Glass[1], Phillip B. Paty[5], Zvi Fuks[1], Richard Kolesnick[4] and **Karen Hubbard[6,7]**

[1]Department of Radiation Oncology, Memorial Sloan Kettering Cancer Center, USA
[2]Department of Biology, The City College of New York, USA
[3]CUNY Graduate Center, USA
[4]Laboratory of Signal Transduction, Memorial Sloan Kettering Cancer Center, USA
[5]Department of Surgery Memorial Sloan Kettering Cancer Center, USA
[6]Department of Biology, The City College of New York, USA
[7]CUNY Graduate Center, USA
[8]Department of Radiation Oncology, Memorial Sloan Kettering Cancer Center, USA

Purpose: Previous studies show increased sensitivity of older (28-29 months) compared with young adult mice (3 months, possessing a mature immune system) to radiation-induced GI lethality. The objective of this study is to determine whether the cycling crypt base columnar 1 cells (CBCs) in aging animals are specifically more sensitive to radiation effects than the CBCs in young adult mice, and to identify factors that contribute to the increased radiosensitivity.

Results: Mortality induced by sub-total body radiation was assessed at different doses (13Gy, 14Gy, and 15Gy) in young adult mice versus older mice. Each dose was evaluated for the occurrence of lethal GI syndrome. A higher death rate due to radiation-induced GI syndrome was observed in older mice as compared with young adult mice: 30% vs. 0% at 13Gy, 90% vs. 40% at 14Gy, and 100% vs. 60% at 15Gy. Radiation-induced damage to crypts was determined by measuring crypt regeneration (H&E staining, Ki67 expression), CBC biomarkers (*lgr5* and ascl2), premature senescence (SA-ý-gal activity) and apoptosis of CBCs. At all three doses, crypt microcolony survival assays showed that the older mice had fewer regenerating crypts at 3.5 days post-radiation treatment. Furthermore, in the older animals, baseline CBCs numbers per circumference were significantly decreased,

correlating with an elevated apoptotic index. Analysis of tissue damage showed an increased number of senescent CBCs per crypt circumference in older mice relative to younger mice, where the latter was not significantly affected by radiation treatment.

Conclusions: Enhanced sensitivity to radiation-induced GI syndrome and higher mortality in older mice can be attributed to a decreased capacity to regenerate crypts, presumably due to increased apoptosis and senescence of CBCs.

Biography

Adriana Haimovitz-Friedman has completed her PhD from Hebrew University at Hadassah Medical Center, Jerusalem, Israel. She is an attending Radiation Biologist at Memorial Sloan Kettering Cancer Center in New York, USA. Dr. Haimovitz-Friedman has over 125 publications that have been cited over 700 times. Dr. Haimovitz-Friedman is the Biology chairwoman for the New York Proton Center for pre-clinical studies and has been serving as an editorial board member of several reputed journals. Her research focuses on radiation therapy (RT) side effects among them radiation-induced gastrointestinal syndrome (GI) mediated by damage in the endothelium, via activation of ASMase pathway involved in microvascular dysfunction, which regulates the ability of tissues stem cells to process potentially lethal damage directly induced in them by radiation.

Last Aid International: Fostering public engagement in palliative care and end-of-life topics

Erika Zelko[1,2], Georg Bollig[2] and **Rok Mihelič[3]**

[1]Institute for Palliative and Hospice Medicine University Maribor, Slovenia
[2]Institute for General Medicine, Johannes Kepler University Linz, Austria
[3]Department off Anaestesiology, Intensive Care,
Palliative Medicine and Pain Therapy, HELIOS Klinikum Schleswig, Germany

In the modern era, the desire for individuals to receive palliative care at home during their final moments is undeniable. However the reality still is that most people day in institutional settings, such as hospitals, long-term care facilities, and hospices. The growing demand for home-based palliative care in the future necessitates the active involvement of the public, including friends, relatives, neighbours, colleagues, and community members. Last Aid Movement endeavours to facilitating the crucial conversations about palliative care, death, dying, grief, and end-of-life care. Last Aid Courses, introduced in various countries since 2014, have been instrumental in raising awareness and empowering individuals to participate actively in palliative care and end-of-life support. The members of the movement advocates for the inclusion of both First Aid and Last Aid as essential components of standard school education and lifelong learning. By educating the public about these vital topics, Last Aid International aims to prepare individuals to play their part in the community's provision of palliative care. The Last Aid Course curriculum was first established by Georg Bollig in 2008 and was formalized in 2014 by the International Last Aid working group. Notably, the Last Aid Movement has evolved into an international phenomenon, with organizations and supporters from 21 countries, including Europe, Brazil, Canada, and Australia. While national palliative care organizations are key contributors, universities, hospices, and religious institutions have also embraced the Last Aid initiative. In 2019 was formed an international research group (LARGI), which brings together researchers worldwide to investigate the impact of Last Aid Courses and public palliative care education. Throughout its development, Last Aid International and its founder, Georg Bollig, have received recognition and prizes, underscoring the growing significance of the Last Aid Movement. We would like to provide a comprehensive

overview of the content, impact, and global reach of Last Aid International and the Last Aid Movement, emphasizing their role in promoting vital conversations about palliative care and end-of-life topics in the community.

Biography

Education:

University: Medical Faculty University Ljubljana

Postgraduate Education:

2002 do 2007 – Medical Faculty Ljubljana, Master degree at Public Health Department with the the thesis: »Local community health enhancing Program assessment. The case of the Beltinci community«, December 2007.

18.6.2015 Graduated with PhD thesis: »Development of Methodology of public health approach at the Roma community«

San Diego University Program of Addiction Medicine

CINDI Program Education - Finnland

EUPCA – Leadership Course 2017 – 2019

LAST AID Instructor course/ Latvia

Employment : 1994-2015 Public Health Centre Murska Sobota

2015-2021 Public Health Centre Ljubljana and Medical Faculty Maribor

2021 - Head of the Institut for General Medicine JKU Linz, AUT

Going Global: Bringing artificial intelligence education to a Global audience

Jordan D Perchik, Andrew D Smith, Houman Sotoudeh, Steven A Rothenberg and **Srini Tridandapani**

University of Alabama at Birmingham, USA

Introduction: Applications of artificial intelligence (AI) in radiology continue to increase every year, however most radiology residencies lack a dedicated AI education curriculum. Fundamental AI education resources are even more sparse for trainees in low to middle income countries and under-resourced healthcare systems. The AI Literacy Course has served as a free resource for fundamental AI education since 2020. We detail the scalability of the course to a nationwide and international audience and the effect of the course on participant knowledge of AI.

Methods: A week-long AI in radiology literacy course for radiology trainees was held October 3-7, 2022. Ten 30 min lectures utilizing a remote learning format covered basic AI terms and methods, clinical applications of AI in radiology by three different subspecialties, and special topics lectures. Lectures were also recorded for asynchronous learners. A proctored hands-on clinical AI session allowed participants to directly use an FDA cleared AI-assisted viewer and reporting system for advanced cancer. Pre- and post-course electronic surveys were distributed to assess participants' knowledge of AI terminology and applications and interest in AI education.

Results: A total of 25 residency programs throughout the US participated in the course with participants attending from 10 countries. An average of 150 participants viewed the course per day. Nearly all participants reported a lack of sufficient exposure to AI in their radiology training (95.8%). Participant knowledge of fundamental AI terms and methods increased after completion of the course, with an average pre-course evaluation of 8.3/15 and a post-course evaluation of 10.0/15 (p=0.01).

Conclusion: The scalability of the AI Literacy Course demonstrates a viable model to bring accessible fundamental AI education to radiology trainees in the United States and internationally.

Biography

Dr. Perchik is a Diagnostic Radiologist with the University of Alabama at Birmingham specializing in Abdominal Imaging and Informatics. Perchik is the co-founder and President of Artificial Intelligence in Radiology Education, the largest free resource for Radiology AI education in the world. His areas of interest include ethics and bias in AI, clinical integration of AI, and ensuring AI quality and safety.

Impact of the affordable care act on participation in the supplemental nutrition assistance program among low-income older Medicare beneficiaries

Hyunmin Kim[1], Asos Mahmood[2], Cyril Chang[3], Noah Hammarlund[4] and Aram Dobalian[5]

[1]The University of Southern Mississippi, USA
[2]University of Tennessee Health Science Center, USA
[3]The University of Memphis, USA
[4]University of Florida, USA
[5]The Ohio State University, USA

The current study investigates whether the Affordable Care Act (ACA), under an explicit policy aim of enhancing the interface between Medicare and Medicaid, has improved participation in the SNAP among low-income older Medicare beneficiaries. We extracted 2009 through 2018 data from the US Medical Expenditure Panel Survey (MEPS) for low-income (≤%138 Federal Poverty Level [FPL]) older Medicare beneficiaries (n=50,466; aged≥65), and low-income (≤%138 FPL) younger adults (aged 20 to<65 years, n=190,443). MEPS respondents of>%138 FPL incomes, younger Medicare and Medicaid beneficiaries, and older adults without Medicare were excluded from this study. Using a quasi-experimental comparative interrupted time-series design, we examined (1) whether ACA's support for the Medicare-Medicaid dual-eligible program, through facilitating the online Medicaid application process, was associated with an increase in SNAP uptake among low-income older Medicare beneficiaries, and (2) in the instance of an association, to assess the magnitude of SNAP uptake that can be explicitly attributed to the policy's implementation. The outcome, SNAP participation, was measured annually from 2009 through 2018. The year 2014 was set as the intervention point when the Medicare-Medicaid Coordination Office started facilitating Medicaid applications online for eligible Medicare beneficiaries. Overall, the change in the probability of SNAP enrollment from the pre- to post-intervention period was 17.4 percentage points higher among low-income older Medicare enrollees, compared to similarly low-income, SNAP-eligible, younger adults ($\beta=0.174$, $P<.001$). This boost in SNAP uptake was significant and more apparent among older White ($\beta=0.137$, $P=.049$), Asians ($\beta=0.408$, $P=.047$) and all non-Hispanic adults

($\beta = 0.030$, $P < .001$). The ACA had a positive, measurable effect on SNAP participation among older Medicare beneficiaries. Policymakers should consider additional approaches that link enrollment to multiple programs to increase SNAP participation. Further, there may be a need for additional, targeted efforts to address structural barriers to uptake among African Americans and Hispanics.

Biography

Dr. Hyunmin Kim currently holds the position of Assistant Professor of Health Policy and Administration within the Department of Public Health at the University of Southern Mississippi School of Health Professions. Her areas of expertise encompass policy analysis, quantitative methods, health economics, healthcare financing, and health informatics. Her ongoing research is centered on the evaluation of health policies, including value-based payment programs and the Affordable Care Act, to understand their implications for equity and healthcare disparities. She has published extensively in leading journals in healthcare policy and health information management, such as BMC Health Services Research (Impact Factor: 2.8), Journal of Medical Systems (Impact Factor: 5.2), and JMIR mHealth and uHealth (Impact Factor: 5.0). Additionally, she currently serves on the Editorial Board of the American Journal of Health Behavior and holds the position of Review Editor in the Frontiers in Public Health, Health Economics section.

Wellness together Canada: Digital implementation of the stepped care 2.0© model for population mental health

M. Inrig[2] and A. Churchill[1]

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This presentation will highlight the application of an innovative stepped care framework (SC2.0) within a digital population based mental health service for all people across Canada. With 4 million unique site visitors, Wellness Together Canada (WTC) offers low barrier preventative care, early intervention, and ongoing mental health and substance use health support, available 24/7 across a continuum of care.

The implementation of the SC2.0© model is demonstrated to reduce wait times, improve access and individual choice, adherence to treatment, and satisfaction. With 7 different types of services and over 500 resources for individuals to choose from, the Wellness Together Canada portal is delivered in alignment with the SC2.0 guiding principles of open-access, person-centric and strengths based care.

Through the WTC web based and mobile application, self-assessment and wellness tracking is provided to support individuals to monitor their mental health over time and make informed choice through the use of three validated questionnaires.

In addition to mental health and substance use health information and courses, easily accessible counselling services, peer and crisis supports are available on demand with low to no wait times, no referral or identification required. Funded by the Government of Canada, the cost of delivering this population level service is less than $2 per person, with additional system cost savings. To continue to respond to emerging and ongoing needs, community engagement and co-design are robust and ongoing, focusing on the unique needs of communities across Canada, including Indigenous communities, Black Canadian communities, healthcare workers and veterans.

Having emerged out of increased need during the COVID pandemic, Wellness Together Canada continues to provide population level, digital mental health service to the 38 million people living across Canada.

Biography

Maggie Inrig is a passionate system leader, dedicated to population mental health and increased access to service. Maggie has held positions in clinical social work, program development, and for the past ten years working in system change across Canada. She brings expertise in implementation science, and in collaboratively working with staff, organizations and systems to undergo complex change to better serve people and communities. Maggie holds a Bachelor of Health Science, a Bachelor of Social Work, and Master of Arts in Critical Disability Studies.

Disparities in violent fatal injury among racial and ethnic minorities, 2009–2019: A portfolio analyses

Maria-Isabel Roldós[1], Tilda Farhat[2] and **Marcia M. Gómez[2]**

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Background: The excess mortality burden due to violent fatal injuries is an urgent public health issue for adolescents and young adults, especially those from racial and ethnic minority populations. We examined the research portfolio of the United States, National Institutes of Health (NIH) related to violent fatal injuries between 2009 and 2019 to focus on adolescents and young adults from NIH-designated populations experiencing health disparities and to identify trends and research gaps.

Methods: We extracted the following descriptive variables from the grant's abstracts and the grant's description from RePORTER: (1) year of funding award; (2) location of the research, such as city and state; (3) population focus classified as racial and ethnic minorities; less privileged socioeconomic status populations; underserved rural populations and sexual and gender minorities, as grants could identify more than one population focus; (4) type of research conducted, defined as:

• Etiology grants: examining determinants and their interactions, as well as

contributing pathways;

• Intervention grants: developing interventions to prevent or reduce violent fatal injury;

• Dissemination and implementation grants: translating evidence-based interventions to prevent or reduce violent fatal injury to real-world settings; and

• Surveillance grants: creating or enhancing data systems to monitor the incidence, prevalence, and mortality of violent fatal injury.For the grants that met the inclusion criteria, the authors reviewed the grant's information downloaded from RePORTER. This information included the abstract and administrative data of the award. To identify the determinants studied

in each grant, authors reviewed the abstracts and specific aims. Only where determinants had been studied explicitly, we coded grants using the Framework of the National Institute of Minority Health and Disparities (NIMHD). Key words from the abstracts were analyzed to identify fields studies and presented in a word cloud.

Results: In 10 years, NIH funded 17 grants that produced 90 publications. Researchers used socioecological frameworks most to study violent crime, except in rural locations. Research gaps include the direct impact of violent crime among those victimized and health care (the least studied determinant) and premature mortality disparities caused by hate crimes.

Table 1 NIH funded projects studied violent fatal injury determinants according to minority health and disparities research framework

Domains of influence	Individual	Level of influence, number of determinants			
		Interpersonal	Community	Societal	Total determinants[a]
Biological					
Behavioral	13	12	13	6	44
Physical/built environment	6	6	10	3	25
Socio-cultural	2	8	12	8	30
Health Care system	4	2	5	1	12
Total determinants[a]	25	28	40	18	

[a]Grants address multiple determinants

Fig.2 Abstract's key terms cluster analyses of publications stemmed from NIH grants in 2009-2019(data accessed Feb. 2022)

Biography

Dr. Maria-Isabel Roldós is an Associate Professor with the Department of Health Equity, Administration and Technology- HEAT at the School of Health Sciences, Human Services & Nursing at Lehman College. Prior to joining Lehman in 2020, she served in various U.S. federal institutions including NIH and CDC, as well as held high leadership positions in the implementation of population-based projects including country director of a USAID project related to capacity building of civil society organization (CSOs); Associate Dean of the School of Public Health and co-founder of the Schools of Medicine and Public Health's Global Health program; and as Health Commissioner of the capital of Ecuador-Quito (2014-2016). Her research and practice focus are in data science and in the applications of economic evaluations in health policy to improve minorities' health reduce health disparities and achieve health equity. Currently, her focus is in the use of Health-Related Quality of Life (HRQoL) analyses to characterize populations that experience health disparities and to develop innovative methods to improve minorities' participation in research, practice, and programs.

The impact of SARS-CoV-2 infection and the anti-COVID vaccine on the menstrual cycle, among female students at the Faculty of Nursing

Yllka Stramarko

Scientific Research Centre for Public Health, University of Vlore "Ismail Qemali", Albania

The menstrual cycle is an important part of a woman's life. A normal menstrual cycle is an indicator of good health, and disturbances in the menstrual cycle can indicate underlying conditions. There has been substantial anecdotal and media coverage on the effect of COVID-19 on the female reproductive system and changes in the menstrual cycle, but so far available data are not robust enough to draw firm conclusions about the questionnaires. In September 2023, 130 students completed an anonymous survey (with a questionnaire) as part of an observational study of women's reproductive health over the course of the pandemic. The included students were 18 to 23 years old and were not or had not recently been pregnant at the time of inclusion. They were asked if they had noticed menstrual cycle changes as an ongoing symptom or if they had noticed new ones related to their COVID-19 illness. Of these, 16% (n = 20) reported menstrual cycle changes. The number of days between a positive SARS-CoV-2 test and the last reported menstrual cycle change varied between 28 and 72 (median 57.5). The most common changes were irregular menstruation (n = 12), an increase in premenstrual syndrome symptoms, and infrequent menstruation (n = 7). Infrequent menstruation was defined as menstrual periods occurring at intervals longer than 35 days. Irregular menstruation was defined as a significant variation in the length of one's menstrual period or the time between two periods. There was no statistically significant difference in any form of menstrual cycle irregularity between mildly and severely ill students. The findings show mainly a decrease in menstrual volume and a prolongation of the menstrual cycle. There were no students who had only received vaccinations; all of them had tested positive for COVID. The findings indicate a change in the menstrual cycle, mainly a decrease in menstrual volume and a prolongation of the menstrual cycle. They also indicate that the severity of COVID-19 does not play a role in menstrual cycle changes. Future studies that include a large sample size are recommended.

Biography

Yllka Stramarko (Bilushi) was a pathologist at the polyclinic of specialties in Vlorë (Albania) and then a lecturer at Ismail Qemali University, Vlorë. She has been in charge of the Department of Public Health. During 01/09/1985–30/06/1990, she studied general medicine at the University of Tirana, Tirana (Albania). In the period of 02/02/1996–01/08/1996, she has been specializing in primary education at Glasgow University, Glasgow (United Kingdom). On May 05/06/2007–07/12/2010 she took the Scientific Degree: Doctor in Public Health, University of Tirana, Tirana (Albania), January 19, 2012. Title: Docent from the Council of Professors, UV, Vlora, December 20, 2012. Academic Title: Associate Professor; Council of Professors, 04/10/2016 Academic Title: Professor; University of Medicine of Tirana, Tirana (Albania).

Self-management, a challenge in coping with rheumatoid arthritis: Case report

Glodiana Sinanaj

Scientific Research Centre for Public Health, University of Vlore "Ismail Qemali", Albania

Rheumatoid arthritis (RA) is a chronic disease that causes inflammation around the body and commonly presents with pain in the joints. Women and older people have a higher risk of developing RA. Rheumatoid arthritis can be prevented and managed through reducing occupational risks, lifestyle behaviors, healthy eating, physical activity and maintaining a normal body weight. The aim is to present what the patient with rheumatoid arthritis refers to, based on her experience with the disease, for a healthier life. In this study, I am reporting a case, a woman with rheumatoid arthritis under the age of 50. Semi-structured face-to-face interview was conducted based on qualitative research method. The patient woman included in the study was diagnosed with rheumatoid arthritis and was randomly selected from the medical records at the Mother Teresa Tirana University Hospital Center (QSUT). Initially, the patient was contacted by phone, the purpose was explained to her, and she expressed her desire to be part of the study. This study reflects the history of the disease of the woman diagnosed for 12 years with rheumatoid arthritis, the factors, difficulties and key elements in the effective self-management of rheumatoid arthritis, also shows the preventive measures for rheumatoid arthritis. This case clearly reflected how rheumatoid arthritis worsened quickly and without understanding the health of the young woman, it had a great impact on her health and that of her family, especially when this disease was not evaluated in its beginnings. People with rheumatoid arthritis can have a healthier life if they are educated and advised on how to manage their symptoms. It is important to maintain a healthy lifestyle with regular physical activity and a nutritious diet. The recommendation to take medications based on the medical protocols of the disease is also of particular importance.

Biography

Glodiana Sinanaj is currently a Lecturer at the Faculty of Health at the Scientific Research Center for Public Health since 2008. In the years 2004-2005 she successfully completed the Postgraduate Specialization for "Nursing in Public Health", and in the years 2011-2013 she completed the "Master of Science in Nursing Sciences". In 2021 she defended his doctorate in Nursing Sciences at the Faculty of Medical Sciences, Medical University of Tirana. Graduate Doctor - Doctor Degree. She has published quite a few articles. The research interest is health care; chronic disease management, nursing education and dermatological health care.

Pitfalls of recreational drug use when travelling

Marian Sujak

Neurologische Klinik, Landesklinikum Baden-Mödling, Austria

Global tourism brings its risks and pitfalls regarding recreational drug use. While legal terms around illicit drugs may vary in different countries, substance composition and dosing are often uncertain. On the other hand, an unintended intoxication may be the consequence of a falsely prepared tripping session or the ingestion of drugs looking like food. Traditional recommendations around safer use are not easily applicable to the travelling individual in his special headspace searching for memorable experiences.

Biography

Specialist in Neurology practicing from Austria (greater Vienna), interested in developments around recreational drug use with possibilities of safer use, drug checking and targeted therapy.

A whole new world of healing: Exploring medical hypnotherapy for pediatric patients

V.B.Bastek[1] and **M.J. van Vliet[2]**

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Klinikum Region Hannover Psychiatrie Wunstorf, Germany
[2]Department of Social Pediatrics, Beatrix Children's Hospital,
University Medical Center Groningen, University of Groningen, Netherlands

With the introduction of 'Positive Health' in pediatrics, which defines health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity', mind-body health techniques have become an even more relevant and accepted part of treatment. In mind-body health techniques, medical hypnotherapy is increasingly being used as an effective adjunctive treatment for several symptoms and disorders in pediatric medicine. It has especially gained attention due to its ability to directly and positively affect the subconscious mind. In this way it's possible to retrain the brain to diminish symptoms, modulate destructive subconscious beliefs and teach patients coping skills. Its potential to prevent chronic pain and subsequent psychiatric sequelae later in life is not clear yet.

Biography

Vanessa has studied the effect of medical hypnotherapy early in her studies at the university of Groningen, NL. While also becoming a hypnotherapist for pediatric patients in the meantime she had the ability to practice as an intern in several specialties and lately as a doctor in training for pediatric psychiatry. Due to its novelty and unleashed potential, Vanessa keeps being astonished by the effects of medical hypnotherapy. She aims to spread her knowledge to evoke a higher consideration of this treatment option for children in western medicine.

Workplace ostracism in healthcare and it's association with job satisfaction, stress, and perceived health

Sirpa M. Manninen[1], Samuli Koponen[2], Timo Sinervo[3] and Sanna Laulainen[4]

[1,2,4]University of Eastern Finland, Finland
[3]Finnish Institute for Health and Welfare, Finland

We have global concerns about how the workforce will cope in the future in healthcare. There is a need to focus on those factors that undermine well-being and job satisfaction and to work to prevent them. This paper aims to increase understanding of workplace ostracism (WOS), examine the association between job satisfaction, stress, and experienced health, and whether this relationship is mediated by loneliness and self-esteem. WOS is a phenomenon where someone is rejected or excluded from social interaction at work *without any words or explanations*. Typical examples of WOS are avoiding eye contact (Wu et al., 2016) or failing to answer questions or greetings (Robinson et al., 2013), to name a few.

The data was collected from two Finnish university hospitals by a web-based questionnaire in January 2021. The participants of the study consisted of healthcare workers (nurses, practical nurses, social workers, doctors) and managers from all levels (N = 569). The data was analyzed by linear regression analysis and mediator model tests.

Results raise worry. Even 72 percent of healthcare workers (n = 418) had experienced WOS at least in some form. WOS occurred in every occupational group, including managers. WOS had a clear direct association with job satisfaction, stress, and perceived health. Loneliness fully mediated the relationship between WOS, stress, and experienced health, and partly mediated the association between WOS and job satisfaction. Self-esteem partly mediated the association between WOS, stress, job satisfaction, and experienced health.

According to the results of this study, WOS is a very detrimental phenomenon. In the future need to pay more attention to inclusion and belongingness in work environments. More commonality and consideration for others at work are needed because these factors may help increase work well-being and strengthen the experience of inclusion.

Biography

"It didn't matter how much I got paid, it mattered that I felt like I belonged and that I was important to my work community." This was a reason why Manninen started studying workplace ostracism. Ostracism is a phenomenon where someone is rejected or excluded from social interaction without any words or explanations.

Sirpa M. Manninen worked in healthcare for 10 years (midwifery) before academic studies. She started her PhD studies (health and social management science) in 2020 at the University of Eastern Finland (UEF) and will complete her PhD this spring. Manninen has studied workplace ostracism in healthcare. This phenomenon is limited to study in Europe, and globally limited in healthcare. Manninen published her latest article in a top peer-reviewed journal (Journal of Advanced Nursing). Manninen's research interests are workplace ostracism, organizational behavior, interaction, social inequality, and inclusion. In addition, she lectures on workplace ostracism, community, and interaction.

Role of top flat magnetic stimulation for urinary incontinence as a debilitating condition of pelvic floor dysfunction: An observational evaluation of Latin American population

Antonio Posada Dominguez[1], Pablo Gonzalez Isaza[2], Sarai Niño Pantoja[1] and Irene Fusco[3]

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[2]Functional and Regenerative Gynecology International Consultant Private Practice Barcelona, Spain, Pereira, Colombia
[3]El. En. Group, Italy

Background: Urinary incontinence (UI) is a common dysfunction of the pelvic floor, afectin 10–20% of all women, and up to 70% in the elderly general prevalence of 17% 20-year-old women and 38% in women over 60 years. It is estimated that only 25% of patients seek treatment for this debilitating condition.

Aim: The aim of this study was to evaluate the efcacy of a device based on top flat magnetic stimulation to treat pelvic floor disorders especially female urinary incontinence.

Methods: A total of 33 volunteer patients were divided into 5 groups according to the type of complaint. Subjects received 8 treatment sessions, with a frequency of twice a week with two diferent settings. Pelvic Floor Bother Questionnaire (PFBQ), Pelvic Organ Prolapse/ Urinary Incontinence Sexual Function Questionnaire (PISQ-12) and Urinary Incontinence Short Form (ICIQ-UI-SF) were compiled by all patients at the beginning and after 3 months from the end of the last treatment (3MFU).

Results: The patient's scores from validated Questionnaires signifcantly decreased ($p < 0.01$) from baseline up to 3MFU inside most of the groups.

Conclusions: The noninvasiveness and safety of this device make this treatment a very good alternative for pelvic floor dysfunctions mainly SUI.
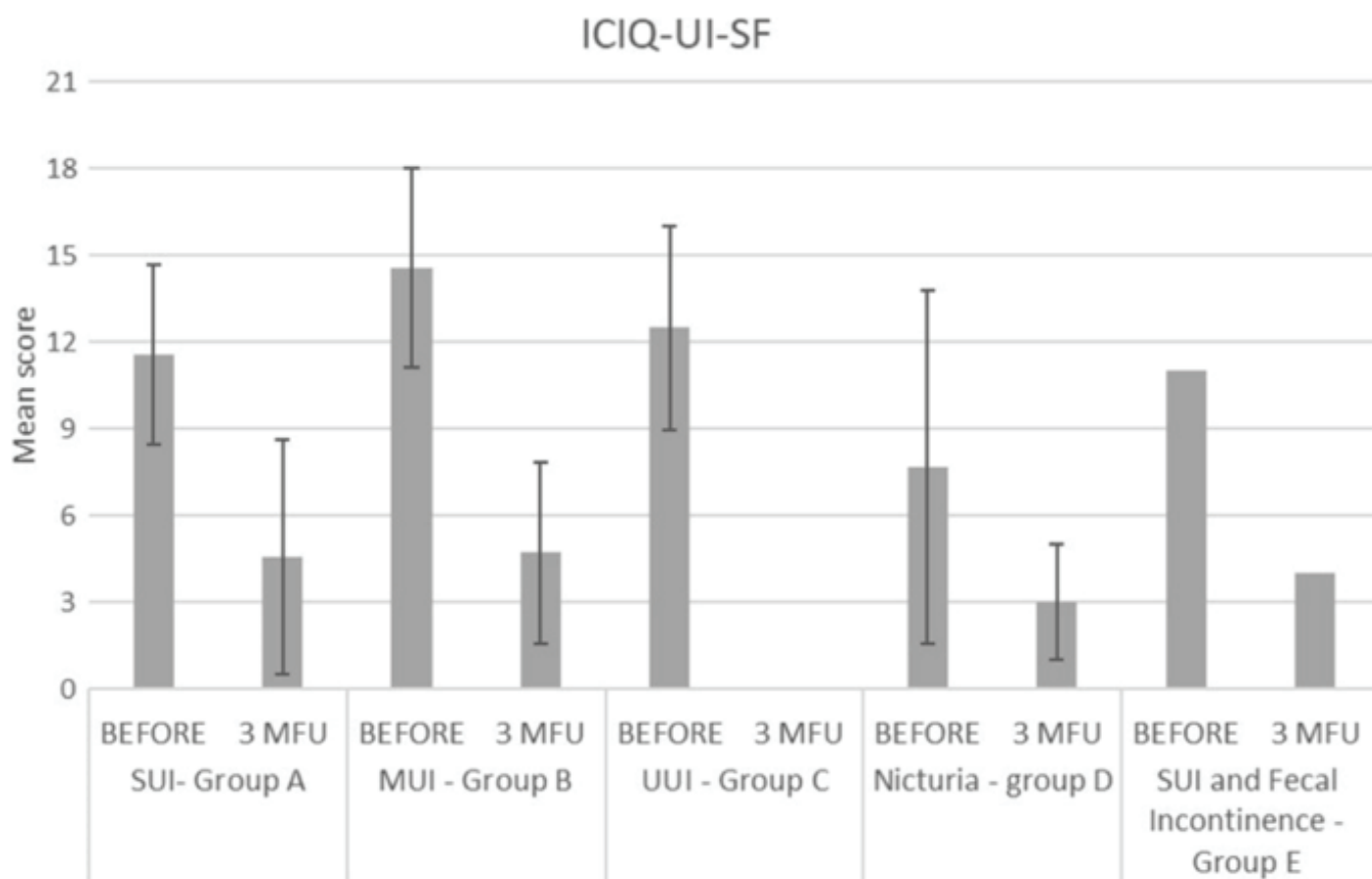
Fig.1 Histogram representation of the results from ICIQ-UI-SF at baseline and 3MFU for each patient's group

Biography

Dr. Antonio Posada Domínguez

Board Certified in Ob-Gyn.

Board Certified in Gynecologic Oncology

Breast Surgeon

Expert in Lasers and EBD´s for functional and regenerative gynaecology

Expert in Bioidentical Hormone Replacement Therapy in Men and Women

Functional Medicine

CEO and Founder of BIOCAM HEALTH MEXICO.

Convalescent plasma a treatment option for pandemics in low-and Middle- income countries; The use of Hemoclear Filter as prepared readiness

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[2]Department of Internal Medicine, Academic Hospital Paramaribo, Suriname

Convalescent plasma has been a potential treatment option for various viral diseases such as mumps, measles and influenza for more than several decades (1). The lack of definitive treatment or preventative options for COVID-19 led us in Suriname early on to consider convalescent plasma (CP) as potentially therapeutic. Access to CP therapy in a low-resource setting was enabled by the novel filtration device Hemoclear, which was easy to implement in an intensive care (ICU) setting and was used without adverse effects on both the donor and the CP recipients [2]. Equitable access to such methods may allow readiness in case of viral mutations or new pandemics everywhere.

Method: Two hundred patients with severe SARS-CoV-2 infection requiring intensive care were recruited. Fifty eight patients (29%) received COVID-19 convalescent plasma (CCP) treatment in addition to standard of care (SOC). Groups were matched by age, sex, and disease severity scores.

Results: Mortality in the CCP treatment group was significantly lower than that in the SOC group (21% versus 39%; Fisher's exact test P = 0.0133). Multivariate analysis using ICU days showed that CCP treatment reduced mortality (hazard ratio [HR], 0.35; 95% confidence interval [CI], 0.18 0.66; P = 0.001).

Conclusion: CP obtained via this novel blood filter is safe and could contribute to care during new pandemics. The easy applicability and reduced costs make this procedure accessible in low resource settings and also opts for a decentralized approach (figure 1).
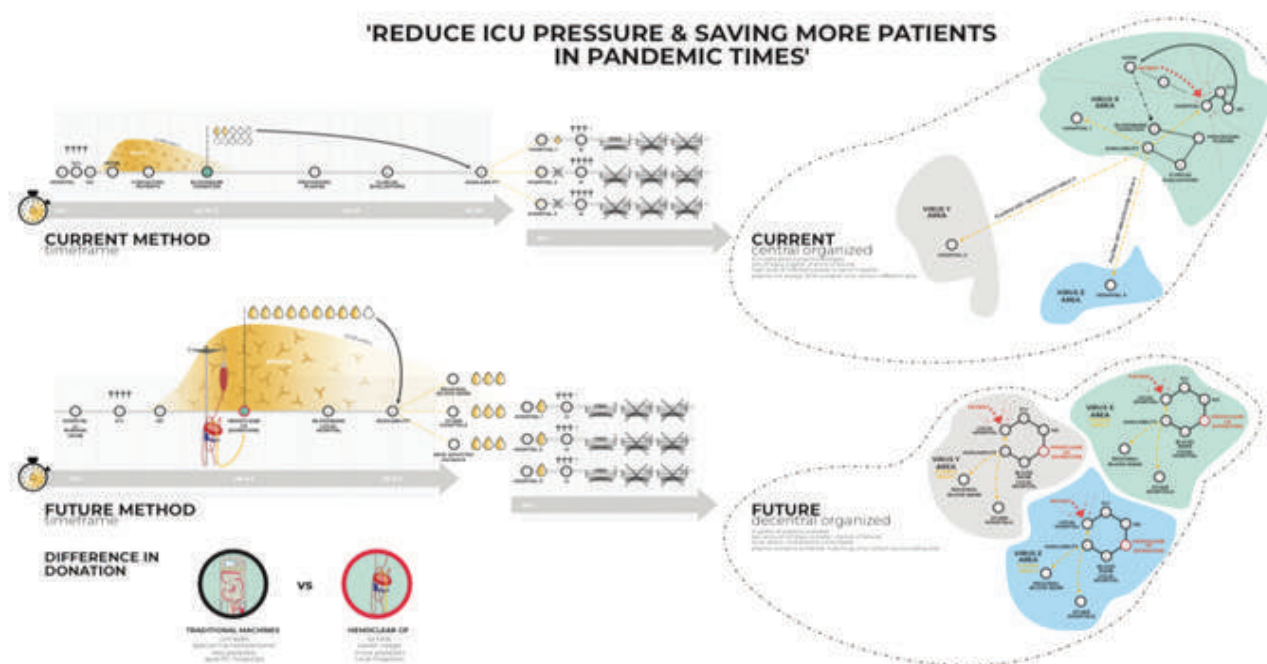
Biography

Rosita Bihariesingh is a cardio-anesthesiologist and Intensivist in the Academic Hospital Paramaribo. Suriname. A small Dutch speaking country on the northern coast of South America with only 600 000 inhabitants.

Rosita is since 2006 part of a very small dedicated team responsible for all cardiac and pulmonary surgery per and postoperatively. Since 2022 she is also the chief trainer for the anesthesiology residents in Suriname.

Working in a 3rd world/ developing country demands dedication and inventivity because of scarce resources. Blood management, fereses and convalescent plasma in the covid period are among her fields of interest.

She has recently received the Jan Taco te Gussinklo Award in the Netherlands for her work of deriving convalescent plasma with the Hemoclear filter for the treatment of Covid 19 patients.

One Health through the integration of wildlife management, veterinary medicine, and data science

Brenda J. Hanley[1], Rachel C. Abbott[1], Cara E. Them[3], Nicholas A. Hollingshead[1] and Krysten L. Schuler[1]

[1]Wildlife Health Lab, Cornell University, USA
[2]Cara Them Consulting LLC, USA

There exist unlimited opportunities to convene interdisciplinary teams of animal and human health professionals with quantitative scientists to drive discoveries that benefit the well being of humans, animals, and ecosystems. I will discuss mathematical, statistical, and data science techniques that we used to mesh veterinary records of chronic wasting disease with population data of free-ranging cervids to support disease surveillance decisions. Acting as a computational bridge, quantitative partners can propel timely decision making by veterinarians, biologists, and public health officials in our shared pursuit of One Health.

Biography

Jointly trained in geography, mathematics, statistics, and computational biology, she is a Research Associate at the Wildlife Health Lab in the Department of Public and Ecosystem Health of the College of Veterinary Medicine at Cornell University. She applied her quantitative knowledge to questions posed by diverse teams of wildlife health professionals to develop mathematical and statistical tools needed to answer urgent questions in One Health.

Modulation of histamine neuronal activity by Thyrotropin-Releasing Hormone neurons: Self-inputs or neighboring ones?

Edith Sánchez-Jaramillo[1], Gábor Wittmann[2], Csaba Fekete[2,3], Jean-Louis Charli[4] and **Ronald M. Lechan[2]**

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[3]Department of Endocrine Neurobiology, Institute of Experimental Medicine, Hungary
[4]Departamento de Genética del Desarrollo y Fisiología Molecular, Instituto de Biotecnología, Universidad Nacional Autónoma de México (UNAM), México
[5]Department of Neuroscience, Tufts University School of Medicine, USA

Hypophysiotropic thyrotropin-releasing hormone (TRH) neurons function as metabolic sensors that regulate the thyroid axis and energy homeostasis. Less is known about the role of other hypothalamic TRH neurons. As central administration of TRH decreases food intake and increases histamine in the tuberomammillary nuclei (TMN), and TMN histamine neurons are densely innervated by TRH fibers from an unknown origin, we recently mapped the location of TRH neurons that project to the TMN.

By injecting the retrograde tracer, cholera toxin B subunit (CTB), into the TMN subdivisions of adult Sprague–Dawley male rats, we observed retrograde tracing in several hypothalamic and limbic nuclei. However, CTB/TRH+ double-labeled cells were only observed in the tuberal lateral hypothalamus (TuLH). The specificity of this result was confirmed by administering the anterograde tracer, Phaseolus vulgaris leuco-agglutinin (PHAL) into the TuLH. Double-labeled PHAL/TRH+ boutons were identified in all subdivisions of the TMN. Interestingly, subpopulations of TMN neurons where positive for histidine decarboxylase (Hdc)/PHAL, Hdc/Trh receptor (Trhr), and Hdc/Trh. Further confirmation of a TuLH-TRH neuronal projection to the TMN was established in a transgenic mouse that expresses Cre recombinase in TRH-producing cells following the microinjection of a Cre recombinase-dependent AAV that expresses mCherry into the TuLH. According to our data, the TRH

innervation of TMN originates in part from TRH neurons in the TuLH. However, it could also be originated from a TMN neuronal subpopulation that co-synthesize TRH/histamine. We are currently studying the contribution of these populations in the regulation of energy homeostasis. Our findings contribute to the description of new pathways involved in the regulation of food intake and add to others that could eventually contribute to counteract obesity and diseases related to changes in body weight regulation.

Biography

Dr. Edith Sánchez-Jaramillo holds a Bachelor of Science degree in Biology. She graduated with a MSc., PhD. in Biochemical Sciences from the National Autonomous University of México. Her graduate studies focused on the heterogeneity of the response of hypophysiotropic Thyrotropin-releasing hormone (TRH) neurons in two models of acute stress, one induced by suckling and the other induced by cold stimulation. She then joined the Department of Endocrinology at Tufts University - New England Medical Center as a Postdoctoral research fellow, under the mentorship of Dr. Ronald Lechan, where she worked on the elucidation of the effects of hypophysiotropic TRH neurons on appetite, thermogenesis and infection, and participated in the development of a transgenic mouse that expresses Cre recombinase in TRH-synthesizing neurons. She currently studies the lateral hypothalamic TRH neurons that innervate the histamine neurons from the tuberomammillary nuclei and its importance on feeding behavior by using retrograde, anterograde tracers and genetic and viral tools

The level of Vitamin D in the staff of the Faculty of Health, University of Vlore, Albania- The role of educational training- A case-control study

Jerina Jaho

Scientific Research Centre for Public Health, University of Vlore "Ismail Qemali", Albania

Vitamin D testing has grown exponentially in recent times. The data have suggested that approx. 40% of Europeans are vitamin D deficient and 13% are severely deficient. Serum 25 (OH) D concentration is currently the main indicator of vitamin D status. It reflects endogenously produced vitamin D and that obtained from foods and supplements. Vitamin D deficiency is related in similar ways inseparable from bone demineralization, and some studies have shown an association between 25 (OH) D levels and different chronic diseaes. This is a case-control study, during April-July 2023 at the staff of Faculty of Health. The objective was the assessment of vitamin D status in staff by measuring 25 (OH) D concentrations in the serum, the identification of the lifestyle especially to the factors that influence the status of vitamin D and to highlight the differences between the attitudes of the staff before the training and at the end of it, about vitamin D. The study was carried out in two phases, where in the first phase was measured the level of 25 (OH) D and were distributed the questionnaires related to knowledge about vitamin D. The second phase was developed after three months, where we measured the vitamin D levels of the group that was part of informative trainings. After we measured of the level of vitamin D of the participants staff of the Faculty of Health, among the 42 people included in the study, 12 people had deficient levels of vitamin D. Only 7 people had sufficient levels and the rest at deficient levels. Participants were all women and between the ages of 25 and 71. Undiagnosed Vitamin D deficiency is highly prevalent in apparently healthy persons. The study identifies also level of knowledge, attitude, and practice of faculty staff on vitamin D status measurement, diagnosis of deficiency, and management and treatment of its health consequences. We recommend that training and information sessions to be held on the importance of vitamin D in health and on ways to maintain its adequate level in the body.

Biography

Graduated in 2014 in general medicine. Family doctor during 2015-2017 and from 2017 currently assistant lecturer at University "Ismail Qemali" Vlore, Albania. Being part of the Faculty of Health gives her the opportunity to know much better the problems of public health. As a lecturer at the Faculty of Health, she has been engaged in several subjects for nursing students, but also in scientific research. The main fields of study belong to public health issues such as prevention and awareness of tumor diseases, management of chronic diseases, and the role of vitamin D in health. She is also author and co-author of several articles published in indexed medical journals. Actually, she is a PhD student at the University of Rome, Tor Vergata, Italy.

Medicines and supplements taken by people with multiple chronic conditions, and the evaluation of the association between age, gender, and the other variables

Brunilda Subashi[1,2], Fatjona Kamberi[1], Enkeleda Mahilaj[1] and **Erlini Kokalla[3]**

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[2]Department of Biomedicine and Prevention, University of Rome Tor Vergata, Italy
[3]Department of Healthcare, University of Vlore "Ismail Qemali", Albania

The elderly population often faces the challenge of managing multiple chronic diseases. These chronic diseases require long-term medication management, leading to the elderly taking a multitude of medicines and supplements. The purpose was to examine the evidence of medicines and supplements taken by adults and older adults with chronic diseases in the city of Vlora and evaluate the association between age, gender, and the other variables. This is a cross-sectional study, conducted on April 7, 2023, in adult and elderly subjects of the City of Vlora, through an administered questionnaire, during the provision of free health services on the occasion of World Health Day. In the study, a group of 50 adult and elderly subjects participated, of which most of them were male (56%), aged 60 and over (86%), and with secondary education (52%).70% of the sample has chronic diseases, of which hypertension and diabetes together make up 59% of the sample. 76% of subjects take antihypertensive and antidiabetic medications; 20% of them take nutritional supplements; 38% take Vitamin D; and 78% take Folic Acid. Regarding the last time of consultation with the doctor or nurse, 32% referred that they were consulted in the last month, 40% were consulted 2-4 months ago, and 18% were never consulted with the doctor or nurse. Approximately 80 percent of the sample believe that with good self-care, they can avoid the need to consult a doctor or nurse. By normal standards, the association between the two variables age and taking any daily medication would be considered statistically significant (95% CI, rs = -0.31, p (2-tailed) = 0.02), and the association between the two variables gender and folic acid intake would be considered statistically significant (95% CI, rs = 0.31, p (2-tailed) = 0.03).

Biography

Brunilda Subashi has a Bachelor's Degree in General Nursing, Master of Science in Sciences of Nursing, and Doctorate in Public Health. Brunilda Subashi currently is member of Scientific Research Center in Public Health and works as a Lecturer at the University of Vlora 'Ismail Qemali'. Her research is focused on the fields of Nursing, Public Health, Nutrition and Dietetics, Physical Activity, Chronic Diseases, Health Education, etc. Actually, she is a PhD student at the University of Rome, Tor Vergata, Italy.

Cow's Milk Protein Allergy (CMPA) - Case report

Irini Rapushi

Scientific Research Centre for Public Health, University of Vlore "Ismail Qemali", Albania

Case Presentation: The child presented to the hospital when he was three months old. The parents reported that the boy is very fussy; he cries all the time, and there is nothing to console him. Also, the parents told us that he vomited a lot, giving rise to a suspicion of gastroesophageal reflux for two months, and now he's having bloody diarrhea with mucus. Apart from the symptoms listed above, he also started to have red and dry skin conditions that are getting worse. The parents stated that they have tried to treat reflux with magnesium alginate, trying different remedies for colics, but nothing could help the boy calm down. On physical examination, the child is alert, active, and very fussy; his weight was minus 1 standard deviation; he was not gaining weight properly; the skin was notably covered with patchy red and dry scales, signs compatible with atopic dermatitis. His mucous was moist; his heart had a normal rhythm without murmurs; his lungs were clear to auscultation; his abdomen was soft but tender to palpation; and no organomegaly was noted. He was born to a G1P1 mother without postnatal problems. Family history revealed allergic problems in the father's child without definitive confirmation. The parents denied skin atopy. We perform blood tests, including the CBC biochemistry panel, LDH, chocolate ferritin, ESR, total protein, IgE-Rast for alpha-lactalbumin, and beta-lactoglobuline. The results revealed a raised number of eosinophils and IgE-Rast for milk protein. Based on clinical symptoms, signs, and blood tests, we concluded that the boy suffered from CMPA and corresponding failure to thrive, a very frequent condition that affects infants. We were devised by the mother to keep a strict diet without dairy products, seafood, or dry nuts. After two weeks, the bloody diarrhea stopped, the skin recovered, he started to gain weight, and the abdominal pain disappeared. The mother was also advised to take calcium and vitamin D supplements to prevent deficiency, given her diet without dairy products.

Biography

Irini works as an assistant lecturer at "Ismail Qemali" University and is a pediatric emergency physician at "Regional Hospital Vlore, Albania". Her qualifications include assisting the health sector in planning and ensuring equal health services for mothers and children. She is married, and her husband is her biggest supporter, together with her lovely family (dad, mom, sister, and brother). In her free spare time, she enjoys traveling, walking her four dogs in nature, reading books, and dancing (though she is not always successful at following the rhythm). Her goals are to learn a new language (Spanish and German) and work as a resident doctor in the near future. Actually, she is a PhD student at the University of Rome, Tor Vergata, Italy.

Self-care practices of type 2 diabetic patients and Albanian questionnaire validation - Translating research into practice

Fatjona Kamberi and Jerina Jaho

Scientific Research Centre for Public Health, University of Vlore "Ismail Qemali", Albania

Adults with type 2 diabetes are becoming more prevalent in developing countries, driving up the demand for continued care due to the poor quality of available resources, the shortcomings of present monitoring techniques, and the severity of the disease's disabilities. The aim was to validate the Summary of Diabetes Self-Care Activities Measure (SDSCA) questionnaire in Albania as a low-cost method for assessing type 2 diabetes self-care. A cross-sectional study was conducted during 2020–2021 among 400 patients with type 2 diabetes aged 40–65 in five primary health care centers in Albania. The validation consisted of evaluating the comprehensibility of the questions and the validity of activities related to diabetes care: (1) food diet, (2) physical activity, (3) blood sugar measurement, (4) drugs used, and (5) smoking. Factorial analysis showed that all variables' questions related to the respondent's perception of disease management were high. The Cronbach Alpha coefficient (0.792) showed that the reliability of the instrument was high and that the set of questions would produce consistent results at different times and with different choices. Correlation coefficient values indicated a significant relationship between the set of comprehension questions and the 0.05 error level. The Albanian SDSCA questionnaire is a valid and reliable tool that may be widely and simply utilized in clinical settings, aiming at translating research into practice. Its use will help people with type 2 diabetes improve their self-care abilities and quality of life, reduce health and social costs, and raise the standard of the health care they receive.

Biography

Fatjona Kamberi works as an Associated Professor and researcher at the University of Vlore "Ismail Qemali" in Albania in the Faculty of Health. She has a Ph.D. in Health Sciences, and, since 2020, she has been the director of the Scientific Research Center for Public Health in the same faculty. Her primary research interests are evidence-based practice, chronic care, medication adherence, health education and promotion, public health, mental health, nutrition, self-management, e-health and health literacy. She is a member of the Technical Advisory Group on Risk Communication and Community Engagement (TAG on RCCE) in the WHO European Region.

Investigating the Impact of the exhibition of digital models of legacy anatomy collections on society and the possible value conflicts in the future

Banu Buruk[1] and **Güneş Aytaç[2]**

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[2]University of Hawaii at Manoa, USA

For many of the human remains found in museums, it is unknown to what extent the deceased and their relatives were aware of or consented to the removal of the remains. This research investigates the societal impact of exhibiting digital models derived from legacy anatomy collections, specifically exploring potential value conflicts that may arise in the future. The study delves into the repercussions of presenting digital reproductions of collections involving human remains, examining their influence on prevailing issues such as respect, human dignity, and community awareness. The objectives encompass an analysis of the societal implications of displaying digital copies of legacy anatomy collections, while the scope extends to the evaluation of value conflicts related to respect, human dignity, and community awareness. Employing a comprehensive methodology that involves qualitative and quantitative approaches, the study scrutinizes public perceptions and ethical considerations surrounding the exhibition of digital anatomical collections. Preliminary results highlight nuanced perspectives on the matter, underscoring the need for a balanced discourse. Some of these results indicate that open exhibitions could generate public acceptance and empathy for the norms and values of earlier times and can confront viewers with the imperfection of nature. The conclusion underscores the necessity for conscientious curation and ethical frameworks in the exhibition of digital models to navigate potential value conflicts and ensure responsible engagement with legacy anatomy collections. As a Conclusion, this research will promote critical thinking in the use of emerging technology, in order to understand oneself and the environment and to make preliminary inferences about unintended consequences.

Biography

Banu Buruk recently teaches at TOBB ETU University, School of Medicine, Department of Medical Ethics and History of Medicine. Her main research and publication fields are research ethics, technology ethics, ethics of personal data usage in research, and ethics education. She worked as a project manager at the Turkish Research

Funding Agency (TUBITAK) for 13 years and gave seminars on research management and research ethics in different academic environments. She visited Boston Children's Hospital and Harvard Medical School in 2014 as an NIH-Fogarty Fellow, and the Western Institutional Review Board (WIRB) in 2018. She also visited Radboud University, Donders Institute with an Erasmus Scholarship in 2023. She served on the National Open Science Committee as a member between the years 2017-2019. She is still a member of the Clinical Research Ethics Committee of TOBB ETU University since 2017.

Comparative evaluation of the inhibitory effect of *Lactobacillus rhamnosus* on Halitosis-causing bacteria: An *In vitro* Microbiological Study

Aishwarya Patil and **Sarika Shetty**

MGM Dental College and Hospital, India

Objective: To determine the effectiveness of *Lactobacillus rhamnosus* in inhibiting halitosis-causing bacteria relative to other possible inhibitors, such as mouthwashes.

Materials and Methods: This *in vitro* study was done using a diffusion test with three groups with 11 samples in each group: group A, *Porphyromonas gingivalis*; group B, *Tannerella forsythia*; and group C, *Prevotella intermedia*. At 24, 48, and 72 hours, the inhibitory effect of *L. rhamnosus* was tested.

Results: A statistically significant difference was seen for halo formation in group A, where all 11 samples showed an inhibitory effect after 72 hours. After 48 hours, seven of the 11 samples in group B and nine of the 11 samples in group C showed inhibitory effects.

Conclusion: The study found that L. *rhamnosus* had an inhibitory effect on halitosis-causing bacteria like *P. gingivalis* after 72 hours, which was statistically significant. The same was true for *T. forsythia and P. intermedia* after 48 hours. This means that *L. rhamnosus* has an inhibitory effect on halitosis-causing bacteria like *P. gingivalis*.

Biography

Dr. Aishwarya Patil (MDS in Periodontology):

- Completed BDS from Bharati Vidyapeeth Dental College in the year 2018
- MDS from MGM Dental College and Hospital in the Year 2023 and currently a staff in the same institution
- A Gold Medalist in the subject of Periodontology in BDS
- A 1ˢᵀ Prize Winner in Paper Presentation at Periovista Conference in the year 2023
- A 1ST Prize Winner in Poster Presentation at Periovista Conference In The Year 2022
- A Consolation Prize Winner at the 45ᵗʰ Indian Society of Periodontology Conference in the year 2021
- A Life Member of Indian Society of Periodontology

A general model of infection dynamics

Giuseppe Carbone and **Ilario De Vincenzo**

Department of Mechanics, Mathematics and Management (DMMM),
Polytechnic University of Bari, Italy

We present a general theory of infection spreading. It directly follows from conservation laws once known the probability density functions of latent times. The theory can deal with any distribution of compartments latent times. Real probability density function can be then employed, thus overcoming the limitations of standard SIR, SEIR and other similar models that implicitly make use of exponential or exponential-related distributions. SIR and SEIR-type models are, in fact, a subclass of the theory here presented. We show that beside the infection rate, the probability density functions of latent times in the exposed and infectious compartments govern the dynamics of infection spreading. We study the stability of such dynamical system and provide the general solution of the linearized equations in terms of the characteristic functions of latent times probability density functions. We exploit the theory to simulate the spreading of COVID-19 infection in Italy during the first 120 days.

Biography

Giuseppe Carbone is Full Professor of Applied Mechanics, Head of the Department of Mechanics Mathematics and Management at Politecnico di Bari (Italy). He has been Visiting Scientist at the Juelich Research Center (Germany) and at the Eindhoven University of Technology (Netherlands), Academic Visitor at the Imperial College London, and Visiting Scholar at University of North Texas. He is Research Associate at the Institute of Photonics and Nanotechnologies of the National Council of Research - Italy. His scientific interests focus mainly on contact mechanics, viscoelastic materials, adhesion, biomimetics, system dynamics, swarm intelligence and complex systems. His research has been funded from National and European programs and private companies with more than 8 million €. His H-index is 40 (source: Scopus). He authored about 270 publications, of which about 165 in archive journals indexed in Scopus and ISI Web of Science and received about 5500 citations.

Diabetes discourse: Analyzing prevention and treatment in academic research and social media

Fereshteh Didegah

Karolinska Institutet, Sweden

This study aims to analyze how effectively research on diabetes prevention and treatment is communicated from academics to the general public. It sets out to map the research articles on diabetes prevention or treatment using Medical Subject Headings (MeSH) terms, to map the mentions of these articles on various social media and news platforms like blogs, Twitter, Facebook, Wikipedia, and news sites and to compare these two mappings to identify similarities and differences. To gather a substantial dataset, the study searched PubMed with relevant MeSH headings, collecting 155,000 articles published between 2011 and 2020. It focused on articles related to diabetes 'Prevention and Control' and various therapies ('Therapy', 'Drug Therapy', 'Diet Therapy', 'Radiotherapy'), finding that about 30% of the articles were therapy-related, with drug therapy being the most discussed topic (20%), and only 6% focused on prevention and control. The study also tracked the online presence of these articles on different platforms through their pmids, finding that about 65% of articles on diabetes prevention were shared on Twitter, news outlets, Facebook, and blogs. Despite the limited number of articles on prevention, they receive significant attention on these platforms, particularly those addressing the prevention of type 2 diabetes, obesity, and diabetic foot.

Biography

Dr Fereshteh Didegah is a researcher/data analyst at Karolinska Institutet in Sweden. She is also a research associate at Turku University in Finland. In her current projects, her focus is on the societal impact of medical research publications and the factors influencing social visibility of research outputs in Health and Medical Sciences. She has published extensively on meta-research analysis, social media metrics and scholarly communications.

Impact of the COVID-19 Pandemic on public hospitals in the United States

Will Ross

Washington University School of Medicine, USA

The country's public hospitals, guided by the principles established by the first such hospital in in 1736 and codified through the policies of the Surgeon General in 1936, have played an outsized role as safety net institutions for disadvantaged populations. Public hospitals are predominantly located in urban, under resourced neighborhoods, and treat a larger percentage of low-income individuals who are uninsured or enrolled in Medicaid. In assessing the status of public hospitals and urban communities in the 21st century, the impact of the COVID-19 pandemic was evaluated at two high performing public hospitals: Grady Memorial Hospital and Rush University Medical Center, and a network of safety hospitals affiliated with the Missouri Hospital Association. COVID-19 infections and death rates stratified by race and ethnicity were examined. The results suggest a trend towards lower mortality in African American patients in the first year of the pandemic, and possible adverse outcomes in a subset of rural hospitals in Missouri. This study highlights the need to expand funding and support for the nation's essential hospitals.

Biography

Will Ross, MD, MPH is associate dean for diversity at Washington University School of Medicine and professor of medicine in the Renal Division. As a public health and health care policy expert he has worked nationally and globally on systems integration and construction of conceptual frameworks to reduce health care disparities. He is a charter and founding member of the St. Louis Regional Health Commission, which has been instrumental in leveraging millions of dollars annually to St. Louis to maintain an integrated network of safety net primary care clinics and public health services. He served as Chairman of the board of directors of the Missouri Foundation for Health, where he directed the Foundations's creation of the nonprofit center, Health Literacy Missouri. He is Chairman of the Directors of the Mid America Transplant Services Foundation and Chairman of the St. Louis Board of Health. He served as a member of the Institute of Medicine health Literacy Roundtable and is a member of Centers for Disease Control health Disparities Subcommittee where he promotes efforts to further diversity in the public health workforce. Dr. Ross is the associate editor of the public health journal, Frontiers in Public Health Education and Promotion. He has received numerous honors and awards, including the 2009 Washington University Medical Center Alumni Faculty Achievement Award, the 2011 Health Literacy Missouri Trailblazer Award, and the 2013 Samuel Goldstein Leadership in Medical Education Award. A Yale University graduate, he completed medical school at Washington University School of Medicine, Internal Medicine residency at Vanderbilt University, and a Rental Fellowship at Washington University, He completed a Master's of Science in Epidemiology at the Saint Louis University School of Public Health.

Campylobacter spp. In The Estonian Meat Production Chain

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[2]National Centre for Laboratory Research and Risk Assessment, Fr. R. Kreutzwaldi 30, Tartu, Estonia

Introduction: Our first study investigated *Campylobacter* spp. prevalence and antibiotic resistance in fresh broiler chicken meat from Estonian, Latvian, and Lithuanian origin at Estonian retail level and genotype diversity among *Campylobacter* isolates from fresh broiler chicken meat.

Our second study investigated the antimicrobial resistance of *Campylobacter* spp. isolated from caecal samples of fattening pigs at the Estonian slaughterhouse level over a five-year period.

Materials And Methods: 429 fresh broiler chicken meat samples (collected in 2018-2019) from the biggest supermarket outlets in Estonia were investigated. The detection and enumeration of *Campylobacter* spp. were performed in accordance with ISO 10272. 55 *Campylobacter* isolates were genotyped and sequenced using MLST to compare the genetic similarities of isolates from human patients in Estonia with that of *Campylobacter* species from broiler chicken meat from Estonia, Latvia, and Lithuania. The antimicrobial resistance of 61 *Campylobacter* isolates were studied.

At slaughterhouses, a total of 229 pig caecal samples were collected within a five-year period (87, 68, and 74 samples, respectively, in 2015, 2017, and 2019). At the National Center for Laboratory Research and Risk Assessment, *Campylobacter* spp. isolation and antimicrobial susceptibility tests were carried out in accordance with the ISO 10272.

Results And Conclusions: In total, 3 (1.8%), 49 (36.8%), and 89 (66.9%) of the broiler chicken meat samples from Estonia, Latvia, and Lithuania tested positive for *Campylobacter* spp. A total of 90.2% of broiler meat origin *Campylobacter* isolates were resistant to one or more of the antimicrobials (Table 1). Multidrug resistance was found in 27.9% of isolates.

Nalidixic acid and ciprofloxacin resistance in *Campylobacter* isolates was highest (90.2%), followed by tetracycline (57.4%), streptomycin (42.6%), and erythromycin (6.6%). 22 different multilocus sequence types (MLST) were identified. The most common MLST in *C. jejuni* and *C. coli* were ST2229 and ST832 and ST872, respectively. The genotypes ST122, ST464, ST7355, and ST9882 were found in both broiler chicken meat and human origin samples (Figure 1.).

At the Estonian retail level, imported fresh broiler chicken meat is more contaminated with resistant *Campylobacter* spp. Genotyping revealed links between *campylobacter*iosis incidents in Estonia and imported fresh broiler chicken products. Conclusion of the first study is that imported fresh broiler chicken meat carries higher human *campylobacter*iosis risk in Estonia compared to fresh broiler chicken meat produced in Estonia.

Table 1. The antimicrobial resistance of Campylobacter spp. isolated from fresh broiler chicken meat at Estonian retail in 2018-2019

Antimicrobial	No. of resistant isolates (%)				
	Estonia n=4	Latvia n=16	Lithuania n=26	Human, EST n=15	Total n=61
Nalidixic acid	0 (0)	**16 (100)**	**26 (100)**	**13 (86.7)**	**55 (90.2)**
Ciprofloxacin	0 (0)	**16 (100)**	**26 (100)**	**13 (86.7)**	**55 (90.2)**
Tetracycline	0 (0)	3 (18.8)	**20 (76.9)**	**12 (80.0)**	**35 (57.4)**
Streptomycin	0 (0)	**11 (68.8)**	**11 (42.3)**	**4 (26.7)**	**26 (42.6)**
Erythromycin	0 (0)	1 (6.3)	3 (11.5)	0 (0)	4 (6.6)
Gentamicin	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Sensitive to all six	4 (100)	0 (0)	0 (0)	2 (13.3)	6 (9.8%)
Resistant to one or more	**0 (0)**	**16 (100)**	**26 (100)**	**13 (86.7)**	**55 (90.2)**
Multidrug resistant	**0 (0)**	**2 (12.5)**	**10 (38.5)**	**4 (26.7)**	**16 (26.2%)**
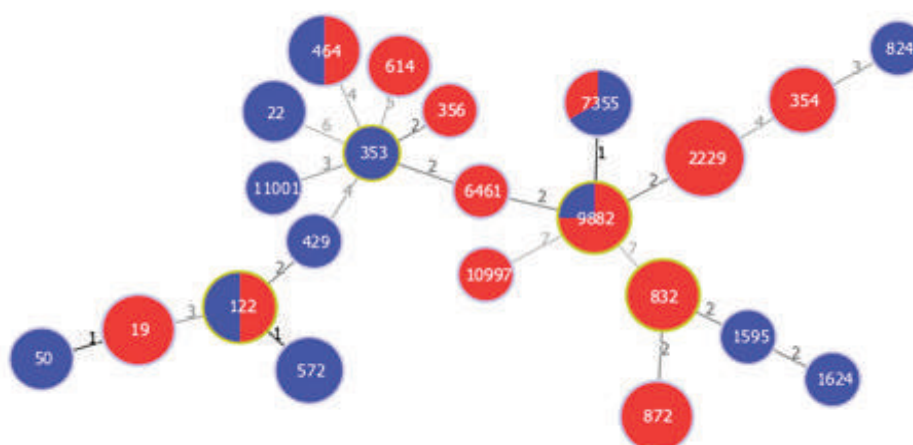
Figure 1. Distribution of MLST genotypes among the Campylobacter isolates in Estonia in 2018-2019. Nodes are named after STs and colour-coded according to isolate sources: chicken (red), and human (blue). Links are labelled with number of allelic differences.

52% of the pigs caecal samples tested positive for *Campylobacter* coli. A total of 111 (93.3%) isolates were resistant to one or more antimicrobials (Table 2). In 2015, 2017, and 2019, the rates of resistance to one or more antimicrobials were 87.9%, 95.0%, and 95.5%, respectively. Streptomycin (74.8%) and tetracyline (45.4%) had the highest rates of resistance, followed by ciprofloxacin (34.4%) and nalidixic acid (31.9%).

Conclusion: Of the second study is that pigs are reservoirs of antimicrobial resistant *C. coli,* therefore the consumption of contaminated pork can pose a public health risk.

Table 2. The number of resistant and susceptible
Campylobacter coli isolates from pigs caecal samples

Year	No. of Isolates	Resistance to antimicrobials				Multidrug-Resistant	Susceptible to All Antimicrobials (%)
		To one	To two	To three	To four		
2015	33	17	7	4	1	5	4 (12.1)
2017	20	10	6	3	-	3	1 (5.0)
2019	66	28	25	10	-	10	3 (4.5)
Total	**119**	**55**	**38**	**17**	**1**	**18**	**8 (6.7)**

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4th International Conference on

Future of Preventive Medicine & Public Health

March 18-19, 2024
Amsterdam, Netherlands

FUTURE OF PMPH 2024

EmpowerSafe: Building boundaries and confidence - A sexual abuse prevention program for young minds with intellectual abilities

Natasha Jojo[1], Prasanthi Nattala[2],

Shekhar P Seshadri[2] and **P. Krishnakumar[3]**

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[2]NIMHANS, India
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Background of the Study: Sexual abuse of children with Intellectual Disability is a global concern. The rate of Sexual Abuse among the Intellectually Disabled (ID) is 2-4 times the pace in the general population. Thirty-nine to 83% of girls and 16%- 32% of boys with ID typically experience sexual abuse by the time they reach the age of 18, and 49 % will experience ten or more abusive incidents. However, these children are generally exempted from sex education programs.

Objective: The study's main aim is to assess the effectiveness of Behavioural Skills Training (BST) on knowledge of sexual abuse and resistance ability among children with Intellectual Disabilities.

Design and Methods: A true experimental, pre-test, post-test control group design with longitudinal measurement of outcomes was adopted to evaluate the effectiveness of BST on Knowledge of Sexual Abuse and Resistance Ability. The study was conducted among 120 children with mild or moderate disability attending 12 special schools (60 in the experimental and control groups, respectively) randomly selected from 25 special schools. BST was administered in 3 sessions a week on alternate days, each lasting for an hour, extended over one month. Post-assessment of the Experimental Group was carried out one week after the Intervention, and Post-assessment of the Control Group on Knowledge of Sexual Abuse and Resistance Ability after one week following Treatment as Usual (TAU). Follow-up assessments were done at one month, three months and six months.

Results: Behavioural Skills Training programme was found to be effective in increasing knowledge (p<0.01) regarding sexual abuse and resistance ability (p <0.01) against sexual

abuse among children with mild or moderate disability. Also, no significant adverse effects were reported from participating in the BST.

Conclusion: BST can be used as a prevention programme for sexual abuse for children with Intellectual Disability without affecting them negatively.

Biography

Dr Natasha Jojo is an Assistant Professor and an early career researcher under the Faculty of Health at the University of Canberra. With a deep passion for healthcare and education, Dr. Natasha has dedicated their career to both nursing practice and academic advancement. Dr. Natasha holds a PhD in Mental Health Nursing from the National Institute of Mental Health and Neurosciences (NIMHANS), India. Dr Natasha has combined 17 years of clinical nursing experience with 13 years of dedicated teaching at the university level. Throughout their academic tenure, Dr Natasha has been actively involved in research initiatives focusing on developing and evaluating programs aimed at children with intellectual disabilities, their parents, teachers, and carers. Their work has been published in esteemed Q1 journals contributing valuable insights to the field of nursing practice and education. Beyond academia, Dr. Natasha maintains affiliations with professional nursing organizations, such as the Australian College of Nursing, the Australian College of Mental Health Nurses, and the Professional Association of Nurses in Developmental Disability Australia, where they actively engage in discussions on advancements and challenges in the nursing field.

PEERS ALLEY MEDIA

The combination of laser acupuncture and face diagnosis will play an important role in preventive medicine and public health

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Based on traditional Chinese medicine (TCM), the organ situations can be revealed on the face. The TCM doctors can diagnose the patient with the characteristics on the face, like as spots and colours. On the other hand, laser acupuncture (LA) can be used to treat the subject easily. And the meridians values can be measured with a portable measurement system based on TCM. Two cases treated with LA and measured with the meridians measurement system will be presented. Two cases with heart disease treated with LA and face variations before and after will be presented. In the future, the artificial intelligence face diagnosis system will be developed and combined with LA, and they will impact preventive medicine and public health.

Biography

Jih-Huah Wu received his Ph. D. degree in Optical Sciences at National Central University in Taiwan in 2005. After served as one year post-doctoral fellow in the Department of Power Mechanical Engineering in the National Tsing Hua University, he joined Ming Chun University served as an assistant professor at the Department of Biomedical Engineering. He has become an associate professor since 2010. He has become a full professor since 2014. His research interests include laser acupuncture, light therapy, electro-optical system design, and the applications of semiconductor lasers in biomedical researches.

Genetic profiling of sodium channel in painful and painless diabetic and idiopathic small fiber neuropathy

Maurice Sopacua[2], Rowida Almomani[1], Margherita Marchi[3]
and **PROPANE Study Group**

[1]Department of Medical Laboratory Sciences, Jordan University of Science and Technology, Jordan
[2]Department of Neurology, School of Mental Health and Neuroscience, Maastricht University Medical Centre+, The Netherlands
[3]Neuroalgology Unit, IRCCS Foundation "Carlo Besta" Neurological Institute, Italy

Neuropathic pain is a frequent feature of diabetic peripheral neuropathy (DPN) and small fiber neuropathy (SFN). Resolving the genetic architecture of these painful neuropathies will lead to better disease management strategies, counselling and intervention. Our aims were to profile ten sodium channel genes (SCG) expressed in a nociceptive pathway in painful and painless DPN and painful and painless SFN patients, and to provide a perspective for clinicians who assess patients with a painful peripheral neuropathy.

Between June 2014 and September 2016, 1,125 patients with painful-DPN (n=237), painless-DPN (n=309), painful-SFN (n=547) and painless-SFN (n=32), recruited in four different centres, were analysed for SCN3A, SCN7A-SCN11A and SCN1B-SCN4B variants by single molecule Molecular inversion probes-Next Generation Sequence. Patients were grouped based on phenotype and presence of SCG variants.

Screening of SCN3A, SCN7A-SCN11A, SCN1B-SCN4B revealed 125 different (potential) pathogenic variants in 194 patients (17.2%, n=194/1125). A potential pathogenic variant was present in 18.1% (n=142/784) of painful neuropathy patients vs 15.2% (n=52/341) of painless neuropathy patients (17.3% (n=41/237) for painful-DPN patients, 14.9% (n=46/309) for painless-DPN patients, 18.5% (n=101/547) for painful-SFN patients, and 18.8% (n=6/32) for painless-SFN patients). Of the variants detected, 70% were in SCN7A, SCN9A, SCN10A and SCN11A. The frequency of SCN9A and SCN11A variants was the highest in painful-SFN

patients, SCN7A variants in painful-DPN patients, and SCN10A variants in painless-DPN patients.

Our findings suggest that rare SCG genetic variants may contribute to the development of painful neuropathy. Genetic profiling and SCG variant identification should aid a better understanding of the genetic variability in patients with painful and painless neuropathy and may lead to better risk stratification and the development of more targeted and personalized pain treatment.

Biography

Maurice Sopacua studied Human Movement Sciences at the VU University (Amsterdam). He graduated for his Master's degree in the field of Rehabilitation & Physiotherapy (January, 2008). After that, he graduated in Medicine (shortened trajectory) at the Rijksuniversiteit Groningen (June 2013). He returned to his hometown to work as non-resident for one year in the Rehabilitation department in Maastricht University Medical Center+ (MUMC+). In the same hospital, he started his PhD-research in the Neurology department of MUMC+, under supervision of Prof. C.G. Faber, titled 'Improving the assessments of the diagnosis of Small Fiber Neuropathy'. From June 2018, he started as resident in Rehabilitation Medicine in Adelante Zorggroep. Since March 2022, he is a PM&R specialist in Libra Revalidatie & Audiologie. His daily practice is in the hospitals Sint Jans Gasthuis (Weert, The Netherlands) and Elkerliek Ziekenhuis (Helmond, the Netherlands).

Towards home-based diabetic foot ulcer monitoring: A systematic review

Arturas Kairys[1], Renata Pauliukiene[2], Vidas Raudonis[1] and **Jonas Ceponis[3]**

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It is considered that 1 in 10 adults worldwide have diabetes. Diabetic foot ulcers are some of the most common complications of diabetes, and they are associated with a high risk of lower-limb amputation and, as a result, reduced life expectancy. Timely detection and periodic ulcer monitoring can considerably decrease amputation rates. Recent research has demonstrated that computer vision can be used to identify foot ulcers and perform non-contact telemetry by using ulcer and tissue area segmentation. However, the applications are limited to controlled lighting conditions, and expert knowledge is required for dataset annotation. This paper reviews the latest publications on the use of artificial intelligence for ulcer area detection and segmentation. The PRISMA methodology was used to search for and select articles, and the selected articles were reviewed to collect quantitative and qualitative data. Qualitative data were used to describe the methodologies used in individual studies, while quantitative data were used for generalization in terms of dataset preparation and feature extraction. Publicly available datasets were accounted for, and methods for preprocessing, augmentation, and feature extraction were evaluated. It was concluded that public datasets can be used to form a bigger, more diverse datasets, and the prospects of wider image preprocessing and the adoption of augmentation require further research.

Biography

Arturas Kairys, a second-year Informatics Engineering Ph.D student at Kaunas University of Technology in Lithuania. Although his Bachelor's and Master's degrees focused on Control Systems, his interest in machine learning has driven him to pursue a doctoral degree in Informatics Engineering, specifically working on the practical application of artificial intelligence.

He is actively engaged in researching diabetic foot ulcer monitoring using deep learning methods. The goal of this research is to develop a publicly accessible diagnostic and monitoring system for diabetes patients. Currently, he is in the process of clarifying the practical application of his research and the possibility of developing a publicly available ulcer monitoring system. Such a system could enhance treatment outcomes, prevent foot amputations and even mitigate premature deaths. For him, the doctoral journey has evolved into a dual pursuit – an academic career and the creation of a product that could save lives.

Evolving Partnership: A Japan-lead pandemic-resilient training model for clinical research professionals in resources limited settings

Sifa Marie Joelle Muchanga, Marlinang Diarta Siburian, Maria Ruriko Umano, Maria Rejane Umano, Masato Ichikawa and **Tatsuo Iiyama**

Department of International Trials, National Center for Global Health and Medicine, Japan

Objective: The documented increase in number of clinical trials with the onset of the COVID-19 pandemic exacerbated the existing shortage of qualified clinical research professionals. Speeding up the development of human resources able to self-sustain clinical research and development in every setting and particularly in resource limited countries was our aim.

Methods: The National Center for Global Health and Medicine (NCGM) carried out an adaptive and collaborative training model that progressively consisted in four different steps. Since 2016, before the COVID-19 pandemic, clinical research professionals were trained in Japan using the train-the-trainer (ToT) model. With the global movement restrictions resulting from the COVID-19 pandemic, we strived to develop a new training model that could sustain human capacity building activity in the network. This was a mixed model that consisted on an adjunction of four different methods: ToT, needs-oriented training, open symposiums, and advanced learning while fostering global research collaboration. The model was named "the evolving Partnership Training model (ePT)". The ToT model used before the COVID-19 pandemic was then shifted to the ePT model during the pandemic.

Results: From 2016 to 2021, five countries, including four from Asia (Indonesia, the Philippines, Thailand, Vietnam) and one from Africa (Democratic Republic of the Congo) participated in the program. The number of trained professionals significantly increased from 41 between 2016-2020, when using the ToT, to 2,810 in 2021 when the program shifted to the ePT.

Conclusion: Our experience has proven that despite the constraint of the pandemic, the ePT is a viable approach compared to a single method for providing quality training and increasing the number of participants while strengthening global research collaboration.

Biography

Dr.Muchanga Sifa Marie Joelle is a clinical research project manager, Department of International Trials, National Center for Global Health and Medicine (NCGM), Japan. In addition to managing multi countries clinical research, she has been coordinating in collaboration with academic and research institutes from developing countries the design and implementation of training courses for clinical research professionals based on the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) guidelines with respect to each involved country's regulations and other international standards.

She is a core member of the Joint Task Force for Clinical Trial Competency framework for Clinical Research Professionals of the Harvard Multi Regional Clinical Trial Center, that defines the knowledge, skills and attitudes necessary for conducting safe, ethical and high-quality clinical research. She is also Professor of Gynecology and Obstetrics at the University of Kinshasa, Democratic Republic of Congo.

PEERS ALLEY
M E D I A

CSF and venous blood flow from childhood to adulthood studied by real-time phase-contrast MRI

Prativa Sahoo[1], Jost M. Kollmeier[2], Nora Wenkel[1], Simon Badura[1], Jutta Gaertner[1], Jens Frahm[2] and **Steffi Dreha-Kulaczewski[1]**

[1]Department of Pediatric and Adolescent Medicine,
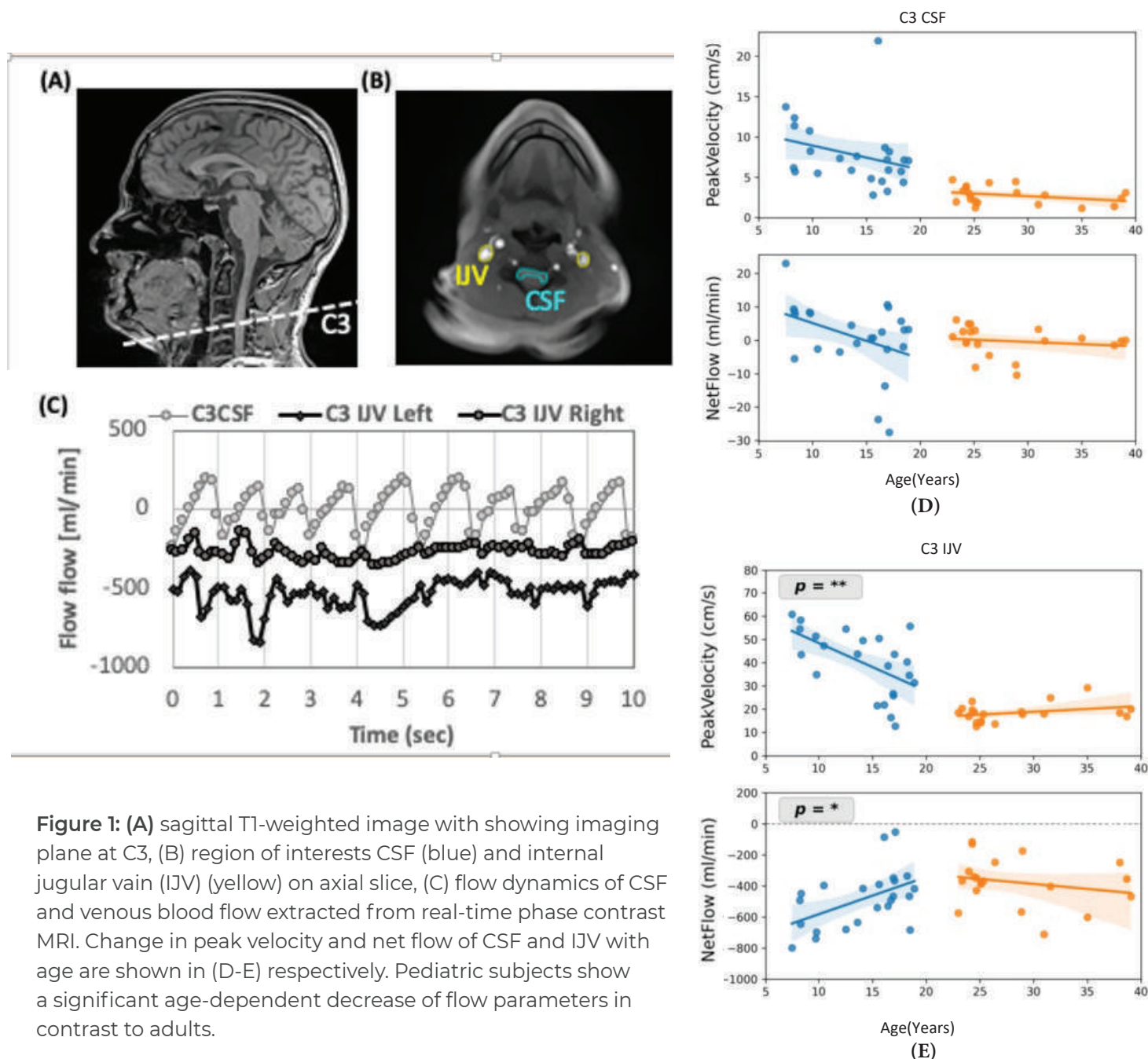University Medical Center Göttingen, Germany
[2]Biomedical NMR, Max Plank Institute for Multidisciplinary Sciences, Germany

Purpose: In vivo measurements of CSF and venous flow using real-time phase-contrast (RT-PC) MRI facilitate new insights into the dynamics and physiology of both fluid systems (Fig.1A-C). However, routine use of RT-PC MRI in clinical practice is still limited. Because many forms of hydrocephalus manifest in infancy and childhood, it is a prerequisite to investigate normal flow parameters during this period to assess pathologies of CSF circulation. This study aims to establish reference values of CSF and venous flow in healthy subjects using RT-PC MRI and to determine their age dependency.

Methods: RT-PC MRI was performed in 44 healthy volunteers (20 females, age 5–40 years). CSF flow was quantified at the aqueduct (Aqd), cervical (C3) and lumbar (L3) spinal levels. Venous flow measurements comprised epidural veins, internal jugular veins and inferior vena cava. Parameters analyzed were peak velocity, net flow, pulsatility, and area of region of interest (ROI). Statistical methods used for data analysis are Linear regression, student's t-test and analysis of variance (ANOVA).

Results: In adult volunteers, no significant changes in flow parameters were observed at all locations. In contrast, pediatric subjects exhibited a significant age-dependent decrease of CSF netFlow and pulsatility in Aqd, C3 and L3 (Fig.1D-E). Several venous flow parameters decreased significantly over age at C3 and changed more variably at L3.

Conclusion: Flow parameters varies depending on anatomical location and age. We established changes of brain and spinal fluid dynamics over an age range from 5–40 years. The application of RT-PC MRI in clinical care may improve our under-standing of CSF flow pathology in individual patients.

Figure 1: (A) sagittal T1-weighted image with showing imaging plane at C3, (B) region of interests CSF (blue) and internal jugular vain (IJV) (yellow) on axial slice, (C) flow dynamics of CSF and venous blood flow extracted from real-time phase contrast MRI. Change in peak velocity and net flow of CSF and IJV with age are shown in (D-E) respectively. Pediatric subjects show a significant age-dependent decrease of flow parameters in contrast to adults.

Biography

Dr. Sahoo has completed her PhD in the department of Mathematica and statistics at Indian institute of technology Kanpur, India. Her doctoral thesis was focused on pharmacokinetic modeling for glioma patients using dynamic contrast enhanced (DCE) MRI. She extended her knowledge in the field of quantitative MRI developing predictive model for response to treatment, dose optimization, implementing post-processing tools, optimizing imaging protocol at Philips Healthcare, India, and Beckman Research Institute, City of Hope, CA, USA. Currently she is a research scientist at University medical center Göttingen in the department of Pediatrics and Adolescent Medicine. Her research involves in finding imaging biomarkers for early detection of Leukodystrophy (LD), exploring mechanism of CSF circulation and its relation to respiration.

The meniscus, a useless remnant of evolution or an essential part of the knee joint? And highly essential to prevent early osteoarthritis?

Diederick B. Wouters

ETZ Hospital, Netherlands

In the knees of Eryops megalocephalus, who lived from 299 million to 251 million years ago, menisci were found. From that time until the present in all vertebrates knees are menisci.

In 1897, Sutton, a surgeon, stated that the meniscus is "A functionless remains of leg muscle origins".

This led to uninhibited removal of meniscus parts for many years, until research in the 1970s showed that removal of 16-34% of the meniscus increases the articular contact forces up to 350%! (3 – 4x) and removal of the total meniscus: increase up to 1000% (10x)!

In the late 1980s and 1990s, gradually awareness arose that repair of ruptured menisci could prevent early knee arthrosis, leading to a worldwide movement: "Save the meniscus" that was mentioned in many editorials and at conferences since 2000.

Still, a failure rate was found of approximately 20% to 48%.

If a finger tendon is cut or ruptured and repair is later than 3 weeks, it is well known, that it will heal less or not.

The core of a meniscus is composed of tendon like tissue, does the same apply here?

One author mentions an improvement of failure rate from 48% if repair is performed later than 6 weeks, to 17% when repair was performed within 6 weeks.

Repair of the ruptures was performed in this series in one group of 91 patients, within 3 weeks after trauma, in group 2, 15 patients, by necessity, later than 3 weeks after the injury.

The overall failure rate was significantly lower in patients who underwent meniscus repair within 3 weeks, 3.3%, than after 3 weeks (or more) after the trauma, 20%.

Conclusion, early repair of meniscus tears can prevent failure of meniscus repair surgery and so, preventable, early arthrosis of that knee compartment and loss of a normal live.

Biography

Starting as general and trauma surgeon in 1983, he started arthroscopic surgery, in addition, in 1984.

In 2002 he moved from Dokkum to Tilburg, the Netherlands, the level 1 Trauma Centre, being part of the trauma surgery group and to continue also arthroscopic surgery.

In 1989 the research in biodegradable fixation devices was started, finally leading to a PhD thesis in 2009.

Since 1990 oral-, poster- and e-poster presentations in München 1990, Brussels, 1992, 1993, Amsterdam, 1996, Rotterdam 1998, Bruges 2000 and at the ISAKOS congresses in Montreux 2001, Osaka 2009, Rio de Janeiro 2011, Cancun 2019, Cape town 2021 were performed.

His active surgical career ended in 2018, after 35 years and over 4.500 arthroscopic procedures.

However ONE mission persisted: to prevent damage from unnecessary meniscal resections and to propagate menisci suturing. A paper on this was published in: Knee Surg Sports Traumatol Arthrosc 2023 Jun; 31(6):2246-2250.

Ketamine as the main analgesic agent during analgesia-based sedation for elective colonoscopy- A randomized, double-blind, control study

M. Kovacevic

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School of Medicine, Zenica, Bosnia and Herzegovina

Scope: The aim of the study was to compare the analgesic effects of ketamine over fentanyl combined with propofol in analgesia based elective colonoscopy with purpose of patient safety and satisfaction.

Methods: This is a double blinded prospective randomized controlled trial. Ninety patients were included and randomized to either fentanyl propofol (Group FP, n: 30), ketamine propofol (Group KP, n: 30) or propofol control group (Group C, n: 30). Group FP patients received fentanyl and propofol, Group KP received ketamine and propofol and Group C, propofol. In all groups, incremental doses of propofol were used to maintain a Ramsay sedation score (RSS) of 5. Respiratory depression and hemodynamic parameters were monitored for the first minute and every 5 min during endoscopy. Fifteen minutes after the procedure, the degree of pain was assessed using a visual analog scale (VAS), the quality of recovery according to the Aldrete score (ARS), complications during and after the procedure and additional doses of propofol were recorded.

Results: Mean arterial pressure (MAP) at 5 and 30 min ($p < 0.05$), heart rate (HR) at 15, 25 and 30 min ($p < 0.05$) and peripheral oxygen saturation (SpO_2) at 30 min ($p < 0.05$) were statistically significant for Group FP. Desaturation (*$p = 0.033$), and weakness (*$p = 0.004$) was also significant for Group FP at 20, 25 and 30 min ($p < 0.05$). Pain was lower assessed for the Group KP according to the VAS (**$p = 0.025$).

Conclusion: In analgesia based colonoscopy, ketamine provides appropriate analgesia and less incidence of complications compared to fentanyl.

Biography

Mirza Kovacevic graduated from the Faculty of Medicine of the University of Tuzla in 2013. He has been employed at the Zenica Cantonal Hospital in the Department of Anesthesiology, Reanimation and Intensive Care since 2013. He started his specialization in anesthesiology in 2015. He passed the specialist exam in 2020 in Tuzla and obtained the title of specialist in anesthesiology, resuscitation and intensive care. His postgraduate studies started in 2019 at the University of Tuzla. Since then he has been actively engaged in scientific research. He is the author and co-author of several published scientific and professional works. Before and during his doctoral studies, he was a lecturer at numerous domestic and international symposia and congresses, he would single out the congresses in Paris, Rome, Barcelona, London and Vienna where he was also a member of the scientific committee.

Socio-Demographics of Initial Substance Use Exposure and Its Relation to Progression in Saudi Arabia: Implications for Practice

Alaa Nabil Mahsoon[1], Lina Almashat[2], Norah Alsubaui[2], Shahad Hindi[2], Shahad Alharbi[2], Sara Yaghmour[1] and **Loujain Sharif[1]**

[1]Department of Psychiatric and Mental Health Nursing, King Abdulaziz University, Saudi Arabia
[2]Faculty of Nursing, King Abdulaziz University, Saudi Arabia

Introduction: Empirical evidence on substance use in Saudi Arabia is lacking. This quantitative study is aimed at describing the socio-demographics of initial exposure to substance use and its relation to substance abuse progression.

Method: A questionnaire about socio-demographics during initial exposure to substance use was completed by 379 participants.

Results: For most participants, the commencement of substance abuse occurred at the age range of 19—23 years, and while in high school, they first started taking drugs with school friends. The two psychoactive substances most commonly taken for the first time were hashish and alcohol. The two main reasons for first drug exposure were teenage curiosity and joy-seeking. The chi-square test revealed statistically significant differences between substance abuse progression by sex, current age, father's education level, parent's marital status, and one's company in substance use. Female participants were more likely to continue taking drugs.

Conclusion: Young people must be educated about the risks and consequences of substance use from early adolescence.

Biography

Assistant Professor of psychiatric and mental health Nursing. College of Nursing at King Abdul-Aziz University from 2019 to present. Certificated trainer of the essential skills for clinical simulation instruction. Doctor of Philosophy in Nursing. Case Western Reserve University, Cleveland, Ohio, United States. Area of interest: nursing education, nursing mental health, psychology, quality and safety.

Diabetes in School - A Practical Example

Nicola Sommer

University of Teacher Education Salzburg, Austria

The number of students suffering from type 1 diabetes has increased in recent years. It is therefore essential to ensure that these children and young people have inclusive access to the education system. An online seminar on "Diabetes at school? No problem!" is designed to enable student teachers and teachers to expand their skills in dealing with diabetes or to sensitize them to the special needs of children and adolescents with diabetes.

Initial results of the evaluation of the online seminar show a significant increase in knowledge and competence in all areas covered (basics diabetes, diabetes management at school or in the classroom, self-care). Based on the results, further courses have already been designed and implemented with great success.

Biography

Nicola Sommer, a former secondary school teacher, studied psychology and educational sciences, graduated with PhD. She has worked in various educational settings and is currently employed as a university professor at the University of Teacher Education in Salzburg, Austria. She concentrates on sensitizing teachers to the topic of "illness in school", to support competence development through newly developed courses and incorporates the different perspectives of health in the process. Nicola Sommer leads the study focus "Health Education and Life Skills", the university course "Illness and School" and conducts research in the field of health and illness in school.

Screen time behavior among school-aged children

Hui Yin[1,3], Jingbo Qi[1] and **Yujie Yan[2]**

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[2]China-Japan Friendship Hospital, China
[3]Institute of Global Health, Peking University, China

Background: Excessive screen time is a global public health issue among school-aged children, especially in the context of the increasing use of digital technology for distant learning.

Objective: The purpose of this study was to conduct systematic review to analyze the relevant studies on the length and use of screen time of school-aged children.

Methods: Screen time related studies were searched on PubMed, EMBASE, Clinical Trials, Controlled Trials, The WHO International Clinical Trials Registry Platform, the Cochrane Central Register of Controlled Trials, CNKI, and Whipple Journal databases from January 1, 2016 to October 31, 2021.

Results: Fifty-three articles were included. Sixteen articles studied screen time length in the form of continuous variables. Thirty-seven articles studied screen time in the form of grouped variables. The average screen time of schoolchildren aged 6 to 14 was 2.77 h per day, and 46.4% of them had an average screen time ≥2 h per day. A growth trend could be roughly seen by comparing studies in the same countries and regions before and after the COVID-19 outbreak. The average rates of school-aged children who had screen time within the range of ≥2 h per day, were 41.3% and 59.4% respectively before and after January 2020. The main types of screen time were watching TV (20 literatures), using computers (16 literature), using mobile phones/tablets (4 literatures). The mainly uses of screens were entertainment (15 literatures), learning (5 literatures) and socializing (3 literatures). The types and mainly uses of screen time after January 2020 remained the same as the results before January 2020.

Conclusions: Excessive screen time has become a common behavior among children and adolescents around the world. Intervention measures to control children's screen use should be explored in combination with different uses to reduce the proportion of non-essential uses.

Biography

Dr. YIN Hui is a lecturer at School of Public Health and Institute for Global Health, Peking University. She served as a TFI consultant for WHO in 2022. Her research focuses on health behavioral promotion, global health governance, social and cultural determinants of global health, and global health education. Dr. Yin has worked for more than ten years on research, teaching and consulting services in global health promotion, including the prevention and control of noncommunicable diseases, and in global health governance. She has undertaken, participated in, and managed a number of international health projects in the field of health systems and global health governance. She has successively hosted and participated 10 global health projects and have developed good networks with the National Health Commission, China CDC, Ministry of Commerce, Ministry of Foreign Affairs, Ministry of Education. She is currently the co-PI of the CMB Global Health Leadership Development Program.

How can we promote vaccination of the mass population? -Lessons from the COVID-19 vaccination defaults

Mira Namba[1], Yudai Kaeda[2], Tatsuya Koyama[3], Soichiro Miyashita[4], Kurenai Takebayashi[4], Motoki Oonishi[3,4] and **Masaki Takebayashi[3]**

[1]School of Medicine, Keio University, Japan
[2]School of Medicine, Hokkaido University, Japan
[3]Aomori University of Health and Welfare, Japan
[4]Aomori Prefecture, Japan

Introduction: Recently, attention has been focused on the use of 'nudge' strategies such as opt-in and opt-out systems in healthcare, especially concerning COVID-19 vaccinations. Despite their role as default options, the actual effectiveness of these nudges for the broader population remains unclear. Our study aimed to examine the vaccination rates, cancellation rates in these systems for COVID-19 vaccinations.

Method: All 10 cities in Aomori Prefecture, Japan, were surveyed as of 10 October 2021 on the vaccination coverage by age group (12 years and older) and the cancellation rate on the day of vaccination. For vaccination rates for the comparable age group of 20-64, a 95% confidence interval was calculated and analyzed descriptively. Cancellation rates were compared between municipalities that had responded.

Results: Among ten cities studied, eight adopted the opt-in system for COVID-19 vaccinations, while one city implemented the opt-out system, with exceptions for individuals with urgent needs and those aged 12-14 years, who were designated the opt-in system. One city was excluded from the analysis due to a lack of information regarding vaccination coverage. Results indicated higher COVID-19 vaccination rates for the age groups 20-64 in the opt-out group, with a 95% confidence interval (CI) of 88.2%-89.2% for the first dose and 84.9%-86.0% for the second dose. This was in contrast to the opt-in group, where the 95% CI was 74.1%-80.1% for the first dose and 55.7%-67.5% for the second dose. Cancellation rates in the opt-out group were 11.3% for the first dose and 14.6% for the second dose. However, comparisons between the groups could not be conducted, as data from the other cities were unavailable.

Conclusion: Despite some limitations, such as regional specificity and variations in infection

rates, this study has revealed that the opt-out system might have effectively increased COVID-19 vaccination rates without leading to substantial cancellations.

Biography

Mira Namba is a medical student engaged in public health research at Keio University. Her current research is particularly focused on the vaccination trends of the HPV vaccine in Japan, and on health promotion through nudging, a behavioral economics technique aimed at increasing the adoption of vaccines and sanitization methods. At the 13th Japan Primary Care Association Annual Meeting held in 2022, she presented a poster entitled 'Urban Fieldwork and Health Promotion Initiatives by Medical Students,' summarizing her findings to date, and was selected for an excellence award given to the top four presentations. Her favorite way to spend time is hiphop dancing, which she started to learn in the U.S. She likes traveling around foreign countries, and she was especially fascinated by Cambodia, where time flew gently and people showed lovely smiles.

Quercetin as a Dietary Supplementary Flavonoid Alleviates the Oxidative Stress Induced by Lead Toxicity in Male Wistar Rats

Mohammed Al-Zharani[1], Mohammed Mubarak[1], Hassan Ahmed Rudayni[1], Amin A. Al-Doaiss[2], Mahmoud M. Abd-Elwahab[3] and **Mohammed S. Al-Eissa[1]**

[1]Department of Biology, College of Science, Imam Mohammad Ibn Saud Islamic University (IMSIU), Riyadh 11623, Saudi Arabia
[2]Department of Biology, College of Science, King Khalid University, Saudi Arabia
[3]Department of Mathematics and Statistics, College of Science, Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia

Quercetin is a naturally existing plant pigment belonging to the flavonoid group; it is contained in a wide range of vegetables and fruits. The accumulated evidence points to the potential uses of quercetin in protection of some disease conditions. Lead is one of the highly toxicant heavy metals that are widely spread in the environment and implicated in a wide spectrum of industries. No previous study has been reported to evaluate the effect of quercetin on lead toxicity. Therefore, the present study was conducted to elucidate some aspects of quercetin bioactivities in regard to its ability to combat the oxidative stress induced by lead toxicity. For this purpose, a total of sixty male Wistar rats were randomly and equally divided into three groups of 20 animals each; untreated control animals (group 1), lead-exposed animals (group 2; exposed to lead daily by oral gavage at the dose of 80 mg/Kg b.w.), and group 3 of animals, which were exposed to lead and daily received quercetin (10 h gap time between lead exposure and the receiving of quercetin) by oral gavage at the dose of 350 mg/Kg b.w. The experiment period was 8 weeks. All the assayed hematological and biochemical parameters of animals exposed to lead were significantly altered compared with the untreated control levels. Animals exposed to lead (group 2) exhibited significant decrements of the erythrocytic and total leucocytic counts, hemoglobin concentration, packed cell volume percent, total proteins, albumin and globulin. These animals also disclosed significantly decreased levels of antioxidant markers including total thiols, catalase and glutathione. On the other hand, these animals demonstrated significant increments in the levels of bilirubin, urea, creatinine, BUN, serum

enzymes, H2O2 and MDA. Animals exposed to lead and given quercetin (group 3) exhibited improvement of these parameters, which were brought back at varying degrees toward the untreated control levels. Basing on the improvements of the assayed hematological and biochemical parameters, it was concluded that quercetin as a dietary supplement can act efficiently as an antioxidant to counteract the oxidative stress induced by lead toxicity and to maintain the oxidant antioxidant balance.

Biography

Name: Dr. Mohammed Musa Yahya Alzahrani

Academic Career:

- (2017): Doctor of Philosophy in Science - Cell biology, heredity and tissue - Department of Zoology – College of Science - King Saud University Excellent general rating).
- (2007) : Master of Science in Cell Biology, Genetics and Tissue - Department of Zoology – College of Science - King Saud University - Excellent General Assessment.
- (1998): Bachelor of Faculty of Education - Department of Biology - King Faisal University - a good general estimate.

Employment Career:

- Assistant Professor of biology, IMSIU University, College of Science, Riyadh, 2018 to date.
- Vice Dean of the College of Science for Educational Affairs.
- Teacher in the Department of Education in Riyadh.
- Teacher in the General Administration of Education in the Eastern Region.
- Assistant Supervisor in the General Administration of Education in the Eastern Region 2003/2004
- A teacher to the Kingdom of Bahrain for four years.
- Educational trainer in the Kingdom of Bahrain for one year during my work there.

Factors associated with prolonged viral shedding of SARS-CoV-2 Omicron variant infection in Shanghai: A multicenter retrospective observational study

Wenbin Liu

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Shanghai Jiao Tong University School of Medicine, China

This multicenter retrospective observational study conducted in Shanghai delves into the factors associated with prolonged viral shedding in patients infected with the SARS-CoV-2 Omicron variant. The study encompasses a significant cohort of 208,373 COVID-19 patients, primarily infected with the Omicron BA.2.2 sub-lineage, presenting a unique opportunity to understand the dynamics of this variant. The research focuses on a comprehensive analysis of patient demographics, clinical symptoms, vaccination status, and other relevant factors influencing the duration of viral shedding time (VST).

Key findings of the study reveal a median VST of 8.3 days, with a range of symptoms like fever, cough, and gastrointestinal issues commonly observed among the patients. The study identifies several factors associated with an extended VST. Notably, older age groups, presence of comorbidities, and delayed isolation post-diagnosis were linked to longer VST. In contrast, being female and having received vaccination (either two or three doses) were factors associated with a reduced duration of viral shedding.

These insights are crucial for public health strategies and policies, especially in managing outbreaks of the Omicron variant. The study highlights the importance of timely isolation, the impact of vaccination in reducing the severity and duration of infection, and the need for special attention to vulnerable groups such as the elderly and those with existing health conditions. This comprehensive analysis provides valuable information for healthcare professionals and policymakers in formulating targeted responses to COVID-19, particularly in the face of evolving variants like Omicron.

Biography

Dr. Liu Wenbin, a dedicated neurosurgeon and Ph.D. candidate in Emergency Medicine. He completed his Clinical Medicine degree at Jilin University and further pursued a Master's in Neurosurgery at Jilin University First Hospital. Currently, he's advancing his studies at Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, with a focus on emergency medicine, aiming to complete his Ph.D. in 2024. Dr. Liu has made significant contributions to medical research, particularly in acute pancreatitis and COVID-19. His work on mitochondrial damage in acute pancreatitis and high-dose Vitamin C treatments has been published in notable medical journals. With extensive experience in neurosurgery and emergency medicine, Dr. Liu's clinical skills are complemented by his academic achievements, including various awards and scholarships, showcasing his commitment to improving healthcare outcomes.

Preventing harm from purely Symptomatic Treatment: A case study of fatigue

C. Langston

Albert Einstein College of Medicine, USA

Some medications are used to treat symptoms, irrespective of the causative disease. Conspicuous examples include medications for pain and fatigue. Based on the data from the TRIUMPHANT-MS trial, this case study of fatigue demonstrates that there are preventable harms to public health that arise from the purely symptomatic treatment of fatigue: violations of informed consent; risks of addiction; tachyphylaxis and reduced efficacy; lost opportunities for non-pharmacologic interventions; and misuse of medical resources, by both patients and physicians. Based on this analysis, I propose the following tentative cost-benefit criteria for purely symptomatic treatment: the symptom interferes with daily living to at least a moderate degree; disease-targeted treatments and non-pharmacologic interventions have failed to reach sufficient efficacy; the impact of pharmacotherapy on non-pharmacologic interventions has been mitigated; and, over the entire treatment course, the treatment is expected to improve symptoms. I show that these criteria can prevent many of the anticipatable harms of pharmacotherapy for fatigue, and then I apply the same criteria to purely symptomatic pharmacotherapy for pain.

Biography

Christopher Langston is an assistant professor of neurology at the Albert Einstein College of Medicine in New York. He is the medical director of the Madlyn Borelli Multiple Sclerosis Center and holds appointments at several hospitals in the Montefiore Health System, including Burke Rehabilitation Hospital. In addition to conducting clinical research on multiple sclerosis, he writes about medical ethics.

Inflammatory profile and phase angle analysis by bioelectrical impedance in elderly people with Chronic Kidney Disease

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and **Milena Beatriz de Araújo Silva[4]**

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[2]Clinics Hospital of Pernambuco, Federal University of Pernambuco, Brazil
[3]Post-graduate Program in Biologia Aplicada à Saude,
Federal University of Pernambuco, Brazil
[4]Resident doctor in Geriatrics, Federal University of Pernambuco, Brazil

Objective: Immunosenescence promotes an increase in cytokines, and this inflammatory condition ("inflammaging") contributes to a greater predisposition to illness and worsening of chronic diseases, including Chronic Kidney Disease. The association of inflammaging and mortality risk suggests that cytokines are involved in pathological processes or act as sensitive markers of subclinical disorders in elderly populations. At the same time, aging, especially in the presence of a chronic disease, promotes the loss of cellular mass and integrity, resulting in sarcopenia and fragility. Phase angle reflects the state of cellular health and is considered a promising prognostic marker.

Methods: Cross-sectional study from April to October/2019, with 58 elderly patients followed at the outpatient clinic specializing in chronic kidney disease in Recife/PE. Cytokines (Interleukins 2, 4, 6, 10, Interferon-Y and Tumor Necrosis Factor-α) were analyzed by flow cytometry. The phase angle resulting from electrical bioimpedance was analyzed using Seca analytics software. To verify the existence of a significant association, the Chi-square and Fisher's exact tests were applied. The Mann-Whitney test allowed comparison between age groups. Conclusions considered a significance level of 5%.

Results: Cytokines were at high levels in most study participants, with statistical significance for IL-6 (p=0.038), as it was higher in the older group. The Phase Angle presented values below normal (unfavorable) in both groups and statistically significant in the older group (p=0.040).

Conclusion: Elderly people with pre-dialysis chronic kidney disease showed high levels of cytokines in both age groups, but with higher values in the older group, corroborating the importance of inflammaging. The Phase Angle exposed tissue impairment in both age groups, more markedly among the oldest.

Biography

- Graduated in Medicine from University Federal of Pernambuco (UFPE)
- Medical Residency in clinical area by University of Pernambuco UPE)
- Post-Graduation in Cardiology from UPE
- Title of Specialist in Adult Intensive Care by the Brazilian Society of Intensive Care
- Specialization in Palliative Care from the University of Brasilia
- Master in Medicine from UFPE
- PhD in Tropical Medicine from UFPE
- Preceptor in Medicine at UFPE
- Teeacher in Medicine at Afya faculty of medical sciences of Jaboatão

Maternal stress and perceived nurse support among mothers of premature infants in the neonatal intensive care unit of a tertiary hospital in Qatar

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[1]Women's Wellness and Research Center, Hamad Medical Corporation, Qatar
[2]University of the Philippines Open University, Philippines
[3]Adamson University, Philippines
[4]College of Nursing, University of the Philippines, Philippines

Objectives: This study determined the maternal stress and perceived nurse support among mothers of premature infants in a Level III Neonatal Intensive Care Unit.

Methods: The descriptive correlational study utilized two previously validated tools: Parental Stress Scales: NICU (PSS: NICU) and Nurse Parent Support Tool (NPST). The tools were also translated to Arabic since the setting is in Qatar and majority of the respondents are Arabic speakers.

Results: Data gathered from 71 mothers (n = 71) who participated in the study showed that regardless of nationality, having a premature infant in the NICU is considered a stressful experience (M = 2.41, SD = 1.03). Both parental role alteration (M = 3.21, SD = 1.52) and instrumental support received the highest mean for subscales in maternal stress, and nurse support, respectively. Overall, mothers felt supported most of the time (M = 3.67, SD = 1.32), especially whenever they see that nurses provide direct nursing care and show concern to the preterm infants (M = 3.85, SD = 1.48). The study provided a significant positive correlation between overall perceived nurse support and parental role alteration (r = 0.39, p > 0.05). Similarly, the relationship between parental role alteration and instrumental support was significantly positive (r = .261, p > 0.05).

Conclusion and Implications: The fragility of preterm infants was not the primary source of maternal stress in the NICU. The inability to provide intensive or specialized care, as that by the NICU nurses, was perceived as the most stressful. This study revealed that providing quality nursing care in NICU should be provided to both the infants and their mothers.

NICU nurses are encouraged to provide care to mothers by encouraging and assisting in parenting roles according to the preterm infants' needed care. Involving the mothers in the care plans can provide better healthcare outcomes for both preterm infants and their mothers.

Biography

John Paul Ben Silang has been the Director of Nursing in Research at the Women's Wellness and Research Center of Hamad Medical Corporation in Doha, Qatar, since 2020. He is one of the leads who established the first Clinical Nursing & Midwifery Research Unit, envisioned as the center for research collaboration and knowledge generation in nursing. In 2007, he was a Staff Nurse I in the Philippines in clinical wards, emergency department, and perioperative units. In 2010, he was an Assistant Professor III in the College of Nursing at state universities in the Philippines. He migrated to Saudi Arabia in 2016 and worked as a Nurse Researcher at King Saud University. He finished a bachelor's degree in Zoology and a master's in Nursing Education and Administration. He will complete post-graduate degrees in 2024, including a Ph.D. in Nursing at Silliman University and Clinical Research at Harvard Medical School in the USA.

Long-term follow-up of multidrug resistant tuberculosis patients of Delhi, who had received DOTS Plus treatment along with home care and counselling

Joyce F Vaghela[1] and Tanu Anand[2]

[1]Department of Community Health, St. Stephen's Hospital, India
[2]Department of Health Research, Indian Council for Medical Research, Ministry of Health & Family Welfare, India

Background: To realize the vision of a world free of TB, it becomes mandatory to disallow Ex-TB and Ex-MDR TB patients to have relapse or become Extremely Drug Resistant (XDR). Long-term follow-up of treated cases, who also received home care and counselling hasn't been done thus far in India.

Objective: To find out whether 50% of Ex-MDR TB patients who had also received home based support with counselling are healthy after five years.

Methods: This retrospective study of 109 Ex-MDR-TB patients was carried out by Community Health Department (CHD) of a tertiary care hospital in Delhi. Patients had received daily MDR Regimen (starting from August 2009 to August 2010 from their respective DOTS Providers) and home care and strong counselling support. They completed it by 2011 or 2012. The study period was from May to August 2015.

Results: After a long follow up of these patients in 2015 it was found that 71(65.14%) were alive & healthy, 26(23.85%) dead, 5(4.59%) defaulters, 1(0.92%) failure cases, 4(3.67%) lost to follow-up, whereas 2(1.83%) were on treatment as they had relapsed.

Conclusion: Our study concludes that more than 50% Ex-MDR TB cases who had also received home based support with counselling are alive and healthy after five years. We recommend that a mechanism for home-based care & counselling and Long Follow Up for MDR TB patients be developed.

Biography

Joyce Felicia Vaghela, MPH (Johns Hopkins University, USA), MBBS (Christian Medical College & Hospital, Punjab) is former HOD of Community Health Department of St. Stephen's Hospital, Delhi. She was an active faculty member from 1999 to 2020. She was also the Deputy Director (Material Management) of the hospital. She worked as a

consultant in the National Program for Control of Blindness in 1997- 98 and as the Executive Director of Delhi Brotherhood Society from 1986 - 96.

Projects implemented: Mother NGO for the Homeless Citizens. *Humana People to People Foundation* – (i) Kitchen Garden to enrich Elderly Homes in Delhi, (ii) A Model for Development & Health of Adolescents and their Families. *Eli Lilly and United Way Worldwide -* Home Care for MDR TB Patients. *The Hans Foundation -* Community Mental Health Project. *Indraprastha Gas Limited – Swastha Saarthi* Preventive Health Program for Auto and Taxi Drivers.

Case series analysis of chronic venous Insufficiency, to determine associated Arthrosis and Static Foot Deformity

Roy Varghese[1], Malay Patel[2] and **Manjusha Rajarishi[3]**

[1]Silverline Hospital, India
[2]Apollo CVHF Hospital, India
[3]Rootssimplified.org, India

Decades ago, a link between chronic venous insufficiency and osteoarthritis of the knee, as well as arthrosis of ankle and foot joints, was established but later fell into obscurity. In a recent investigation involving 197 patients afflicted with chronic venous ulcers and venous insufficiency, our study aimed to rekindle this connection. The comprehensive analysis encompassed historical data, X-ray imagery, colour Doppler scans, and computerized foot scans that delved into alignment and static foot irregularities.
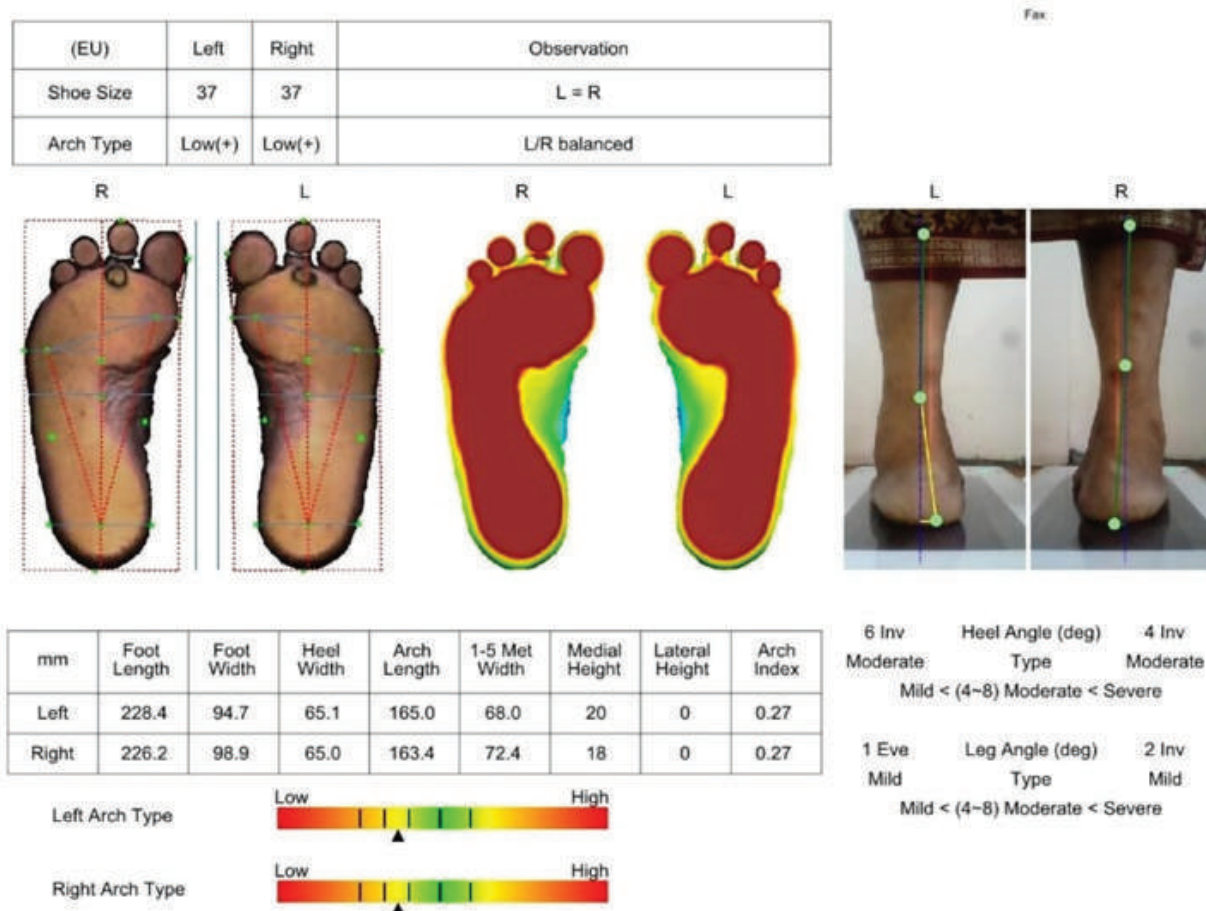
Scrutinizing the amassed data revealed a clear-cut correlation between chronic venous insufficiency and a cluster of issues including non-healing ulcers, arthrosis of the ankle, foot, and knee, as well as static foot disorders. Specifically, ankle arthrosis manifested as restricted range of motion—encompassing dorsiflexion, plantar flexion, eversion, and inversion at the mid-tarsal joint. This limitation hindered the efficient operation of foot muscles responsible for venous propulsion, ultimately fostering venous hypertension encircling the ankle and foot.

Moreover, decreased perfusion pressures in these joints triggered the atrophy of essential foot muscles, comprising lumbricals and interossei, thus resulting in the emergence of claw foot deformities. This process further induced the deformation of long and short foot tendons, culminating in arch distortions and the development of flat feet. Consequentially, the peroneal muscle group within the anterior and lateral compartments developed to spasms, exacerbating defects in both foot and calf muscle pumps. This intricate interplay contributed to the manifestation of unconventional venous ulcers on the dorsum of the foot and the anterior and lateral compartments of the leg.

Patients experiencing non-healing ulcers despite adhering to optimal wound care practices, including compression bandaging and addressing comorbidities such as hypertension, hypothyroidism, and rheumatic disorders, were subjected to meticulous computerized

assessments for static foot anomalies. Notably, an overwhelming 82% of these individuals exhibited misalignments, medial and lateral arch malformations, or elevated pressure points across the hind and forefoot regions.

Foot Analysis Report Diagram-1

(EU)	Left	Right	Observation
Shoe Size	37	37	L = R
Arch Type	Low(+)	Low(+)	L/R balanced

mm	Foot Length	Foot Width	Heel Width	Arch Length	1-5 Met Width	Medial Height	Lateral Height	Arch Index
Left	228.4	94.7	65.1	165.0	68.0	20	0	0.27
Right	226.2	98.9	65.0	163.4	72.4	18	0	0.27

6 Inv Moderate	Heel Angle (deg) Type	4 Inv Moderate
	Mild < (4~8) Moderate < Severe	
1 Eve Mild	Leg Angle (deg) Type	2 Inv Mild
	Mild < (4~8) Moderate < Severe	

In summation, our findings underscore the necessity of incorporating multifaceted interventions into the management of chronic venous insufficiency. These encompass compression bandaging, targeted foot evaluations to identify pressure points and static foot disorders, and strategic physiotherapy. Through this integrative approach, we aspire to enhance the prognosis and quality of life for individuals grappling with this complex interplay of conditions.

Biography

In 1987, Roy Varghese completed his Master of Surgery degree at Government Medical College Bellary. Following that, in 1991, he achieved his PhD in Vascular Surgery at the esteemed National Centre for Surgery in Moscow. Subsequently, he took on the role of an Associate Professor in Vascular Surgery at Jubilee Mission Medical College in Trichur, India. Throughout his academic and professional journey, his focal point has consistently gravitated towards Chronic Venous Hypertension, fuelin his passion for in-depth exploration and understanding in this field.

Prevalence of NCD risk factors, Health-promotive behaviors, and Associated factors among Nursing students in two selected Schools of Nursing in Western Province, Sri Lanka

Warnakulasuriya S.S.P[2] and **F. Attygalle D.S. V[1]**

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[2]Faculty of Nursing, University of Colombo, Sri Lanka

Background: Non-communicable diseases are mainly responsible for morbidity and mortality. The primary prevention strategy for NCD is health promotion. Maintaining a healthy lifestyle is beneficial for the own health. Student nurses are the future of nursing. As one of the roles of nurses is health promotion, they will not only persuade others to lead healthy lifestyles but also have the opportunity to set an example for others to follow. There are no reported studies among nursing students related to NCD prevalence and health promoting behavior.

Aim of the study: This study aims to determine the prevalence of selected NCD risk factors, health-promotive lifestyle behaviors, and associated factors among nursing students in two selected schools of nursing in Sri Lanka.

Methodology: Cross-sectional descriptive quantitative study was conducted among randomly selected 560 nursing students from two selected schools of nursing in western province in Sri Lanka. Data were collected by a self-administered questionnaire and Walker's health-promoting lifestyle profile II to assess HPL behaviors. Data analysis was carried out using SPSS statistical package version 25.

Results: Majority (93.4%) were female and belong to age range 23-25 years .Participants (11.4%) belonged to the overweight or obese category. The nearly half (48.2%) physically inactive. However, alcohol use and smoking among student were relatively very low (7.9% and 2.5%). The total HPLP II score was 125.52 –+15.9. interpersonal relations have the highest mean and physical activity has the lowest mean. A significant association found between physical activity and age (p=0.01), accommodation (p=0.03), monthly income (p=0.003). Interpersonal Relationships were significantly associated with monthly income (p=0.02) and stress management significantly associated with monthly income (p=0.002). Nutrition was significantly associated with monthly income (p=0.004).

Conclusion: Prevalence of NCD risk factors such as smoking and alcohol consumption were relatively low among nursing students and physical inactivity and overweight and obesity were prevalent at considerable proportion Student nurses have an unfavourable health-promotive lifestyle. Though they are aware of concepts of health promotion from their learning, it seems they do not adhere to practices. Physical activity differed by gender, age, and monthly income. Health promotion activities need to be established.

Biography

Prof. Sudath Warnakulasuriya entered nursing profession in 1987 and completed nursing diploma in 1990 at the School of Nursing Galle. He completed the BSc Nursing degree in 1998 at Open University Sri Lanka with a second class upper. He received his Master of Science in Nursing from University of Adelaide Australia in 2003. He has obtained Post Graduate Diploma in Counselling and Psychosocial Works in 2011 at University of Colombo. Prof Warnakulasuriya obtained his PhD in 2014 from the University of Sri Jayewardenepura.

He has served in the National Institute of Health and Social Sciences in Republic of Seychelles as a lecturer in mental health for two years.

He has severed in the education sector in nursing for more than 25 years including nursing colleges, local and international universities. He has held various executive positions in nursing professional organizations. During his professional journey, he has received 18 awards including three presidential awards in 2014, 2015, 2017 for his research excellence and three professional awards from professional Nursing Organizations for his contribution to Nursing profession. .

Prof. Warnakulasuriya is maintaining a very exiting research profile with more than 875 citations with H-Index 10.

Comparative investigation of hand and foot reaction ability between the basketball and handball players

Laishram Thambal Singh and **Thokchom Somorjit Singh**

Department of Physical Education and Sports Science, Manipur University, India

Background: Reaction ability is the ability to react against a signal quickly and effectively. An auto-dynamic reflex movement is the quality of reaction ability. It plays a vital role in fast-moving games like basketball and handball to meet the high competition demands.

Scope: The scope of the study was to assess the hand and foot reaction abilities of basketball and handball players and justify their importance in improving performance.

Objective: The study aimed to investigate the admissible standard of hand and foot reaction ability and analyze the significant difference between basketball and handball players.

Methods: Thirty (30) basketball and handball players between 20 and 30 years of age who participated in state level and above competitions from Manipur were randomly selected. Whole Body Reaction Type IV (Takei Kiki Kogyo Co. Ltd) was administered to collect the data for hand and foot reaction ability and recorded at 100 of a second. The descriptive analysis and independent 't' test were used to determine the significant differences in hand and foot reaction abilities between basketball and handball players.

Results: There were found the same mean, i.e., $M=0.25\pm0.05$, in hand reaction ability (HRA) between the basketball and handball players. For the foot reaction abilities (FRA), $M=0.29\pm0.05$ and $M=0.29\pm0.08$ were the means of basketball and handball players, respectively. No significant differences in hand and foot reaction abilities between basketball and handball players were found. The result of the 't' test showed insignificant differences ($p>0.05$) in hand ($t=0.286$) and foot ($t=0.105$) reaction ability at 0.05 level of confidence. The results revealed a similar standard of reaction ability between the basketball and handball players.

Conclusion: The basketball and handball games have a similar nature, intensive motor qualities and competition demands. Therefore, insignificant differences in hand and foot reaction abilities are found between the basketball and handball players. The two games have similar levels of competition demands.

Biography

Prof. Laishram Thambal Singh (PhD) completed BSc (Physical Education) Honours from the DM College of Science, Imphal, Manipur, BPEd and MPEd from the HVPM's Degree College of Physical Education, under the Amravati University, Amravati, Maharashtra, and PGDSM from Alagappa University, Karaikudi, Tamil Nadu. He also qualified for UGC-NET & JRF (2002) and completed PhD research from Lakshmibai National Institute of Physical Education, Gwalior, MP (2006). The author has published multiple research papers (52) in reputed research journals (UGC approved, CARE-I &II) and presented papers in various national and international seminars, conferences, workshops, and other academic organizations. He has completed a significant major research project under the UGC. Presently, he is working as a Professor and Head of department in the Department of Physical Education and Sports Science, Manipur University (A Central University), Imphal, Manipur (India).

Navigating the landscape of concept-supported XAI: Challenges, innovations, and future directions

Zahra Shams Khoozani[1], Aznul Qalid Md Sabri[1], Woo Chaw Seng[1], Manjeevan Seera[2] and **Kah Yee Eg[3]**

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[2]Econometrics and Business Statistics,
School of Business, Monash University Malaysia, Malaysia
[3]Key ASIC Bhd (707082-M), Malaysia

Background: AI technologies have showcased their robustness across medical specialties such as oncology, neurology, and cardiology. Despite these advancements, medical experts exhibit reluctance to fully embrace and trust cutting-edge AI solutions. This study delves into the comprehensive exploration of factors contributing to this hesitation, aiming to uncover challenges and propose innovative strategies to foster trust and acceptance among medical professionals.

Objectives: This comprehensive review of concept-supported interpretation methods in Explainable Artificial Intelligence (XAI) navigates the multifaceted landscape. As machine learning models become more complex, there is a greater need for interpretation methods that deconstruct their decision-making processes. Traditional interpretation techniques frequently emphasize lower-level attributes, resulting in a schism between complex algorithms and human cognition. To bridge this gap, our research focuses on concept-supported XAI, a new line of research in XAI that emphasizes higher-level attributes or 'concepts' that are more aligned with end-user understanding and needs.

Methods: We provide a thorough examination of over twenty-five seminal works, highlighting their respective strengths and weaknesses. A comprehensive list of available concept datasets, as opposed to training datasets, is presented, along with a discussion of sufficiency metrics and the importance of robust evaluation methods.

Results: We identify six key factors that influence the efficacy of concept-supported interpretation: network architecture, network settings, training protocols, concept datasets, the presence of confounding attributes, and standardized evaluation methodology. We

also investigate the robustness of these concept-supported methods, emphasizing their potential to significantly advance the field by addressing issues like misgeneralization, information overload, trustworthiness, effective human-AI communication, and ethical concerns.

Conclusion: The paper concludes with an exploration of open challenges such as the development of automatic concept discovery methods, strategies for expert-AI integration, optimizing primary and concept model settings, managing confounding attributes, and designing efficient evaluation processes.
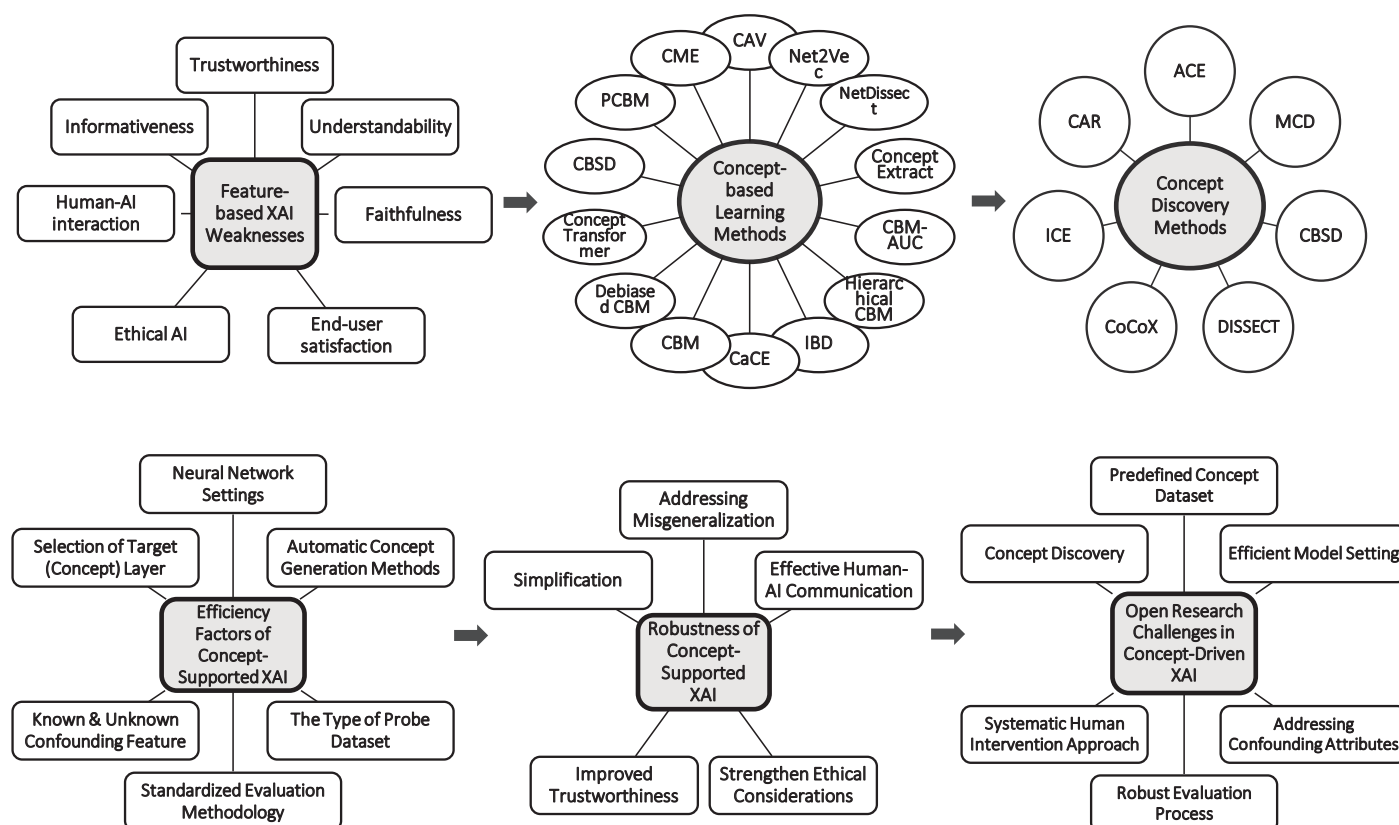
Figure 1: Summary of concept-supported XAI challenges, innovations, and future directions discussed in this study

Biography

Zahra Shams Khoozani is currently a PhD candidate at Universiti Malaya (UM) in the Department of Artificial Intelligence, with experience in both academic and corporate research and development (R&D). As an AI research engineer, her expertise includes mathematical algorithms, statistical models, complex neural networks, computer vision, and medical imaging. Holding a master's degree from UM's Department of Artificial Intelligence, she is enthusiastic about advancing the intersection of AI and healthcare.

A cohort study to assess substantial Impact of Chronic Diseases on Cancer risk and its management

Aayushi Vashi, Kenil Choksi, Jaydev Patel and **Jitendra Vaghasiya**

Parul University, India

Study and Objective: Cancer, the second leading cause of death, manifests as abnormal cell growth with a propensity for uncontrolled proliferation and, in certain instances, metastasis. Shared risk factors, such as aging and unhealthy lifestyles, contribute to cancer and various chronic diseases, collectively responsible for approximately 9.6 million deaths globally in 2018, accounting for one in six deaths. Type 2 diabetes elevates the risk of several cancers, with increased cancer mortality associated with diabetes stemming from heightened cancer incidence and diminished survival among diabetic individuals. The intricate connections between endometrial cancer and polycystic ovary syndrome involve multiple risk factors like obesity, diabetes, hypertension, anovulation, nulliparity, and family history. The study aims to assess the significant impact of chronic diseases on cancer risk and management, addressing objectives such as exploring the interrelationship between cancer and chronic illnesses, comparing cancer incidence in patients with and without chronic conditions, and evaluating medication therapy management in patients with chronic conditions and cancer.

Methods: Patients were categorized into two groups: Group A with a history of chronic conditions and Group B without. Statistical analysis was performed on collected data using various parameters.

Results: Over six months, 211 patients (125 females, 85 males) were studied, with the majority (59.5%) falling in the 50-59 age group. Notably, 18% of patients exhibited coexistence of one or more chronic conditions (diabetes mellitus II, hypertension, chronic kidney disease, hypothyroidism, arthritis, gastroesophageal reflux disease, and chronic tuberculosis) alongside cancer, potentially predisposing them to cancer. Chemotherapy, comprising 41 different combinations of two antineoplastic agents or a single agent, was prescribed.

Conclusion: The study revealed that 18% of the population had coexisting chronic conditions with cancer, establishing a potential link between chronic conditions and cancer. Additionally,

recurrence and metastasis were observed in 5% and 3% of the population, respectively, emphasizing the need for comprehensive cancer management in patients with underlying chronic illnesses.

Biography

This groundbreaking research, involving 418 subjects, revealed compelling evidence supporting the coexistence of cancer with chronic conditions. Dr. Aayushi Vashi discovered that chronic diseases such as diabetes, hypertension, tuberculosis, gastroesophageal reflux disease (GERD), chronic kidney disease (CKD), and chronic obstructive pulmonary disease (COPD) may influence the development of specific malignancies. The study's findings, backed by statistical analyses including McNemar's test and odds ratios, shed light on the intricate links between chronic diseases and cancer incidence. Notably, the research unveiled the potential impact of age, gender, and addiction to cancer predisposition. In the pursuit of scientific excellence, Dr. Aayushi Vashi emphasizes the need for standardized definitions and measurements of comorbidities in future studies. These insights promise to reshape our understanding of cancer risk factors and open avenues for targeted interventions.

Prevention of falling in postmenopausal women with osteoporosis during functional reaching-Transporting task

Marzieh Hatami, Giti Torkaman and Mohammad Najafi Ashtiani

Physical Therapy Department, Tarbiat Modares University, Iran

Falling is reported as the leading cause of eighty percent of all non-spine fractures and over ninety percent of hip fractures in older adults. In this regard, postural stability has been proposed as an essential factor for functional independence in older adults, and impaired postural control is a major risk factor for falls. Postural control is different in individuals with osteoporosis than in general older individuals. Individuals with osteoporosis are more likely to present higher sway velocities and a higher number of falls. A study of community-dwelling older adults found that a substantial proportion of falls occurred during tasks such as carrying an object, reaching or leaning.

Methods: 24 postmenopausal volunteers were classified into two groups based on the lumbar T-score: osteoporosis (≤-2.5,n=12) and non-osteoprosis (>-1,n=12). Using a custom-designed device, participates randomly performed 12 reaching-transporting tasks at the head level. Electromyography signals were collected while reaching task with a wireless system. The peak of the root means square (PRMS) and time to PRMS (TPRMS) were measured. In addition, the isometric muscle strength and the fear of falling were assessed.

Results: The isometric muscle strength in the osteoprotic group was significantly lower than in the non-osteoprotic group (p<0.05), except for vastus lateralis(VL).The fall efficacy score was significantly higher in the osteoporotic group than in the non-osteoporotic group (P<0.001).The PRMS value of the muscles was greater for non-osteoprotic group compared to the osteoprotic group. TPRMS values generally were longer in the osteoprotic group than in the non-osteoprotic group significantly for BF (p=0.026) and TA(p=0.014).

Conclusion: The results showed that the muscles in the osteoprosic group are weaker, this activity may not maintain stability during the task and may cause disturbance and falling. These results can help design the prevention rehabilitation program and ergonomic considerations for the arrangement of household items in postmenopausal women with osteoporosis to decrease the risk of falling.

Biography

1. Personal Information:

Name : Marzieh Hatami

2. Educational Records:

B.Sc: Ahvaz Jundishapur University of Medical Sciences

M.sc: Tarbiat Modares University of Medical Sciences

3. Membership of Scientific Societies:

Physical therapy Iranian Association

4. Innovation:

device for separating different phases in functional test at electromyography signals

5. Papers:

Different muscle strategy during head/knee level of functional reaching-transporting task to decrease falling probability in postmenopausal women with osteoporosis

6. Oral prezantation:

The 1ˢᵗ International Tele-congress on clinical movement sciences:

"Comparison of fall efficacy scale and strength of lower limb and trunk muscles in osteoprotic and non-osteoprotic postmenopausal women"

33ʳᵈ Annual congress of Iranian Physiotherapy Association:

"Comparison of electromyographic activity of Gluteal muscles in reaching task in the post menopausal women with and without osteoporosis"

Understanding variants of uncertain significance in Germline Genetic Diagnostic Testing

P. Nicolosi

Invitae, USA

Appreciation for the diagnostic utility of germline genetic testing (GGT) has increased recently as the technology has become more available in clinical settings. Consequently, there has been an increase in questions regarding when and how GGT results should be used to diagnose and treat patients. Guidelines created by the American College of Medical Genetics and Genomics (ACMG) and others created a framework for classifying variants into five categories: "pathogenic" (P), "likely pathogenic" (LP), "uncertain significance (VUS), "likely benign" (LB), and "benign" (B).[1-3] VUSs represent the majority of variants detected by GGT and have insufficient evidence to establish a disease connection. A study of disease relevant germline variants in men with prostate cancer, found 2/3 of detected variants were VUSs.[4] A majority of VUSs will be downgraded to B/LB based on functional or population frequency data (Invitae, unpublished data). Analysis of variants detected in White versus non-White men with prostate cancer found that African American (AA) men have an equal likelihood of a P/LP variant (p = 0.09), but were more likely to have a VUS (odds ratio [OR] = 1.95; p < 0.0001).[5] Additionally, Hispanic men with prostate cancer have a higher VUS return rate (21.5%) compared to White men (16.6%).[6] These findings highlight that men of color, are more likely to receive an inconclusive result from GGT than their White counterparts. This has serious clinical implications for non-White and ancestral admixture individuals who are underrepresented in the population databases and GGT data sets. GGT is a critical tool in the diagnosis and management of inherited diseases, but more is needed to ensure it is being used accurately and equitably. Until VUSs can be reclassified by the preponderance of available data, clinicians should avoid taking therapeutic action based on a VUS result.

Biography

Dr. Nicolosi received her doctorate in Biomedical Sciences at the University of California, Irvine where her work centered on the development and patterning of stem cell domains in neuroepithelial tissues. She went on to a Postdoctoral Fellowship at Stanford University where she was an NIH IRACDA (Institutional Research and

Academic Career Development Award) Fellow in the Department of Pathology. Her postdoctoral work focused on the genomics of prostate cancer. She is currently a senior clinical genomic scientist at Invitae, a genetic diagnostic testing company, where she serves as a variant analyst and has been involved in the development of both their germline and somatic cancer products. She has published multiple papers on the genetic in collaboration with key opinion leaders in the field of prostate cancer. She currently resides in Washington with her husband and four children.

PEERS ALLEY MEDIA

Antidepressant effects of the aqueous lyophilisate of the leaves of *Malvaviscus arboreus* Dill. Ex Cav. against epilepsy-associated depression in rats

M. B. Adassi[1], G. T. Ngoupaye[2], F. B. Yassi[3], A. F. Foutsop[2], T. D. Kom[1] and **E. Ngo Bum[1]**

[1]Department of Biological Sciences,University of Maroua, Cameroon
[2]Animal Physiology and Phytopharmacology Research Unit, University of Dschang, Cameroon
[3]Department of Biological Sciences, University of Ngaoundéré, Cameroon

Background: Comorbidities associated with epilepsy are of increasing concern in people with epilepsy. Among them, depression occupies a significant place, since it affects nearly 30% of epileptic patients. Considering the fact that several existing antiepileptic drugs do not take care of comorbidities, it is urgent to propose therapeutic solutions in order to allow epileptic patients to fight against comorbidities and particularly against depression, and herbal medicine presents itself as a first-rate choice, especially in developing countries. The present study thus aimed to evaluate the antidepressant effects of *Malvaviscus arboreus (M. arboreus)* in epileptic rats.

Methodology: Forty-two (42) rats of both sexes divided into 06 groups of 7 animals were used. Animals of groups 2 to 6 were pre-treated respectively with distilled water, valproate 300 mg/kg, and the extract of *M. arboreus* at doses 122.5, 245 and 490 mg/kg one hour before the induction of epilepsy. This induction was done by repeated administration of pentylenetetrazole 35 mg/kg every other day until the development of epilepsy in the negative control group. At the end of the induction, the animals were subjected to the depression tests, in particular the Sucrose Preference Test (SPT), the Open Field Test (OFT) and the Forced Swimming Test (FST), then they were sacrificed and biochemical assays of MAO-A, SERT, 5 -HT1A, serotonin, dopamine and noradrenaline were made in the hippocampus, as well as histological sections.

Results: *M. arboreus* extract significantly increased the sucrose preference index (p<0.001), reduced the immobility time (p<0.001), increased the swimming time (p<0.001), reduced the hippocampal level of MAO-A (p<0.001), 5-HT1A (p<0.001), SERT (p<0.001), monoamines (p<0.01); and preserved the architecture of the hippocampus.

Conclusion: Extract of *M. arboreus* prevents the development of depression in epileptic subjects, and could thus contribute to the management of depressive comorbidity in people suffering from epilepsy.

Biography

Maxwell Blesdel ADASSI is a young Cameroonian researcher.

He holds a Master of Science in Neurophysiology and Phytopharmacology and is currently a 3rd year PhD student at University of Maroua, Cameroon.

He has been working since 06 years in the field of physiology and pharmacology of the nervous system. His work focuses specifically on highlighting the effects of plants from the Cameroonian pharmacopoeia, used in the treatment of epilepsy and its comorbidities such as depression and memory impairment, as well as on improving their use.

Mr. ADASSI is a member of several Neuroscience organizations, including International Society of Neurochemistry (ISN), Society of Neuroscientists of Africa SONA) and Cameroon Association of Neuroscience (CAMANE).

For Mr. ADASSI, the brain is, as the surgeon Ben Carson said: "the organ of Miracle". And he therefore nourishes an immense passion and great enthusiasm for all topics involving the nervous system, and particularly its physiology and pharmacology.

State-of-the-art in synthetic data generation for healthcare: Advancements, challenges, and future prospects

Vinh Bui

Southern Cross University, Australia

As the healthcare industry strives to harness the power of data-driven technologies, the quest for comprehensive and privacy-preserving datasets has led to the emergence of synthetic data generation as a compelling solution. This presentation delves into the state-of-the-art in synthetic data generation for healthcare, presenting an overview of cutting-edge methodologies, advancements, challenges, and the potential impact on healthcare research and applications.

Real-world medical data, due to privacy concerns and limited accessibility, often falls short in fulfilling the data requirements for training robust machine learning models. Synthetic data generation, as an innovative alternative, offers the promise of producing realistic and privacy-preserving datasets to address this critical limitation.

The presentation unveils the diverse array of techniques that have garnered attention within the healthcare domain like Generative Adversarial Networks (GANs), Variational Autoencoders (VAEs), and the use of rendering virtual environments such as Unity3D and AI-powered algorithms to generate lifelike avatars harmonizing seamlessly with synthetic data's capacity to emulate genuine patient profiles.

The presentation also emphasizes the importance of maintaining data quality, preventing bias propagation, and validating the efficacy of generated datasets. It also addresses ethical considerations and regulatory compliance to ensure that synthetic data respects patient privacy while still reflecting the true diversity of real-world medical scenarios.

In conclusion, the presentation summarizes the potential impact of state-of-the-art synthetic data generation techniques on healthcare research and applications. By overcoming data scarcity, privacy concerns, and restrictive data access policies, synthetic data has the potential to revolutionize medical imaging, diagnostics, personalized treatment plans, and drug development. However, it underscores the necessity of ongoing research, collaboration, and ethical guidelines to maximize the benefits of synthetic data generation while safeguarding patient rights and ensuring the responsible adoption of this transformative technology.

Biography

Dr. Vinh Bui has background in both computer science and electrical engineering. He holds a Master degree in Information Technology and a PhD in Electrical Engineering, both from the University of New South Wales, Australia. Dr. Vinh Bui is researching in the area of applied computing, focusing on applications of generative AI, machine learning, and big data analytics in healthcare, tourism and waste management. He has a special interest in synthetic data and synthetic environment for training machine learning algorithms. Dr. Bui has published over 30 peer-reviewed articles in the above area and helped to secure over 10 million dollars of research funding. Dr Vinh Bui is a member and certified professional of the Australian Computer Society and member of the IEEE Computational Intelligence Society.

Meditation: Well-being and health

Agustín de la Herrán Gascón

Department of Pedagogy, Autonomous University of Madrid, Spain

Meditation is an ancient path to greater well-being, better health and inner evolution. However, it is still a rare or unconventional practice in health and educational centers. In this paper we will focus only on its possibilities and limits for well-being and health. The aim of this contribution is to provide a representative overview of studies that have shown the advantages that the practice of meditation can have for the majority of the population. We will also analyse some limitations to its implementation and research.

Biography

Lecturer in the Department of Pedagogy at the Universidad Autónoma de Madrid (UAM). Promoter of the radical and inclusive approach to education and radical and inclusive pedagogy. He directs the consolidated research group "Pedagogy, training and conscience" (https://pedagogiafc.com/). He has received around twenty awards for his academic, teaching and research career or for projects on which he has worked.

Breaking barriers: Understanding transphobia, resilience, and psychological distress in the Transgender community of Israel

Mally Shechory Bitton and **Shalhevet Weiss**

Department of Criminology, Ariel University, Israel

Objectives: This study aimed to investigate the relationships between external and internal resilience resources, stress measures, and emotional distress levels among transgender individuals in Israel. Specifically, we examined the mediating role of internalized transphobia in the relations between resilience resources and emotional stress. The study also sought to propose a theoretical model integrating variables from the Minority Stress Model (MSM) and the Transgender Resilience Intervention Model (TRIM), providing insights into the complex links between these factors.

Methods: 119 transgender individuals completed questionnaires assessing personal details, psychological stress levels, personal resilience, social support, coping styles related to gender identity, and internalized transphobia levels. Data analysis included means, standard deviations, Pearson correlation coefficients, t-tests, and multiple linear regressions.

Results: The findings indicated that social support, personal resilience, and problem-focused coping styles were associated with reduced emotional stress. Conversely, higher levels of emotional distress and internalized transphobia were linked to increased stress. While the assumed mediation model was not supported, an alternative model revealed the moderating role of internalized transphobia in the relationships between resilience resources, coping styles, and emotional stress.

Conclusion: This study integrated variables from the MSM and TRIM to develop a comprehensive model predicting emotional stress levels among transgender individuals. These findings have important implications for increasing awareness of the unique stress experienced by transgender individuals and designing targeted intervention programs. These programs can involve awareness campaigns in educational, military, and community settings, as well as family support. Moreover, the proposed model can guide therapeutic plans within transgender support organizations.

Overall, this study enhances our understanding of the factors influencing emotional stress in transgender individuals, providing a foundation for future research and interventions in preventive medicine and public health.

Biography

Prof. Shechory Bitton is a Full Professor at Ariel University, Israel since 2017. Since 2021, she has served as the head of the Master Degree Program in Clinical Criminology, which she founded and opened. Previously, she held the position of vice rector at Ariel University from 2013 to 2020 and served as the head of the Criminology department from 2016 to 2022. Prof. Shechory Bitton completed her studies in Family Therapy at Tel Aviv University and pursued post-doctoral research on Victim Offender Mediation at Tübingen, Germany. Her academic work encompasses various areas, with a particular focus on Trauma and resilience, domestic and sexual violence, Terrorism, and Forensic judgments and detection.

She has acquired practical and theoretical expertise in the fields of victimology, violence, and aggression. Throughout her career, she has received several scholarships that have enabled her to conduct evaluation and applied studies in these areas, contributing to the advancement of knowledge and the development of evidence-based policies and practices.

Campylobacter infections: Is it a neglected entity?

Suseela V Kundoly

Department of Microbiology, Amala Institute of Medical Sciences, India

Objectives: This case report on *campylobacter* infection is to highlight the complications and mortality caused by this infection, if it is neglected.

Scope: Lack of awareness leads to delayed or non-reporting of the campylobacters, a zoonotic infection which may cause complications and mortality. There are reports on the presence of these bacteria in the chicken eggs in this geographical area. But reports on human cases are scant.

Results: Blood culture revealed campylobacter. Despite antibiotic treatment was started, the patient succumbed to the disease. There was *campylobacter* in the peritoneal wash also. Patient had granulomatous lesion in the intestine suggestive of tuberculosis.

Methods: A 22- year-old male patient was admitted with sudden onset of abdominal pain. He had been diagnosed as pulmonary tuberculosis based on the findings like weight loss, dyspnea and pleural effusion. Anti-tubercular drugs had been prescribed empirically during the previous admission four days back. Explorative laparotomy was done and there were intestinal obstruction and perforation. Following the correction of the perforation, during post operative period, the patient developed septicaemia. The blood and peritoneal wash were subjected to bacteriological culture.

Conclusion: The presenting case did come with abdominal complications like intestinal obstruction and perforation. The patient died of *campylobacter* septicaemia. Any intestinal perforation should be investigated for campylobacteriosis and treated specifically to prevent the mortality.

Biography

Prof. Dr. Suseela V Kundoly is working as Professor and Head of Microbiobiology at Amala Institute of Medical Sciences, Thrissur, Kerala, India. She has authored 20 research publications in peer-reviewed National and International journals. She is a life member of Indian Association of Medical Microbiologists and Academy of Clinical Microbiologists, Kerala. She has more than 20 years of teaching experience at undergraduate and postgraduate courses and serves as consultant Microbiologist. She is an active participant and has presented various research articles in International and National conferences. Prof. Dr. Suseela is an examiner to Microbiology courses in the various Medical Universities and her area of research interest is bacteriology.

Enhancing job quality experiences for Intimate Partner Violence (IPV) survivors

Laura Kauzlarich

Northwest Missouri State University, USA

Recent research (Krigel & Benjamin, 2020) has demonstrated that for intimate partner violence (IPV) victim/survivors, predominate neoliberal policy in the workplace clashes with the patriarchal culture that dominates their personal lives in such a way that their primary perceptions of their work and behaviors in the workplace are formed according to their experiences of IPV in their intimate relationships. The academic purpose of my current research is to extend those findings by examining both the cognitive and emotional responses of victim/survivors to prompting events at work to better understand how those events are interpreted through the lens of the patriarchal culture in their personal lives. The practical purpose of this research is to better understand how victim/survivors can better reframe their experience of work towards effectively building agency and sustainable economic independence. Based upon in-depth interviews with currently employed victim/survivors of IPV, this study utilizes a grounded theory approach to explore victim/survivors' experiences in the personal and employment domain with the foundational assumption that these two domains are interconnected for IPV victim/survivors (Krigel & Benjamin, 2020). The in-depth interview structure is based upon the comprehensive Model for Describing Emotions (Gilbar et al, 2020) utilized in Dialectical Behavior Therapy, a methodology that has been shown useful for improving mental health and recovery prospects in IPV victims/survivors (i.e. Newlands & Benuto, 2021). The Model for Describing Emotions describes an individual's response to a prompting event (i.e. at work) via pre-existing vulnerability factors (i.e. IPV), their cognitive interpretation of that event (i.e. framed by patriarchal culture in their personal life), and the aftereffects of that interpretation (i.e. perceptions of their work and workplace behaviors). Findings include new insights into the ways in which violent relationships in the personal domain effectively serve as barriers to economic sustainability and independence. `

Biography

Dr. Laura Kauzlarich is an Assistant Professor in the Melvin D. & Valorie G. Booth School of Business at Northwest Missouri State University. Completing her doctorate in 2020 at Creighton University, she devoted her dissertation to the impact of intimate partner violence (IPV) on the workplace and on victim/survivors' experience of work itself. Dr. Kauzlarich's research pursuits focus upon the responsibility of the organization in responding to impact of IPV on the workplace, trauma-informed workspaces, and the role participation in the workforce and the experience of that work plays towards agency for victim/survivors of IPV. Interested both in IPV as a global epidemic at the macro level and in the experience of work for individual victim/survivors at the micro level, Dr. Kauzlarich seeks both to raise awareness about this critical global phenomenon and increase practical knowledge of how to mitigate the impact of work-related IPV on both victim/survivors and organizations.

Climate-sensitive infectious diseases in the Mekong Delta Region: From scientific evidence to preventive practices

Dung Phung

The University of Queensland, Australia

Background: The Mekong Delta Region (MDR) is vulnerable to climate change which results in more frequent and intense climate-sensitive infectious diseases (CSIDs).

Objectives: This presentation would overview the effects of climatic factors on the CSIDs and an example of translating from the complex scientific evidence to the CSIDs prevention in the MDR.

Methods: Time-series analyses were used to examine the effects of climatic factors on the CSIDs. A wide range of epidemiological methods was applied for the translational research.

Results: The previous studies revealed that the numerous CSIDs, including respiratory, water-borne, and vector-borne diseases, were strongly associated with the weather factors (temperatures, humidity, and rainfall) and extreme weather events (e.g., flood) in the MDR. Dengue was found to be most sensitive to the changes in the climatic conditions, and the climate-based prediction models could be used for developing an early warning tool for dengue prevention. We propose to develop and evaluate the effectiveness of a digital dengue early warning system (E-DENGUE), based on a prediction model, to assist the local health systems and the local communities affected by dengue to proactively mitigate the impact of outbreaks in the MDR.

Conclusion: The development of data science, technology, and digital innovation, which would have enabled the incorporation of climatic data into surveillance systems to enhance their capacity to predict trends in outbreak prevalence and location of the CSIDs. Timely warnings from a surveillance system can help to empower decision-makers in proactively preventing and controlling CSIDs and facilitating effective management of finite resources.

Biography

Dr. Dung Phung has background in both medicine and public health. He received Master of Public Health in Occupational and Environmental Medicine from University of Washington, and PhD in Environment and Population Health from Griffith University, Australia. His recent research focus is on climate change and health in developing countries. The lower Mekong Delta Region (MDR), a developing and tropical area, is considered one of the areas in South-East Asia most vulnerable to extreme hydro-meteorological events associated with climate change. Phung has conducted a series of studies on the health effects of high ambient temperatures, unusual and intensive flooding events, and sea level rises in the MDR. He has expressed a special interest on translating from complex scientific evidence into policy and practices to support climate change adaptation and mitigation strategies in this region.

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