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HYBRID EVENT

SEPTEMBER 19-20, 2024

EURO NURSING CONGRESS

&

WORLD CONGRESS ON

PHARMACEUTICAL CHEMISTRY AND DRUG DEVELOPMENT

VENUE

Millennium Hotel Paris Charles De Gaulle
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Contact Us:

✉ info@scitechseries.com

🌐 https://www.scitechseries.com/

📞 +44 2045874848

🟢 +44 2045250803

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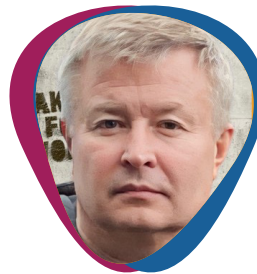**Orestis Ioannidis,**
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Thank You All

WELCOME MESSAGE

Sofica Bistriceanu
Academic Medical
Unit, Romania

On behalf of the Scientific Committee, I welcome you to the Euro Nursing Congress (ENC 2024), a hybrid event in Paris on September 19-20, 2024. Virtually or in person in the magnificent capital of France, you will enjoy healthcare industry news with the theme 'Pioneering Innovation and Pathways that Shape the Future of Nursing.' Improving specific knowledge in the domain prepared for, skills in handling and applying data in practice efficiently, professionally interacting with collaborators, and extending good relationships ensure a successful professional and social life. Being generous, kind, and timely in delivering our services to needy people is essential. Deceptive people interactions disappoint in collaborative work, leading to dissatisfaction of all parties implied in the relationships and altering business stability and continuity. I cordially invite you to enjoy discussions relevant to various topics that will bring to light how to improve our professional and personal lives in a rapidly changing dominant digital medical market. In today's world, data quickly circulates online, making us either ignored or esteemed professionals in the community we serve. Be part of this exciting event!

Sofica Bistriceanu

Terri H Lipman

University of Pennsylvania
USA

Dance for health: Evaluation of a program to increase physical activity in a high risk community

Abstract:

Unacceptably high rates of overweight and obesity disparately affect young, low-income, populations in the US and increase the risk of diabetes, hypertension and cardiovascular disease. The purpose of this study was to evaluate the outcomes of Dance for Health, an intergenerational program designed to increase activity in an under resourced community. Weekly 1.5-hour dance classes (x 38 weeks) were held in a location with high rates of obesity, hypertension and type 2 diabetes. Each week data on weight, baseline and mid activity heart rates and pedometer steps were collected by nursing students. Data were analyzed by descriptive, regression and linear mixed effect modeling. The sample included 130 participants: 96 adults (mean age 59.3 yr; 94% female), 34 youth (mean age 13.4 yr ; 67% female); 89% of adults, 85% of children were Black. Changes in steps over time were examined using linear mixed effects modeling in adults in the overall sample. For each additional dance session, the number of pedometer steps increased by an average of 25 steps ($p < 0.0001$). The activity was rated highly enjoyable by the participants. Dance for Health was found to be highly enjoyable and effective in increasing activity over time. The program can serve as a model for combatting obesity and increasing physical activity in high risk communities. Interventions that engage multiple generations hold promise not only to increase the impact on individuals, but to influence the health outcomes for entire families.

Biography

Terri Lipman is a Professor Emerita at the University of Pennsylvania School of Nursing and a Researcher at Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, USA. Her research is focused on racial disparities in the treatment and outcomes of children with diabetes- with an emphasis on addressing social determinants of health.

Erjola Bej

Catholic University Our Lady of Good Counsel
Albania

Saffron promising Anti-Aging effects against D-Galactose induced aging in vitro model

Abstract:

Aging is a continuous, cumulative, and natural process that results in irreversible alterations in all molecules, cells, tissues, and organs of a living being. The senescence of the brain is linked to an elevated susceptibility of developing various neurological conditions, such as Alzheimer's disease, Parkinson's disease, and stroke. As a result, finding effective methods to mitigate or postpone brain aging is crucial for enhancing the quality of life and health span of the senior population. Prior research has shown that Dgalactose is a suitable agent for inducing aging effects in both in vivo and in vitro models. Human SHSY5Y cells are a well-employed cellular model for studying the mechanistic aspects of neural development and neurodegeneration. Saffron (Crocus sativus L.) is a spice derived from the flower of a perennial plant that belongs to the Iridaceae family. Several clinical and preclinical studies have demonstrated that saffron and its constituents can improve cognitive function, mood, sleep quality, and other neurological outcomes in patients with mild cognitive impairment and Alzheimer's disease. Moreover, saffron and its constituents have been reported to exert neuroprotective effects through various mechanisms, such as modulating neurotransmitters, reducing neuroinflammation and regulating oxidative stress. Based on reported evidence, in this study, we examined the anti-aging effects of local Saffron extract (SE) on a D-GAL-induced aging model using human SH-SY5Y. The first part of the study was focused on the preparation of saffron hydroalcoholic extract and characterization, then we focused on the analysis of cell proliferation, live-cell cytotoxicity, Beta-Galactosidase (β-GAL), lipid peroxidation (MDA), intracellular reactive oxygen species (ROS), superoxide dismutase and catalase, and advanced glycation end products (AGEs) levels. In conclusion, our research underscores the therapeutic potential of SE in brain aging counteracting oxidative stress imbalance.

Biography

Erjola Bej studied Pharmacy in the University of Milan, Italy and at the moment she is a PhD student at the University of L'Aquila, Italy, Department of Life, Health and Environmental Sciences. In the meantime, Erjola is a Professor in the Faculty of Medicine, Nursing and Physiotherapy study programmes, Catholic University 'Our Lady of Good Counsel' Albania, and a member of the Department of Chemical Toxicological and Pharmacological Evaluation of Drugs of the same university.

Esther Igboerika

Fresno Pacific University
USA

School-Based asthma education program

Abstract:

Asthma affects the quality of life of school-age children. Children with asthma and their parents do not effectively practice asthma self-management. These children suffer from mild, moderate, and severe symptoms of asthma. Poor asthma management impacts school attendance. School-based asthma education benefits students, parents, and the school district. Effective asthma education can improve asthma knowledge, symptom/triggers recognition, and medication compliance among children with asthma.

Methods: A quantitative descriptive study using pretest/posttest design. The Pediatric Asthma Quality of Life Questionnaire (PAQLQ) was utilized. A convenience sample of 19 students in grades 6-8 and ages 11 - 14 completed the KicKin' asthma education intervention and the PAQLQ. The KicKin' asthma education was provided once a week for four sessions. The PAQLQ was completed pre and post the KicKin' asthma education intervention.

Results: Significantly higher PAQLQ scores were seen in each of the PAQLQ domains after the Kickin' asthma intervention. For activity limitations T=75, z= -2.810 p <. 005, symptoms T=55, z= -2.970 p <. 003, and emotional functions T=79, z= -2.517 p <. 012 respectively.

Conclusion: The KicKin' asthma education intervention effectively improved the quality of life of middle school students diagnosed with asthma. School-based asthma education is beneficial, and a successful asthma education program can improve the overall health outcomes of children with asthma. Further research is warranted to explore the resources available to sustain school-based asthma education programs.

Biography

Esther Igboerika completed her Doctor of Nursing Practice and Pediatric Nurse Practitioner program from Maryville University. She obtained her BSN/PHN from Azusa Pacific University, and BS. Anatomy from University of Port Har-court Nigeria, She is a credentialed school nurse and she loves educating children. Her clinical experiences are in school health and rural clinics. She is the Chief Nursing Officer and the MSN program director at Fresno Pacific University.

Kulzhan Berikkhanova

Nazarbayev University
Kazakhstan
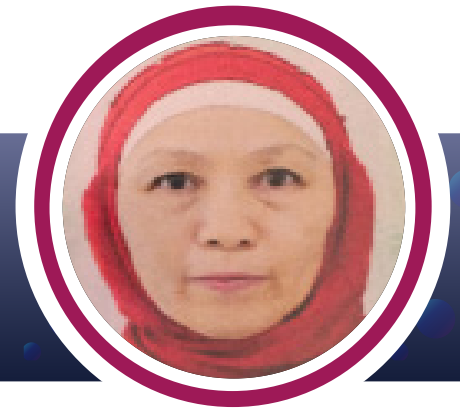
The autologous red blood cells as drug carriers

Abstract:

The use of red blood cells (RBCs) as drug carriers marks a significant advancement in modern pharmaceutical research, offering improved treatment effectiveness across various medical fields. RBCs possess vital physiological characteristics, such as the ability to renew frequently, transport oxygen, maintain a unique shape, and exhibit membrane flexibility, making them ideal and versatile carriers for drugs within the body. A successful method has been developed for loading various antibiotics and cytokines into erythrocytes to target inflammation sites in the body. These drug-loaded RBCs, created through the process of hypo-osmotic haemolysis, are commonly known as "pharmacocytes." Microphotographs showing the morphological changes in erythrocytes during drug encapsulation have been captured using scanning and transmission electron microscopy. Furthermore, comparative studies on the biopharmaceutical parameters of erythrocyte carriers loaded with drugs were conducted using equilibrium dialysis. This method allowed for the determination of association/dissociation constants and dynamic stability over 24 hours. The data suggest that pharmacocytes can serve as effective drug carriers for the targeted delivery of cytokines and antibiotics to inflammation sites, potentially improving treatment outcomes for various diseases. Experimental results indicate that using targeted drug delivery systems based on autologous erythrocytes could offer a new approach for treating inflammation in the body.

Biography

Berikkhanova Kulzhan is MD, PhD, Associate Professor, Leading Researcher at the National Laboratory Astana of Nazarbayev University. She has more than 24 years' experience of a highly qualified surgeon, including clinical experience in the treatment of purulent wounds, as a researcher – 18 years. Her research interests are focused on targeted drug delivery, cellular technology, regenerative medicine, acceleration of healing of purulent wounds. She has 70 scientific publications, including articles in international scientific journals, 1 textbook, 1 monograph, 6 patents. She introduced into clinical practice an innovative method for treatment of purulent wounds, peritonitis using targeted delivery of antibiotics in pharmacocytes

Sheree Moore

Charles Sturt University
Australia

Family and domestic violence discourses and narratives within Australian rural emergency departments

Abstract:

Australian research has indicated that the frequency and severity of family and domestic violence (FDV) increases with remoteness, resulting in higher rates of hospitalisation for some rural communities; however, prior research has suggested that some health-related policies and ED responses to FDV may not be meeting the needs of rural communities. The current study aimed to understand how Australian rural ED's respond to FDV and why they respond in certain ways. Foucauldian Discourse and Narrative Analysis were used to examine three sets of data involving: 1) Australian Government FDV policies; 2) observations of rural ED's; and 3) focus groups with ED nurses. Two rural Australian ED's were involved in the study. Data was collected in 2021 and 2022. The results produced three dominant narratives: Deficit Subject Narratives, Societal Narratives, and Person-Centered Narratives. Narratives had potential significant implications when considering the agency and wellbeing of ED patients, ED clinicians, and individuals impacted by FDV. Deficit Subject and Societal Narratives reduced the visibility of FDV and the agency of the patient within ED, while Person-Centered Narratives enhanced its visibility and empowered patients. The results highlighted the potential for contradictory institutional narratives to threaten the wellbeing of ED clinicians by positioning them as both responsible and helpless in respect to FDV. These results stress the importance of context when considering how rural ED's can be adequately supported to respond effectively to FDV without compromising the welfare of clinicians, patients or local communities.

Biography

Sheree Moore has qualifications in nursing and psychology. They are enrolled in a Doctor of Philosophy (Psychology) course and have completed the following qualifications: Bachelor of Science, Bachelor of Nursing, Graduate Diploma of Psychology, and Bachelor of Social Science (Psychology) Honours. Sheree has over 10 years' experience supporting children, adults, families and frontline health workers in regards to family violence in rural and remote areas of Australia. This includes psychology and nursing roles within Emergency Departments, public community mental health services, schools, private psychology practice and child protective services.

Carmen Josefa Sierra

University of Miami
Spain

Enhancing global health: The impact of Dose-sparing features in syringe technology

Abstract:

The incorporation of dose-sparing features in syringe design represents a significant innovation in medical technology, offering a plethora of advantages that enhance the efficiency and effectiveness of healthcare delivery. Dose-sparing syringes are meticulously engineered to minimize the volume of medication that remains unused in the syringe after administration, ensuring that patients receive a full dose while reducing waste of precious medical resources. One of the primary advantages of dose-sparing syringes is the optimization of vaccine and medication utilization. In scenarios where the supply of vaccines or medications is limited, the ability to administer doses accurately and with minimal waste can significantly extend the reach of these critical resources, potentially saving more lives and treating more patients with the same amount of product. This is especially vital during public health emergencies when the demand for vaccines and medications surpasses the available supply. Furthermore, dose-sparing syringes contribute to cost savings for healthcare systems. By maximizing the use of each vial of medication or vaccine, healthcare providers can reduce the overall cost of medical treatments and vaccinations, making healthcare more affordable and accessible to a broader population. Additionally, the precision and efficiency of dose-sparing syringes enhance patient care by ensuring that individuals receive the intended dose of a medication or vaccine, thereby improving the efficacy of treatment and vaccination programs. This can lead to better health outcomes and increased confidence in public health initiatives. In conclusion, dose-sparing syringes offer significant advantages in terms of resource optimization, cost savings, and improved patient care.

Biography

Carmen Josefa Sierra, a distinguished nurse scientist and Doctorate of Nursing Practice graduate from Rush University in Chicago, Illinois, stands as the clinical lead for Sol-Millennium, a leading global manufacturer of needles, syringes, and blood collection devices. With a profound commitment to enhancing patient care and healthcare worker safety, Carmen has contributed significantly to the field of infectious diseases through her publications in reputed journals. Currently, she is finalizing her dissertation, furthering her expertise in the study of disease patterns, causes, and effects in populations. Her work epitomizes the intersection of clinical leadership and impactful research.

Lidia Sierpinska

Independent Public Health Care Unit
Poland

Risk of infection with HCV in the practice of nurses and other medical staff

Abstract:

Infection with hepatitis C virus (hepatitis C) is an important medical and social problem in Poland and worldwide. The etiologic factor of this disease is hepatitis C virus (HCV), which is transmitted via blood and blood-derived products. The routes of infection with HCV are various types of damage (disruption) of tissue continuity, and contact with infected blood, e.g. medical procedures and occupational exposure). According to the reports by the Nofer Institute of Occupational Medicine in Łódź, Poland, the majority of cases of infection with HCV or HBV were due to occupational infection in Polish hospitals. HCV antibodies (anti-HCV) were found among the examined medical staff, including nurses, e.g. in 2009 (1.40%); 2011 (1.42%); and in 2013 (0.80%). Considering the risk of infection with HCV among nurses and other medical staff it is necessary to observe the procedures of prevention of occupational exposure, proper management of employees after occupational exposure (immediate laboratory tests of the employee and the patient, post-exposure prophylactic administration of immunoglobulin or antiviral agents). Considering a high risk of infection with HCV in medical facilities among nurses and other medical staff it is necessary to conduct a wide range of non-specific methods of prevention – lack of specific methods.

Biography

Lidia Sierpinska, MD, RN. Specialist in public health and in the field of epidemiological nursing. Head nurse, Military Clinical Hospital No. 1 with Polyclinic, Independent Public Health Care Unit, Lublin, Poland (33 years). Research and didactic employee at Vincent Pol University in Lublin, nursing speciality (2 years). Adjunct at the Radom School of Higher Education, nursing speciality (17 years). National consultant for defence in the field of nursing (15 years). Many publications within the scope of issues concerning quality management of medical services, and problems of hepatitis C as a risk factor for hospital-acquired infections.

Lalit Dzifa Kodza

Zhengzhou University
China

A walk with Depression: An interpretive phenomenological analysis study with depressed adolescents

Abstract:

Adolescence is a high-risk period for depression, yet few studies have examined depressed adolescents' perspectives on their experiences with depression. This study sought to understand adolescents' experiences of living with depression.

Methods: Seven purposely selected depressed adolescents (14–17 years old) admitted to a mental health facility in a suburb of Accra, Ghana, for one month were interviewed using semi-structured interviews. We analyzed the transcribed data using interpretative phenomenological analysis.

Results: The mean age of adolescents was 15 years (SD=1.00); adolescents were all in junior high school, about 71.4% had been admitted once to psychiatric in-patient units for depression (mean 1.29, SD=.488), and the mean age at first diagnosis was 13.57 years (SD=.976). Emotional Struggle, Social Challenges, Coping Mechanisms, Academic Impact, and Support System Needs were the five interwoven themes identified. Emotional toll was key across themes.

Conclusion: The results underscore potential directions for clinical practice and measures for tailoring support to meet specific individual adolescents' needs, as well as conducting mixed methods surveys of the identified themes with other age groups. Understanding and addressing these complexities are vital for effective adolescent mental health care.

Biography

Lalit Dzifa Kodzo is a committed Mental Health Nurse dedicated to improving patient well-being. Currently pursuing a Ph.D. in Nursing at Zhengzhou University, China, Lalit holds a Master's in Public Health, a Bachelor of Education in Health Science (Psychiatry) and a Diploma in Mental Health Nursing. Her expertise spans various disciplines, including psychiatric nursing, epidemiology, and health promotion. With a diverse educational background, Lalit's career encompasses clinical practice, education, and research roles across Ghana and China. Recognized for her dependability, excellent communication, and organizational skills, she is currently the president of the Zhengzhou University International Students' Association. Dzifa's passion extends beyond mental health; she enjoys spending time with family, reading, writing, and cooking.

Damla Camveren

Kutahya Health Science University
Turkey

The effects of a preceptorship program on newcomer nurses' turnover intention, commitment and job satisfaction: Quasi-experimental study

Abstract:

Aim: The aim of the present study was to examine the effect of an organizational socialization model-based preceptorship program on the organizational outcomes of newcomer nurses.

Background: Preceptorship programs need to be strengthened to ensure the organizational socialization of newcomer nurses.

Design: This study was conducted with a one group pretest-posttest design.

Methods: The sample consist of newcomer nurses from the university hospital of İzmir (N = 56) in Turkey. Data were collected using scales on turnover intention, professional and organizational commitment and job satisfaction. The dependent t-test was used for data analyses.

Results: The newcomer nurses' intention to leave their unit and profession, organizational and professional continuance commitment, professional normative commitment and job satisfaction levels were similar at the end of the one-year preceptorship program compared with the baseline (p > .05). It was also determined that the participants' intention to leave the organization increased (t = −4.153, p < .001), while their affective (t = 4.443, p < .001) and normative commitment to the organization (t = 3.443, p < .001) and their professional affective commitment decreased (t = 7.390, p < .001) by the end of the program.

Conclusions: The organizational socialization model has the potential to be used as an effective framework to improve the organizational outcomes of new graduate nurses. Although organizational socialization meets some dimensions of institutional and professional needs of newcomer nurses in the first year, there is still a need to use different strategies and enrich organizational socialization to support their adaptation process.

Biography

Damla Camveren is an esteemed academic in the field of nursing, currently serving as an Assistant Professor at Kütahya Health Sciences University, Faculty of Health Sciences, Department of Nursing since 2022. She has a robust academic background, having earned her Doctorate in Nursing from Dokuz Eylul University in 2021, a Postgraduate degree from Ege University in 2016, and her Undergraduate degree from Hacettepe University in 2011. Her research primarily focuses on health sciences and nursing, contributing significantly to these fields through her work. She has previously held roles as a Research Assistant at both Ege University and Dokuz Eylul University between 2014 and 2022.

Senay Takmak

Kutahya Health Science University
Turkey

Does fear of compassion effect caring behaviors: A cross-sectional study among nurses

Abstract:

Aims: The aim of this study is to determine the levels of nurses' fear of compassion for others, fear of compassion from others, and fear of self-compassion and to examine the effect of fear of compassion on caring behaviors.

Method: A cross-sectional, quantitative design was used. The study was conducted between October 2022 and April 2023 with 304 nurses working in two public hospitals. Data collection tools were the "Fears of Compassion Scales" and the "Caring Behaviors Inventory". Data were analyzed using a t-test, one-way ANOVA, Pearson correlation analysis, and stepwise multiple regression model.

Results: The mean scores of nurses on fear of compassion for others and from others were at a moderate level, and their scores on fear of self-compassion were close to a moderate level. It was found that the level of nurses' fear of compassion was related to their sociodemographic and professional variables. Fear of self-compassion, fear of compassion for others, and fear of compassion from others explained 33.5% of the total variance in caring behaviors.

Conclusions: Nurses' caring behaviors were shown to be more associated with fear of self-compassion than fear of compassion for others. Fear of compassion may be one of the barriers to compassionate care. Interventions that will reduce nurses' fear of compassion may be one way to provide compassionate care. It is recommended to conduct awareness studies on self-compassion and accepting compassion from others in nurses.

Biography

Takmak graduated from Erciyes University, Department of Nursing. She completed her master's and doctorate education in the fundamentals of nursing at Pamukkale University. She worked in the fields of operating room nursing, internal and chest diseases clinical nursing, and intensive care nursing for 15 years. She has been working at Kütahya Health Sciences University Nursing Department as an assistant professor for the last four years. Nursing education, skills training, nurse care behaviors, compassion and self-care are her fields of study. She has publications in international and national nursing journals.

Hye youn Lee

Seoul National University Hospital
South Korea

Development of an education visit process for the safety of homecare clients

Abstract:

Purpose: With the advancement of medical care, the trend of patients being discharged home with a variety of medical devices and tubes is increasing, increasing the psychological and emotional burden on caregivers due to unfamiliar situations and difficulties related to tube management. Accordingly, it is essential to classify patient groups that require accurate knowledge and efficient management methods and provide convenient and standardized education at the appropriate time. We started this activity to increase understanding of new medical devices and tubes through educational visits and to reduce the burden on caregivers.

Methods: Six key topics requiring educational visits have been identified: T-can, PG, L-tube, ventilators, tube management (PTBD/PCD/PCN), and end-of-life patient care. Educational materials have been developed for these topics, and simulation kits have been crafted for post-discharge home visits. The goal is to conduct necessary education, evaluate nursing performance, and measure satisfaction levels.

Results: We have developed six education visit processes, and completed the production of educational materials and equipment kits successfully. In addition, the knowledge and performance scores of patients and caregivers before and after the education visits showed a remarkable increase, rising significantly from an average of 45 points to 98 points. The satisfaction score after the education visit was 99 out of 100, which was very satisfactory.

Conclusion: The outcomes of these educational visit programs are expected to contribute comprehensively to the enhancement of healthcare services and the practical implementation of more efficient and secure home care.

Biography

Hye youn Lee have been working at Seoul National University Hospital. She as a nurse in the hematology and Emergency room. Afterwards, she worked as a head nurse since 2011, and has been working as a team manager of the home health care team since 2022. She hold APN certification in Home Health Care and Oncological Nursing.

Zahid Hasan

Charter University
Pakistan

Nano medicine: Design of Graphene–Based nano thermo Ro-bot for the treatment of chronic disease empowered with soft computing

Abstract:

Nano medicine has emerged as a promising field for the targeted treatment of various chronic diseases, including cancer, cardio-vascular diseases, and neurological disorders. In this context, the design and development of Nano robots capable of precise therapeutic interventions at the Nano scale hold significant potential. Here, we propose a novel approach using graphene-based nanomaterial's for the construction of thermo-responsive Nano robots for chronic disease treatment. Graphene's unique properties, including high surface area, thermal conductivity, and bio-compatibility, make it an excellent candidate for such applications. The Nano robot design incorporates graphene oxide (GO) or reduced graphene oxide (rGO) as the main component, functionalized with thermally responsive polymers or drug-loaded nanoparticles. These Nano robots are remotely activated using external stimuli, such as near-infrared (NIR) light, to induce hyperthermia at targeted disease sites. This localized heating effect facilitates various therapeutic modalities, including drug delivery, photo thermal therapy (PTT), and photodynamic therapy (PDT). In this study we will design a model of "Thermal Distribution Control System" which will work as heat therapy for the treatment of the fatal disease of cancer on the bases of graphene material by controlling the intensity of heat at the range of 38 C0 to 45 C0 for the treatment of cancer by using the magical properties of coated graphene Nano-particles and evaluate the thermo phoresis Nt. An infrared thermal camera is utilized to measure the thermal conductivity and monitor the temperature change of the composites, respectively. Furthermore, the Nano robots can be engineered to respond to specific biomarkers or physiological conditions, enabling precise targeting and controlled release of therapeutic payloads. This review discusses recent advancements in the design, fabrication, and applications of graphene-based Nano thermo robots, highlighting their potential for the treatment of chronic diseases and the challenges that need to be addressed for clinical translation. Inclusive, graphene-based Nano thermo robots represent a promising avenue for next-generation Nano medicine, offering tailored and efficient therapeutic strategies for chronic disease management.

Biography

Zahid Hasan has completed his PhD at the age of 45 years from NCBA&E. He is the HOD for graduate program of computer science department of Charter University NCBA&E He has published more than 16 papers in reputed journals and has been serving as an assistant professor in repute institute of Pakistan.

KEYNOTE PRESENTATIONS

SEPTEMBER
19-20, 2024

Sofica Bistriceanu

Academic Medical Unit
Romania

Deceptive people interactions negatively impact public health

Abstract:

No one can live in isolation and succeed without the support and contributions of others; they must continuously change their products, services, or ideas as necessary. People's interactions in person or virtually influence their lives. Many individuals prefer to collaborate virtually with their partners/clients because this model is a more convenient tool for cooperative work, saving costs and time. However, in-person collaboration offers more accurate verbal and non-verbal data for building and extending relationships. Quickly and effectively processing data in practice, skilled communication with business partners and community members, professionally sharing the presence, and acting by social norms lead to a successful professional and social life and ensure business continuity and growth. By contrast, deceptive people interactions negatively impact the emotional life of collaborators, leading to disorders such as depression, arterial hypertension, dyslipidaemia, type 2 diabetes, and even brain haemorrhage in vulnerable individuals. In addition, their suffering extends to their loved ones who resonate with their distress. The customer/patient's negative experience determines them to look for another collaborator/provider for the following episodes of care from the offerings. This determines a decrease in investment returns, affects business continuity, and alters personal reputation and social lives. That is why people's interactions can positively or negatively impact public health, individuals' professional and social lives, and society's advancement.

At the end of this presentation, the audience will be able to–identify the causes and effects of deceptive people's interactions–initiate informative programs in their communities about people's interaction significance for public health and society's advancement–recognize the value of people's interactions for the individual's life.

Biography

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

Sergey Suchkov

The Russian University of Medicine and Russian Academy of Natural Sciences, Russia

Personalized Health-Related and integrative nursing care in precision medicine era

Abstract:

A new systems approach to diseased states and wellness result in an upgraded model in the healthcare services, personalized and precision medicine (PPM). The implementation of PPM would require major changes and challenges, including the incorporation of IT technology to in-troduce support tools for the clinical use and also brings important implications for nursing to se-cure PPM-based strategies. Regarding the above-mentioned features of PPM, nurses of the next-step generation need to be prepared to assist patients in interpreting the results of consumer-based testing, and/or referring to the targeted specialists as needed. Nurses need to assess clinical risk factors; discuss and clarify patient values and priorities; provide in-formation to enhance deci-sion making around screenings or risk-reducing treatments; and provide support for family notifi-cation and testing as indicated. For nursing services of the near future to come, the main chal-lenge is the incorporation of the OMICS-technologies in training and professional practice, so that nurses can empower themselves to provide per-sonalized care to individuals and families based on PPM-driven innovations. To meet the new demands for care, these advances need to be incorporated into professional nursing practice and, above all, into nursing care. In order for pa-tients and their families to fully benefit from the explosion of genomic knowledge, healthcare professionals, especially nurses, need to grasp the underlying principles of genomics that have been shaping all healthcare practice and care. Therefore, the necessary emphasis on the profes-sional training of nurses based on genomics will become an important requirement as the omics sciences will become part of routine care, no longer being exclusively an area of specialization.

Nurses face increasing challenges and opportunities in communication, support, and ad-vocacy for patients given the availability of advanced testing, care and treatment in PPM. Meanwhile, the current curricula for training nurses often fail to give them the knowledge they need to deliver precision care and thus do need to understand PPM in some depth. And a lack of medical guide-lines has been identified by responders as the predominant barrier for adoption, indicating a need for the development of best nursing practices! So, nursing ed-ucation and continuing education, clinical decision support, and health systems changes will be necessary to provide personalized multidisciplinary care to patients, in which nurses play a key role. And getting education and col-laboration right for PPM-driven resources could be just a first step towards a more universal in-volvement of nurses in precision health!

Biography

Sergey Suchkov was born in the City of Astrakhan, Russia, in a family of dynasty medical doctors, and in 1980, graduated from Astrakhan State Medical University being awarded with MD. In 1985, Suchkov maintained his PhD at Sechenov University and Institute of Medical Enzymology. In 2001, maintained his Doctor Degree at the National Institute of Immunology, Russia. From 1989 through 1995, a Head of the Lab of Clin Immunology, Helmholtz Eye Res Institute in Moscow. From 1995 through 2004 - a Chair of the Dept for Clin Immunology, Mos-cow Clinical Research Institute (MONIKI). In 1993-1996, was a Secretary-in-Chief of the Editorial Board, Biomed-ical Science, an international journal published jointly by the USSR Academy of Sciences and the Royal Society of Chemistry, UK.

Alain Chapel

Institute of Radiological Protection and Nuclear Safety
France

From experimental research to clinical trial in the treatment of complication of radiotherapy by stem cells

Abstract:

Statement of the problem: The late adverse effects of pelvic radiotherapy concern 5 to 10% of patients, which could be life threatening. However, a clear medical consensus concerning the clinical management of such healthy tissue sequelae does not exist. Our group has demonstrated in preclinical animal models that systemic mesenchymal stromal stem cells (MSCs) injection is a promising approach for the medical management of gastrointestinal disorder after irradiation.

Methodology & theoretical orientation: In a phase 1 clinical trial, we have shown that the clinical status of four first patients suffering from severe pelvic side effects (Epinal accident) was improved following MSC injection (figure). Two patients revealed a substantiated clinical response for pain and hemorrhage after MSC therapy. The frequency of painful diarrhea diminished from 6/d to 3/d after the first and 2/d after the 2nd MSC injection in one patient.

Findings: A beginning fistulization process could be stopped in one patient resulting in a stable remission for more than 3 years of follow-up. A modulation of the lymphocyte subsets towards a regulatory pattern and diminution of activated T cells accompanies the clinical response. MSC therapy was effective on pain, diarrhea, hemorrhage, inflammation, fibrosis and limited fistulization. No toxicity was observed. We are now starting a clinical research protocol for patients with post-radiation abdominal and pelvic complications who have not seen their symptoms improve after conventional treatments (NCT02814864, Trial evaluating the efficacy of systemic MSC injections for the treatment of severe and chronic radiotherapy-induced abdomino-pelvic complications refractory to standard therapy (PRISME). It involves the participation of 6 radiotherapy services for the recruitment of 12 patients. They will all be treated and followed up in the hematology department of Saint Antoine Hospital. The cells will be prepared in two production centers (EFS Mondor and CTSA). Treatment is a suspension of allogeneic MSCs. Eligible patients must have a grade greater than 2 for rectoragy or hematuria at inclusion and absence of active cancer. Each patient receives 3 injections of MSCs at 7-day intervals. Patients will be followed up over a 12-month period. The main objective is a decrease of one grade on the LENT SOMA scale for rectorrhagia or hematuria. The secondary objective is to reduce the frequency of diarrhea, analgesic consumption, pain and improved quality of life.

Conclusion: At the end of this period, if the efficacy of the treatment is proven, a phase III trial including a larger number of patients over a longer period will be used to confirm the therapeutic properties of this treatment.

Biography

For 30 years, he has been developing gene and cell therapy using non-human primates, immune-tolerant mice and rats to protect against the side effects of radiation. He collaborates with clinicians to develop strategies for treatment of patients after radiotherapy overexposures. He has participated in the first establishment of proof of concept of the therapeutic efficacy of Mesenchymal stem cells (MSCs) for the treatment of hematopoietic deficit, radiodermatitis and over dosages of radiotherapy. He has contributed to the first reported correction of deficient hematopoiesis in patients (graft failure and aplastic anemia) thanks to intravenous injection of MSCs restoring the bone marrow microenvironment, mandatory to sustain hematopoiesis after totl body irradiation. He is scientific investigator of Clinical phase II trial evaluating the efficacy of systemic MSC injections for the treatment of severe and chronic radiotherapy-induced abdomino-pelvic complications refractory to standard therapy (NCT02814864Hirsch Index 31).

Ashwini Vijayrao Jadhav

Genba Sopanrao Moze College of Pharmacy
India

Development and validation of UV spectrophotometric method for estimation of pantoprazole sodium in bulk and tablet dosage form

Abstract:

Pantoprazole is a gastric proton pump inhibitor. Pantoprazole is used for short-term treatment of erosion and ulceration of the oesophagus caused by gastro oesophageal reflux disease. In present work, a simple, sensitive, accurate and economical spectrophotometric method has been described for the assay of pantoprazole either in pure form or in pharmaceutical solid dosage form. An absorption maximum of Pantoprazole was found to be at 289 nm. Beer's law is obeyed in the range 3-21 µg/mL with correlation coefficient of 0.997. Result of percentage recovery of Pantoprazole sodium ranges from 99.7 to 100.8% in Pharmaceutical dosage form. Results of the analysis were found to be satisfactory. The proposed methods are simple, rapid and suitable for the routine quality control application.

Biography

Ashwini Vijayrao Jadhav has total 15-year academic and one-year industrial experience. She obtained her M. Pharm in Pharmaceutics from SPPU, Pune University and PhD from VISTAS, Vels University, Chennai, and Tamilnadu, India. She has more than 10 years of research experience with over 30 national and international publications has been serving as an editorial board member of repute. She is currently working as associate professor in Pharmacy College. She has approved Teacher from SPPU and MSBTE governing Body. She worked as research coordinator in the institute. She has guided around 5 M.pharm students.

Noriyo Colley

Hokkaido University Faculty of Health Sciences
Japan

Nursing technological development to protect our lives by ourselves

Abstract:

Some might have allergic reaction to hear the term "nursing robots". Is it true it only steals nurses' job opportunity? To differentiate expert nurses' activity from simple repetitive maneuvers, the clinical judgments made by skilled nurses were illustrated as activity diagrams, and the endotracheal suctioning technique, which is an essential nursing technique for mechanical ventilator care, is verbalized. In addition, a series of endotracheal suction tasks of skilled nurses are expressed in words to make a flow chart. By doing so, we can consider clarifying the scope of efficiency that can be improved through automation. As a result, rather than treating nurses' dedicated care during an emerging infectious disease outbreak amidst a shortage of personal protective equipment as a virtue, we can determine a room for developing novel nursing technology. Just as a diver would not dive without an oxygen tank, no matter how important it may be to save a victim's life. It is significantly important for nurses to develop a nursing technology to mutually respect and protect our own lives by ourselves. We must be continuing to jointly discuss a space for nursing automation with engineering professionals. One good example is an automatic suctioning system equipped with a mechanical ventilator for the next global pandemic, such as COVID-19.

Biography

Noriyo Colley has completed her Master of Nursing Studies from La Trobe University and postdoctoral studies from Hokkaido University School of Education. She is the ex-member of the ICN NP/APN Network (2018–2022), and conducting collaborative research called ESTE-SIM project. She has published more than 80 papers in reputed journals and has been serving as an editorial board member of the Japan Journal of Nursing Science English journal.

Maria Borrell

Sant Pau Research Institute
Spain

Blood cholesterol levels and inflammation are regulated by PCSK9

Abstract:

Atherosclerosis, the leading cause of cardiovascular diseases, is driven by high blood cholesterol levels and chronic inflammation. The disruption of the hepatic interaction between Proprotein Convertase Subtilisin/Kexin 9 (PCSK9) and Low-Density Lipoprotein Receptor (LDLR) downregulates blood cholesterol levels and reduces cardiovascular events. Recent data suggest that other members of the LDLR superfamily may be targets of PCSK9. In this presentation I will show that LDLR-related protein 5 (LRP5) is a PCSK9 target, and both proteins participate in foam cell formation and hence, in the mechanism of lipid accumulation and atherosclerotic plaque formation. I will first show that LRP5 is needed for macrophage lipid uptake since LRP5-silenced macrophages have less intracellular cholesterol accumulation. Immunoprecipitation experiments will show that LRP5 forms a complex with PCSK9 in lipid-loaded macrophages opening the possibility that PCSK9 induces lysosomal LRP5 degradation in a similar manner than it does with LDLR. We have also studied the role of PCSK9 and LRP5 in the inflammatory response by TLR4/NFkB signalling pathway and show that PCSK9 gene interference decreases inflammation supporting a role for PCSK9 as an inflammatory mediator in atherosclerosis. We then validated our results in an in vivo mice model. We analysed the differential expression of cholesterol related genes and proteins including LRP5, PCSK9, VLDLR, LRP6, LRP2 and LRP1 in wild type (Wt) and LRP5 knock-out (Lrp5-/-) mice fed a normocholesterolemic (NC) or a hypercholesterolemic (HC) diet. Lipid uptake was studied in liver resident cells (HepG2) and in liver fat storing cells (hepatic stellate cells) with and without LRP5 and PCSK9. Results show that cholesterol accumulates in livers of Wt and Lrp5-/- mice. This accumulation can be explained by the increased expression of LRP receptors in HC Wt mice or scavenger receptors in HC Lrp5- mice. More importantly, PCSK9 and LRP5 bind intracellularly in fat storing liver cells but not in structural liver cells and both proteins are needed for lipid uptake.

Biography

Borrell is a senior investigator in the Cardiovascular Program at the Hospital de la Santa Creu i Sant Pau, Barcelona. Prior appointments include a postdoctoral position in the Neurology Department of the Curie Institute, Paris, France studying Huntington's disease. She leads a project based in lipoprotein receptors role in holesterol metabolism. In the recent years, she has been developing a project that analyses the function of PCSK9 beyond its canonical function in cholesterol lowering. These results have been published in different journals including EHJ, BRIC or CVR and lead to the concession of projects financed by both, the government and the industry.

Gholamhossein Sodeifian

University of Kashan
Iran

Thermodynamic modelling of tramadol hydrochloride drug in supercritical carbon dioxide

Abstract:

In general, to micro and nanosizing a drug through supercritical fluids technology, it is necessary to obtain its solubility behavior. The present study aimed to determine the solubility of tramadol hydrochloride (T-HCl) in supercritical carbon dioxide (SC-CO2). The solubility measurements were conducted at various operating temperatures and pressures, ranging from 308 to 338 K and 100 to 270 bar, respectively. The maximum solubility of T-HCl was recorded as 1.384×10^{-4} at a temperature of 338 K and a pressure of 270 bar. Moreover, the experimental solubility data was subjected to modeling using seven semi-empirical correlations, such as Sodeifian model. These correlations aimed to predict the solubility behavior accurately. Subsequently, the enthalpies associated with T-HCl/SC-CO2 interactions, including vaporization, total, and solvation enthalpies, were calculated based on the Bartle et al., Kumar-Johnston, and Chrastil correlations. The values obtained were 60.5231 kJ/mol, 46.0750 kJ/mol (Kumar-Johnston), 38.5474 kJ/mol (Chrastil), -14.4481 kJ/mol (derived from Kumar-Johnston and Bartle et al.,), and -21.9757 kJ/mol (via Chrastil and Bartle et al.,), respectively. Furthermore, the solubility of T-HCl was modelled using two distinct Equations of State (EoSs): the simplified perturbed chain statistical associating fluid theory (sPC-SAFT) and the Soave-Redlich-Kwong (SRK) EoSs, both incorporating the van der Waals mixing rule type II. The semi-empirical correlations and the EoSs were meticulously fitted to the experimental solubility data and evaluated using the Average Absolute Relative Deviation (AARD) parameter. The results demonstrated a notable agreement of the sPC-SAFT EoS with the experimental solubility data, achieving an AARD value of 10.18%.

Biography

Gholamhossein Sodeifian (1971) graduated in chemical engineering (M.S) from University of Tehran, in 1997 and received his doctorate (Ph.D), in polymer engineering from Tarbiat Modares University, Tehran, in 2002. After that, he has worked till now as a chemical engineering professor, at University of Kashan. His researches focuses on extraction of essential and seed oils, solubility measurement of solid drugs, micro and Nano-particle formation of pharmaceutical materials in supercritical carbon dioxide (SC-CO2), and other new techniques. He has developed for the first time in the world a new and efficient technique for nanoparticle formation, i.e., US-RE-SOLV. He has published more than 100 ISI scientific papers with 5 inventions and 9 books in Persian language. Also, professor Sodeifian is named in the world's top 2% of scientists list in 2020, 2021, 2022 and 2023.

Nazim Hussain

North East Frontier Technical University
India

Anticancer activity of the bark's extract of cordia dichotoma

Abstract:

Objective: The present study was carried out to evaluate the antitumor and antioxidant activities of the methanol extract of Cordia dichotoma (MECD) against EAC in Swiss albino mice.

Materials and Methods: The present study evaluated the anticancer effect of the methanolic extract of Cordia dichotoma (MECD) bark against Ehrlich Ascites carcinoma (EAC) cells induced in albino mice and against human cancer cell lines (malondialdehyde-MB-231 and-MCF-7cells).

Results and Discussion: There was significant fall in the red blood cell count and haemoglobin (Hb) content, and a significant increase in white blood cell (WBC) count in the EAC control mice as compared to normal control mice. Treatment with MECD (500 mg/kg, b.w., p.o.) or 5-Fluorouracil (20 mg/kg b.w., i.p.)In EAC-cell, bearing mice caused a significant ($P < 0.01$) increase in Hb levels while a significant ($P < 0.01$) decrease in WBC levels compared to EAC control rats. Furthermore, increase in the concentration of MECD dose-dependently increased the percent cytotoxicity and decreased the cell viability in both cell line types. The results with MECD were comparable to the tamoxifen. The maximum gain of body weight was observed in the EAC control group. In case of MECD and 5-Fluorouracil treated groups, the body weight was significantly ($P < 0.01$) reduced. The tumour volume and tumour weight were found to be significantly ($P<0.05$ or $P<0.01$) decreased in MECD treated animals at the doses 250 and 500mg/kg and 5-Fluorouracil (20mg/kg) when compared with EAC control animals. With MECD treatment, the survival of EAC bearing mice significantly ($P < 0.01$) increased as compared to EAC bearing control group. In treated group, mean survival time (MST) was significantly increased to 29.0±1.98 (%ILS=69.04), 34.12±1.84 (%ILS=81.25), and 36.87±1.67 (%ILS=87.79), respectively, when compared to EAC control group.

Conclusion: The results of the current study proposed that the antitumor activity of MECD can be inferred from the increased life span of EAC bearing mice which is due to its antioxidant activity.

Biography

Nazim Hussain joined the Center for Applied Molecular Biology (CAMB) PU, Lahore in 2006 as a forensic scientist and after preliminary training at CAMB went to Indianapolis USA for hands-on training in evidence examination, serology procedures, DNA extraction, Real-time PCR and, DNA Short Tandem Repeat (STR) analysis using ABI 310 Genetic Analyzer. He solved more than 300 criminal cases including parentage, theft, rape, murder, sodomy, robbery, mass disaster, and dead body identification at CAMB. Meanwhile, more than a dozen symposium, and hands-on training workshops were arranged for Medico legal Doctors, Judiciary personals, and police officials. Later he joined the department of biochemistry and molecular biology at Xian Jiaotong University Xian China for his Doctoral programme. During his Ph.D. at Xian Jiaotong medical university, he explored a novel miRNA involved in the regulation of rheumatoid arthritis and proposed its therapeutic importance for the treatment of RA. He is foreign PhD degree holder along with 48.5 impact factor. He has also been recognized as HEC approved PhD supervisor and had published more than 16 publications. Currently, along with teaching/supervising M-Phil and Ph.D. students, also providing molecular diagnosis of Covid-19, HCV, and HBV at molecular diagnostic laboratory CAMB.

Sadhana S. Raut

Sinhgad College of Pharmacy
India

Development and evaluation of 6-Gingerol-Loaded ethosomal gel for Anti-Inflammatory, and antifungal applications

Abstract:

This study explores the development and evaluation of a gel formulated with ethosomes encapsulating 6-gingerol, aiming to harness its antifungal, anti-arthritic and anti-inflammatory properties. Ethosomes, lipid vesicles enriched with ethanol, have shown potential in enhancing transdermal drug delivery. The research involved preformulation studies using UV-visible and IR spectroscopy. Ethosomes were synthesized through a modified cold method utilizing soya lecithin and ethanol, resulting in particle sizes ranging from 130-170 nm and zeta potentials between -24 to -30 mV. The entrapment efficiency (EE) of ethosomes was observed to be 70-80%. The ethosomal gel, formulated with Carbopol 934, underwent evaluations for viscosity, spreadability, pH, texture, and skin irritancy. In vitro analyses using the protein denaturation method demonstrated significant anti-inflammatory activity, with a peak inhibition of protein denaturation at 72%. Additionally, an in vitro agar plate method assessed the antifungal efficacy, revealing zones of inhibition measuring 19.99 mm for 100 ppm, 24.98 mm for 200 ppm, and 29.98 mm for 400 ppm, compared to 34.99 mm for 2% ketoconazole as marketed formulation. The findings suggest that the 6-gingerol-loaded ethosomal gel offers a promising approach for delivering herbal medicines, particularly in treating rheumatoid arthritis and fungal infections.

Biography

Sadhana Raut has completed her Ph. D. from BVDU's, Poona College of Pharmacy. A dedicated and innovative Associate Professor in Pharmaceutical Sciences with over 15 years of experience in academia and research. She is an Associate Professor at Sinhgad Technical Education Society's, Sinhgad College of Pharmacy. She has published more than 10 papers in reputed journals, 6 books and 2 international book chapters. Granted a design patent for a "Device for Instant Estimation of Glycerated Haemoglobin for Diabetic Patients." Presented posters and oral papers in national and international conferences. Actively participated in over 30 seminars, conferences, and faculty development programs (FDPs), enhancing academic and research skills. Attended workshops and served as a chair and subject expert on various academic and research panels. Guided and co-guided multiple postgraduate and undergraduate research projects, resulting in significant contributions to the field.

Raefa Alam

Mansoura University
Egypt

Mentorship program

Abstract:

Mentorship is a relationship in which a more experienced or more knowledgeable person helps to guide a less experienced or less knowledgeable person. Mentoring is a process for the informal transmission of knowledge and the psychosocial support perceived by the recipient as relevant to work, career, or professional development; mentoring entails informal communication, usually face-to-face and during a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less".

Biography

Raefa Refaat Alam is an assistant professor in the Gerontological Nursing Department at Mansoura University and serves as the Dean of the Faculty of Nursing at Mansoura National University. She has held numerous responsibilities, including serving as the Dean of the Technical Institute of Nursing at Mansoura University from 2012 to 2016 and founding the Higher Technology of Health Science Institute and the Technical Institute of Nursing in Egypt from 2017 to 2023. She has participated in various scientific committees at the university and college level, including the quality accreditation unit, internship committee, and university facilities committee. Additionally, she coordinates the internship year at the Technical Institute of Nursing, teaches scientific courses to undergraduate students at the Faculty of Nursing and the Technical Institute of Nursing, and instructs postgraduate students pursuing master's and doctoral degrees. Raefa has supervised three theses at the Faculty of Nursing, prepared and written scientific research papers to achieve the highest scientific grades in her specialty, completed a quality management training course, and has been a research nurse at the Egyptian Liver Hospital for six years.

Dimitrios C. Theodoropoulos

University of Crete
Greece

Intracranial pressure estimation with deep learning using CT brain scans

Abstract:

We demonstrate the development of a non-invasive method for estimating intracranial pressure (ICP) using computed tomography (CT) images and artificial intelligence (AI) techniques. Elevated ICP is a critical condition that requires timely diagnosis and management to prevent severe neurological damage or death. Traditional methods for measuring ICP are invasive and carry risks of complications. This study aims to leverage machine learning algorithms to predict ICP levels from CT scans, providing a safer alternative. A comprehensive dataset of CT images from patients, including demographic and clinical information, was utilized to train and test the AI model. The model was designed to analyze various features in the CT images, such as brain tissue density and anatomical structures, and correlate these with ICP readings obtained through conventional methods. To enhance the model's accuracy, advanced techniques such as image patching and data augmentation were employed. The dataset was divided into multiple patches, increasing the number of samples and reducing overfitting. Data augmentation methods like blurring and rotation were used to further improve the model's robustness. This approach could significantly reduce the risks associated with current ICP measurement techniques and improve patient outcomes. Future work will focus on expanding the dataset, refining the model, and validating the method in clinical settings to ensure its applicability and reliability in real-world scenarios.

Biography

Dimitrios Theodoropoulos is a doctoral candidate at the University of Crete's Medical School, focusing on AI applications in medical imaging. He holds a degree in Physics with a specialization in Microelectronics and a master's in Computer Engineering. His research includes AI-driven diagnostic tools for diabetic retinopathy and non-invasive intracranial pressure monitoring. With a background in radiology, he has worked in various medical centers and currently supervises the radiology lab at Asclepius Crete. He is also an advisor for the Greek Cancer Prevention Society and Medpro24, contributing to AI model training for medical applications. His research has been recognized in conferences and scientific journals, contributing to advancements in medical imaging and AI.

Faiza A. Abou El-Soud

King Saud Bin Abdulaziz University for Health Sciences, Saudi Arabia

The relationship between Health-Related quality of life and burden among family caregivers of elderly patients undergoing hemodialysis in Saudi Arabia

Abstract:

Aim: The study aimed to examine the relationship between health-related quality of life (HRQOL) and burden among family caregivers of elderly patients undergoing hemodialysis, in Saudi Arabia.

Methods: Cross-sectional, descriptive, and correlational designs were used. A structured interviewing questionnaire was used to recruit 50 caregivers by a simple random sample. Pearson correlation was used to correlate socio-demographic data, HRQOL, and burden degree. Ethical approval was assured.

Results: A statistically significant negative association was found between the degree of burden and HRQOL among family caregivers. There was a significant positive association between burden degree and the caregivers' age, marital status, the duration of caregiving and care recipient's age, physical function, physical health problems, and emotional problems. Meanwhile, there was a negative association between burden degree and level of education, general health perception, emotional well-being, vitality, and social functioning.

Conclusion: When the nurses understand the relationship between the burden of care experience among the caregivers and HRQOL, it leads them to intervene effectively with a multi-disciplinary team to support caregivers to minimize the level of burden and avoid burnout.

Biography

Faiza A. Abou El-Soud has had a distinct teaching experience since 1993. She got her BSN from Cairo University, Egypt. Following her master's Degree and doctorate in nursing from Menoufia University, Egypt. She had a postdoctoral fellowship at Case Western Reserve University Cleveland, Ohio, USA for one year. Faiza has more than thirty years of experience in Teaching and academic nursing career. She held many academic positions in various as a nursing professor in ARE, and an associate professor in UAE. Currently, she acts as an assistant professor in community health nursing for the BNS program and midwifery programs for the master program at KSAU-CONR. Dr. Abou El-Soud contributed to many scientific committees and she eagers to establish multidisciplinary approaches in curriculum development, ensuring the highest quality teaching and research, and raising the progress of students' knowledge and skills. Supervising the completion of undergraduate students and master's on their research projects and thesis. She has carried out and contributed to many community-based

projects and publications. In 2018, Dr. Abou El-Soud received the best award for a Poster Presentation at, the 4th Annual Congress and Medicine Expo on Trauma & Critical Care Pairs, France. In 2023, Dr. Abou El-Soud received the best award for Oral Presentation, 2nd Research Day, Exploring Recent Trends in Nursing Sciences. Dr. Abou El-Soud's research focuses primarily on geriatric health, activity restriction, and rehabilitation. However, the scope of research interest is extended to include using artificial intelligence and its impact on nursing care and students' performance.

Yacob Mathai Kunnathazhath

Marma Health Centre
India

Paracetamol is the most unscientific and dangerous drug for fever. Anyone can create a fever within hours using antipyretic objects

Abstract:

No one has scientifically proven that antipyretic therapy, which reduces the heat of a fever, is an appropriate treatment for fever and inflammation. Conflicting opinions on the effectiveness of various antipyretic treatments can be found in various journals. Here we consider the basic contrast between the basic action of fever and the basic action of paracetamol. Most people mistake fever as high temperature and think it is dangerous and take paracetamol to reduce temperature as fever is determined by checking temperature. A high temperature is not a fever, but hyperthermia, which is the opposite of fever. The only cause of fever is inflammation. But hyperthermia is high heat. Antipyretics are the only substances needed to induce fever in any organism. We can create a fever within a few hours by antipyretics. It cannot cause hyperthermia. Hyperthermia can be created within seconds by using hot objects. It cannot cause fever. Paracetamol is given to reduce prostaglandin E2. It is not a fever-causing substance. It has hyperthermic and anti-inflammatory properties, and endothelial cells produce prostaglandin E2. It is more abundant after inflammation in the body. From this, the immune system produces prostaglandin E2, which reduces inflammation and increases blood flow to the body or organ, making the body healthier and live longer. The essence of today's fever treatment is fever can be cured by using fever-creating substances. The medical book states that paracetamol may cause fever, neutropenia, thrombocytopenia, nephropathy, and skin reactions 1. This is not a side effect of paracetamol, but its proper function. Paracetamol is given again to relieve the fever caused by taking paracetamol. There is no science or technology like this anywhere in the world. Researchers have found that even a single dose of paracetamol can reduce the levels of glutathione, a chemical in the body that reduces inflammation2. Yet paracetamol is classified as an anti-inflammatory. To reduce substances like prostaglandin E2 and glutathione is homicidal. Antipyretic therapy is a necessary and appropriate treatment for hyperthermia and not for fever.

Biography

A practicing physician in the field of healthcare in the state of Kerala in India for the last 35 years and very much interested in basic research. My interest is spread across the fever, inflammation and back pain. I am a writer. I already printed and published Ten books on these subjects. I wrote hundreds of articles in various magazines. I have published 11 articles on fever in various journals. After scientific studies, we have developed 8000 affirmative cross checking questions. It can explain all queries related to fever.

Shajaira Payne

US Embassy Panama
Panama

The impact of mitochondrial dysfunction (MD) on the limbic system, the correlation with dementia, and possible strategies to reduce MD

Abstract:

The mitochondria, membrane cell organelles that oversee the energy in the cells, store Triphosphate Adenosine (ATP) which allows the cell to perform metabolic functions. When there is a dysfunction at the mitochondrial level, the limbic system, which in charge of our mood and behavioral responses, may be affected and possibly manifests in an individual as anxiety disorder, dementia, autism, depression, bipolar disorder among other issues. In this session, we will concentrate on the MD, it's impact on the limbic system, the correlation with dementia and possible ways to reduce mitochondrial dysfunction.

Biography

Shajaira Payne is working on her thesis to receive her PhD on Education with Emphasis on Investigation. Graduated from the University of Panama obtaining her Bachelor of Science of nursing, her practice for Register Nurse Title was done in Children Hospital in Panama and in La Palma Hospital, Darien. She was Head of Regional Health Services Provision in Darien, Head of Nursing at the Sambu Health Center in Darien. Nursing Clinical Supervisor at 24 of Decembre Hospital in the Capital of Panama. Now working as a Nurse at the US Embassy Panama for the Department of State.

Narayanan Gokarneshan

SSM College of Engineering
India

Innovative biomaterials in wound dressings and care – Problems and prospects

Abstract:

The skin, the largest organ in the human body, plays an indispensable role in tissue repair and is a critical barrier against external threats. Despite its protective function, the skin is continually exposed to various aggressions that can lead to wound formation. In recent decades, the prevalence of chronic wounds has emerged as a significant challenge for public health, characterized by its substantial economic burden, prolonged therapeutic interventions, and the persistent nature of chronicity. Therefore, to address this concern, the biomaterials industry has experienced substantial growth, focusing on accelerating wound healing and reducing treatment duration. These biomaterials encompass a wide variety, including polylactic acid, polycaprolactone, polyglycolic acid, alginate, hyaluronic acid, gelatin, xanthan gum, chitosan, keratin, carboxymethylcellulose, cellulose, hemicellulose, collagen, and several others. In addition, commonly employed biomaterial formats include hydrogels, films, foams, membranes, gels, intelligent and environmentally responsive dressings, 3D bioprinting, and combination therapies, all aimed at creating an optimal environment for wound healing. In this sense, this review covered a broad spectrum, including wound typologies, classifications, contamination gradients, healing mechanisms, key growth factors crucial for addressing chronic wounds, and a thorough examination of the diverse biomaterials used in injury treatment.

Biography

N.Gokarneshan got his PhD in Textile Technology from Anna University, Chennai, India. He has about 30 years of experience in the field of education. He has authored 18 books, published over 200 papers in journals, presented papers in a number of international conferences as plenary session, key note and invited speaker. He has contributed a number of book chapters for edited books. He is editorial board member in some journals and recipient of a number of awards and recognitions for his contributions in field. His areas of interest include medical textiles and nano textiles in medicine. Prof. A. Jothimakandan has experience of over 10 years in the field of education. He has published a number of papers in leading journals. His area of interest is Antibacterial textiles.

Alexander Valyaev

Institute of Russian Academy of Sciences
Russia

Application of nanotechnology for the treatment of human bone joints with severe injuries

Abstract:

Using of nanotechnologies requires detailed analysis of existing obstacles to technology translation. Here we consider some bio nanotechnologies for the treatment of human bones, including its musculoskeletal system, experiencing the maximum load during the functioning of any living organism. LitAr implantable material creation and its using in some medical clinics and centers of Russian Samara city showed successful bone resorption and reduce scarring from surgical procedures. In our communication we discuss some details of using LitAr technology for these purposes. Our results may use in cases of critical situations in thematic medical centers and especially under emergency surgery. It would be logical to combine such technologies in those operating medical centers, hospitals and clinics that have already successfully applied them. It is especially difficult to organize for the Russian provincial doctors and the thematic scientists. This is the essence of the implementation problem with creating financial support. But we hope that the scientific community efforts will help to change the attitude to innovations for the better in the interests of the whole humankind. Quick note. Also, we already successfully used LitAr material in fight against heart attack, eye transplant, growing teeth after its losing.

Biography

Alexander Valyaev, Leading Researcher, professor,   doctor of Sciences Division of Ecological Safety and Radiation Risk, Nuclear Safety Institute of Russian Academy of Sciences, Born on May 15, 1949 in Leninogorsk city, Republic of Kazakhstan. In 1972 he graduated with honours from the Tomsk Polytechnic Institute. In 1978, I successfully defended Ph.D. thesis in Russian Sverdlovsk city and in 1998 doctoral dissertation in Alma –Ata city of Republic of Kazakhstan. In 1994, I worked as the technical expert in USA and Canada according to international government contract. I participated with the thematic reports at many international thematic conferences and symposiums. From 2001–2011 I participated in 12 domestic and foreign events of NATO Program Scientific Committee. From 2017 to the present, I have been successfully collaborating with professors from Moscow and Russian Samara city on nanomedicine on development and application of prostheses for human organs.

K. M. Yacob

Marma Health Centre
India

The definition, diagnosis and treatment of fever are against modern science in the world today! Why?

Abstract:

Most people mistake fever as high temperature and think it is dangerous and take paracetamol to reduce temperature as fever is determined by checking temperature. A high temperature is not a fever, but hyperthermia, which is the opposite of fever. Paracetamol is given to reduce prostaglandin E2(PGE2), which increases temperature. Prostaglandin E2 is not a fever-causing substance. It is excessively seen in the body during fever. It has hyperthermic, vasodilatory, and anti-inflammatory properties, Endothelial cells produce prostaglandin E2, which is an important part of the immune system and regulator of vascular homeostasis. The essence of today's fever treatment is fever can be cured by using fever-creating substances. No science or technology exists anywhere in the world that claims to cure fever with fever-causing substances. A claim to cure fever by using fever-creating substances is not called a treatment. It is a murderous attempt. The current definition of fever is against modern science. The current definition of fever is usually only a elevated body temperature above 100.4oF (38°C). It is not a scientific definition. Elevating the temperature is an action like walking and sitting. In many medical books, we can see different types of fever definitions. It is against modern science to give different definitions for one thing (fever). A single criterion for a definition is not found in the current definition of fever. The definition of fever does not even say why the temperature is elevated. Because it is not known what the temperature of the fever is, modern science has not investigated what our immune system does with the heat energy of fever. The definition of fever is the basis of fever. If the definition of fever is wrong, the diagnosis and treatment based on it will be wrong. In modern science, no one can make a true definition, diagnosis, or treatment of fever without knowing the basics of fever. If made, it would be fundamentally against modern science. Not only does the current definition of fever not include the purpose of the fever or the purpose of the temperature of the fever, but the current definition of fever does not include anything that occurs only when the fever is present, or the test or treatment. The seriousness and danger of the definition of fever is recognized when the diagnosis and treatment of fever is not based on the current definition of fever. Today, Fever is not tested according to the definition of fever. Today, hyperthermia is called fever. A thermometer is a temperature-measuring device, not a fever-measuring device. Conservative fever definition, diagnoses and treatment has no relation with what is happened in fever. The basic elements

necessary for a scientific definition, diagnoses and treatment are not provided in conservative fever definition, diagnoses and treatment. It should be revised according to what is happening in fever. A new fever definition, diagnosis, and treatment have been created according to modern science without any room for doubts and complaints. This discovery completely overturns the current definition, diagnosis and treatment of fever.

Biography

A practicing physician in the field of healthcare in the state of Kerala in India for the last 35 years and very much interested in basic research. My interest is spread across the fever, inflammation and back pain. I am a writer. I already printed and published Ten books on these subjects. I wrote hundreds of articles in various magazines. After scientific studies, we have developed 8000 affirmative cross checking questions. It can explain all queries related to fever.

Homayoon Kazemy

Rafsanjan University of Medical Sciences
Iran

A virtual training program for improving cultural competence among academic nurse educators

Abstract:

This study aimed to evaluate the effect of a virtual training program on the cultural competence of academic nurse educators. The randomized controlled study included nurse educators working in six nursing schools affiliated with medical universities of Kerman province in southeastern Iran. The training program consisted of three 2-hour sessions for a month. Cultural Diversity Questionnaire for Nurse Educators Revised (CDQNE-R) was used to evaluate the cultural competence of educators before and one month after the virtual training program. Both the intervention and control groups demonstrated a similar level of cultural competence before the training program. After the training, the intervention group showed a significant increase in cultural competence compared to the control group. This improvement resulted in culturally competent participants becoming culturally proficient.

Biography

I studied at the National Organization for Development of Exceptional Talents in Iran during school. Now, I'm a Master's student in Critical Care Nursing at Rafsanjan University of Medical Sciences, having started in 2023. I earned a Bachelor's in Nursing from Kerman University (2019-2023) and studied English Literature at Payam Noor University (2015-2019). I've published research on substance craving, complementary medicine in prostate cancer, intermittent fasting effects, and body image in mastectomy women. I've presented at several conferences. I'm a member of the Iranian National Elites Foundation and served in executive roles at the Razi Scientific Nursing Association and Kerman University.

Shahin Salarvand

Lorestan University of Medical Sciences
Iran

The sense of dignity care and the perceived social support for hospitalized elderly patients

Abstract:

Introduction: Hospitalization is a common experience among elders all over the world, which often is associated with a high level of stress. These stressors can affect Patient Dignity (PD). In addition, the elders rely on many social support networks for aging-related challenges. This study aimed to determine the relationship between PD and perceived social support (PSS) in hospitalized elders.

Methods: In this cross-sectional study, the samples of this research were 360 older people 60 years old and older who were hospitalized in educational hospitals in Khorramabad city (Lorestan province in the western area of Iran). The applied instruments in this research included; demographic characteristics, PD, and the PSS questionnaires.

Results: This study showed that %92.2 of hospitalized elders had at least one underlying disease. The men significantly had a lower sense of dignity in comparison with women. There was a significant statistical correlation between the increase in the PSS and the increase in the sense of dignity in elders.

Conclusion: The elders perceived more social support and had more of a sense of dignity. The men had lower dignity in comparison with their women counterparts. Also, the elders who suffered an underlying disease had a lower sense of dignity.

Biography

Shahin Salarvand is an academic member and researcher. She studied Nursing at the Isfahan University of Medical Sciences, Iran. She received her Ph.D. degree in 2018 at the same university. She has published more than 40 research articles in various academic/scholarly journals. At present, she works as a faculty member and associate professor at Lorestan University of Medical Sciences, Iran. She is interested in cooperating with international researchers as a team.

Arpi Manookian

Tehran University of Medical Sciences
Iran

Dignity therapy: An approach to shed light on quality life of terminally ill patients

Abstract:

Cancer brings up a wide range of physical, psychosocial, spiritual, and existential distresses and impacts on the patient's well-being and quality of life. Dignity therapy is a practical psychotherapeutic individualized intervention that aimed at creating a sense of meaning among patients with terminal illnesses. This study aimed to assess the effect of dignity therapy on the quality of life of patients dealing with cancer. In this quasi-experimental study, 50 patients with cancer hospitalized in a palliative care center in Tehran, Iran, who fulfilled inclusion criteria, were selected through convenience sampling. EORTC-QLQ-C15-PAl questionnaire was filled by patients before and 2 weeks after dignity therapy. Data were analyzed using descriptive and inferential statistics. Results showed that dignity-therapy led to more improvement in the quality of life of the intervention group ($t35,18 = 4.82$, $p = 0.001$). There was a significant difference between the two groups in terms of the physical ($t32,96 = -2.60$, $p = 0.01$) and emotional functioning ($t\ 45,69 = 6.54$, $p < 0.001$). Also more improvement in nausea and vomiting ($\chi2 = 5.71$, $p = 0.02$), insomnia ($\chi2 = 15.78$, $p < 0.001$), appetite ($\chi2 = 5.09$, $p = 0.02$), and constipation ($\chi2 = 12.50$, $p < 0.001$). This study indicates that dignity therapy has a significant effect on the quality of life of patients with advanced cancer. Thus, the application of this new therapeutic approach would shed light on quality of life of mentioned patients in terms of reducing their physical distress and improving their emotional well-being.

Biography

Arpi Manookian has completed her PhD at the age of 32 years from Tehran University of Medical Sciences. She is an Associate Professor of Nursing and Vice-Dean for International Affairs of the School of Nursing & Midwifery, Tehran University of Medical Sciences. She has published more than 30 papers in reputed journals.

Chaplain Linda S. Golding

NewYork-Presbyterian Hospital
USA

Innovations in spirituality for nursing practice: A curriculum

Abstract:

Human beings are driven to make meaning of their circumstances, especially during times of illness and patients express the desire and need for healthcare providers to acknowledge spirituality in their care (Acta Biomed. 2019; 90 (suppl 4): 44-55). This workshop will introduce a curriculum of interactive didactic sessions combined with chaplain led one on one clinical practicum to consider spirituality and its significance in the care and assessment of patients by nurses. There will be opportunities for role-play and discussion.

Biography

Chaplain Linda S. Golding received her Masters Degree in Jewish Studies and the Certificate in Pastoral Care and Counseling from the Jewish Theological Seminary (NYC) in Spring 2013 and became a Board Certified Chaplain through the Association of Professional Chaplains in 2014. Golding has served as Staff Chaplain and Coordinator, Pastoral Care & Education at New York-Presbyterian Hospital/Columbia University Medical Center since 2010, caring for patients, families and staff throughout the adult and children's hospital. She is the chaplain member of the hospital's Ethics Committee and its Organ Donor Council and leads regular didactics for chaplains, nurses, doctors and medical students, as well as workshops and webinars for peers and colleagues, and is the 2022 recipient of the Jewish Theological Seminary Center for Pastoral Education Chaplain Leader Award, and the 2023 recipient of CUIMC's Friend of Nursing Award. Named a member of the inaugural 2020-21 REACH fellowship program sponsored by NewYork-Presbyterian and ICAP under the aegis of the Dalio Center for Health Justice, Golding's Capstone Project is VitalForce: An EveryDay Readiness Plan for Spiritual and Emotional Well-being. She also led the 2021 Luce Foundation funded program The Body Knows, a pilot to provide support to frontline hospital staff. She is an adjunct professor in the Bioethics program at Columbia University where she teaches Hope, Meaning and Clinical Ethics, the Jewish Theological Seminary (pastoral torah of dying and death), Union Theological Seminary (professional ethics for spiritual care and ministry) and the Columbia University School of Nursing (foundations in spirituality for healthcare.) Publications include spiritual care with non-communicative patients: A guidebook (Hachette/Jessica Kingsley Publishers 2019) and "The Evolving Role of Hospital Chaplains at the End of Life" co-authored with The Reverend Martha R. Jacobs in our changing journey to the end (Praeger/ABC-CLIO 2014). Springer Nature will release spiritual care and bioethics: When science.

Amir Mohammadamini

University of Mahabad
Iran

## Medicines and storage of clinical trials in software

Abstract:

Drug (in English: Drug) in medical knowledge is any substance that is used for treatment, relief of symptoms, diagnosis or prevention of disease and affects the structure or function of the organism and after entering the body, corrects the function of the body. . In another definition, a drug is a substance that initiates or inhibits a specific function by acting on a specific receptor inside, outside or on the cell wall, and the strength of the drug's effect is directly proportional to the amount and number of this interaction; Of course, drugs that have a local effect, such as: antacids, local disinfectants and contrast agents the clinical trials industry has seen a perceptible increase in recent years and India is one of the global destinations for clinical trials. The safety and efficacy of all new treatments as a drug, vaccines, medical devices, dietary supplements etc. are analysed through clinical trials. Clinical trials are the most important part of drug discovery for the treatment of diseases such as COVID-19, swine flu, cancer etc. Clinical trials are experiments or observations in clinical research to generate data on the safety and efficacy of new molecules. Researchers or investigators initially select a small group of volunteers or patients and subsequently conduct larger comparative studies based on the type of new molecules. Clinical study design aims to ensure the scientific validity and reproducibility of the results. In clinical trials, the number of subjects (sample size) greatly impacts the ability to measure the effects of the interference. This ability is described as its 'power' and a larger sample size increases the statistical power. The statistical power estimates the ability of a trial to detect a difference of a particular size between the treatment and control groups.

Biography

Amir Mohammad Amini is a dedicated expert in sports medicine with over a decade of experience teaching at the university level. He has authored multiple books and articles in the field of medical sports science, with his works being translated into nine languages. Amir is also an international professional coach, recognized for his analytical skills and commitment to physical fitness. He is fluent in Kurdish and Persian, and his contributions to the field are widely respected.

Borim Ryu

Seoul National University Boramae Medical Center
South Korea
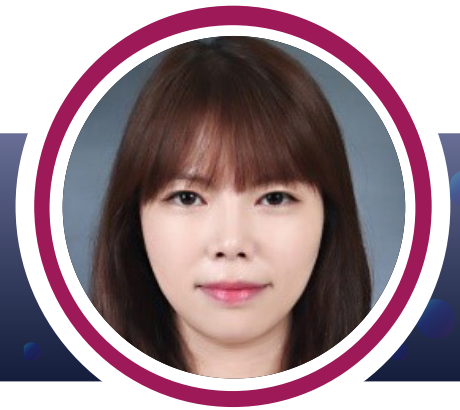
Development and validation of a High-Risk prediction model based on standardized observational nursing data

Abstract:

This study developed a predictive machine-learning model of in-hospital mortality based on pneumonia patient's real-world clinical data. Predicting in-hospital mortality among high-risk patients is a critical issue in the medical field. Particularly, the prediction of risk occurrence in most pneumonia patients is based on pathological and radiological measurements, which are costly and time-consuming to analyze. Here, we propose a machine learning model that predicts the death of high-risk pneumonia patients based on actual clinical data, such as diagnosis codes, drug prescription codes, laboratory test codes, and nursing records from patients admitted with pneumonia. Specifically, we developed the model using data transformed into a 'Common Data Model (CDM)' format, which standardizes hospital data into a common framework. We demonstrate two types of predictive models: 1) traditional machine learning models and 2) stacking-based ensemble models. The mortality prediction model for patients diagnosed with pneumonia was evaluated in terms of precision, recall, F1-measure, and area under the curve (AUC). The experimental results show that our methods outperform standard classification models and, particularly, identify which factors based on the features input into the model influence the risk of death in patients. Since this model is based on CDM, it has the advantage of being extendable to other hospitals that hold this type of data in the future.

Biography

Borim Ryu received the Ph.D. degree in the Department of Biomedical engineering, college of medicine from Seoul National University, Seoul, Korea in 2022. She is currently an associate professor, in center for data science, biomedical research institute of Seoul National University Boramae medical center. From 2015 to 2021, she was a Senior Researcher and Researcher at digital healthcare research center, in Seoul National University Bundang Hospital. In 2022, she worked as an assistant professor at Seoul National University Boramae Medical Center. Her research interests include AI for medicine, digital healthcare, international standards in biomedical domain.

Bernd Blobel

University of Regensburg
Germany

Designing and managing intelligent and ethical transformed health and social care ecosystems

Abstract:

Advancing from phenomenological, evidence-based, person-centered, and personalized care, health ecosystems currently undergo a transformation towards personalized, preventive, predictive, participative precision medicine (5PM), supported by technology. It considers individual health status, conditions, genetic and genomic dispositions in personal social, occupational, environmental and behavioral context, understanding the pathology of diseases and turning health and social care from reactive to proactive. Thereby, we have to enable communication and cooperation between all actors from different knowledge spaces including the subject of care, representing different disciplines, using different methodologies, perspectives, intentions, languages, etc., based on different educations and skills. Therefore, the knowledge-based, multidisciplinary, highly complex and highly dynamic 5PM ecosystem must be consistently and formally represented. The outcome is a system-theoretical, context-sensitive, architecture-centric, ontology-based, policy-driven approach for designing and managing intelligent, ethical and sustainable 5PM ecosystems, developed by the author and internationally standardized. The deployment of the approach is meanwhile defined by leading standards developing organizations such as ISO, CEN, IEEE, etc., as mandatory for all projects covering more than just one domain.

Biography

Bernd Blobel received a multi-disciplinary education, covering mathematics, physics, systems engineering, electronics, medicine, informatics and medical informatics, including habilitations in medicine and informatics. He was Head of the Institute for Biometrics and Medical Informatics at the University of Magdeburg, and then Head of the Health Telematics Project Group at the Fraunhofer IIS in Erlangen. Thereafter, he acted until his retirement as Head of the German National eHealth Competence Center at the University of Regensburg. He was leadingly involved in many countries health digitalization as well as electronic health record strategy. He was and is still engaged in international standardization at ISO, CEN, HL7, OMG, IEEE etc. Furthermore, he still engaged in international higher education.

Orestis Ioannidis

University of Thessaloniki
Greece

Use of indocyanine green fluorescence imaging in the extrahepatic biliary tract surgery

Abstract:

Cholelithiasis presents in approximately 20 % of the total population, ranging between 10% and 30 %. It presents one of the most common causes for non malignant surgical treatment. The cornerstone therapy is laparoscopic cholecystectomy, urgent of elective. Laparoscopic cholecystectomy is nowadays the gold standard surgical treatment method, however bile duct injury occurred to as high as 0.4-3% of all laparoscopic cholecystectomies. The percentage has decreased significantly to 0.26-0.7% because of increased surgical experience and advances in laparoscopic imaging the past decade which have brought to light new achievements and new methods for better intraoperative visualization such as HD and 3D imaging system. However, bile duct injury remains a significant issue and indocyanine green fluorescence imaging, mainly cholangiography but also angiography, can further enhance the safety of laparoscopic cholecystectomy as it allows the earlier recognition of the cystic and common bile duct, even in several times before dissecting the Callot triangle. Fluorescence cholangiography could be an ideal method in order to improve bile tree anatomy identification and enhance prevention of iatrogenic injuries during laparoscopic cholecystectomies and also it could be helpful in young surgeons training because it provides enhanced intraoperative safety, but however this method does not replace CVS. Finally, our ongoing current study results comparing intravenous to direct administration of ICG in the gallbladder will be presented.

What will audience learn from your presentation?

• ICG fluorescence cholangiography can enhance the safety of laparoscopic cholecystectomy as it allows the earlier recognition of the cystic and common bile duct, even in several times before dissecting the Callot triangle

• The best timing and dosage of ICG administration in order to perform ICG cholangiography and angiography

• ICG fluoresce imaging doesn't replace the critical view of safety

Biography

Ioannidis is currently an Assistant Professor of Surgery in the Medical School of Aristotle University of Thessaloniki. He studied medicine in the Aristotle University of Thessaloniki and graduated at 2005. He received his MSC in "Medical Research Methodology" in 2008 from Aristotle University of Thessaloniki and in "Surgery of Liver, Biliary Tree and Pancreas" from the Democritus University of Thrace in 2016. He received his PhD degree in 2014 from the Aristotle University of Thessaloniki as valedictorian for his thesis "The effect of combined administration of omega-3 and omega-6 fatty acids in ulcerative colitis. Experimental study in rats." He is a General Surgeon with special interest in laparoscopic surgery and surgical oncology and also in surgical infections, acute care surgery, nutrition and ERAS and vascular access. He has received fellowships for EAES, ESSO, EPC, ESCP and ACS and has published more than 180 articles with more than 3000 citations and an H-index of 28

Andrey Belousov

**Kharkov National Medical University
Ukraine**

Clinical case of magnetite nanoparticles application in multiple sclerosis

Abstract:

Multiple sclerosis (MS) is a serious neurological problem because of its high prevalence, chronic course, frequent disability, and propensity to affect young people. The mmunopathogenesis hypothesis underlies the origin of MS. Selective sorption activity of biocompatible magnetite nanoparticles against surface proteins of cell membranes, circulating immune complexes, lymphocytotoxic antibodies, complement system, the effect of increasing phagocytic activity and leukocyte phagocytosis completion index allows the effective use of these Nano devices for immunocorrection. The main goal of the study is to slow down the progression of MS, improve the neurological status and general condition of the patient, and reduce the dynamics of the spread of demyelinating foci in the brain. Materials and methods: a patient diagnosed with multiple sclerosis, secondary progressive type of course, cerebro-spinal form, clinical aggravation stage; EDSS neurological status and disability assessment scales; contrast-enhanced MRI of the brain. An oral form of the Nano device Micromage-B was used as an immunosorbent and immunomodulator. The choice of the regimen and dosage of Micromage-B was personalized. Assessment of the general condition and neurological status was performed every 7 days for 6 months. Contrast-enhanced MRI of the brain was performed at the 5th month of the study. As a result of using Micromage-B in MS treatment, objective improvement of neurological status, reduction of stiffness and rapid fatigability of the lower extremities were observed. Gait and coordination improved, hand tremors decreased, depression and signs of concentration disorders disappeared, appetite restored, and speech improved. During the entire period of Micromage-B application, positive dynamics in the normalization of the neurological status was observed. After 6 months of treatment, the total score dropped by 210 to 45. It was found that the maximum positive effect was observed in the evaluation of the pyramidal system and coordination. The EDSS Disability Scale score decreased from 6.0 to 5.0. Contrast-enhanced MRI brain examination for the first time showed a decrease in the number of new foci of demyelination in the brain by the 4th month of Micromage-B administration. The positive dynamics of normalization of the neurological status correlated with the results of brain MRI. The process of recovery of central nervous system activity in MS is not only due to the immunosuppressive properties of magnetite nanoparticles, but is probably caused by the activation of remyelination mechanisms and oligodendrocyte differentiation through enzymatic methylation. Considering the above, the use of biocompat-

ible nanodevices in the complex treatment of MS is a promising direction. The scheme and method of using biocompatible magnetite nanoparticles to improve the effectiveness of MS treatment require further improvement and study.

Biography

Andrey Nikolaevych Belousov is Doctor of Medicine degree on speciality - Anaesthesiology and Intensive Care. Author a new medicine products – nanotechnology preparations based on magnetite nanoparticles (Fe3O4) (www.nanolab.com.ua): Micromage-B (officially registration in Ukraine); Magnet–controlled sorbent brand of MCS-B for extracorporeal detoxication of biological liquids (officially registration in Ukraine and was allowed for medical practice); NanoBiocorrector for intravenous application – ICNB (intracorporal nanosorbent). A.N. Belousov is author new method of extracorporeal hemocorrection using magnet–controlled sorbent (MCS–B). The published more 280 scientific works on results application of nanotechnology preparation in experimental and practical medicine. At now Andrey Belousov - the Head of Laboratory Applied Nanotechnologies in Ukraine, DM, Professor of Kharkiv National Medical University, Ukraine.

Mirza Muhammad Faran Ashraf Baig

**The Hong Kong University of Science and Technology
China**

Recent advances of magnetic gold hybrids and nanocomposites, and their potential biological applications

Abstract:

Magnetic gold nanoparticles (mGNP) have become a great interest of research for nanomaterial scientists because of their significant magnetic and plasmonic properties applicable in biomedical applications. Various synthetic approaches and surface modification techniques have been used for mGNP including the most common being the coprecipitation, thermal decomposition, and microemulsion methods in addition to the Brust Schiffrin technique, which involves the reduction of metal precursors in a two-phase system (water and toluene) in the presence of alkanethiol. The hybrid magnetic–plasmonic nanoparticles based on iron core and gold shell are being considered as potential theragnostic agents. Herein, in addition to future works, we will discuss recent developments for synthesis and surface modification of mGNP with their applications in modern biomedical science such as drug and gene delivery, bioimaging, biosensing, and neuro-regenerative disorders. I shall also discuss the techniques based on my research related to the biological applications of mGNP.

Biography

My research work mainly focuses on the construction and function of DNA nanomachines, which are cutting-edge and challenging topics. I designed and constructed unique DNA motifs using a short circular DNA nanotechnology technique and functionalized these probes with fluorophores, gold nanoparticles, small molecular drugs, and peptide ligands. To achieve plasmon resonance effects, I achieved Nano-specific precision in organizing plasmonic nanoparticles on the Nano DNA frameworks. My work on the DNA nanomachines provided an efficient fluorescence resonance energy transfer mechanism that realizes the bio-imaging, detection of biological events, and functions of the biomolecules. I have also been working on multi-layered hybrid magnetic nanoparticles for applications in nanomedicine for the last three years.

ACCEPTED
PRESENTATIONS

SEPTEMBER
19-20, 2024

Evangelia Michail Michailidou

General Hospital of Agrinio
Greece

Errors in medicine during the Covid crisis

Abstract:

Introduction: In the current environment, the potential risk of medical errors is potentially much more likely. Prior to COVID-19, medical errors were considered a global priority, which prompted the WHO to hold the first "World Patient Safety Day" on September 17, 2019. The goal is to make healthcare safer, raise global awareness of patient safety, and encourage people to demonstrate their commitment ("representing patient safety"). Several interrelated factors have been identified that affect the quality and timely delivery of care in emergencies. These include organizational systems, workloads, time constraints, teamwork, individual human factors, and case complexity. The remainder of this article provides an overview of specific individual human factors (HF) and working within hierarchies during an epidemic do.

Preliminary Clinical Preparation: What can you do? Simulation Training is a well-established training tool used in the military, aerospace and civilian sectors. It facilitates kinesthetic learning, but it is also a very effective way to learn from mistakes and mistakes in a safe environment. There is evidence that the simulator is effective in improving clinical skills as well as non-technical skills. The courses, including HF training, are: NOTSS (Non-technical skill for surgeons). START (Acute Disease Recognition and Systematic Training in Surgical Treatment) Course. Training exercises in the military context reduce the risk of "invalidation". Candidates for the 2015 LIVEX (Live Training in Exercise) pilot project have proved to be a good way to stay ready for operation. This is especially true in the military medical environment where HOSPEX (hospital movement simulation) is deployed. This can be reminiscent of certain threats such as the crisis of Ebola and many lessons at B. Op GRITROCK are related to COVID 19.

Conclusion: The current situation has created challenges for the workforce in terms of adapting to new ways of working, relocating clinically, and managing our own health and the health of our loved ones. Many front-line colleagues are separated from their families for fears of spreading the virus. All official evaluations, such as the MRCS and FRCS exams, have been discontinued. There is also intense exposure to politics and politicians every day. For example, there is a certain degree of skepticism and distrust about resolving the situation, given previous responses to contracts with junior doctors. COVID19 is affecting all us, our extended families and all those we serve. We must continue to adapt to these new ways of working: within our levels of competency, to deliver safe patient care, and, to minimise the potential for error.

Biography

Evangelia Michail Michailidou is an Anaesthesiologist-Intensivist at Apollonion Private Hospital of Lefkosia_Cyprus with 14 years experience in the field of anaesthesiology & 7 years in intensive care, exemplifies unwavering dedication, unparalleled expertise, and exceptional leadership skills. As a full-time professional in her field and a remarkable Life and Leadership Coach, Evangelia sets new standards in patient care through her visionary guidance. Her coaching inspires individuals to unlock their potential and embrace their leadership qualities. She has participated in many seminars, research-educational projects, and conferences as a speaker and as a trainer and trainee about issues in medicine. Also, she has many publications in medical journals. She was a member of the National Team in the Youth and Women categories in FIN Swimming, winning 11 international medals in international competitions during the six years 1997-2002

Joselice Almeida Gois

State University of Feira de Santana
Brazil

Psychosocial aspects of work and burnout syndrome in intensive care nurses

Abstract:

Objective: To estimate the prevalence and investigate the association between psychosocial aspects of work and Burnout Syndrome in intensive care nurses in a large city in the interior of Bahia.

Methods: Cross-sectional, population-based study that used a self-administered question-naire to investigate the psychosocial aspects of work through the Job Content Questionnaire (JCQ) and the prevalence of Burnout Syndrome through the Maslach Burnout Inventory (MBI).

Results: The prevalence of Burnout Syndrome was 55.4%. Emotional exhaustion was the most affected dimension among the workers studied. A strong association was observed between the passive work situation (low demand, low control) and low demand (low demand, high control) of the demand–control model and the prevalence of Burnout Syndrome in intensive care nurses.

Conclusions: The results of this study can contribute to the discussion on strategies for im-proving working conditions, seeking to prevent physical and mental illness among intensive care nurses.

Biography

Graduated in Nursing and Midwifery from the State University of Feira de Santana, specialist in Intensive Care, Master's degree in Nursing from the Federal University of Bahia, PhD candidate in the Postgraduate Program in Public Health. She is currently a permanent professor at the Department of Health at the State University of Feira de Santana. Member of the research groups: NIPES - Interdisciplinary Center for Health Studies, SSAEE - Health Situation and Statistical Analysis Room.

John Foster Atta Doku

University of Education Winneba
Ghana

Literacy-Related factors and knowledge of patient rights Charter: Evidence from nurses in selected hospitals in Ghana

Abstract:

Systems of across the world have developed and implemented patient rights policies to protect and improve the provider-patient relationship. The Patient Charter of Ghana was developed in 2002 to improve service quality and protect patients' rights. However, it is not yet known whether those at the frontline of healthcare delivery can read and understand the contents of the charter. While studies have explored the socioeconomic and institutional level factors related to awareness and knowledge of the Patient Rights Charter, there is a lack of literature on its readability and comprehensibility among nurses. This study assesses nurses' knowledge of the Patient Rights Charter and associated literacy-related factors. An exploratory cross-sectional design and quantitative methods were used to collect data on knowledge, comprehension, and readability of the Patient Rights Charter. 205 nurses from four district hospitals in the Central Region were recruited using proportional and total enumeration sampling. Data were collected using structured questionnaires and were processed using SPSS (version 26) and an online text readability consensus calculator (version 2.0). Descriptive and inferential statistical analyses were performed, and data were presented using simple frequencies, readability statistics, and regression output.

The results show the charter is written at a higher reading grade level; Flesch-Kincaid Grade Level (13.36), Simple Measure of Gobbledygook (11.57), Coleman-Liau Readability Index (14.2). The average reading grade level score was 14. The Gunning Fox Index (15.40) and the Flesch Reading Ease Score (34%) show the patient charter is difficult to read and will require at least 14 years of education to be able to read. 87.3% of nurses were able to read and comprehend the charter. Very few (8.3%) read at frustration level. Nurses' actual comprehension of the charter was the only significant predictor of knowledge of the charter. Comprehension of the patient charter is an important predictor of its knowledge. The results emphasize the need to enhance the readability and comprehensibility of the charter for providers. Hospitals can stimulate nurses' knowledge of the charter by simplifying the charter's language and deliberately educating nurses on its content.

Biography

John Foster Atta-Doku, born on November 21, 2000, in Accra, is a dynamic Ghanaian individual shaping his trajectory with determination. In 2023, he earned a Bachelor's in Health Administration & Education from the University of Education Winneba, complemented by a Project Management certification from Coursera. He published research in his final year together with his lecturers, showcasing a commitment to scholarship, and is currently a Research and Teaching Assistant at the university. Atta-Doku, a leader as President of the Health Administration and Education Students' Association in 2023, envisions impactful contributions in health literacy. With plans to pursue a Master's in Public Health, he epitomizes dedication to scholarship, leadership, and continuous learning.

Thendo Mahafha Mposi

University of Pretoria
South Africa

Experiences of nurse managers regarding the implementation of the African Ubuntu philosophy on mentoring newly graduated professional nurses in a tertiary hospital in the gauteng province of South Africa

Abstract:

Background: Mentoring newly graduated professional nurses entering the profession has a direct impact on patient outcomes, however, it remains a challenge faced by many countries and South Africa is no exception. Newly graduated professional nurses depends on experienced nurse managers for support and mentoring.

Aim: This study aim to explore the experiences of nurse managers regarding the implementation of the African Ubuntu philosophy on mentoring new professional nurses in a tertiary hospital in the Gauteng province of South Africa.

Setting: The study was conducted in one of public Tertiary Hospital in Gauteng Province

Methods: A qualitative, descriptive, exploratory design and a non-probability purposive sampling method was used to recruit participants for this study. The population comprised of 11 Area Nurse Managers supervising Medical and surgical Units with 3 years experience in the post. Data collection was carried out through semi-structured face to face interviews.

Results: Participants reported Nurse managers' understanding of Ubuntu, Nurse managers experiences of mentoring newly graduate professional nurses and nurse managers' recommendations to improve Ubuntu in mentoring of newly graduated professional nurses.

Conclusion: It was recommended that nurse managers to identify the newly graduated professional nurses offer their helping hand for mentoring.

Contribution: Strategies to effective support in mentoring of newly graduated professional nurses applying African Philosophy of Ubuntu be developed with the idea of "It takes a village to raise a child in Nursing society" which may help in enhancing mentoring.

Biography

Thendo Mposi is a distinguished nursing professional based in Johannesburg, South Africa. He is currently affiliated with the Gauteng Department of Health, where he plays a significant role in advancing healthcare initiatives within the region. Mr. Mposi is a member of the Faculty of Health Science, specifically within the School of Health Sciences, Department of Nursing Science. With a strong academic background, Mr. Mposi holds a Master's degree in Nursing Management. His academic journey was guided and supervised by Dr. M.A.R. Du-Plessis, under whose mentorship he developed a deep expertise in nursing management. Mposi's commitment to the nursing profession and his contributions to the healthcare sector in South Africa reflect his dedication to improving patient care and advancing the field of nursing science.

Leili Borimnejad

Iran University of Medical Sciences
Iran

Artificial intelligence in nursing Education: Challenges in developing countries

Abstract:

Nursing education is a complex and dynamic process that involves the acquisition and application of knowledge, skills, attitudes, and values that are essential for professional practice. Nursing education also requires the integration of theory and practice, the adaptation to diverse contexts and situations, and the continuous reflection and improvement of one's own learning and performance. To support these processes, nursing education can benefit from the use of innovative technologies that can enhance the quality and effectiveness of teaching and learning. Artificial intelligence (AI) is a technology that can perform tasks that normally require human intelligence, such as reasoning, learning, decision making, and problem solving. AI has been applied to various fields and domains, including education. In particular, AI has the potential to support nursing education, as it can provide personalized and adaptive learning experiences, facilitate collaboration and communication, and enhance data analysis and feedback. However, while AI offers many opportunities for nursing education, it also poses many challenges, especially for developing countries. These challenges include the lack of infrastructure, resources, skills, and policies that are needed to implement and sustain AI in nursing education. This article aims to explore some of these challenges and suggest some possible solutions.

Biography

Leili Borimnejad is a Professor in Nursing Education. She also studied "e-learning in medical education" and "Evaluation" at Shahid Beheshti University School of Medical Education. She is the director of WHOCC for Education and Research in Nursing and Midwifery. She has published more than 120 papers in reputed journals and has been serving as an editorial board member of several journals. She has more than 20 years of education and research experience at Iran University of Medical Sciences. Her research interests include nursing education, e-learning, evaluation, and quality improvement.

Narges Rahmani

**Islamic Azad University
Iran**

Nurses' experiences of the social stigma caused by the COVID-19 pandemic: A qualitative study

Abstract:

Background: The World Health Organization (WHO) declared the COVID-19 outbreak an international health crisis in January 2020. The patient's fear of social reactions, disease stigma, and being a transmitter of the disease is among the psychological and social implications of developing some diseases, particularly infectious diseases in any society. One of the mental and psychological illnesses that health personnel face when treating COVID-19 patients is the societal stigma. This issue has not been addressed due to the disease's devastating impact on numerous sectors of society.

Research Aim: This study aimed to learn more about how nurses deal with social stigma during the COVID-19 pandemic.

Research Design: Inductive qualitative content analysis was used to conduct this qualitative research.

Participants and Research Context: COVID ward nurses who had been subjected to social stigma were chosen as study samples. Graham and Landman's inductive qualitative content analysis method was used to collect data through semi-structured and individual interviews simultaneously and continuously (2004).

Ethical Considerations: The researcher started the interviews after confirming the Ethics Committee of the Azad University of Babol with Ir.iau.babol.rec.1400.150.

Results: There are three main classes and six subclasses of social stigma experienced by nurses:
1) dual emotions (psychological stress and a positive attitude),
2) abandonment (isolation and total expulsion), and
3) adaptation coping strategies (self-awareness and the influential role of the media).

Conclusions: The findings of this study can help improve the quality of care by enhancing understanding of the psychological needs arising from social stigma. Based on these findings, designing psychosocial interventions related to stigma can promote the mental health of this group and their families.

Biography

Narges Rahmani is an Assistant Professor in Psychiatric/Mental Health Nursing at the Faculty of Medical Sciences, Babol Islamic Azad University, located in Babol, Mazandaran Province, Iran. With a strong academic background and a focus on mental health, Dr. Rahmani is dedicated to advancing the field of psychiatric nursing through her teaching, research, and clinical expertise. Her work significantly contributes to the development of mental health care practices in the region.

Joyce Durowaa Agyei

**Okomfo Anokye Teaching Hospital
Ghana**

Robotic Liver Resection for Improved Surgical Outcomes in Africa: The Role of Nurses in Ghana Case Study

Abstract:

The advent of robotic liver resection has revolutionized surgical procedures, offering enhanced precision, reduced recovery times, and improved patient outcomes. This study explores the implementation of robotic liver resection in the context of African healthcare, focusing on a case study from Ghana. Emphasizing the critical role of nurses, the research delves into their contributions to the success of these advanced surgical interventions. In Ghana, the integration of robotic-assisted surgery presents both opportunities and challenges. This study highlights the pivotal role nurses play in this evolving landscape, encompassing preoperative preparation, intraoperative assistance, and postoperative care. Through a detailed case study of a Ghanaian hospital, the research examines how nurses adapt to new technologies, acquire specialized skills, and collaborate with multidisciplinary teams to enhance surgical outcomes. Key findings indicate that nurses are instrumental in facilitating patient education, managing surgical equipment, and providing comprehensive care that bridges the gap between traditional and modern surgical practices. Their ability to adapt to robotic technologies significantly influences the overall success of liver resections, reducing complication rates and promoting faster recovery times for patients. The insights gained from this case study in Ghana can serve as a model for other African nations, demonstrating the transformative potential of robotic surgery and the indispensable role of nurses in achieving optimal surgical results.

Biography

Joyce D. Adjei is a certified nurse dedicated to the surgical department at the KATH. She is currently pursuing a master's degree at the Kwame Nkrumah University of Science and Technology. Passionate about innovations in nursing, Joyce aims to leverage research to advance the nursing profession. With a strong commitment to patient care and professional development, she continuously seeks new ways to enhance clinical practices. Joyce's dedication to both her patients and her studies underscores her ambition to make a meaningful impact in healthcare through research and innovation.

Abdeen M. Omer

Occupational Health Administration
Sudan

The efficiency of Inefficiency: Medicine distribution in Sudan

Abstract:

The strategy of price liberalisation and privatisation had been implemented in Sudan over the last decade, and has had a positive result on government deficit. The investment law approved recently has good statements and rules on the above strategy in particular to pharmacy regulations. Under the pressure of the new privatisation policy, the government introduced radical changes in the pharmacy regulations. To improve the effectiveness of the public pharmacy, resources should be switched towards areas of need, reducing inequalities and promoting better health conditions. Medicines are financed either through cost sharing or full private. The role of the private services is significant. A review of reform of financing medicines in Sudan is given in this article. Also, it highlights the current drug supply system in the public sector, which is currently responsibility of the Central Medical Supplies Public Corporation (CMS). In Sudan, the researchers did not identify any rigorous evaluations or quantitative studies about the impact of drug regulations on the quality of medicines and how to protect public health against counterfeit or low quality medicines, although it is practically possible. However, the regulations must be continually evaluated to ensure the public health is protected against by marketing high quality medicines rather than commercial interests, and the drug companies are held accountable for their conducts.

The CMS reform is stronger today than it was in the early 1990s when the reforms were started. There are many highly committed and able individuals throughout the public sector in the absence of the single-minded pursuit of commercial success. Also, in the long-term interest of employment growth and the public at large, narrower concerns have prevailed. Managements and boards are less able and less willing to impose accountability for results on themselves and their employees. Stock-out of life saving items is common, and sanctions for non-performance are often absent altogether. To overcome those common symptoms of all public owned enterprise, and achieve the strategic objectives of the FMOH by increasing the access of population to the essential medicines. The privatisation of the CMS's ownership is the best solution of choice. By resurrecting competition, which could be achieved mainly through privatisation of the CMS ownership, many of the mentioned pitfalls can be avoided. The new business should be responsible (of course without any kind of monopoly) for drug supply and distribution to the public health facilities on competition basis. The initial capital of the drug stocks for the different health facilities should be given by this new business by

signing a clear agreement with interested states' ministries of health.

Conclusions: The CMS reform is stronger today than it was in the early 1990s when the reforms were started. There are many highly committed and able individuals throughout the public sector in the absence of the single-minded pursuit of commercial success. Also, in the long-term interest of employment growth and the public at large, narrower concerns have prevailed. Managements and boards are less able and less willing to impose accountability for results on themselves and their employees. Stock-out of life saving items is common, and sanctions for non-performance are often absent altogether. To overcome those common symptoms of all public owned enterprise, and achieve the strategic objectives of the FMOH by increasing the access of population to the essential medicines. The privatisation of the CMS's ownership is the best solution of choice. By resurrecting competition, which could be achieved mainly through privatisation of the CMS ownership, many of the mentioned pitfalls can be avoided. The new business should be responsible (of course without any kind of monopoly) for drug supply and distribution to the public health facilities on competition basis. The initial capital of the drug stocks for the different health facilities should be given by this new business by signing a clear agreement with interested states' ministries of health.

Biography

Abdeen M Omer, BSc, MSc, PhD is an Associate Researcher at Occupational Health Administration, Ministry of Health and Social Welfare, Khartoum, Sudan. He has been listed in the book Who's Who in the World 2005, 2006, 2007 and 2010. He has published over 300 papers in peer-reviewed journals, 200 review articles, 7 books and 150 chapters in books. Abdeen M Omer, BSc, MSc, PhD is an Associate Researcher at Occupational Health Administration, Ministry of Health and Social Welfare, Khartoum, Sudan. He has been listed in the book Who's Who in the World 2005, 2006, 2007 and 2010. He has published over 300 papers in peer-reviewed journals, 200 review articles, 7 books and 150 chapters in books.

Chand pasha

**Royal Commission Yanbu Colleges and Institutes
Saudi Arabia**

Determination of folic Acid – A Vitamin B9 in pharmaceutical dosage samples by spectrophotometric method

Abstract:

A simple spectrophotometric method for the determination of folic acid in pharmaceutical dosage samples was developed. The method is based on the diazotization reaction of thiourea with sodium nitrite in acidic medium yields diazonium compounds, which is then coupled with folic acid in basic medium yields yellow coloured azo dyes. Beer's Lamberts law is observed in the range 0.5 – 16.2 µgmL–1 at a maximum wavelength of 416nm. Molar absorptivity, sandells sensitivity, regression equation, detection limit and quantitation limit were found. This method successfully determined Folate in Pharmaceutical formulations.

Biography

Chand Pasha currently works as an Associate professor, at the Department of General Studies, Royal Commission Yanbu Colleges and Institutes (RCYCI), Kingdom of Saudi Arabia. Currently my research program focuses on the new reagents for the spectrophotometric determination of anions, metal ions, pollutant and pharmaceutical drugs. The determination of anions (iodate and hypochloride), metal ions (As, Se, Cr, Pt, Pd & V) pollutants (endosulfan) in environmental, biological, pharmaceutical chemistry.

Dariya Kassymova

Al-Farabi Kazakh National University
Kazakhstan

Pharmaceutical development and validation of a technology for obtaining gel compositions with phytosubstances from Limonium gmelinii plants

Abstract:

Plants of the genus Limonium gmelinii (L. gmelinii), recognized as an official pharmacopoeial raw material in Kazakhstan, show great potential for medical applications due to their accessibility and valuable biological properties. Developing new phytomedicines is challenging due to variable chemical composition from genetic, ecological, and seasonal factors. This study aimed to develop and validate a technology for gel formulations using phytosubstances (API) from L. gmelinii, following ICH Q8 guidelines.

Results: Compatibility of excipients and APIs was confirmed through IR spectral analysis and visual evaluation. No physical changes were observed after 30 days of storing API solutions with excipients. All gel samples exhibited acceptable pH, transparency, homogeneity, and stability during phase separation tests. The 1.0% carbomer and the 10.0% propylene glycol concentration was found to be optimal based on release kinetics and rheological characteristics. Validation tests of lab batches showed Cp and Pp > 1.33, indicating high process capability, though Cpk and Ppk were negative. This issue is common with herbal preparations, which often have only lower specification limits and require more data collection for stability assessment. Gel containing 7.0% API showed the best anti-inflammatory effects in vivo on the formalin-induced paw edema model in mice, outperforming Diclofenac gel, while gel with 5.0% API had comparable effectiveness, demonstrating a dose-dependent anti-inflammatory effect, with higher efficacy observed in gels made from the aerial parts compared to the roots. Validation confirmed the process's compliance with international standards, controllability, and potential for successful scaling. Further monitoring and optimization are necessary to ensure stability and reproducibility when scaling up production.

Biography

Dariya Kassymova is a PhD candidate at the Department of Chemistry and Technology of Organic Substances, Natural Compounds, and Polymers at al-Farabi Kazakh National University. Her research focuses on developing and validating technological schemes for obtaining substances from Limonium Mill plants and preparing plant-based gels. Dariya has interned at the University of Valencia, La Sapienza University of Rome, The National Center of Expertise of Medicines and Medical Devices, and Abdi Ibrahim Global Pharm. She has published more than 10 papers and abstracts in reputed journals and conference proceedings.

Fayez Omear Alotaibi

King Abdul Aziz University
Saudi Arabia

Clinical pharmacokinetics evaluation of optimized liquisolid tablets as potential therapy for male sexual dysfunction

Abstract:

The study aimed at developing a liquisolid tablet (LST) containing tadalafil (TDL) and dapoxetine (DPX) with improved bioavailability as a potential therapy for male sexual dysfunction. A mixture of nonvolatile solvents, namely PEG 200 and Labrasol®, was utilized to prepare LSTs that were assessed for their quality characteristics. The BoxBehnken design (BBD) was employed to statistically explore the effect of the formulation factors on the quality attributes of LSTs. Furthermore, an in vivo pharmacokinetic study was carried out for the optimized LST in comparison with the marketed tablets on healthy human volunteers. The optimized LST revealed acceptable quality limits with enhanced dissolution for both APIs. The pharmacokinetic parameters after oral administration of the optimized LST indicated that the Cmax of TDL in LSTs was 122.61 ng/mL within 2h compared to the marketed tablets, which reached 91.72 ng/mL after 3 h, indicating the faster onset of action. The AUC was improved for TDL in LST (4484 vs. 2994 ng/mL·h in the marketed tablet) and DPX in LST (919.633 vs. 794.699 ng/mL·h in the marketed tablet). This enhancement in bioavailability potentially minimizes the associated side effects and improves the treatment of male sexual dysfunction, particularly for diabetic patients.

Biography

Fayez Alotaibi has completed his MSc at the age of 40 years from King Abdul Aziz University at Jeddah, Saudi Arabia and He completed his Mpharm at age of 35 years from Bradford University, United Kingdom. He is the director for pharmaceutical Services at King Fahd Jeddah General, Saudi Arabia. He has published more than 3 papers in reputed journals. He is a member of pharmacy and therapeutic committee. He is a member of morbidity and mortality committee. He is a member of Quality and Patient Safety Council.

Ljubisavljevic Srdjan

University of Nis
Serbia

Screening for depression among medicyation overuse headfache patients and its treatment could be useful for improving their quality of life

Abstract:

Background: The negative impact of medication overuse headache (MOH) on the quality of life (QoL) of the patient is undoubted.

Objective: The aim of this study was to identify clinical and headache related parameters that directly affect HRQoL of MOH patients.

Patients and Methods: 183 patients (111 men and 72 women) firstly diagnosed as having MOH and 81 healthy subjects (22 men and 59 women) in control group (CG) were enrloed in this study. The age of the study subjects range from 18 to 71 years. HRQoL was assessed using a Short Form – 36 questionnaire (SF–36), measuring its Physical Composite Score (PCS), Mental Composite Score (MCS) and Total score (TS).

Results: All HRQoL domeins (PCS, MCS, TS) were lower in MOH compared to the CG ($p < 0.001$). In MOH, the depression itself is a risk factor for all aspects of HRQoL, for PCS (B = –0.70, 95% CI –1.32 – – 0.08, p = 0.027); for MCS (B = –0.71, 95% CI –1.14 – – 0.29, p = 0.001); for TS (B = –0.69, 95% CI –1.16 – – 0.22, p = 0.005)), with female gender being an associated risk factor only for PCS (B = –15.47, 95% CI –26.79 – – 4.14, p = 0.008). The results did not find a predictive role of anxiety, stress, and ruminative style of thinking for HRQoL in MOH patients ($p > 0.05$).

Conclusions: Screening for depression among MOH patients and its treatment could be useful for improving their HRQoL.

Biography

Srdjan ljubisavljevic (2024) is a highly skilled and experienced General physician. With over a decade of experience, Dr. Srdjan ljubisavljevic is known for his exceptional medical expertise and compassionate patient care. He has dedicated his career to diagnosing and treating a wide range of medical conditions while providing personalized healthcare services to his patients. He is known for his compassionate and personalized approach to patient care. He takes the time to listen to his patients' concerns and works closely with them to develop a treatment plan that meets their individual needs.

Muhammad Mazhar

Guizhou University
China

The interplay of dietary fibers and intestinal microbiota affects Type 2 diabetes by generating Short-Chain fatty acids

Abstract:

Foods contain dietary fibers which can be classified into soluble and insoluble forms. The nutritional composition of fast foods is considered unhealthy because it negatively affects the production of short-chain fatty acids (SCFAs). Dietary fiber is resistant to digestive enzymes in the gut, which modulates the anaerobic intestinal microbiota (AIM) and fabricates SCFAs. Acetate, butyrate, and propionate are dominant in the gut and are generated via Wood—Ljungdahl and acrylate pathways. In pancreatic dysfunction, the release of insulin/glucagon is impaired, leading to hyperglycemia. SCFAs enhance insulin sensitivity or secretion, beta-cell function, leptin release, mitochondrial function, and intestinal gluconeogenesis in human organs, which positively affects type 2 diabetes (T2D). Research models have shown that SCFAs either enhance the release of peptide YY (PYY) and glucagon-like peptide-I (GLP-I) from la-cells (entero-endocrine), or promotes the release of leptin hormone in adipose tissues through G-protein receptors GPR-41 and GPR-43. Dietary fiber is a component that influences the production of SCFAs by AIM, which may have beneficial effects on T2D. This review focuses on the effectiveness of dietary fiber in producing SCFAs in the colon by the AIM as well as the health-promoting effects on T21).

Biography

Muhammad Mazhar, a doctoral student at Guizhou University China, is leading this research project, which is expected to be completed by the next year. The present study focuses on the investigation of Adzuki beans and their endogenous components, including the determination of their glycaemic index, phenolic profile, and fermentation by human gut microbiota. Additionally, this research aims to explore the genomics and metabolomics of fermented beans. The findings of this study are expected to provide valuable insights into the nutritional and health benefits of Adzuki beans and their potential as a functional food source. The combined effects of endogenous components of adzuki beans will be evaluated for type 2 diabetes patients.

Oscar Notoriuwa Aghedo

University of Benin
Nigeria

Investigating tetrapleura tetraptera phytochemical composition, elemental make up and antioxidant properties

Abstract:

This study investigates the phytochemical composition, elemental make-up, and antioxidant properties of the dried fruit of Tetrapleura tetraptera. The fruit was analysed for mineral content, including Mn, Fe, Zn, Mg, Ca, Na, and K, which were found to be 0.20 ±0.01 mg/ml, 0.80-±0.03 mg/ml, 0.11-±0.01 mg/ml, 0.92-±0.01 mg/ml, 2.15 ± 0.01 mg/ml, 2.25 ± 0.01 mg/ml, and 3.21-±0.02 mg/ml respectively. These values are lower compared to previously reported data by Abii and Elegalam (2015) and Uyoh et al. (2013). Phytochemical screening revealed the presence of glycosides, saponins, eugenols, terpenoids, reducing sugars, flavonoids, tannins, and alkaloids, but phenolics and steroids were absent. The antioxidant activity, determined by the DPPH radical scavenging assay, showed significant free radical scavenging ability, with the methanol extract displaying an IC_{50} value of 113.22 µg/ml, indicating potential health benefits. This study highlights the nutritional and medicinal value of Tetrapleura tetraptera, promoting its use in traditional medicine.

Biography

Aghedo N. Oscar is a lecturer in the department of science lab technology, University of Benin. He is a devoted researcher with a huge hunger to meet human desire and improve lives through research.

Raja Tounsi

Gravity G-Tunis
Tunisia

Gravity Syndrome

Abstract:

Objective: The objective of my theories is to deepen the rational understanding of the Covid-19 Virus or "MN" Virus (Multiple Nucleons) as I have challenged it in my study while basing myself on a clinical axis and an astrophysical axis to better understand its definition, its origin, its constitution, its cycle and its impact on the body. My research is based on an in-depth and detailed study, focused on an advanced probability calculation methodology, based on an authentic Hypothesis determining relativity at the body level in its atmospheric setting while emphasizing the importance of energetic matter and its role essential in future cures for certain diseases. Because the human body is a ball of renewable energy, this study is based on the scientific definition of relativity at the body level in relation to the atmospheric environment that houses it because body gravity is based on the magnetic field of each neuron that transmits a bio-electrical signal called a nerve impulse. Neurons have two physiological **Properties:** excitability, or the ability to respond to stimuli and convert them into nerve impulses, and conductivity, which is the ability to transmit impulses through the body to generate bodily energies that constantly act on rotation, circulation of neurons and accentuate the operational deficiency of the cellular rhythm in normal times and creates the productivity of the mitochondria of the powerhouse of the cells. This relativity causes the law of body weight in relation to atmospheric deficiency and determines the immune intensity of the organism in relation to viral contamination.

Methodology: Research technique: Theoretical study based on high-level scientific data determining the factor of the energy power available to the human body, which has body gravity as its central axis in relation to the viral energy deficiency of the crowned Atmosphere with precise and well-calculated diagrams. My Hypothesis will be the basis for the determination of the Covid-19 Virus or "MN" Virus (Multiple Nucleons) under its two main axes: Clinical Axis – Astrophysical Axis.

Results: The resolutions of the intelligence axes of the virus. My theories will be the basis for the determination of the Covid-19 Virus or "MN" Virus (Multiple Nucleons) under its two main axes: Clinical Axis – Astrophysical Axis with a pharmaceutical solution against Covid-19. This is why a serious study of an appropriate molecule without side effects on the body is well appreciated in order to fight this viral scourge My Molecular Resolution is a complementary factor to the link between DNA and RNA. It is the nucleus of coordination and the mother factor of

the vital triggering of the life of a living organism. The DHN is a molecule made up of a chain of 48 potassium– charged filaments connected by two centrals the "Co" which maintains the gravity of the molecule while carrying out the circulatory trajectory of the potassium liquid and its ejection in the event of a viral attack in the organism and the "Co' "which maintains the intensity of the components which cause the radicalization of the virus in the event of a viral attack. The basic formula is the DHN molecule which acts on the circulatory rotation of neurons, something which accentuates the operational trajectory of the cellular rhythm, it also acts on the bone system in the Vertical direction, at the blood level in the transverse direction and on the heart rhythm in horizontal direction causing a relativity allowing the activity of bodily gravity and a constant immunity in relation to atmospheric deficiency. The DHN molecule reacts on the lymph and spreads to the gray matter. Its active effect at the level of the organism activates and multiplies the intensity of the defensive cells at the level of the organism which procreates tenacity and re–balances the energies of the body which gives way to remarkable bodily immunity. The DHN molecule is The COVID–19 Treatment a buffer molecule to radicalize the virus of the body and provide the body Constant immunity despite the atmospheric failure classified under a viral axis. The HLD radicalizes the virus and allows the regulation of the Na+ neuron charge. The HLD Straightens the arterial pump of the blood circuit which, by Covid–19, has become higher than the body's magnetic pressure causing a relaxation of the vital tissues, a factor which causes a failure in blood speed.

Conclusion: These Researches comprising A Unique and Valuable Molecule which will be the Starting up of a scientific evolution in the World and will provide The World with an unequaled success. My researches are based on the following axes: Astrophysics: The calculation of the exact mechanism of the Intensity of the Virus Geophysics: The simulation of the axes of the virus.

Biology: Calculation and simulation to know the exact components of the virus.

Pharmacology: The resolution of the axes of intelligence of the virus.

Biography

I love what I am doing because it offers me a constant variety and diversity, without ever having a normal day, creativity, growth and new concepts, seeing my innovations grow and develop diversity to make a lot of research and no routine – The opportunity to create something new for a better world. In this book I developed relativity at the body level in its atmospheric setting. The human body is a ball of renewable energy; this study is based on the scientific definition of the relativity at the body level among to the atmospheric environment which shelters it. My Theories accentuate the importance of the energetic material and its primordial role in future cures for certain Pandemics and help finding resolutions for the Climate change. In the current pandemic situation that the whole world shares and based on my theories traced from 2002 until today, I found it necessary and a duty to share the information summarizing thirty years of research and which s parallel to all the data collected by scientific committees around the World. My research is based on two axes of determination of the Pandemic with data carefully calculated and established theoretically in order to find a way out of this enormous and con–fused epidemic phenomenon and natural disasters which have invaded the Planet.

Sanchez Ramos Juan

University of South Florida
USA

Design and optimization of nanoparticles for intranasal administration of gene therapy for Huntington's disease

Abstract:

Background: Lowering expression of the mutated Huntington Disease (HD) gene (HTT) currently requires chronic administration of anti-sense oligonucleotides (ASO) or small interfering RNA (siRNA) into the cerebrospinal fluid (CSF) by intrathecal infusions or direct intracerebral injections. Ongoing clinical trials have demonstrated that intrathecal administration of anti-HTT ASO is well-tolerated for at least several years. However, repetitive long-term intrathecal infusions can result in range of complications and may not be acceptable for a lifetime of treatment. In addition, treatment of patients with a greater disease burden (older subjects with high CAG repeat length) did not appear to impact clinical measures of progression.

Approach: In developing a nose-to-brain nanocarrier system for gene therapy, we prepared a series of nanoparticle (NP) formulations that used chitosan or other matrix materials for encapsulating anti-HTT siRNA. The NPs were designed to package the maximum amount of siRNA (an "enrichment" procedure) while at the same time protecting the payload from degradation "en route" to the target. In addition, hybrid NPs (HNP) where produced by adding a lipophilic layer over the chitosan matrix loaded with anti-HTT siRNA. The lipid shell of the HNP incorporated an anti-inflammatory agent cannabidiol (CBD), providing the HNPs the capacity to both lower gene expression and to attenuate inflammation.

Results: Optimization experiments identified key factors to improve production of effective nanocarriers of anti-HTT siRNA. We identified a set of NPs capable of lowering HTT mRNA expression by at least 50% in the YAC128 mouse model (HD). Preliminary studies demonstrated the HNPs were effective in lowering inflammatory cytokines in a cell culture system expressing mutant HTT.

Conclusion: Intranasal administration of nanoparticles carrying siRNA is a promising therapeutic alternative for safe and effective lowering of mutant HTT expression. Use of HNPs with dual actions may also mitigate the inflammatory process triggered by the mutant htt protein within brain in those subjects with greater disease burden

Biography

Juan Sanchez-Ramos currently works at the Department of Neurology, University of South Florida. Juan does research in Neuroscience and Biology. Their most recent publication is 'Chitosan-Mangafodipir nanoparticles designed for intranasal delivery of siRNA and DNA to brain'.

Shiva Fallahiana

Islamic Azad University
Iran

Green synthesis of silver nanocomposite from Zataria multiflora Boiss extract for antioxidant, antibacterial and anticancer activities

Abstract:

Development of biologically inspired green synthesis of silver nanocomposites has attracted considerable worldwide attention in matter of medical science and disease treatment [1–3]. Herein, the green synthesis of silver nanocomposites using organic green sources has been evaluated and discussed. In the present work, silver nanoparticles/ordered mesoporous carbon (AgNPs/OMC) nanocomposite was synthesized in the presence of Zataria multiflora Boiss extract as a reducer and stabilizer agent in aqueous solution. The results showed rod shape Ag nanoparticles with a diameter in the range 30–42 nm on composite. The AgNPs/OMC due to fictionalize by phenols of Zataria multiflora Boiss exhibited excellent antioxidant, antibacterial and anticancer activity. The content of total phenols 12 ppm and DPPH free radical scavenging 81.23% were calculated. The antibacterial activity of AgNPs/OMC nanocomposite was tested on gram–negative (Escherichia coli) and gram–positive (Staphylococcus Aureus) bacterial species. The results exhibited strong antibacterial activity against bacterial species especially Gram–positive bacteria Staphylococcus aurous. Also, in this work, we evaluated cell cytotoxicity effects of AgNPs/OMC against breast cancer (AU145). The cell test experiments (MTT) showed higher viability loss and significant toxicity of AgNPs/OMC nanocomposite against AU145 cells. The cell viability was founded at 24 and 48 for AU145 cells about 23 % and 12% with AgNPs/OMC nanocomposite 300 µg/mL. Thus, the AgNPs/OMC nanocomposite because of unique physicochemical, high surface area and stronger scavenging properties has could potentially acts as antioxidant, anticancer and antibacterial agent, which may be applied in clinical systems.

Biography

Shiva Fallahianshafiei completed her Master's degree in Pharmaceutical Sciences at the Islamic Azad University, Ayatollah Amoli Branch in 2020. She is currently a pharmacist and researcher. Her research focuses on the cancer drug development. Shiva has worked on the "Evaluation of anticancer effect of colchicum autumnale L. Corm on breast cancer cell" as her thesis project. Her expertise extends to various cellular and molecular techniques, including PCR, RT–qPCR, Cell culture, Flow Cytometry and Western Blot. She is actively engaged in multidisciplinary research aimed at advancing therapeutic strategies in oncology.

Srinivasulu Cherukupalli

Norwegian University of Science and Technology
Norway

Design, synthesis and pharmacological evaluation of Pyrrolo[2,3-d]pyrimidines as potent CSF1R inhibitors; Suzuki-Miyaura, Sonogashira and Negishi Coupling Approach

Abstract:

Colony stimulating factor 1 receptor (CSF1R), which is a membrane-associated tyrosine kinase, belongs to the type III growth factor receptor family that includes FMS-like tyrosine kinase 3 (FLT3), stem cell factor (KIT), and platelet-derived growth factor receptor (PDGFR) α/β. Signaling via the receptor tyrosine kinase CSF1R is thought to play an important role in recruitment and differentiation of tumor-associated macrophages (TAMs). TAMs play pro-tumorigenic roles, including the suppression of anti-tumor immune response, promotion of angiogenesis and tumor cell metastasis. Due to the role of this signaling pathway in the tumor microenvironment, many small molecule CSF1R kinase inhibitors are undergoing clinical evaluation for cancer therapy, either as a single agent or in combination with other cancer therapies, including immune checkpoint inhibitors. Herein, we report the design, synthesis and pharmacological evaluation of novel pyrrolo[2,3-d]pyrimidines derivatives as potent CSF1R inhibitors. More than 40 novel molecules were synthesized by introducing various aliphatic and aromatic groups at C-4 position of the scaffold via Negishi coupling and incorporation of 5- and 6-membered aromatics at C-6 position through Suzuki-Miyaura and Sonogashira coupling. The compounds were characterized by modern analytical techniques. Most of the synthesized compounds displayed potent CSF1R inhibitory activity with enzymatic IC50 values ranging from <3 nM to 96 nM. The compounds were also tested against Ba/F3 CSF1R cell line and some maintained a high potency. A brief SAR study revealed the significance of specific functional groups at both C-4 and C-6 position of the scaffold to achieve high CSF1R activity.

Biography

Srinivasulu Cherukupalli graduated with M.Sc. Organic Chemistry (2012) from Sri Venkateshwara University, India. In April 2018, he has completed PhD from the Dept. of Pharmaceutical Chemistry, University of KwaZulu-Natal (UKZN). Later, he worked as postdoctoral fellow at RUDN University and Shandong University for 3 years. Currently, he is working as Postdoctoral fellow at Norwegian University of Science and Technology, Norway. He has published more than 36 publications in international reputed journals. With strong synthetic organic and medicinal chemistry abilities, his research work mainly focuses on design, synthesis, and pharmacological evaluation of novel heterocyclic compounds for the targeted therapeutic use.

Suren Azad Ramadhan

Knowledge University
Iraq

The development of ternary and quaternary solid Dispersion-Based hydrotropic blends of atorvastatin calcium

Abstract:

Objective: The major goal of this current experimental study was to use various hydrotropic agents in the formation of solid dispersion-based hydrotropic blends to improve the solubility properties of poor aqueous soluble drug atorvastatin calcium (ATV). Since, atorvastatin calcium has a solubility in aqueous solutions of greater than 0.1 mg/ml, which is very slightly soluble. When developing dosage forms for these medications, formulation scientists still face challenges.

Methods: In this study, twenty-two distinct binary, ternary, and quaternary formulations of ATV were prepared by employing five different hydrotropic agents (sodium benzoate, sodium salicylate, resorcinol, d-mannitol, and PEG 6000), and combining at least two hydrotropic agents in concentrations of 10% and 20% (w/v). Moreover, four different solid dispersions by the solvent evaporation method and physical mixture-based hydrotropic blends in the ratio of (1:2) have been formulated. The produced formulations were characterized using an FTIR analysis.

Results and discussion: According to the findings, binary formulations containing 20% (w/v) concentrations of sodium benzoate (SB), sodium salicylate (SS), and resorcinol (R) boosted the solubility ratio of ATV by 439.31, 689.57, and 106.21 folds, respectively. Furthermore, ternary formulations (FT14) and quaternary formulations (FQ18) resulted in the enhancement of ATV solubility by 938.45 and 995.12 folds, respectively. Ternary solid dispersion demonstrated the highest enhancement in solubility ratio by 87.68 folds and resulted in a higher dissolution rate of ATV than pure samples of the drug. Finally, FTIR analyses ruled out any interactions between medications and excipients by showing no noticeable shift in the peaks.

Conclusion: Solid dispersion-based hydrotropic blends can provide the production of the dosage forms of practically insoluble drugs with a favorable enhancement ratio in solubility.

Biography

My name is **Suren Azad Ramadhan**, and I am a pharmaceutical specialist in pharmaceutics. I hold a Bachelor's degree in Pharmaceutical Sciences, and a Master's degree in Pharmaceutics, and I am currently pursuing a PhD in the same field. Additionally, I am a health awareness activist. I work as a Lecturer of Industrial Pharmacy, Cosmeceutical Sciences, and Biopharmaceutics & Pharmacokinetics at the College of Pharmacy, Pharmaceutics Department at Knowledge University. Since 2016, I have been active in the Kurdistan pharmaceutical market, assuming various roles until I arrived at my current position as a Product and Marketing Manager in March 2021. Throughout my professional career, I have had the privilege of being involved in numerous national and international symposiums and conferences, taking on various roles such as attendee, speaker, and member of the organizing committee. These experiences have provided me with valuable opportunities to expand my knowledge, network with professionals in my field, and contribute to the advancement of research and innovation.

Wafa Mohamed AL-Madhagi

Sana'a University
Yemen

Novel Potential of Meclizine and Pyridoxine Combined with Cephalosporin Antibiotics Against Resistant Bacteria

Abstract:

Antimicrobial resistance (AMR) is a growing threat to the treatment of infections caused by bacteria, parasites, viruses, and fungi. High rates of resistance have been reported in bacteria responsible for common infections, such as urinary tract infections and pneumonia, across all WHO regions. Meclizine, an antihistamine for motion sickness, and Pyridoxine (vitamin B6), used to treat Pyridoxine deficiency and sideroblastic anemia, have shown potential as antibacterial agents. New derivatives of Pyridoxine exhibit notable activity against Staphylococcus aureus, while PASS (Prediction of Activity Spectra for Substances) analysis suggests that meclizine could inhibit cephalosporin C deacetylase, potentially enhancing antibacterial efficacy or reducing resistance. This study evaluates the antibacterial effects of meclizine and Pyridoxine, individually and combined with cephalosporin antibiotics, against four bacteria: Staphylococcus aureus, Streptococcus pyogenes, Escherichia coli, and Pseudomonas aeruginosa. Antibacterial activity was measured using the well-diffusion method, and the interactions with cefuroxime and cefotaxime were assessed for synergistic, additive, or antagonistic effects. Results revealed that meclizine showed the highest activity against E. coli, Pseudomonas aeruginosa, and Staphylococcus aureus, while Pyridoxine was most effective against Staphylococcus aureus and Pseudomonas aeruginosa. Both drugs demonstrated synergistic activity with cefotaxime against Staphylococcus aureus, with additive effects noted against E. coli and Pseudomonas aeruginosa when combined with ceftriaxone. However, antagonistic effects were observed with cefuroxime. These findings indicate that meclizine and Pyridoxine, particularly in combination with cephalosporins, may offer promising antibacterial activity and help mitigate resistance.

Biography

Wafa Mohamed Al Madhagi completed her PhD from the University of Malaya in Pharmaceutical medicinal chemistry and drug discovery. She is the head of the Pharmacy department and deputy dean of the medical science faculty at Al Nasser University. She has experience in the Humanitarian sector and is one member of the WHO CSO steering committee and one of the global experts to provide consultation for WHOs Global Research Agenda on Knowledge Translation. She has published up to 18 papers.

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