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# ADV. ADDICTION MEDICINE & PSYCHIATRY

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September 13, 2023



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# **A CONFLUENCE OF ERUDITE & KNOWLEDGE- SEEKER**

## **PROGRAM-AT-A-GLANCE**

**ADV. AMP 2023**

SEPTEMBER 13  
2023

Scientific  
Program

BST - British Summer Time

09:00-09:05 Opening Ceremony

**Distinguished Speaker Talks**

**Topics:** Addiction Medicine & Psychiatry | Addiction Pharmacology | Cognitive Disorders  
| Depression and Anxiety | Drug Abuse and Psychology | Anaesthesia and Critical Care |  
Psychological Treatment | Psychiatric Treatment | Pain Medicine and Pain Management

09:05-09:30 Title: Postural effects of social impressions  
Miho Kitamura, *Waseda University, Japan*

09:30-09:55 Title: Mental health concerns and help-seeking behaviours among adolescents  
in high socioeconomic status groups: A scoping review  
Jodie Matar, *Monash University, Australia*

09:55-10:20 Title: Mobile phone usage, social support, attitude to aging, and depressive  
symptoms among older adults  
Linlin Ding, *Hubei University of Chinese Medicine, China*

10:20-10:45 Title: Personalized video recommendation systems and its potential role as a  
trigger of addiction  
Kadir Uludag, *Chinese Academy of Sciences, China*

10:45-11:10 Title: The effect of negative emotion on concentration through emotional  
regulation: Mediated moderation of metacognitive awareness  
Jeong-hwa Lee, *Seoul Cyber University, South Korea*

11:10-11:35 Title: Blockchain based organ donation system  
Bipin Kumar Rai, *ABES Institute of Technology, India*

11:35-12:00 Title: A systematic review of the psychophysiological problems resulting from  
COVID-19  
Meenakshi Shukla, *University of Allahabad, India*

12:00-12:25	<b>Title: Role of kinesiotaping on the pain control of athletes</b> Rose Fouladi, <i>University of Mazandaran, Iran</i>
E-posters	
Lunch Break 12:25-13:30	
13:30-13:55	<b>Title: Evaluation of antimicrobial potential of endophytic fungi and characterization of compounds from mycelial extract of <i>Talaromyces assiutensis</i> and <i>T. trachyspermus</i></b> Hafiza Farhat, <i>Gomal University, Pakistan</i>
13:55-14:20	<b>Title: The power of data-centric approach over model-centric approach for ASD diagnosis using facial traits</b> Mohammad Shafiul Alam, <i>International Islamic University Malaysia, Malaysia</i>
14:20-14:45	<b>Title: Addictive substances: Postmortem analytical challenges</b> Ghadeer M. M. Abdelaal, <i>Zagazig University, Egypt</i>
14:45-15:10	<b>Title: The effects of adding splint use to corticosteroid injection for the treatment of trigger finger</b> Hamid R. Fateh, <i>Tehran University of Medical Sciences, Iran</i>
15:10-15:35	<b>Title: Philosophical views on interoception</b> Emilia Barile, <i>University of Bologna, Italy</i>
Refreshment Break 15:35-16:00	
16:00-16:25	<b>Title: Chronic impact of cannabis to the brain GABA and glutamate system: From regions to pathway</b> Chun S. Zuo, <i>McLean Hospital, USA</i>
16:25-16:50	<b>Title: Examination of ligand-receptor interactions amongst different multiple sclerosis lesion types</b> Brandon Lucke-Wold, <i>University of Florida, USA</i>
16:50-17:15	<b>Title: How adolescent self-efficacy in concussion recovery affects migraine symptoms</b> Molly Bruh, <i>Children's National Hospital, USA</i>
17:15-17:40	<b>Title: Spiritual support for families coping with refusal of their deceased substance user child's donated organs by patients awaiting transplants: A double loss for all parties</b> Rena Arshinoff, <i>Baycrest Centre for Geriatric Care, Canada</i>
Closing Remarks	







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YOUR DATES**

**2<sup>ND</sup> GLOBAL CONGRESS ON  
ADVANCES IN ADDICTION MEDICINE AND  
PSYCHIATRY: NOVELTY IN ADDICTION  
RESEARCH AND THERAPY**

September 2024 | Rome, Italy

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*SCIENTIFIC  
ABSTRACTS*

Advances in  
Addiction Medicine  
and Psychiatry

September 13, 2023

## Mental health concerns and help-seeking behaviours among adolescents in high socioeconomic status groups: A scoping review

J. Matar<sup>1</sup>, S. Laletas<sup>1</sup> and D. Lubman<sup>2,3</sup>

<sup>1</sup>Faculty of Education, Monash University, Australia

<sup>2</sup>Turning Point, Eastern Health, Australia

<sup>3</sup>Monash Addiction Research Centre, Eastern Health Clinical School, Monash University, Australia

There is growing evidence that adolescents in high socioeconomic status groups may be at increased risk for some mental health concerns. This presentation will present the recently published scoping review that aimed to synthesize empirical literature from 2010 to 2021 on mental health concerns and help-seeking behaviours among this adolescent group. Six comprehensive electronic databases yielded 1316 studies that were systematically reviewed in Covidence to identify relevant research. PRISMA-ScR analysis was used. Eighty-three studies met the eligibility requirements. NVivo was employed for coding, data extraction, and analysis. Key findings suggest substance use, in particular, alcohol, is the main mental health concern among adolescents in high socioeconomic status groups. Other main mental health concerns were externalizing and risk behaviours, bullying, depression, anxiety and stress. These concerns were shown to be influenced by parents, peers, school, and neighbourhood contextual factors. Three emerging subgroups were identified as being at higher risk of mental health concerns among adolescents in high socioeconomic status groups. Specifically, adolescents residing in boarding schools, those with high subjective social status (e.g., popular) or low academic performance. Being pressured by parents to perform well academically was identified as a risk-factor for substance use, depression and anxiety. Albeit limited, areas explored for help-seeking behaviours centred on formal, semi-formal and informal support. Further research examining multi-level socioeconomic status factors and mental health concerns and help-seeking behaviours are urgently needed to inform appropriate interventions for this under-represented group.

### Biography

Jodie Matar is a PhD candidate at Monash University, psychologist and a teaching associate. Her PhD focuses on the help-seeking behaviours for mental health concerns, including substance use, among adolescents in a specific at-risk group. Jodie is currently working in private practice with adolescents (two years and 8 months at June, 2023), has worked as a project lead for the development and implementation of an online intervention co-designed for young people and as a research assistant on a number of projects. Jodie also brings sound international knowledge and cultural awareness through her international business career travelling and working extensively throughout most of Asia, Europe, Middle East, United Kingdom and the USA for ten years. This experience can be drawn from when engaging with consumers from diverse cultural backgrounds.

## Mobile phone usage, social support, attitude to aging, and depressive symptoms among older adults

**Linlin Ding and Zhenfang Xiong**

*School of Nursing, Hubei University of Chinese Medicine, China*

**Background:** Little is known about mobile phone problem use (MPPU) among older adults. This study investigated critical factors affecting MPPU and filled the gap between social support and MPPU in older people.

**Methods:** A cross-sectional study was conducted in community (n = 376) with questionnaires of Multidimensional Scale of Perceived Social Support (MSPSS), Geriatric Depression Scale (GDS-15), Attitudes to Aging Questionnaire (AAQ) and Mobile Phone Problem Use Scale (MPPUS).

**Results:** 80.9 % older people used smartphones and spend less than three hours on mobile phone per day. MPPU was affected by social support ( $\beta = 0.16$ ,  $P = 0.041$ ), AAQ-psychosocial loss ( $\beta = 1.11$ ,  $P < 0.001$ ), AAQ-psychological growth ( $\beta = 0.51$ ,  $P = 0.021$ ), GDS-15 ( $\beta = 0.56$ ,  $P = 0.036$ ). The relationship between social support and MPPU was partially mediated by attitudes to physical loss. However, only the indirect path through both depressive symptoms and psychological growth was associated with MPPU.

**Conclusion:** Almost half of older adults have MPPU. Positive social support negatively affected depressive symptoms and positively affected attitude to aging, which may increase MPPU in turn.

### Biography

Linlin Ding was born in January 2000. A postgraduate student majoring in nursing, school of nursing, Hubei University of Chinese Medicine, Wuhan, China, has published SCI papers (first author, impact factor 6.473), and participated in National Natural Science Foundation of China and Hubei Provincial Education Department projects. She has been invited to give oral presentations at important academic conferences at home and abroad, such as the 4th Belt & Road Initiative Global Health International Congress & 2022 University Alliance of the Silk Road Health Forum and the 9th Congress of Hubei Nutrition Society and Wuhan Nutrition Society and the 24th academic exchange Conference.





## Personalized video recommendation systems and its potential role as a trigger of addiction

**Kadir Uludag**


*CAS Key Laboratory of Mental Health, Institute of Psychology, Chinese Academy of Sciences, China*

The algorithms of most popular search engines affect the mind of society. Initially, engineers have tried to build an algorithm to offer the best results for every related keyword. However, later, their goal shifted to creating the best results using the personalized search method.

Personalized search is a feature that has been developed to improve users' engagement by profiling their previous search interests accumulatively, with or without the users' permission. With novel technology and advanced machine learning (ML) techniques, popular websites or applications store and analyze user interests. For the developers who especially provide content, including videos, the main strategy of the personalized search algorithm is to increase the users' page duration. However, it is unclear how it impacts the psychology of users since it may trigger addiction by increasing their susceptibility to addiction cues. But it may be a problem if the internet user is dependent (internet addiction, gaming addiction, porn addiction, or obesity) and tries to minimize his exposure to addiction cues. Put it simply, if a person is diagnosed with obesity and is suggested to watch videos related to food cues, there is a chance that the user may not be able to eat less.

As a method, we have analyzed previous studies to speculate about the potential consequences of the personalized search recommendation system on addiction.

Taken together, considering the proposed mechanisms of addiction, attention should be given to such mechanisms to reduce the likelihood of exposure to unwanted addiction cues. Internet users should have the option of searching without a personalized search. Thus, our study aims to speculate how personalized search and addiction are related.



## The effect of negative emotion on concentration through emotional regulation: Mediated moderation of metacognitive awareness

**Jeong-hwa Lee**

*Department of Military & Police Counseling, Seoul Cyber University, Korea*

Adolescence is a period marked by the highest emotional instability, during which concentration is heavily influenced by emotional state. This study aimed to investigate the mediating effects of emotional regulation on the relationship between negative emotions and concentration and examine whether the former affects the latter through emotional regulation, moderated by metacognitive awareness. Data were collected from 409 high school students using tools for measuring metacognitive awareness, negative emotional state, emotional regulation, and concentration state. The results showed that negative emotions had a significant negative effect on concentration and emotional regulation, while emotional regulation partially mediated the relationship between negative emotions and concentration. This study confirmed that negative emotions negatively affected emotional regulation in individuals with low metacognitive awareness but had little effect on emotional regulation in those with high metacognitive awareness. Moreover, the indirect effect of negative emotions on concentration through emotional regulation was not consistent; such effects were absent in people with high metacognitive awareness and only evident in those with low metacognitive awareness. This suggests that those who are capable of dealing with their moods through metacognitive approaches can better maintain their emotional regulation even when experiencing negative emotions. It also indicates that metacognitive awareness is an effective moderator for lowering negative emotions and increasing concentration in adolescents characterized by an unstable emotional transition.



## Blockchain based organ donation system

**Bipin Kumar Rai**

*ABES Institute of Technology, India*

Organ donation is a noble act providing possibility of new life and improves health plus well-being of the society. There is an increasing number of patients who dies due to lack of transplantable organs. Blockchain technology can be a key solution for the needs by enabling transparency, immutability, dependability and auditable computing within the system via utilizing decentralized network of peers and ledger having provable time-stamped proof of owning and generation.

### Objectives:

1. To provide a decentralized platform that allows donors and recipients to control and share their information securely. By utilizing blockchain technology, the platform will be immutable, traceable, and reliable, which will increase the efficiency of the procedure by eliminating the dependency on a single node.
2. To increase transparency and trust in the organ donation process by creating a tamper-proof record of all transactions on the blockchain, which can be accessed by all parties involved. This will increase accountability and reduce the risk of fraud or corruption in the organ donation process.
3. To ensure that all parties involved in the organ donation process are fully informed and have given their informed consent. The system will provide a transparent record of all communication between donors, recipients, and medical professionals, ensuring that all parties are aware of the risks and benefits of the procedure. The system will be designed with a focus on usability, ensuring that it is accessible to all users, regardless of their technical expertise.

Eliminating inefficiency will result in a decrease in cost by performing transactions through smart contracts, between parties without centralized control. Using smart contracts will help in authentication of the users to make the system more trustworthy for both the donor and receiver.

## Biography

Ph.D. from Banasthali University, Rajasthan and M.Tech. & B.Tech. in Computer Science and Engineering, Prof. (Dr.) Bipin Kumar Rai has more than 18+ years teaching experience in different renowned Institutions. His areas of interest are Cryptography & Information Security, Blockchain and Data Structures. He has published 30+ research papers in ESCI/Scopus indexed Journals/Conferences (Scopus indexed), 4 books and 6 book chapters in Springer/CRC Press Taylor & Francis Group. He has published his Ph.D thesis work entitled "Pseudonymization Based Mechanism for Security & Privacy of Healthcare: PcPbEHR Solution for Healthcare" and M. Tech. dissertation work entitled "An Optimized Solution for Certified e-mail with Trusted Third Party". He has worked as a Guest Editor/Reviewer of several SCI/Scopus Indexed Journals.





## A systematic review of the psychophysiological problems resulting from COVID-19

**Meenakshi Shukla<sup>1</sup>, Niti Upadhyay<sup>2</sup> and Josbert Gyereh<sup>3</sup>**

<sup>1</sup>University of Allahabad, India

<sup>2</sup>Banaras Hindu University, India

<sup>3</sup>St. Bartholomew's Hospital, United Kingdom

This systematic review (PROSPERO Registration number: CRD42022363505) explores the nature and prevalence of persistent psychophysiological complications among healthcare workers (HCWs) and COVID-19 recovered patients. MEDLINE, PubMed, PsychInfo, ProQuest, Scopus, APA Psych Articles, and Cochrane Controlled Trials Register were explored between September 30-October 22, 2022 for longitudinal, cross-sectional, cohort, and case-control studies published in English between 2019-2022 focusing on prevalence & types of psychophysiological complications among HCWs and recovered COVID-19 patients. Studies with patients/HCWs with pre-diagnosed or current physical/mental health conditions, or systematic reviews/meta-analyses, interventions, & randomized-controlled trials were excluded. To assess the risk of bias, Cochrane Risk of Bias Tool was utilized and the studies included showed overall low risk of bias. Identified psychophysiological complications were summarised in a tabular format and compared. Pooled prevalence of complications was also calculated. Twenty-eight studies (9 with patient & 19 with HCW samples) were included. Significant complications reported by recovered patients involved fatigue (34.17%), PTSD/PTS (26.74%), anxiety (23.70%), and depression (15.84%). On the contrary, a majority of HCWs reported burnout (61.14%), anxiety (44.19%), depression (42.30%), PTSD/PTS (35.74%), insomnia (32.98%), and stress (6.83%). Significantly more HCWs reported anxiety, depression, and PTSD than patients. These findings suggest the distinct nature of complications among the two groups. However, most studies evaluated complications based on self-report and pooled prevalence could only be calculated from studies where data was available, which limits the generalizability of findings. Findings indicate that multidisciplinary services should be equipped and trained accordingly to manage these distinctive psychophysiological consequences of COVID-19 among patients and HCWs.

### Biography

Dr. Meenakshi Shukla is an Assistant Professor of Psychology at University of Allahabad, Prayagraj, India. She has completed her graduation, post-graduation, and Ph.D. from Banaras Hindu University. She was awarded the Junior and Senior Research Fellowships by the University Grants Commission of India for pursuing her Ph.D. research. She has been the recipient of the Commonwealth Split-site (Ph.D.) Scholarship in 2016-2017. Her research interests involve exploring the relationship of emotions and emotional disorders with health. She has published 19 papers in reputed national and international journals with high impact. She has presented research papers in over 20 national and international conferences, and has won several Best Paper Awards. She is a member of several national and international academic bodies. She is a member of the CSC Alumni Advisory Panel. She was selected as a CSC Mentor for the year 2020-21. She has contributed as a reviewer in several reputed journals.



## Role of kinesiотaping on the pain control of athletes

**Rose Fouladi<sup>2</sup>, Fatemeh Dehghan<sup>1</sup> and Jeffrey Martin<sup>3</sup>**

<sup>1</sup>PhD candidate, Division of Kinesiology, Health and Sport Studies Wayne State University, USA

<sup>2</sup>Department of sports biomechanics, Faculty of sports sciences, University of Mazandaran, Iran

<sup>3</sup>Division of Kinesiology, Health and Sport Studies Wayne State University, USA

**K**inesio tape (KT), known as elastic bandage, has been proposed as an easy and cost-efficient method to help athletes. The present study is a review of articles that assessed KT effects on pain. Ten papers were on how KT effects pain in athletes and some others that evaluated performance, range of motion and proprioception as well. The present Review was conducted on Google Scholar, PubMed, SPORT, MEDLINE, and Science Direct according to the PRISMA extension for Scoping Reviews (PRISMA- ScR) guidelines. Peer-viewed studies were in English between January 2010 and January 2023 and the keywords for research included "Kinesio taping" (taping, kinesiology tape), "sport", "athletes", "exercise", and "pain".

In the lower extremity, particularly in anterior knee pain, vastus medialis obliquus muscle (VMO) taping and in some studies with combination of anterior thigh or patellar tendon taping were effective in reducing anterior knee pain noticeably. Six articles studied VMO muscle taping to decrease patellofemoral pain and tendinopathy. There were 2 studies that investigated pain at the calf muscle and Achilles tendon. It was shown that pain controlled after 15 minutes following KT and range of motion of Achilles tendon improved. Two papers investigated the upper extremity; neck and shoulder, respectively. In one of them, cervical muscles were targeted and pain intensity was evaluated that was reduced significantly after 3 to 7 days. In the second study, deltoid fibers were targeted and shoulder pain at rest and dysfunction of the shoulder were assessed. In the results it was indicated that pain intensity reduced, immediately after taping at both rest and arm movement.

In conclusion, KT was effective in all studies. It seems that it can have a great effect on pain reduction by stimulating the cutaneous mechanoreceptors and increasing afferent feedback to the central nervous system.

### Biography

I am physical therapist, PHD in sport sciences and injuries, and faculty member of department of sport biomechanics, University of Mazandaran, Iran. I am practical in sports physical therapy, post OP rehabilitation and return to sport, especially after knee ligament injuries. I cooperate with the Iranian Sports Medical Federation and I have had some experience of international tournaments as a member of medical team.

## Evaluation of antimicrobial potential of endophytic fungi and characterization of compounds from mycelial extract of *Talaromyces assiutensis* and *T. trachyspermus*

**Hafiza Farhat**

Assistant Professor, Gomal University D.I Khan, Pakistan

Infection is the second leading cause of death in patients with cancer. Loss of efficacy in antibiotics due to antibiotic resistance in bacteria is an urgent threat against the continuing success of cancer therapy. The advent of multidrug resistance among pathogenic bacteria is imperiling the worth of antibiotics, which have previously transformed medical sciences. The crisis of antimicrobial resistance has been ascribed to the misuse of these agents and due to unavailability of newer drugs attributable to exigent regulatory requirements and reduced financial inducements. Comprehensive efforts are needed to minimize the pace of resistance by studying emergent microorganisms, resistance mechanisms, and antimicrobial agents. In this study, different plant sample were collected from different areas of agriculture lands in order to isolate endophytic fungi. The isolated fungi were test for antibacterial activity against common laboratory bacteria and also checked their antifungal activity against root rot fungi. Gas Chromatography and Mass Spectrometry analysis of mycelial extract of *Talaromyces assiutensis* and *T. trachyspermus* were also performed in order to characterize compound from them as they showed strong antimicrobial activity and antifungal activity. Endophytic fungi isolated from healthy plants have showed strong antibacterial activity against common laboratory bacteria (*Salmonella typhimurium*, *Pseudomonas aeruginosa*, and *E.coli*, *Bacillus subtilis* and *Staphylococcus aureus*) by forming the zone of inhibition. These endophytic fungi also showed strong potential against phytopathogens viz; *Macrophomina phaseolina*, *Fusarium oxysporum*, *F.solani* and *Rhizoctonia solani*. GC-MS spectroscopy of mycelial extract of *Talaromyces assiutensis* and *T. trachyspermus* revealed the presence of several compounds and some of them are new from this source as confirmed by computer matching against National Institute of Standards and Technology, USA (NIST Mass Spectrometry Data Center (mainlib) and finally compared with science finder. Antibiotic stewardship is, therefore, much needed to ensure not only the appropriate use of antimicrobials but also the choice of antimicrobials and their duration of use. The problem of antimicrobial overuse extends beyond antibiotic resistance and includes fungal and viral resistance.

## Biography

I Dr Hafiza Farhat did Ph.D on Antibiotic producing endophytic fungi associated with healthy plants and received Ph.D degree from university of Karachi. Now I am working in well renowned university (Gomal University D.I Khan) of Pakistan as an Assistant Professor. I have research articles in high impact factor journal in national and international journals. I attended so many conference and workshop as a speaker.



## The power of data-centric approach over model-centric approach for ASD diagnosis using facial traits

**M. S. Alam and A. R. Faizabadi**

*International Islamic University Malaysia, Malaysia*

**A**utism spectrum disorder (ASD) is a neurological disorder marked by cognitive, physical, and social abnormalities. There is no specific drug available to treat this condition; only early intervention can improve brain function. While there is no medical test to diagnose ASD, a diagnosis may be difficult. Being one of the potential reflections of the brain, the human face can be employed as a biomarker and hence as a simple and effective tool for early diagnosis. Using deep convolutional neural network (CNN)-based transfer learning techniques to detect autistic children using face images is a novel area of study. The model-centric methodology focuses on optimizing the prediction accuracy by adjusting the various hyperparameters and optimizers using the model as its focal point. The data-centric method focuses primarily on pre-processing the necessary dataset in order to maximize prediction, as opposed to experimenting with different algorithms. The research indicates that by adopting a data-centric strategy, the detection accuracy for autism spectrum disorder (ASD) diagnosis can be increased by 4-5% compared to a model-centric approach. The data-centric approach's improvement can be observed and characterized using the explainable AI. Explainable AI can identify the facial feature points that are emphasized during the diagnosis of ASD by using heatmaps to describe the patterns followed by various models to recognize the autistic face. In addition, researchers will be able to focus on these specific regions, and clinical professionals will be able to identify autistic children at very young ages, allowing for early intervention with a greater chance of increasing their IQ levels and retraining their ability to execute daily tasks.

### Biography

Mohammad Shafiu Alam is currently pursuing the Ph.D. degree in computer vision and deep learning with the Department of Mechatronics, International Islamic University Malaysia (IIUM), Malaysia. He was also worked with the Robi Axiata Limited and other industries of repute. He is a Researcher with over 12 years of experience in research and development, teaching, and industry. He has published a dozen peer-reviewed research articles. He is now volunteering as an Ex-com, IEEE SB IIUM 2023–2024.

AHMED RIMAZ FAIZABADI (Member, IEEE) is currently pursuing the Ph.D. degree in computer vision and deep learning with the Department of Mechatronics, International Islamic University Malaysia (IIUM), Malaysia. He was also worked with the General Motors Research and Development India Science Laboratory (GM-ISL) and other industries of repute. He is a Researcher with over 15 years of experience in research and development, teaching, and industry. He has published over a dozen peer-reviewed research articles and authored two books. He has volunteered as a Treasurer, IEEE SB IIUM 2021–2022. Society of Automotive Engineers Malaysia (SAE-M) has awarded him an Outstanding Student of 2021.



## Addictive substances: Postmortem analytical challenges

**Ghadeer M. M. Abdelaal**

*Forensic Medicine and Clinical Toxicology Department, Faculty of Medicine, Zagazig University, Egypt*

The analysis of addictive substances in postmortem samples is of critical importance for forensic investigations and understanding the causes of death related to substance abuse. However, the detection and quantification of these substances in postmortem matrices present unique challenges due to various factors, such as postmortem redistribution, degradation, and the complexity of sample matrices. In this essay, we explore the analytical challenges encountered in postmortem toxicology investigations involving addictive substances, including opioids, stimulants, sedatives, and alcohol. We discuss the impact of postmortem variables on drug concentrations, the need for appropriate sampling and storage techniques, and the utilization of advanced analytical methods to overcome these challenges. Understanding and addressing these analytical hurdles is crucial for accurate interpretation and determination of the role of addictive substances in postmortem cases.

### Biography

Dr. Ghadeer Abdelaal is a senior lecturer of Forensic Medicine and Toxicology (PhD) at Faculty of Medicine, Zagazig University, a fellow of Egyptian Forensic Medicine Authority in Cairo, and a senior consultant at Forensic Medical Consultation Center of Zagazig University. She is a founding member of Zagazig Forensic and Clinical Toxicology Research Lab, and Safe Woman Unit in Zagazig University Hospitals. She is a member of Arab Union of Forensics and Toxicology, and Egyptian Society of Clinical Toxicology. She is a TEDx Speaker, also speaker and organizer at many national and international conferences. She served as postgraduate, strategic planning, and resources coordinator at faculty Quality Assurance Unit (2018-2021), and as a trainer in Internship Qualification Program. She participated in Zagazig university strategic planning (2011-2016), and in Continuous Improvement and Qualifying for Accreditation Project (2012). She organized a medical convoy in Sharkia governorate, Egypt (2011). She has many international scientific publications.



## The effects of adding splint use to corticosteroid injection for the treatment of trigger finger

**Hamid R. Fateh**

*Assistant Professor at Tehran University of Medical Sciences, Iran*

**T**igger finger is the most common flexor tendinopathy affecting the general population. Patients experience pain and locking of a finger during flexion or extension. Therapeutic strategies are aimed at terminating pain and triggering. Surgical release of the A1 pulley is recommended when TF is unresponsive to conservative therapies.

Conservative treatments include non-steroidal anti-inflammatory drugs, hand splints, corticosteroid injections (CIs), physical therapies with mobilization, and stretching exercises. CIs have greater success and satisfaction rates and more potential for controlling pain, improving handgrip, and decreasing triggering compared with physiotherapy. Although, repetitive CI has not been recommended.

While TF is a common disease, there is a paucity of evidence on the optimal conservative treatment of TF. Orthotic immobilization reduces tendon excursion through the A1 pulley and diminishes the surrounding synovitis in TF. Combination therapy including a static MCP splint immediately following a single injection of corticosteroid would increase and stabilize the clinical benefits of corticosteroid treatment for TF

### Biography

Hamid R. Fateh has completed his specialty at the age of 35 years from Tehran University of Medical Sciences (TUMS), Iran. He is an associate professor and the head of physical medicine and rehabilitation department of TUMS at Shariati hospital. Also, he is a scientific member of Endocrinology and Metabolism Clinical Sciences Institute and Neuromuscular Research Center. He has also worked on the fields of pain, diabetes, and neuro-rehabilitation. He has several article and book publications. He has been serving as a reviewer of some reputed journals.



## Philosophical views on interoception

**E. BARILE**

*University of Bologna, Italy*

In this talk, I offer a philosophical view and a conceptual analysis on some neurophysiological hypothesis on the role of interoception proper for mind and subjectivity grounding.

I especially focus on 'the feeling of being alive'. This feeling has attracted the attention of several scholars in different fields of the affective sciences: Psychologists (Stern, 2010); neuroscientists (Damasio, 2021, 2010; Panksepp, 1998), psychiatrists (Fuchs, 2012, Glannon, 2002), philosophers (Engelen, 2014; Colombetti, 2014; Ratcliffe, 2012, 2005). Despite the collective effort, however, both the definition and the distinctive features of this feeling are still controversial.

Differently to the mainstream view (Fingerhut & Marienberg, 2012), I propose an account of the feeling of being alive as a *unique, continuous*, basic feeling 'of the body as a whole' (Barile 2023). I find empirical support to this view in neuroscience, mainly in Damasio's work on interoception (Damasio, A. & Damasio, H., 2022; Carvalho & Damasio, 2021): Particularly, in his insights of the *distinctness* of the *interoceptive system*, and, especially, in the continuity of the interoceptive flow – as the physiological underpinning of the feeling of being alive. This hypothesis is in line with many other approaches recognizing the role of interoception proper also for mind and subjectivity (Tsakiris and De Prester, 2019).

The continuous 'flow of life' the feeling of being alive reveals (usually in the background) comes suddenly and dramatically into the foreground when disrupted in several psychopathologies (Tsakiris, Prabhu & Haggard, 2006; Sacks, 1987). Moreover, a lack of the feeling of being alive is recognized especially in depressive states (Fuchs, 2012, 2005; Glannon, 2002) or in Cotard's syndrome (Radovich, 2017; Ratcliffe, 2004) – as in other psychiatric disorders. Further research on this feeling, though puzzling, is pushing nowadays, especially for clinics: An interdisciplinary view might probably enhance this collective effort.

### Biography

Dr. Phil. Emilia BARILE (3.9.1976).

PhD in Cognitive Science (Uni Siena (IT)); MA in Philosophy (Uni Bari (IT)).

PostDoc position at RES (research group in Education) – Uni Bologna (IT).

A. von Humboldt Fellow at Prof. Dr. Dr. T. Fuchs - UniKlinik Heidelberg (DE), at Berlin School of Mind and Brain (DE), at IKW - Osnabrueck (DE); visiting scholar at CenSes - Uni London (UK) and Uni Exeter (UK). In Italy: Scholar at Uni 'San Raffaele' Milano and at Uni Parma.

Research topics: *Background feelings and 'primordial' feelings, Damasio, aliveness, bodily self, interoception, bipolar disorder, depressive states.*





## Chronic impact of cannabis to the brain GABA and glutamate system: From regions to pathway

**Chun S. Zuo**

*McLean Hospital, USA*

Cannabis exposure is known to impact the brain  $\gamma$ -amino butyric acid (GABA) and glutamate system, and cannabis withdrawal may be associated with a reset of regional GABA and glutamate concentrations secondary to changes in the endocannabinoid system during abstinence. We recently used magnetic resonance spectroscopy (MRS) to monitor changes of these neurochemicals in Dorsal anterior cingulate cortex (dACC) and striatum of twenty-six frequent, recreational cannabis users and eleven age-matched non-using controls during a three week verified abstinence. Twenty users and ten control participants completed the 21-day abstinence protocol. dACC and striatal GABA and glutamine concentrations were measured at baseline and on abstinence days 7 and 21 in conjunction with measures of cannabis withdrawal symptoms and mood state. We found dACC glutamate was significantly lower than the controls through the study timeline, striatal glutamate + glutamine (Glx) mildly increase compared to the control's. Changes in dACC glutamate between baseline and abstinent day 21 had a significantly negative correlation with corresponding changes in craving after adjusting for age, consumption of alcohol/cigarettes, sleep difficulties, and urinary THC levels. Changes in striatal GABA concentration and withdrawal symptoms between baseline and abstinence day 7 were positively correlated, baseline striatal GABA concentrations were negatively correlated with withdrawal symptoms on abstinence day 7. Further investigation on the difference between dACC and striatum found chronic cannabis exposure may leverage-change the dACC-striatal glutamatergic balance. These data provide preliminary evidence that chronic cannabis use may lead to a distorted glutamate balance from regions to pathway.

### Biography

Chun S. Zuo is a MR physicist at McLean Imaging Center. He is the principal investigator of the presented study.



## Examination of ligand-receptor interactions amongst different multiple sclerosis lesion types

**Brandon Lucke-Wold**

*Department of Neurosurgery, University of Florida, USA*

**M**ultiple sclerosis represents a debilitating disease. It has many different forms and warrants further investigation. The purpose of this research paper is to look at the available RNA sequencing for white matter lesion disorders in the brain. We performed a comprehensive systematic review to correlate RNA sequence to white matter lesion accuracy. In particular, we looked at ligand receptor scoring. The results are highlighted in a series of tables showing key significant findings. The paper will serve as a catalyst for further scientific development.



## How adolescent self-efficacy in concussion recovery affects migraine symptoms

**M. Bruh and G. A. Gioia**

*Children's National Hospital, USA*

**Objectives/Scope:** Migraine-like headache symptoms are often-reported symptoms following a concussion (Lumba-Brown et al., 2019), resulting in a significant impact on the adolescent's quality of life. Their self-efficacy for managing recovery-related stress and activity is hypothesized to be critical to managing headache pain symptoms.

**Methods:** Adolescents diagnosed with concussion, ages 13-18, were evaluated at two clinic visits (Visit1 n=308, Visit2 n=172). Each completed the validated Post-Concussion Symptom Inventory-2 (PCSI-2; Gioia, Vaughan, and Sady, 2019) and the 17-item Progressive Activities of Controlled Exertion—Self-Efficacy scale (PACE-SE; Gioia, 2015), consisting of four domains. Correlations between PACE-SE scores and the PCSI-2 migraine cluster items were examined.

**Results:** The PCSI-2 migraine score was significantly negatively correlated with the PACE-SE Total at Visit 1 ( $r=-.468$ ,  $p<.001$ ) and the scales: Maintaining Positive Outlook ( $r=-.477$ ,  $p<.007$ ), Managing Stress ( $r=-.450$ ,  $p<.001$ ), Managing Activity ( $r=-.383$ ,  $p<.001$ ), and Seeking Adult Assistance ( $r=-.291$ ,  $p>.001$ ). The pre-injury migraine score was negatively correlated with the Visit 1 Total self-efficacy score ( $r=-.187$ ,  $p<.001$ ) though to a lesser degree with Managing my Activity ( $r=-.169$ ,  $p=.003$ ). Visit 2 Migraine scores were negatively correlated with the Visit 1-Visit 2 change in PACE-SE Total Score (mean change=+15.3) ( $r=-.243$ ,  $p=.002$ ), and specifically with Managing Activity ( $r=-2.34$ ,  $p=.003$ ) and Managing Stress ( $r=-2.16$ ,  $p=.004$ ).

**Conclusion:** Findings indicate the lower the patient's self-efficacy, the larger the migraine symptoms burden with pre-injury migraine symptoms burden associated with lower self-efficacy initially. An increase in patient self-efficacy over the two visits was associated with reduced migraine symptom burden. Although direct causality cannot be established, these findings suggest that confidence in one's ability to manage one's activity and stress while maintaining a positive outlook is associated with a decrease in migraine symptoms burden.

Psychoeducation to build the adolescent's confidence in managing their concussion recovery may be important for alleviating migraine symptoms and for concussion recovery overall.

## Biography

Molly Bruh M.A. is a third year Clinical Psychology Ph.D. student training to become a Neuropsychologist. Molly is currently training with Dr. Gioia at the Safe Concussion Outcome, Recovery & Education Program; she is interested in Sports-Related Concussion research and clinical practice. Molly's work thus far has focused on self-efficacy in patient care and behavior, athletic identity and mental health, and cultural concerns in treatment.





## Spiritual support for families coping with refusal of their deceased substance user child's donated organs by patients awaiting transplants: A double loss for all parties

**Rabbi Dr. Rena Arshinoff**

*Baycrest Centre for Geriatric Care, Canada*

**Objectives:** This presentation will focus on parents who experience the death of a child to drug addiction and face grief that is compounded by stigma as well as judgment by others. Attention will be given as well to patients' refusal to accept organs donated by drug users. The overarching theme in this workshop is the provision of spiritual support for both parties.

**Scope:** Many individuals who live with drug addiction register to donate their organs upon death. Research shows that patients receiving a life-saving transplant from organs harvested from drug dependent decedents do as well as those receiving transplants from other donors. Despite this, some patients who desperately need a transplant refuse to accept an organ from an individual who had used illicit drugs. Tests done on such organs undergo stringent testing and toxicology studies to ensure they are safe.

For parents who have lost a child due to a drug related death and hope that his/her organs can bring extended life to those awaiting transplants, refusal can be yet another "loss". Additionally, for patients awaiting and hoping for a transplant, refusal for them is another loss. They have lost the function of a part of themselves and refusal of an organ from someone who has used illicit drugs creates another loss as they may not live until another organ becomes available for them.

In such situations, all parties experience intense emotions associated with special and unique losses. Spiritual care addresses the spiritual distress experienced by these individuals and how Spiritual Care professionals and all health professionals address such distress these individuals experience in addition to the pain of bereavement and loss with the intention of promoting healing.

**Methods:** This workshop will focus on the scant research that has been done in this field and key areas in such bereavement and disappointment that results from misunderstandings of substance abuse in such dire situations as transplantation.

### Conclusion:

- Attendees will identify the issues associated with organ donation by substance users
- Describe the interplay of various complex dimensions of bereavement, loss, religion, and fear
- Identify relevant and controversial issues for clinicians who work with drug users, organ donation, and the attempt to find meaning in loss.

## Biography

Rabbi Dr. Rena Arshinoff obtained her nursing training in Montreal, a Master of Health Science in Epidemiology at University of Toronto, and Rabbinic Ordination in 2008 from Hebrew Union College. She holds a PhD in Palliative Care from Lancaster University and is currently studying Bioethics. She is a certified chaplain in Canada and the United States. She works in Toronto at Baycrest Centre for Geriatrics as Rabbi/Spiritual Care Practitioner. She holds an adjunct lecturer appointment with the Division of Palliative Medicine at University of Toronto and the Institute for Life Journey and Aging, and teaches at Wilfred Laurier University.



## Postural effects of social impressions

**M. Kitamura**<sup>1,2,3</sup>

<sup>1</sup>Waseda University, Japan

<sup>2</sup>IdeaLab.Inc, Japan

<sup>3</sup>Chicago University, USA

People often try to improve their social impressions by performing “good” postures, particularly when others are evaluating them. We aimed to investigate whether such postural management to modulate social impressions are indeed effective, and in the case that they are effective, which impressions are modulated and how quickly these impressions are formed. In total, 207 participants in two different experiments reported their impressions from photographs where other people performed “good” or “bad” postures in three viewing angles (back, front, and side). Participants were presented with a total of 96 pictures without time limitation in Experiment 1; then, for Experiment 2, they were presented with the same pictures, but with time limitations (100, 500, or 1000 ms). In both experiments, participants were asked to report their impressions for each photograph related to the person’s attractiveness, trustworthiness, or dominance. Results showed that the people with “good” postures were generally rated as more attractive and trustworthy. More importantly, it was found that impressions formed after a 100 ms exposure had high correlations with impressions formed in the absence of time constraints, suggesting that the sight of a managed posture for 100ms is sufficient for people to form social impressions. The findings suggest that people quickly make attractiveness and trustworthiness impressions based on managed postures.

### Biography

Miho Kitamura is a researcher of Waseda University and IdeaLab.Inc, Japan. She is also visiting researcher at Chicago University in USA. Her major is social impressions during in person communication, especially for body posture and voice effects on impression formation.



***E-POSTERS***

# Advances in Addiction Medicine and Psychiatry

September 13, 2023

## Features of the emotional status of patients with coronary artery disease and sleep disorders

**A. D. Ibatov and Yu.V. Shkurenko**

*Federal State Autonomous Educational Institution of Higher Education I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation (Sechenov University), Russia*

**Purpose:** To study emotional status of patients with coronary artery disease (CAD) and sleep disorders (SD).

**Methods:** 244 patients with CAD at the age of 36 to 76 years were examined. Patients are divided into two groups. The first group included 113 patients with SD (18 points and lower on the sleep quality questionnaire). The second group included 62 patients without SD (22 points and higher on the sleep quality questionnaire). The level of anxiety and depression was investigated by the Hospital Anxiety and Depression Scale (HADS), personality characteristics - by the MMPI questionnaire. Data are presented as mean and standard deviation.

**Results:** The level of anxiety and depression were in the 1st group accordingly -  $9.2 \pm 3.5$  and  $7.7 \pm 3.7$  scores, in the 2nd group accordingly -  $5.9 \pm 2.9$  ( $p < 0.001$ ) and  $3.9 \pm 2.8$  ( $p < 0.001$ ) scores. MMPI test parameters in the first and second group were, accordingly: on scale of Hypochondriasis -  $59.8 \pm 8.7$  and  $53.4 \pm 6.5$  ( $p < 0.001$ ) T-scores; on scale of Depression -  $57.5 \pm 12.4$  and  $45.8 \pm 8.9$  ( $p < 0.001$ ) T-scores; on scale of Hysteria -  $57.5 \pm 7.2$  and  $49.8 \pm 4.7$  ( $p < 0.001$ ) T-scores; on scale of Psychopathic Deviate -  $47.6 \pm 9.7$  and  $44.1 \pm 8.5$  ( $p < 0.05$ ) T-scores; on scale of Paranoia -  $55.6 \pm 11.3$  and  $48.3 \pm 10.8$  ( $p < 0.001$ ) T-scores; on scale of Psychasthenia -  $53.1 \pm 11.3$  and  $47.0 \pm 2.1$  ( $p < 0.01$ ) T-scores; on scale of Schizophrenia -  $50.7 \pm 12.0$  and  $47.0 \pm 8.9$  ( $p > 0.05$ ) T-scores; on scale of Hypomania -  $49.6 \pm 9.4$  and  $44.9 \pm 9.2$  points ( $p < 0.01$ ) T-scores.

**Conclusions:** Patients with sleep disorders had a more high level of anxiety and depression, and more expressed personality characteristics, that should be considered in treatment and rehabilitation of this of patients.

### Biography

Ibatov A.D. is a specialist in the field of psychovegetative and psychosomatic relationships in patients. The area of research interests of Ibatov A.D. is sleep medicine, psychiatry, neurology, cardiology and therapy.



## Features of the emotional status of patients with coronary artery disease and different severity of pain syndrome

**A. D. Ibatov and Yu.V. Shkurenko**

*I.M. Sechenov First Moscow State Medical University (Sechenov University),  
Russia*

**Aim:** To study features of the emotional status of patients with coronary artery disease and different severity of pain syndrome.

**Materials and methods:** 264 patients with angina pectoris of II-IV functional class (aged from 36 to 72 years - average age  $56.8 \pm 8.4$  years) were examined. The level of depressive disorders was studied by the Beck Depression Inventory, the level of state and trait anxiety was studied by The State-Trait Anxiety Inventory, personality characteristics - by MMPI questionnaire, the pain syndrome - by visually analog scale (VAS). The patients had pain from 0 to 10 score of VAS, the average level of pain was  $4.9 \pm 1.9$  score. Data are presented as mean and standard deviation.

**Results:** Patients were divided into 2 groups depending on the severity of pain syndrome. The 164 patients (62.1%) had severity of pain syndrome 5 score and more, they were included in the 1st group; 100 patients (37.9%) had severe of pain syndrome 4.9 score and lower, these patients were included in the 2nd group. The level of depression were  $15.2 \pm 9.9$  and  $12.3 \pm 6.8$  score accordingly in the 1st and the 2nd group ( $p < 0.01$ ). The level of state and trait anxiety were accordingly  $46.5 \pm 9.5$  and  $48.2 \pm 9.3$  score in the 1st group and  $41.7 \pm 9.2$  and  $44.3 \pm 7.5$  score in the 2nd group (both  $p < 0.001$ ). The patients of the 1st had higher level scores on scale of Hypochondriasis, Depression, Hysteria, Psychasthenia, Schizophrenia, Hypomania.

**Conclusion:** The patients with coronary artery disease and more severity of pain syndrome had more accentuated personality characteristics and higher level of anxiety and depression, that should be considered in treatment and rehabilitation.

### Biography

Ibatov Alexey Danilovich – MD, professor, cardiologist studies the mechanisms of influence of psychosocial factors on cardiac patients and on the prognosis of these patients.

## Electrochemical artificial skin tattoo sensor for anesthesia control of cranial nerve pain

Jung Hyun Park, Jiwon Min, Jason Sahngwook Kim, Kyung Lee, Dong Ho Kim and Suw Young Ly

Biosensor Research Institute Seoul national university of science & technology, korea

**Objectives:** Physical pain measurement can be analyzed by amygdala EEG current. These cranial nerve pain currents depend on the transport of nerve ions such as glucose, dopamine, catechol, and epinephrine.

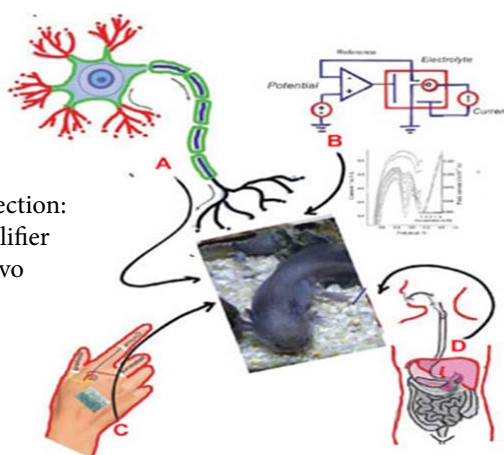
**Scope:** Therefore, these nerve ionic concentrations were analyzed by using voltammetry. Under optimal conditions, it was possible to detect even micro nano and pico grams. Therefore, pain nerve currents could be diagnosed in the skin muscle tattoo probe using, in vivo and in vitro working, counter and reference micro mimic skin film. .

**Results:** A synthetic artificial skin tattoo sensor was used for the pain current detection. The neural signal was amplified and diagnosed by 10-3A to 10-6A with an operational amplifier. The logarithmic function was used for the amplification rate.

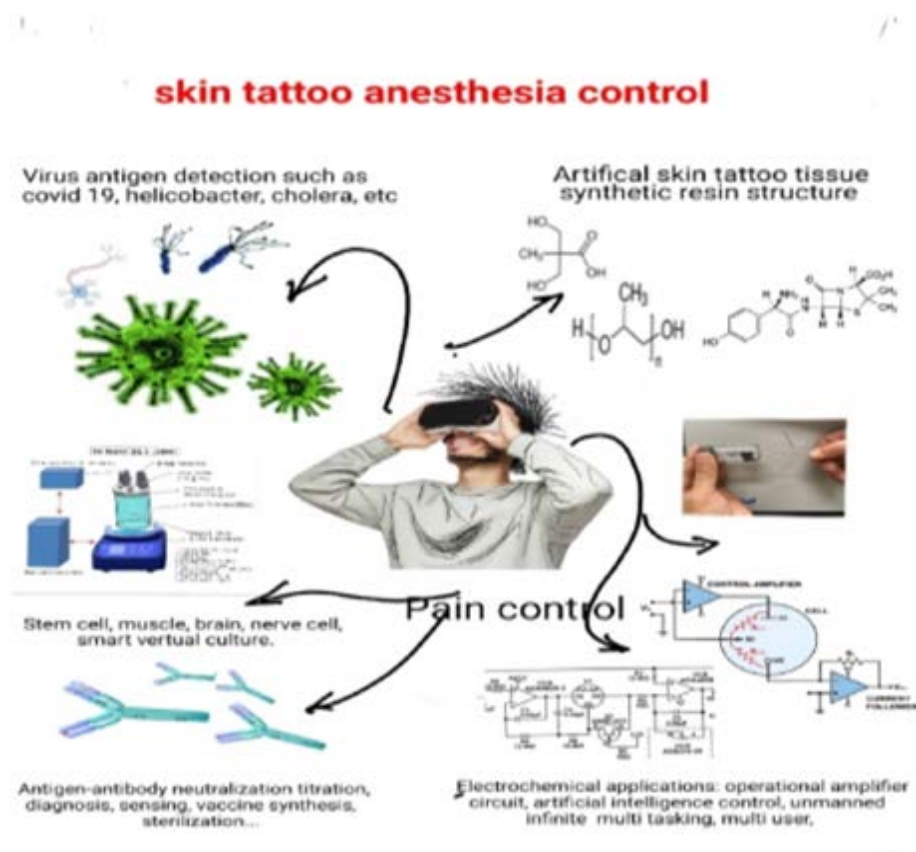
**Methods:** Time current measurement was performed using miniature PCB circuit: 5mm thick, 3.5 mm long, coin size, WiFi near field communication. Diagnostic current was received by Oculus 3D glass computation. The pain signal was diagnosed with an oxidation-reduction potential of 3.0 V to -3.0 V cyclic voltammetry scanning, stripping and chrono amperometry.

**Conclusion:** The optimal experimental result was obtained with a real-time wearable ircuit. The research results can be used for self-diagnosis treatment such as unmanned self-diagnosis, pain control drug injection, and real-time treatment drug injection.

1) Skin tattoo pain sensing connection: neural network, operational amplifier circuit, motion recognition, in vivo organ diagnosis.



In vivo diagnostic real-time wireless sensing.



- 2) Oculus 3D multi pain sensing tasking: multi user, in vivo virus assay, antigen antibody detection, neural network amplification computational CPU pain control.

***ACCEPTED  
ABSTRACTS***

# Advances in Addiction Medicine and Psychiatry

September 13, 2023



## A Study on the Phenomenology of ADHD through Life-Writings

**Amrutha S. L**

*Assistant Professor (Junior), School of Social Sciences and Languages,  
Vellore Institute of Technology, India*

Phenomenology is a philosophical movement that flourished significantly during the first half of the 20th century. Major proponents of the field include Edmund Husserl, Martin Heidegger, Jean-Paul Sartre, and Maurice Merleau-Ponty and the common thread followed by these phenomenologists is their radical insistence on examining the world as experienced through first-person narrative. The Diagnostic and Statistical Manual of Mental Disorders classifies the ADHD body as a cognitively deficient machine or as an unregulated (mindless) vehicle “driven by a motor” (APA, 2017). The dominating theory of ADHD is based on a general neuropsychological model that interprets the behavioral symptoms of ADHD as external markers of an internal problem of the mind (Levin, 2017). Therefore, it can be understood that the existing diagnostic criteria of ADHD reinforce the classical Cartesian Dualism which separates the moving or acting body from the regulating or executing mind. Merleau-Ponty is appropriate in this discussion not only because he developed a comprehensive phenomenology of attention, consciousness, and perception, but also because he speaks to the embodied nature of attention. When attention is considered purely cognitive and controls consciousness, it ignores the embodied experience of attention. Therefore, this paper will analyze ADHD first-person narratives using Merleau-Ponty’s phenomenological framework to comprehend ADHD as a re-orientation of attention and embodied consciousness.

### Biography

Amrutha S.L. is an Assistant Professor (Junior) from the School of Social Sciences and Languages at the Vellore Institute of Technology, Chennai, India. Currently, my research focuses on Neurodiversity, its intersectional and phenomenological aspects which gives neurodevelopmental disorders a humanistic perspective. My research is interdisciplinary in nature and I have published in reputed journals such as Dementia (Q1), Contemporary South Asia (Q1), Sociology of Health & Illness (Q1), and Studies in Media and Communication (Q4).





## Evaluation of a community-based mobile withdrawal management service

**Andrew Lodge<sup>1</sup> and  
Kelly Surbey<sup>2</sup>**



<sup>1</sup>Medical Director, Klinik Community Health, Winnipeg, Canada Clinical Assistant Professor, University of Manitoba, Canada

<sup>2</sup>Program Coordinator and Addiction Counsellor, Klinik Community Health, Canada

As with many jurisdictions across Canada, the city of Winnipeg continues to experience significant problematic substance use. An ongoing methamphetamine epidemic, compounded by a growing opioid crisis and endemic alcohol use, function to strain addiction treatment services, including withdrawal management resources.

In this study, we present results from a novel community-based outreach detoxification service. The Mobile Withdrawal Management Service (MWMS) was formed in 2019 to provide an alternative to facility-based detox services. The program targets individuals voluntarily seeking support to withdraw from substance(s) while remaining in the community. MWMS operates 365 days a year and is deliberately interdisciplinary, staffed by support workers, psychiatric nurses, a program coordinator, and a physician. Additional resources available to clients include peer support, Indigenous cultural support, group therapy, and trauma counselling. Access to harm reduction supplies is readily available to all participants.

The program offers up to 30 days of detox management. Interventions include psychosocial support and medical management such as opioid agonist treatment (OAT) initiation. Targeted outcomes are centred on participant objectives, ranging from stand-alone detox to bridging towards long-term treatment and recovery.

MWMS is committed to continuous quality improvement, through regular program evaluation. In our analyses, we adopt a combination of quantitative and qualitative methodology. The results are presented here, revealing strong uptake reaching program capacity. Demographic characteristics of participants are somewhat different than those seen in conventional withdrawal programs. Reasons behind these differences are examined through analysis of qualitative data in the form of survey responses. Likewise, data reflects strong participant satisfaction with the comprehensive, interdisciplinary approach to home-based withdrawal management.

Future directions for research include direct comparison of both cost-effectiveness and outcomes of the MWMS model versus with facility-based services.

## Biography

Andrew Lodge is Medical Director at Klinik Community Health and Physician Lead for the Mobile Withdrawal Management Service. He is also a Clinical Assistant Professor at the University of Manitoba and Vice-Chair of the Addiction Medicine Member Interest Group at the College of Family Physicians of Canada.

Kelly Surbey is the current program coordinator for the Mobile Withdrawal Management Service at Klinik Community Health in Winnipeg, Manitoba, and has been with the program since its development and inception. She also works clinically in the program as an addiction counsellor.



## Biallelic loss-of-function variants in *NEMF* cause central nervous system impairment and axonal polyneuropathy

Ashfaque Ahmed<sup>1</sup>, Meng Wang<sup>1</sup> and  
Gaber Bergant<sup>2</sup>

<sup>1</sup>Center for Medical Genetics and Hunan Key Laboratory of Medical Genetics, School of Life Sciences, Central South University, China

<sup>2</sup>Clinical Institute of Medical Genetics, University Medical Centre Ljubljana, Slovenia

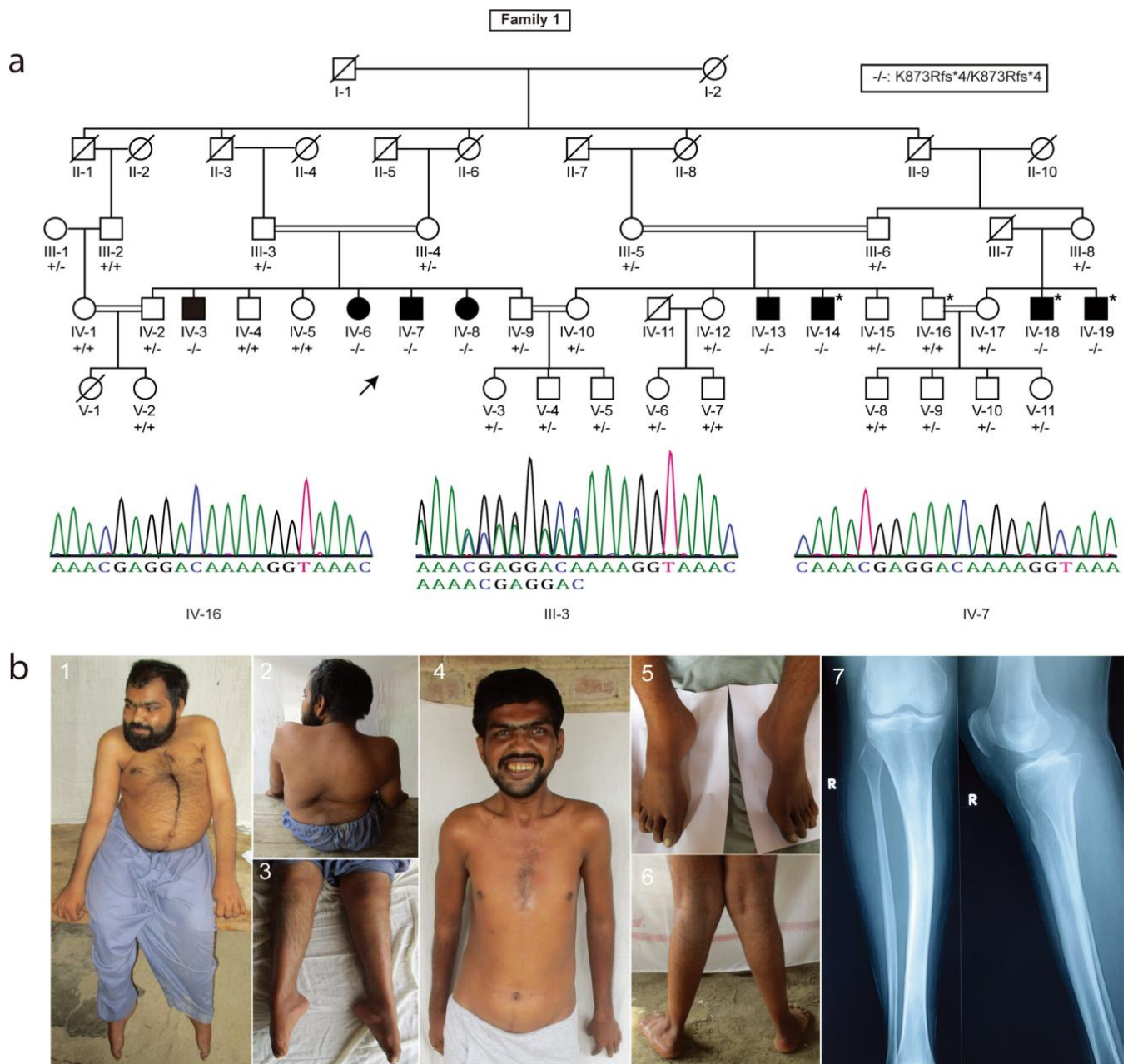
**Introduction:** We aimed to detect the causative gene in five unrelated families with recessive inheritance pattern neurological disorders involving the central nervous system, and the potential function of the *NEMF* gene in the central nervous system.

**Objective:** This study aims to determine the genetic profile of individuals from five pedigrees with ID. We also explored the role of *NEMF* in causing ID, and axonal polyneuropathy during the early development of neurons in the brain.

**Methods:** Exome sequencing (ES) was applied to all families and linkage analysis was performed on family 1. A minigene assay was used to validate the splicing effect of the relevant discovered variants. Immunofluorescence (IF) experiment was performed to investigate the role of the causative gene in neuron development.

**Results:** The large consanguineous family confirms the phenotype causative relationship with homozygous frameshift variant (NM\_004713.6:c.2618del) as revealed by ES. Linkage analysis of the family showed a significant single-point LOD of 4.5 locus. Through collaboration in GeneMatcher, four additional unrelated families' likely pathogenic *NEMF* variants for a spectrum of central neurological disorders, two homozygous splice-site variants (NM\_004713.6:c.574+1G>T and NM\_004713.6:c.807-2A>C) and a homozygous frameshift variant (NM\_004713.6:c.1234\_1235insC) were subsequently identified and segregated with all affected individuals. We further revealed that knockdown (KD) of *Nemf* leads to impairment of axonal outgrowth and synapse development in cultured mouse primary cortical neurons.

**Conclusion:** Our study demonstrates that disease-causing biallelic *NEMF* variants result in central nervous system impairment and other variable features. *NEMF* is an important player in mammalian neuron development.



**Fig. 1** Pedigree, genetic and clinical data of family 1 from Pakistan. **a** The pedigree plot of the Pakistani consanguineous family in this study. \*Individuals whose DNA was used for ES; +/+, homozygous reference allele; +/-, heterozygous; -/-, homozygous alternative allele. Sanger sequencing chromatograms of the co-segregating variant (c.2618del, p.Lys873Argfs\*4) in IV-16 (unaffected), III-3 (unaffected, heterozygous), and IV-7 (proband, homozygous) are shown below the pedigree plot. **b** Photos show the prominent syndromic phenotypic features in the probands (IV-7) (pectus excavatum, truncal obesity, short neck, scoliosis, and flat feet) (1–3), individuals IV-13 (thin physique, pectus excavatum, prominent clavicles, deformed scapula, thin humerus shaft, and camptodactyly) (4–5) and individuals IV-18 (knock knees) (6–7).

**Table 1:** Clinical characteristics and physical features of affected individuals in the consanguineous family 1.

Family ID & Origin	Family 1, Pakistani								
Variant	NEMF, g. 49828775del, c.2618delA, p.Lys873Argfs*4, Homozygous								
Patient ID	IV-3	IV-6	IV-7	IV-8	IV-13	IV-14	IV-18	IV-19	Total
Gender, age (yr.)	M,14	F,18	M,31	F,19	M,24	M,19	M,32	M,18	6M, 2F
Neurodevelopmental problems									
Intellectual Disability	Mod	Mod	Mod	Mild	Mod	Mod	Mild	Mild	8/8
Speech problem	+	+	+	−	+	+	−	−	5/8
Motor developmental delay	−	+	+	+	−	+	−	−	4/8
Poor eye contact	+	+	+	−	+	+	−	−	5/8
Hyperactivity	−	+	−	−	+	+	+	−	4/8
Structural Defects									
Thin/lean physique	+	−	−	−	+	+	−	+	4/8
Pectus excavatum	+	−	+	−	+	+	−	+	5/8
Truncal obesity	−	+	+	−	−	+	+	−	4/8
Short neck	−	+	+	−	−	+	−	−	3/8
Clavicle prominent/symmetric	−	−	−	−	+	+	−	+	3/8
Scoliosis	+	−	+	−	−	−	−	+	3/8
Orofacial Defects									
Open mouth	+	+	−	−	−	−	−	−	2/8
Limited extension of temporomandibular joint	+	−	−	−	+	−	−	−	2/8
Premature greying of hair	−	−	−	−	−	+	−	+	2/8
Low hair line	−	+	−	+	−	−	−	−	2/8



## Biography

Hi, I am Dr. Ashfaque Ahmed belong to Pakistan. I have completed my Ph.D. in June 2022 from Central South University, Changsha, Hunan, China. Currently, I am working as lecturer in Zoology. During my doctorate studies I have found the mutation variants in NEMF causing CNS impairment and axonal polyneuropathy, and OTOF causing profound hearing loss. In addition, I have learned lab work skills such as DNA data analysis, immunofluorescence and pedigree collection from open field etc. I have published six scientific articles in well reputed journals including genetics and cancer field. I am compelled by genetic and molecular studies of human genetic disorders because these disorders surround me since childhood. I am keenly interested to know more about these disorders and would like to try for their therapy in future studies such as postdoc, so I could contribute in welfare of humanity. My goal is to become an independent academic research investigator in the field of human genetics. This conference would be a great platform for me to express myself in front of scientific society. Thank you.



## Investigation of lead-poisoned patients addicted to opium in Baharloo Hospital in Tehran, Iran

Behnam Behnouch<sup>1</sup>, Mojdeh Farshadi<sup>1</sup>,  
Elham Bazmi<sup>2</sup> and Amir Hossein Behnouch<sup>3</sup>

<sup>1</sup>Department of Forensic medicine and toxicology, Faculty of Medicine, Tehran University of Medical Sciences, Iran

<sup>2</sup>Legal Medicine Research Center, Legal Medicine Organization, Iran

<sup>3</sup>School of Medicine, Tehran University of Medical Sciences, Iran

**Objectives:** Nowadays, the prevalence of occupational exposure to lead has declined, however, another form of non-occupational poisoning has increased. Opioid addiction is one of the most prevalent types of addiction in the Middle Eastern countries, including Iran, and lead poisoning in opium users is one of the most important forms of non-occupational lead poisoning in Iran.

**Methods:** This cross-sectional study was conducted from June 2019 to June 2020 at Baharloo Hospital in Tehran. The clinical findings and treatment progression of 50 patients with opium poisoning admitted to the poisoning department were evaluated. The association between blood lead level before treatment with demographic information, clinical symptoms, amount and duration of opium use, laboratory findings, complications, and mortality were investigated. The effect of treatment options (BAL+EDTA or D-penicillamine) was also assessed.

**Results:** There was no significant correlation between duration and amount of opium use and blood lead levels before treatment. The mean blood lead level before treatment was 91 µg/dL and the mean blood lead level after treatment was 34 µg/dL.

The most clinical findings were gastrointestinal findings (96%), most frequently abdominal pain (94%). The most common neurological symptom was fatigue (46%) and decreased level of consciousness in 6% of patients. Anemia was detected in 80% of patients and there was no significant correlation between hemoglobin and blood lead levels before treatment.

The average reduction in blood lead level in patients with EDTA and those treated with BAL + EDTA was statistically significant, while this was not significant for the D-penicillamine regimen. Blood lead levels before and after treatment and laboratory tests were not significantly correlated with mortality.

**Conclusion:** In this study, although there was no significant relationship between the duration and amount of opium use and blood levels of lead, blood lead levels in opium users were high and this necessitated screening and timely screening measures in these individuals. Regarding the high prevalence of gastrointestinal symptoms, it is recommended that lead poisoning be considered in opium users presented with these symptoms. The high prevalence of anemia in these patients shows the need for lead toxicity in anemic opium users. In general, for the reason of unpredictable damage and mortality due to high blood lead, in each patient who uses opium with non-specific symptoms, lead poisoning should be considered as a differential diagnosis.

## Biography

Behnam Behnoush, MD and associate professor of Forensic Medicine and Toxicology at Tehran University of Medical Sciences, is the head of Poisoning ward at Baharloo hospital, one of the poisoning referral centers in Tehran and one of the most prominent ones in Iran. As a researcher, he has published about 50 articles (h-index: 15) with the focus of poisoning and Forensic Medicine.

## Field accumulation and health risk assessment of heavy metals in Agronomic Plants in the mining area of mkpumaakpatata, Southeastern Nigeria

Obasi P. N<sup>1</sup>, Eme U. C<sup>2</sup>, Akpa C<sup>1</sup>, Akakuru, O. C<sup>3</sup>, Nworie C. D<sup>4</sup>, Nweke O. M<sup>1</sup> and Omeokachie A. I<sup>5</sup>

<sup>1</sup>Department of Geology, Ebonyi State University, Nigeria

<sup>2</sup>Department of Geology, Kansas State University, USA

<sup>3</sup>Department of Geology, Federal University of Technology, Nigeria

<sup>4</sup>Department of Geology and Geological Engineering, Colorado School of Mines, USA.

<sup>5</sup>Department of Geological Sciences, Nmandi Azikiwe University, Nigeria

Uptake of heavy metals in nutrients by agronomic plants is possible in mining areas. This has been implicated in bioaccumulation in the food chain. Thirty six (36) samples of leafy vegetables and tubers (*Musa paradisiaca*, *Carica papaya*, *Abelmoschus esculenta*, *Telfira occidentalis*, *Phaseolus vulgaris*, *Manihot esculenta*, *Colocasia esculenta*, *Solanum tuberosum*, *Diocorea alata*, *Dioscorea cayenensis*, *Manihot esculenta*, *Dioscorea rotundata* and *Colocasia esculenta*) were collected within a 100m radius of the Mkpuma Akpatakpa mine site and analysed for heavy metals using Agilent FS240AA Atomic Absorption Spectrophotometer. The Daily Metal Intake (DIM), Health Risk Index (HRI) and Target Hazard Quotients (THQ) were applied to access the health implications for normal daily consumption of these crops and vegetables, for adults and children. The result obtained shows abundance of Zn > Hg > Mn > Cu > Cr > Mo in tuber crops and Zn > Mn > Cr > Pb > Cu > Hg > Cd > Co > Mo > As for vegetable crops with Zn, Pb, Hg, Cd and Cr beyond the EU and WHO/FAO permissible limit mostly in leafy vegetables. The DIM, HRI and THQ values indicate that Hg, Mn, Cd and Pb has DIM higher than RfD in some of the samples. HRI and THQ >1 for the plants indicates high risk of field accumulation for Hg, Mn, and Cd contamination in tubers and leafy vegetables especially in *D. alata*, *M. esculenta*, *C. papaya*, *S. indicum*, *C. esculenta*. Comparative studies shows that children have higher risk exposure than adults while leafy vegetables show higher degree of contamination than tuber crops for all heavy metals except for Hg. The continuous cultivation of food crops in the Mkpuma Akpatakpa mining area should be discouraged as imminent health hazard abound in the area.

## Biomorphometric and hemato-biochemical alterations in juvenile African catfish *Clarias gariepinus* exposed to propranolol

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<sup>4</sup>Department of Biology, Federal University of Technology, Nigeria

This study evaluated the toxicity of propranolol (PRO) and its effects on the haematology, biochemistry, and body condition of *Clarias gariepinus* juvenile. The 96-h median lethal concentration (LC50) of the drug, which was established through an acute toxicity study, is 9.48 mg/L. Based on this value, fish were exposed for 21 days to a control and sublethal concentrations of 1.90, 0.95, and 0.63 mg/L, which are equivalent to 1/5th, 1/10th, and 1/20th of the LC50 of PRO, respectively, before being given 7 days to recover. Each fish's standard length and body weight were measured after each exposure period. The condition factor (CF) and hepatosomatic index (HSI) were not significantly affected by the drug. The red blood cell (RBC) counts, haemoglobin (Hb) and packed cell volume (PCV) levels decreased from day 7 to 21 at the tested concentrations while the white blood cell (WBC) counts significantly increased. There were alterations in the values of mean corpuscular volume (MCV), mean corpuscular hemoglobin concentration (MCHC), and mean corpuscular hemoglobin (MCH) values in the exposed group compared to the control. While neutrophil values increased, the lymphocyte counts decreased but the values of the monocytes, basophils and eosinophils were not affected. Only aspartate aminotransferase was significantly stimulated among the liver enzymes in the groups that were exposed to the drug. The protein and glucose levels in fish exposed to the drug declined. Most of the studied parameters returned to their original values after the 7-day recovery period. The information provided in the current study will be helpful in the monitoring of PRO contamination in aquatic environment.

### Biography

Prof. Christopher Didigwu Nwani is a recipient of the academy of science award for excellence in Biotechnology, He was awarded a Post-Doctoral Fellowship (PDF) in 2007 at the National Bureau of Fish Genetic Resources, Lucknow, India. In 2009, Prof Nwani was awarded another research scholarship on DNA Barcoding at the Canadian Centre for Barcoding of Life, Institute of Biodiversity, University of Guelph, Ontario Canada. In 2010 Prof Nwani was again awarded visiting Fellowship to Jiwaji University India by The Department of Biotechnology (DBT) Government of India in collaboration with CV Raman Fellowship for African Researchers. He was again awarded TWAS-UNESCO award in 2011 as a visiting scholar for 3 years at the Chinese Academy of Science, Institute of Hydrobiology Hubei, China. In 2017, Professor Nwani was again awarded the INTRA-ACP Mobility Scholarship – TRECCAfrica at Mekelle University Ethiopia. In 2018, Prof Nwani won the Elsevier visiting scholar at Mekelle University Ethiopia.

## The treatment of cognitive, behavioural and motor impairments from brain injury and neurodegenerative diseases through cannabinoid system modulation—Evidence from In Vivo studies

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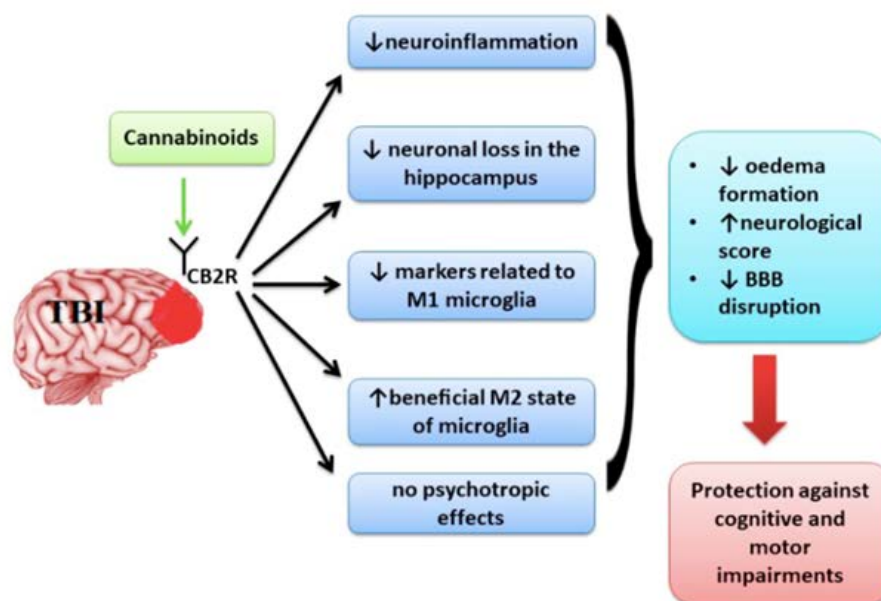
<sup>9</sup>Laboratory of Physiology, Pharmacology & Environmental Health, Faculty of Sciences, University Sidi Mohamed Ben Abdellah, Morocco

<sup>10</sup>Toxicology Department, University of Medicine and Pharmacy of Craiova, Romania

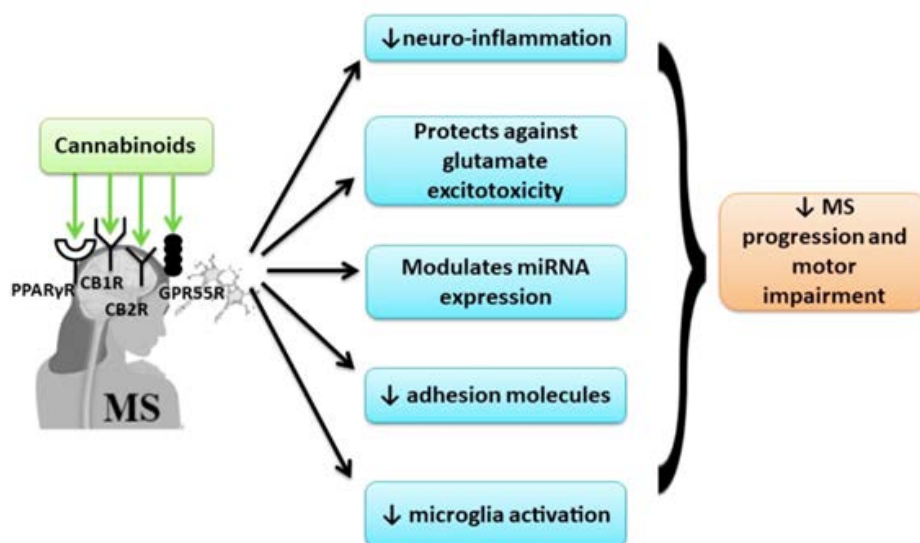
Neurological disorders such as neurodegenerative diseases or traumatic brain injury are associated with cognitive, motor and behavioural changes that influence the quality of life of the patients. Although different therapeutic strategies have been developed and tried until now to decrease the neurological decline, no treatment has been found to cure these pathologies. In the last decades, the implication of the endocannabinoid system in the neurological function has been extensively studied, and the cannabinoids have been tried as a new promising potential treatment. In this study, we aimed to overview the recent available literature regarding in vivo potential of natural and synthetic cannabinoids with underlying mechanisms of action for protecting against cognitive decline and motor impairments. The results of studies on animal models showed that cannabinoids in traumatic brain injury increase neurobehavioral function, working memory performance, and decrease the neurological deficit and ameliorate motor deficit through down-regulation of pro-inflammatory markers, oedema formation and blood-brain barrier permeability, preventing neuronal cell loss and up-regulating the levels of adherence junction proteins. In neurodegenerative diseases, the cannabinoids showed beneficial effects in decreasing the motor disability and disease progression by a



complex mechanism targeting more signalling pathways further than classical receptors of the endocannabinoid system. In light of these results, it appears that cannabinoids may have potential benefits in treating traumatic brain injuries and multiple sclerosis, particularly in patients who have not responded well to traditional therapies. These findings suggest that incorporating cannabinoids into treatment plans could offer a valuable alternative or complementary approach for managing these conditions.



**Figure A.** The main effects of activation of cannabinoid receptor type 2 in Traumatic Brain Injury.



**Figure B.** The beneficial effect of cannabinoids in Multiple Sclerosis by multi-receptor modulation.

## Biography

I am an accomplished author, having published more than 80 scientific articles on "scopus" and an experienced healthcare professional, with 11 years of practice. I obtained my PhD in life and health sciences and specialize in writing, improving, editing, and proofreading scientific manuscripts. My works have been published in prestigious journals, belonging to different high impact factor databases. I have worked in collaboration with many experts around the world in various scientific fields such as biology, biochemistry, pharmacology, histology, epigenetics, microbiology, neurosciences, toxicology, parasitology, biotechnology, immunology, and psychology.

In addition, I have acquired expertise as an editor and proofreader at several renowned publishers such as Elsevier, Hindawi, MDPI, and Springer. My experience and know-how allow me to provide superior services in scientific writing and publication. I am passionate about research and am determined to continue to produce high quality work that contributes to the advancement of life sciences and health.



## Institutional capital, rule dilemma of cognitive disorders and rule creating entrepreneur

**Fairtown Zhou Ayoungman**

*Yunus Social Business Center of Zhengzhou University, China*

**Objectives:** of this paper: Research on the Institutional Causes of Cognitive Disorder, The Path of Reconstructing Cognitive Order, Changing Social Rules as the Best Treatment for Cognitive Disorder;

**Scope of this paper:** Basic Institutional Principles of Cognitive disorder;

**Methods:** used of this paper: Interview survey of the Psychology and Behavior of Cognitive Disorders, Integrating medicine, psychiatry, psychology, sociology, economics, management, and legal philosophy, etc.

**Results and conclusion of this paper:** Cognitive disorder in non democratic countries has become increasingly common and a major cause of neurological and mental disorders. However, our traditional thinking model regards cognitive disorder individuals as patients and uses drugs or physical means to change them to so called normal individuals. However, in the past, they have not improved, but have worsened increasingly. Therefore, our research indicates that:

Firstly, cognitive disorder is not a disease and does not require treatment. The fundamental reason is rule dilemmas. Therefore, changing the environment of cognitive disorder means changing social rules for every one not only for cognitive disorder people;

Secondly, Positive main actors of changing social rules is the Rulecreating Entrepreneurs, who have windfalls to make, which not only promotes social progress and state development but also generates huge institutional profits for themselves;

Thirdly, an important carrier for changing social rules is social enterprises, which institutionalize financial self-sufficiency through sustainable commercial means to solve major social problems;

Fourthly, changing cognitive disorder itself is the reconstruction of cognitive order, the reconstruction of social rules, the creation of institutional capital, and the formation of a matrix of institutional profits. It is a key theoretical innovation knowledge of our Ayoungman team for emerging interdisciplinary fields, which integrating medicine, psychiatry, psychology, sociology, economics, management, and legal philosophy, etc.!

### Biography

Full professor and doctoral supervisor of Business School of Zhengzhou University, Deputy Director of Yunus Social Business Center, First Consultant of Ayoungman Thinktank, First Trainer of Conscience Entrepreneurs Academy, Vice President of WYMRA, Focus on institutional entrepreneurs Research, including Institutional capital theory (underlying logic), social enterprises (social business), rural revitalization (Rural urbanization), returning industrial transfer and industrial cluster coordination, etc.

## The relationship between college students' physical exercise behavior, physical health and anxiety under the silent management of school

**FEILONG WU**

*Department of Physical Education, Xi'an Aeronautical University, China*

**Objective:** To investigate the current situation of college students' anxiety and physical health before and after the lockdown, and to analyze the influence of physical exercise behavior on college students' anxiety and physical health. **Methods:** Based on the data of the 2021 Physical Health Test Survey and the Generalized Anxiety Scale (GAD-7), the physical health and anxiety levels of college students before and after the school lockdown were evaluated, and the influence of the dependent variables on the two independent variables was analyzed by linear regression, and the correlation between the dependent variables and the independent variables was calculated.

**Results:** The results of random sampling of 50 college students, descriptive statistics and paired samples showed that there were significant differences in physical health and anxiety changes of college students before and after the school lockdown ( $P < 0.05$ ). The anxiety level of women was 0.26 higher than that of men. After exercise intervention, the anxiety level of men and women decreased significantly ( $4.03 \pm 1.55$ ,  $4.29 \pm 1.49$ ). There is a significant difference between the total scores of physical health test of the college students before and after school closure control ( $P < 0.05$ ). With the increase of physical activity level, college students' anxiety decreased significantly ( $P < 0.05$ ), but low intensity physical activity had no significant effect on college students' anxiety ( $P > 0.05$ ). The results of linear regression analysis showed that physical exercise behavior was positively correlated with the physical health of college students during the school lockdown period ( $P < 0.05$ ,  $R^2=0.943$ ,  $F=56.45$ ), and negatively correlated with anxiety ( $P < 0.05$ ,  $R^2=0.647$ ,  $F=35.72$ ).

**Conclusion:** During the lockdown period, college students have a high anxiety tendency, and strengthening physical exercise can reduce and alleviate college students' anxiety trend to a certain extent, enhance physical health, and enrich campus life.

### Biography

National champion, Master sportsman, Discipline leader, Academic backbone Sports Medicine Australia and Director of Shaanxi Fitness Qigong Association, Lecturer of Fitness Qigong Foreign Training at the General Administration of Sport of China. Reviewer, chief editor, and editorial board member of SCI and nature journal. This year, I won the Annual Teaching Innovation Award in the National Teaching Innovation Competition. First Prize in National Micro Course Teaching Published more than 20 related academic research papers, and was included in more than 15 papers by SCI, EI&SCOPUS. At present, he is mainly engaged in sports psychology and Sports medicine.



## Application of machine learning techniques for detection and segmentation of brain tumors

**Guru Prasad Dash and Bhagirathi Nayak**

*Sri Sri University, India*

A brain tumor develops when cells multiply rapidly out of control. There is a risk of death if it is not treated in the early stages. Accurate segmentation and classification are still difficult, despite many significant efforts and promising outcomes. The wide range of tumor locations, shapes and sizes causes a significant obstacle in the field of brain tumor diagnosis. The goal of this study is to provide a comprehensive analysis of brain tumor detection malignant or benign using different features of the dataset. Our proposed model focused on the application of Machine Learning Techniques using an ensemble method to develop and classify them into malignant or benign brain tumors. The overall analysis is divided into two parts: first, we extract 30 attributes related to brain tumors from MR images, where datasets are publicly available. After that, we used the ensemble method to detect the tumors from said attributes and segment them into two categories malignant or benign tumors. The outputs of our model give robustness and cross-validation revealing to the accuracy, precision, recall, and AUC as 95.26%, 95.55%, 97.21%, and 96%, respectively. This study proposed a method of dividing the brain tumor with minimal human intervention. The goal of the proposed model is to reduce identification time so that neurosurgeons can get back to saving lives. The experimental results suggest that the method is nearly as accurate as the best existing methods.

### Biography

Dr.Guru Prasad Dash, graduated from the most prestigious Ravenshaw College and having more than Two decades of Experience in Software Development, Teaching and Academic administration and Research. He has received his M-Tech and Ph.D degree from Berhampur University. He served as a visiting professor in many reputed Institutions and Training Organisations, Govt. Colleges and Universities. He has a great passion for Teaching. His core area is Data Science, Machine Learning, Artificial Intelligence, IOT, IIOT, Cloud computing, Data Mining, CRM, Business and Data Analytics in the field of Computer Science and Engineering, Management studies. He has published Several Research papers (High Scopus Index) in the National and International Journals. He has done 3 Patents in his specialised areas. His Research Interests are Machine Learning, Robotic Technology, Computer Aided Software Engineering, Modelling and Simulation, Rich internet Web applications, Conceptual Modelling, Model Driven Engineering.



## Universities readiness in the application of e learning

**J. Pourkarimi**

*University of Tehran, Iran*

The sudden outbreak of a lethal virus known as the COVID-19 pandemic spotlighted e-learning systems worldwide. That forced instructors and faculty members around the world to try the existing instructional platforms in an attempt to shift toward an effective unprecedented learning system. The present study concentrated on enhancing a specific e-learning system experienced for the first time at the University of Tehran (UT) that faced several difficulties in the development process due to the lack of required readiness in diverse aspects. As a phenomenological approach bordered with a descriptive-interpretive framework, the study targets a group of 2000 faculty members at 35 diverse departments of the UT. Data have gathered from 603 faculty members using voice calls, video calls, and emails and then analyzed and diverged into four fundamental segments: sociocultural readiness, pedagogical readiness, organizational readiness, and technological readiness (SCPOT-R). Our findings indicated some remarkable results that underline the significance and high priority of virtual and electronic learning methods since the expansion of COVID-19 and following physical restrictions.

### Biography

I was born in 1971 in Iran (Tehran). I have a bachelor's degree in agriculture and a master's degree in educational research and a doctorate in educational management. I am a member of the faculty of Tehran University and I teach in doctoral and master's degrees. My favorite areas are e-learning and faculty development and professional competency development.





## Psychometric properties of the obsession with COVID-19 scale

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Güngör Sunay<sup>2</sup> and KarimiAfagh<sup>3</sup>

<sup>1</sup>Bu-Ali Sina University, Iran

<sup>2</sup>Gümüşhane Üniversitesi, Turkey

<sup>3</sup>Kharazmi University, Iran

**Aim:** The global spread of Covid-19 has posed significant challenges to public health and has given rise to various psychological consequences. This study aimed to assess the psychometric properties of the Obsession with COVID-19 Scale.

**Methods:** A total of 392 participants aged 18 and above were recruited using an online available sampling method. Data collection included a demographic questionnaire, the Obsession with COVID-19 Scale, and the Fear of Covid-19 Scale. Reliability of the instrument was assessed using Cronbach's alpha internal consistency method and SPSS 25 software, while construct validity was evaluated through confirmatory and exploratory factor analysis with orthogonal rotation of Varimax type using Lisrel 8.8 software.

**Findings:** Exploratory factor analysis revealed that all four items were part of a single factor. Confirmatory factor analysis supported the proposed construct validity. Convergent validity with the Fear of Covid-19 Scale showed a correlation coefficient of 0.25 ( $p < 0.01$ ). The Obsession with COVID-19 Scale demonstrated good internal consistency with a Cronbach's alpha value of 0.797, and split-half reliability coefficient of 0.771.

**Conclusion:** The Obsession with COVID-19 Scale exhibited satisfactory psychometric properties and can serve as a reliable measurement tool in future research endeavors related to Covid-19 and its psychological implications.

## Biography

Dr. Kambiz Karimi is a highly accomplished psychologist with a Doctorate in Educational Psychology from Bu-Ali Sina University in Hamedan, Iran. With extensive expertise in the field of Educational Psychology, he serves as a respected university professor and instructor, teaching courses in Educational Psychology, Statistics and Research Methods, and Cognitive Psychology. Dr. Karimi is recognized as an esteemed editor and reviewer for reputable international journals. He has contributed significantly to the validation and standardization of various psychological instruments, particularly in the context of Covid-19. His dedication to understanding and assessing the psychological implications of the pandemic has been crucial in developing reliable tools for measurement and evaluation. Beyond his academic pursuits, Dr. Karimi is actively involved in charitable organizations and volunteers as a crisis counselor, focusing on suicide prevention. His commitment to helping individuals in need reflects his compassionate and caring nature. With a strong passion for international collaborations, Dr. Karimi actively seeks opportunities to work with motivated researchers across the globe. His diverse experiences and scholarly contributions make him a valuable asset to the field of psychology and a source of inspiration for future researchers.

## Psychotherapeutic potential of cannabis in managing PTSD and the Indian constitutional and legal landscape

**Khagesh Gautam**

*Jindal Global Law School (O.P. Jindal Global University), India*

**P**ost Traumatic Stress Disorder (PTSD) is known psychological affliction. Within common law jurisdictions, many recognize it as a debilitating condition. It is characterized by re-experiencing, avoidance, and hyperarousal symptoms that develop after experiencing of traumatic event. It is also known that a significant number of patients diagnosed with PTSD do not often make a full recovery. Two known medications for PTSD: Paroxetine and Sertraline, are not prohibited under the Indian Narcotic Drugs and Psychotropic Substances Act, 1985 (the Indian equivalent of the U.S. Controlled Substances Act, 1971). Studies indicate that recently the interest in use of cannabinoids for treatment of PTSD has increased. Cannabis (or more specifically (per section 2(iv), NDPS Act) 'all plants of the genus cannabis') is a well known source of cannabinoids and has been used by patients to manage PTSD symptoms. Studies have now started reporting improvements in PTSD symptoms with the use of cannabis. An examination of this emerging scientific consensus in light of the fundamental rights obligations that the Indian Constitution imposes on the Indian state discloses that the criminal prohibition on cannabis in India is of suspect constitutionality. This would allow the Supreme Court of India to judicially review any claim whereby a medicinal exemption could be granted from the NDPS Act to persons diagnosed with PTSD. In any event, Indian Parliament would surely be duty bound to reconsider the criminal prohibition on cannabis that it imposed via the NDPS Act in 1985.

### Biography

Prof. (Dr.) Khagesh Gautam was awarded a S.J.D. from Maurer School of Law, Indiana University in May, 2021, where he finished his doctoral work in record 611 days. His doctoral thesis (unpublished) argues that constitutional validity of section 27 of the Indian Evidence Act, 1872 is suspect on the grounds that it violates article 20(3) of the Indian Constitution. Dr. Gautam graduated with distinction as a Stone Scholar from Columbia Law School in May 2013 where he obtained a LL.M, and received his LL.B. from Campus Law Centre, Delhi University in June, 2008. He practiced law before the Supreme Court of India and Punjab & Haryana High Court between June 2008 and April 2009. He is a faculty member at Jindal Global Law School where he teaches constitutional law, criminal procedure, and evidence. He has also taught comparative evidence at China University of Political Science and Law, Changping, Beijing, PRC (June, 2015 & May-June, 2015); and Comparative Constitutional Law at William S. Richardson School of Law, University of Hawaii, USA (January, 2017).

## Opioid requirement and pain intensity after mandibular surgeries with dexmedetomidine administration in two ways: intraoperative infusion versus bolus injection

Loghman Ebrahimi<sup>1</sup>, Saeed Nezafati<sup>1</sup>,  
Abbas Ali Dehghani<sup>2</sup>, Reza Khorshidi Khiavi<sup>1</sup>,  
and Ali Mortazavi<sup>1</sup>

<sup>1</sup>Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Tabriz University of Medical Sciences, Iran


<sup>2</sup>Department of Anesthesiology, Imam Reza Medical Research and Training Hospital, Iran

**Purpose:** The purpose of this study is to compare the opioid requirement and pain intensity after surgeries of mandibular fractures with administration of dexmedetomidine by two approaches of infusion and single bolus.

**Methods:** In this double-blind clinical trial, the participants were randomized and matched in terms of age and gender in two groups (infusion and bolus). In both groups, the amount of narcotic used, hemodynamic indices, oxygen saturation, and pain intensity were collected based on the ten-point Visual Analogue Scale (VAS) at 7 time points for 24 h. SPSS version 24 software was used for data analysis. A significance level of less than 5% was considered.

**Results:** A total of 40 patients were included in the study. There was no significant difference between the two groups in terms of gender, age, ASA class, and duration of surgery ( $P > 0.05$ ). There was no significant difference between the two groups in terms of nausea and vomiting and subsequently receiving anti-nausea medication ( $P > 0.05$ ). The need for opioid consumption after surgery was not different in two groups ( $P > 0.05$ ). Infusion of dexmedetomidine reduced postoperative pain more rapidly than its single bolus dose ( $P < 0.05$ ). However, over time, there was no significant difference between the two groups in terms of changes in oxygen saturation variables ( $P > 0.05$ ). Hemodynamic indices including heart rate, systolic blood pressure, and diastolic blood pressure in the bolus group were significantly lower than the infusion group ( $P < 0.05$ ).

**Conclusion:** Administration of dexmedetomidine in the form of infusion can reduce postoperative pain better than bolus.



## The definitions of psychological/emotional abuse and neglect of children by the public: A systematic review

**M. Hayashi***University of Tokyo, Japan*

**Background:** Psychological/emotional abuse and neglect of children (PEA) has been a global issue. The significance of PEA can be illustrated by its prevalence of identified cases and evidence of its negative effects. However, there is diversity in how PEA is defined, and the meaning of PEA is unclear. Regardless, PEA could occur in any context and the general population could play a vital role in the early identification of PEA to minimize the adverse consequences on children.

**Objectives:** This review was undertaken to understand the nature of existing literature on the definitions of psychological abuse and neglect of children (PEA) by the public.

**Method:** A systematic review was undertaken to understand the nature of PEA definitions by the public. The literature was searched using two major databases (PsycINFO; Pubmed) based on a combination of key terms. The identified literature was imported to EPPI Reviewer and they were screened and coded.

**Results:** This review revealed that (i) PEA is likely to be studied with other forms of child maltreatment and unlikely to be studied independently; (ii) the public has a high threshold for the abstract definition of PEA (e.g. the respondents are less likely to see PEA as abusive or serious compared to other forms of abuse/neglect; (iii) the public has a high threshold for the operational definition of PEA (e.g. the public is less likely to act when there is a suspicion of PEA); (iv) there are occasions that the public responded to do nothing regardless of its suspicion.

**Conclusions:** Without understanding how PEA is understood by the public, it is difficult to develop policy and improve practice in tackling PEA. Therefore, further research on this PEA definition by the public needs to be done as the public views and responses could be changed depending on social value or context.

### Biography

Masumi Hayashi is a postdoctoral researcher currently working at University of Tokyo. Her research interest is in child abuse and neglect. She has received research grants from Japan Society for the Promotion of Science.



## Multi-level classification of Alzheimer disease using DCNN and ensemble deep learning techniques

**M. Rajesh Khanna**

*Vel Tech Multi Tech Dr.Rangarajan Dr.Sakunthala Engineering College, India*

The utmost popular dementia cause is because the (AD) Alzheimer's disease. A continuous drop in mental ability is referred to as Dementia. Using the medical images of the brain, the developmental stages of AD symptom of neuropsychiatric functionality are analyzed often. Particularly in the area of classification and detection, cutting edge technologies which comprise computer algorithms, have been used for Alzheimer's disease diagnosis treatments. To improve prediction on new data, ensemble learning applies a group of decision-making systems that uses different strategies to unite classifiers. This paper uses the combination of (DCNN) and deep ensemble learning, i.e., MobileNetV2 and LSTM using magnetic resonance images (MRI). The ADNI dataset is used for the dementia stages classification. Compared to CNN, Deep Ensemble Learning (DEL) performs better. For the evaluation, six metrics were used; accuracy, the area under the curve (AUC), F1- score, precision, recall and computational time. In addition, the calculation for specificity and sensitivity is evaluated for the performance enhancement, which shows the exact affected area. A sensitivity of 94% and a specificity of 95% are obtained in the classification, respectively.

### Biography

Dr. M. Rajesh Khanna Ph.D Working As An Associate Professor In The Department Of Information Technology At Vel Tech Multi Tech Dr.Rangarajan Dr.Sakunthala Engineering College. He graduated in Information Technology at Anna University, Chennai, Tamilnadu, India. He secured Master of Engineering in Computer Science and Engineering at Crescent Engineering College, Chennai, India. He awarded doctorate Ph.D. in Computer Science and Engineering at St.Peter's Institute of Higher Education and Research Deemed to be university, Chennai, India. He is in teaching profession for more than 12 years. He has presented number of papers in National and International Journals, Conference and Symposiums. His main area of interest includes Artificial Intelligence, Deep Learning, Cloud Computing, Wireless sensor Networks and Internet of Things.



## Future perspectives of postbiotics: A promising approach to treat/prevent gastrointestinal diseases

**Mangala Lakshmi Ragavan**

*School of Biosciences and Technology, Vellore Institute of Technology, Vellore, India*

Humans and animal's health are significantly influenced by microbiota. Numerous systemic and GI inflammatory diseases have been linked to alteration of gut microbiome. The gut microbiota and its intricate relationship with the gut immune system have significantly improved through various aspects. In particular, commensal bacteria/probiotics exert health benefits in humans by producing metabolites like exopolysaccharides (EPS), antimicrobial proteins, vitamins, short chain fatty acids and etc,. In this study, we investigate the efficacy of postbiotics produced by probiotic yeasts. We have extracted the EPS and proteins from *Yarrowia lipolytica* VIT-MN01, *Kluyveromyces lactis* VIT-MN02 and characterized using various instrumental analyses. *K. lactis* VIT-MN02 showed significant EPS and antimicrobial protein secretion under optimized conditions using response surface methodology. The EPS was found to be a heteropolysaccharide and partially crystalline in nature (67%). It shows good adhesion properties on Caco-2 (74%) and IEC-6 (70%) cell lines. The IC<sub>50</sub> value of EPS was 1.5 g/ml whereas protein shows 600 mg/ml which confirmed the cytotoxicity level of the postbiotics produced by *K. lactis* VIT-MN02. Further, the antimicrobial activity of protein was tested against *Salmonella typhimurium*. The antagonistic activity of antimicrobial protein was found to be more while implementing exclusion (82%) method followed by competition (75%) and replacement (69%) methods. Furthermore, postbiotics were purified using appropriate methods and encapsulated using oats bran gum and whey protein to improve their survival under simulated gastrointestinal tract (GIT) conditions. Encapsulated postbiotics could increase the nutritional and commercial value of the product in the market. Therefore, postbiotics are promising bioactive compounds and may serve as dietary supplement for humans as well as animals.

### Biography

Mangala Lakshmi Ragavan is an active microbiologist in India. She is a self motivated person and working in the field of micro and molecular biology. She pursued Ph. D in Biomedical Sciences where she mainly focused on the gut microbiota for human and animal welfare. She has formulated microcapsules using cost effective material for easy gastrointestinal transit. She has proved her efficiency in teaching and supervision for postgraduate students. She received an award of senior research fellowship from Indian Council of Medical Research in 2019. She was selected as one of the young investigators in gut microbiome research by Gut Microbiota and Probiotic Science Foundation (India). She has experience in animal cell culture as well as animal studies. Now she is focusing in probiotics beyond the gut as a part of her postdoctoral research.



## Tinnitus control by auditory stroop training

**Maryam Emadi**

*Department of Audiology, School of Rehabilitation Sciences,  
Hamadan University of Medical Sciences, Iran*

**Background:** Deficit in cognitive functions and central executive function is one of the popular hypotheses on the underlying cause of tinnitus. Some studies expressed the effect of tinnitus on the inhibitory cognitive tasks, referring to the slower inhibitory results such as in the Stroop task in the people suffering from tinnitus as compared to normal subjects. Since Stroop engages the network overlapping the attention and tinnitus distress networks, it seems likely that Stroop exercises can effectively contribute to controlling the tinnitus and its consequent distress through improvement of the cognitive function and increasing the physiological inhibition.

**Method:** A total of 25 patients with chronic tinnitus (> 6 months) were randomly divided into two groups: an intervention group of 15 patients and a control group of 10 patients. Both groups were subjected to initial evaluations including pure tone audiometry, psychoacoustic measurements, tinnitus handicap inventory (THI) survey, and visual analogue scale (VAS) of annoyance and loudness. The intervention group underwent a rehabilitation program consisting of 6 Stroop training sessions. The control group didn't receive any training. Afterwards, both groups were reevaluated and the results were compared to those of initial evaluations.

**Results:** Results of this study indicated significant differences in THI scores and VAS of annoyance, before and after Stroop training in the intervention group, although no significant difference was observed when it came to VAS of loudness.

**Conclusion:** Successive sessions of conflict processing training can improve the annoyance of tinnitus by enhancing the patient's inhibition control, making this task a safe practice for tinnitus treatment.

### Biography

I have PHD in Audiology and now work as an assistant professor in audiology department of Hamadan University of Medical Sciences. I have been studying on tinnitus and general field of audiology.

My Phd thesis was about effect of neuromodulation and auditory Stroop training in tinnitus. Through which I especially focused on treating tinnitus patients. Nowadays, I am trying my hardest to study Cognitive Behavioral Therapy (CBT) and combination therapies of tinnitus.



## Novel triazole derivatives as potential rodenticides against the Norway rat, *R. norvegicus*: Histology, biochemical alternations, and field application

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Elsayed T. Helmy<sup>2</sup> and Usama A. Soliman<sup>3</sup>

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<sup>3</sup>Faculty of Science, Chemistry Department, Kingdom of Saudi Arabia

Economically speaking, rodents possess a serious threat to the agriculture sector. One of these organisms that directly threaten agriculture, stocks, and others is the Norway rat, *Rattus norvegicus* (*R. norvegicus*). The 2-cyano-N-(1H-1,2,4-triazol-3-yl) acetamide (1) was used as a precursor to give 2-cyano-3-(dimethylamino)-N-(1H-1,2,4-triazol-3-yl) acrylamide (2) and ethyl 2-amino-5-cyano-1,6-dihydro-6-oxo-1-(1H-1,2,4-triazol-3-yl) pyridine-3-carboxylate (3). Infra-red, 1H-NMR, 13CNMR, MS, and elemental analysis were done for the precise structure elucidation of the applied synthons. The prepared compounds were tested as potential rodenticides against the Norway rat, *Rattus norvegicus*. Several biological variables, such as alanine transaminase (ALT), aspartate transaminase (AST), serum urea, creatinine, and total protein, have been assessed and evaluated as biological response indicators. Analysis revealed a highly significant increase in both AST, ALT, urea, and creatinine levels, while the total protein level showed a considerable reduction in treated rats exposed to 2-cyano-N-(1H-1,2,4-triazol-3-yl) acetamide (1) and ethyl 2-amino-5-cyano-1,6-dihydro-6-oxo-1-(1H-1,2,4-triazol-3-yl) pyridine-3-carboxylate (3) when compared to the control treatment. Liver histological examination showed structural changes in the form of congestion in the central vein, necrosis in some hepatic regions, and pyknotic nuclei, while kidney histological examination showed vacuolar degeneration of the epithelial cells of some convoluted tubules and the disappearance of some glomeruli and other marked atrophies. Necrosis in some areas was noticed. Field application through bait consumption took place with a satisfactory reduction of 68.4% for ethyl 2-amino-5-cyano-1,6-dihydro-6-oxo-1-(1H-1,2,4-triazol-3-yl) pyridine-3-carboxylate (3), while it was 61.9% for 2 cyano N-(1H-1,2,4-triazol-3-yl) acetamide (1) when compared to the recommended Zinc phosphide commercial rodenticide that poses an 81% reduction.

### Biography

Ph.D in Organic Synthesis (Organic Chemistry), Faculty of Science, Mansoura University. Thesis title: ((Synthesis of some new cyanoacetamide derivatives and their

role in controlling some land snails))

Researcher, (Plant protection Research institute).

Pesticides, natural products and synthetic compounds application against different agricultural pests (insects, gastropods, rats...etc)

## Effects of opium inhalation on physical and biochemical parameters of stray dogs in Kabul city, Afghanistan

**Mohammad Monir Tawfeeq<sup>1</sup>, Asadullah Hamid<sup>2</sup>, Jahid Zabuli<sup>1</sup>, Sayed Abdul Jalil Hashimi<sup>1</sup>, Mohammad Khalid Formuli<sup>1</sup>, Shahpoor Rahmati<sup>1</sup> and Mohammad Bayer Darmal<sup>3</sup>**

<sup>1</sup>Department of Clinic, Faculty of Veterinary Science, Kabul University, Afghanistan

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<sup>3</sup>Department of Clinic, Faculty of Veterinary Science, Nangarhar University, Afghanistan

Afghanistan is one of the biggest opium producing country and provides a highest percentage of opium poppy in the world. There are more than a million drug addicts in the country, which most of them are living in public places. Stray dogs who lives with drug addicts are at highest risk of inhaling drugs. The aim of this study is to evaluate changes in physical and biochemical parameters of stray dogs living in close contact with drug addicts and inhaling drugs. Total of 12 dogs were assigned into two groups of healthy and infected (stray dogs who inhale drugs) dogs. Physical and biochemical parameters such as glucose, alkaline phosphatase (ALP), alanine aminotransferase (ALT), aspartate aminotransferase (AST), blood urea nitrogen (BUN), creatinine, triglyceride (TG), cholesterol, and total protein (TP) of both groups were evaluated. Subjective evaluation showed clinical changes such as congestion of conjunctiva in infected group. Biochemical examination showed significantly higher level of glucose ( $P<0.05$ ) and total protein ( $P<0.01$ ) in infected group compared to healthy group. The ratio of other biochemical parameters was slightly decreased as compare to healthy dogs. It can be concluded that inhalation of opium smoke may alter the physical and biochemical parameters of stray dogs living in close contact with drug addicts.

### Biography

In 2002 Dr. Tawfeeq earned his undergraduate degree (DVM), from veterinary faculty of Kabul University. Later, he completed his master degree in environment conservation at Tokyo University of Agriculture and Technology. Following that, he completed his PhD degree in veterinary science (Veterinary Internal Medicine) at Gifu University. From graduation (2014) up to now he is working in Department of Clinical Science, Faculty of Veterinary Science, Kabul University, as Associate Professor of Veterinary Internal Medicine. He publishes many research and review papers related veterinary internal medicine in different national and international journals. Now his research focus on pet animal, especial stray dogs.

## Healthy lifestyle & Addiction prevention and control: Focus on Islamic lifestyle

**M. Rabbani Khorasgani M<sup>1,2</sup>**

<sup>1</sup>Department of Cell and Molecular Biology & Microbiology, Faculty of Biological Science and Technology,  
<sup>2</sup>Research Center for Natural & Biopharmaceutical Products, University of Isfahan, Iran

Lifestyle includes behaviors and functions of individuals which are formed in a specific geographical, economic, political, cultural and religious context and influenced by them. The human lifestyle impacts different aspects of human life. In the article, the effects of human lifestyle especially Islamic lifestyle on addiction, as one of the major socio-economic problems affecting the physical and mental life of individuals and society have been briefly described as the following:

1. The linkage between human health with lifestyle
2. Islamic lifestyle as comprehensive life plan that includes different aspects of human body and soul
3. Beneficial effects of Islamic lifestyle for addiction prevention and control
  - 3.1. The central role of keep healthy in Islamic teachings and the obligation to maintain hygiene
  - 3.2. Nutritional lifestyle: The need to evaluate the benefits and harms of Edibles and the sanctity of using harmful substances such as alcoholic beverages
  - 3.3. Family lifestyle: Emphasis on family formation, as the divine building block of society, without delay and having a healthy, happy, lovely and qualified family relationships with spirituality support and respect each other
  - 3.4. Sexual relationship lifestyle through Islamic instructions for enjoyable and healthy sexual relations and prevention of uncontrolled behaviors
  - 3.5. The Islamic beliefs and practices such as devotional activities
    - The emphasis on spiritual health strengthening, piety and abstinence "Taghva"
    - Necessity of pay attention to the rights of others
    - Purity and hygiene of human bodies against filthy: carcass (corpse), blood, urine, feces and semen

3.6. Sleep and awakening pattern with preventive effects against addiction

3.7. Islamic social lifestyle with emphasis on interpersonal relationships with people within their immediate surroundings or general public (avoidance of social isolation and loneliness), suitable gatherings with different purposes including: familial, social, political, religious, travel and tourism events and safe recreation and entertainment activities without unsafe smoking, drug abuse and alcohol drinking

What has been above mentioned is indicating beneficial role of Islamic lifestyle on prevention and control of addiction that would be exploited successfully.

## Biography

Mohammad Rabbani Khorasgani is a professor in University of Isfahan, IRAN. He has DVM and PhD in microbiology degrees. He has published more than 70 articles about infectious diseases, evaluation of natural materials effects for prevention and control of diseases especially infectious diseases. Many of his researches has focused on probiotics. He has some interdisciplinary articles especially about: bioethics, Islamic lifestyle and health relationship, also.





## Molecular imaging and CD9 based nano-sensors promises to deliver a more precise diagnosis in clinical applications

**Mujib Ullah**

*Stanford University School of Medicine, USA*

**M**olecular imaging is a field of medical imaging that allows visualization, characterization, and measurement of biological processes at the molecular and cellular levels. It provides a non-invasive way to study the biological processes and functions in living organisms in real-time. There are several types of molecular imaging techniques, including positron emission tomography (PET), single photon emission computed tomography (SPECT), magnetic resonance imaging (MRI), computed tomography (CT), and optical imaging. These techniques utilize various imaging agents or probes that are designed to target specific molecules or cellular processes in the body. Molecular imaging has a wide range of applications in medical research and clinical practice. It can be used for early detection, diagnosis, and monitoring of various diseases, including cancer, cardiovascular diseases, neurological disorders, and infectious diseases. It can also be used for drug development and evaluation, as well as for understanding the underlying mechanisms of disease and therapy. The level of CD9 expression can provide useful information for diagnostic and prognostic purposes, as well as for monitoring the response to therapy. CD9 is a gene that codes for a protein known as tetraspanin-29 (TSPAN29), which is a member of the tetraspanin family of transmembrane proteins. The CD9 protein is involved in a variety of cellular processes, including cell adhesion, migration, and signaling. A CD9 sensor refers to a biosensor that is designed to detect the presence or activity of CD9 molecules. Biosensors are analytical devices that use biological components, such as enzymes or antibodies, to detect and measure specific molecules in complex samples, such as blood, urine, or saliva. Overall, CD9 sensors for exosomes have the potential to provide valuable information for diagnosis, monitoring, and treatment of various diseases, including cancer. The development of CD9 sensors for exosomes could lead to the development of new diagnostic and therapeutic tools for precision medicine.

### Biography

Dr. Mujib Ullah has completed his PhD in tissue engineering/regenerative medicine, and postdoctoral studies from Stanford University School of Medicine. Dr Ullah is the medical investigator in the Department of Regenerative Medicine, Stanford University. Previously he worked in Harvard University and MIT. He is editor-in-chief for Artificial Intelligence in Cancer, guest editor for ACS Nano, and section editor for Stem Cells Research and Therapy and Nature. He has published numerous papers and has served as an editorial board member for many journals, such as the American Journal of Bioscience and Bioengineering. Dr Ullah has designed many labs, protocols, and study sections. He has mentored many undergraduate, graduate, and postgraduate students. He has supervised and managed many projects and is the advisor for Bio Thinking and Bio Aims Society. He has received many grants, awards, and fellowship in the field of stem cells regeneration and the CPRIT award for Cancer therapies. He has established cell banks for worldwide distribution under NIH and FDA guidelines. He has developed quality assurance protocols for the Food and Drug Administration to monitor stem cell therapies in regenerative medicine.



## Memory, Materiality, and Material Ecologies of Remembering in Trans Autistic narratives

**Niranjana Ganesan**

*Vellore Institute of Technology, India*

**T**ransgender people, like cisgender men and women, experience other illnesses and medical conditions. This paper focuses on analysing the narratives of neurodivergent trans women and men. It mainly focuses on analyzing trans people diagnosed with autism. Autism Spectrum Disorder (ASD) is a type of developmental disability that can result in significant challenges in social and communicative settings. The severity of this disorder varies from person to person, with individuals who have been diagnosed with autism exhibiting a range of thinking, learning, and problem-solving difficulties - from being gifted to being severely challenged. Contributing factors to the development of autism include genetic factors, chromosomal conditions such as fragile X syndrome or tuberous sclerosis, and drug exposure during pregnancy. This condition can occur in children before, during, or immediately after birth. ASD affects individuals from all ethnic, racial, and socioeconomic backgrounds. The umbrella term of ASD encompasses what were once considered separate conditions, such as Autism, Asperger's syndrome, childhood disintegrative disorder, and an unspecified form of pervasive developmental disorder. Neurodivergent trans people suffer at the hands of the discriminating society due to the intersection of Gender and autism in their identity. Autistic people are more burdened in advocating for their rights due to their lack of cognitive abilities. Therefore, they never get access to adequate healthcare and other legal benefits. Many of the autistic transgender narratives analysed in this study demonstrate their inability to articulate their Gender dysphoria. Hence, they suffer more in society. The authors examined in this study explicate the intersection of neurodivergence and gender divergence in the lives of transgender people and how they prevent them from gaining access to a quality life. This study analyzes four short autobiographical slices from Spectrums in terms of memories, materialities, surgeries, and neurodivergence.

### Biography

The author is an assistant professor (part-time) at Vellore Institute of Technology, Chennai, who completed her doctoral research on memories, materialities, and ecologies of remembering in LGBTQIA+ narratives, currently working on qualitative inquiry in post-human studies, and possesses a good number of publications in Scopus and Web of Science indexed journals like Dementia (Q2), Cotemporary South Asia (Q2), Human Arenas (Q2) and Rupkatha Journal of interdisciplinary studies in Humanities with six years of IT industry experience. She is a peer reviewer in Rupkatha Journal on Interdisciplinary Studies in Humanities, International Journal of Literary Humanities, Taylor and Francis, Sage, Springer, and Elsevier Journals as well as a member of the Indian Network of Memory Studies.

## Melatonin mitigates oxidative stress in linuron-induced testicular injury in Wistar rats

**Sakina Chaib<sup>1</sup>, Faouzia Trea<sup>1</sup>, Lazhari Tichati<sup>2</sup>  
and Kheireddine Ouali<sup>2</sup>**

<sup>1</sup>Environmental Biomonitoring Laboratory (LBSE), Biology Department, Faculty of Sciences, Badji Mokhtar University, Algeria

<sup>2</sup>Environmental Research Center (ERC), Campus Sidi Amar, Algeria

Numerous studies have demonstrated that natural antioxidants protect cells from contaminants' toxic effects. This study aims to investigate the potential protective effects of melatonin (MLT) against linuron-induced testicular toxicity and spermatogenesis damage. Rats were divided into four groups: the control group (no treatment), the MLT group that received MLT (10 mg/kg b.w), the LIN group that received LIN (120 mg/kg b.w), and (LIN/MLT) group treated with LIN and MLT. The investigated substances MLT and linuron (LIN) were given orally to the animals for 30 days. The results showed that linuron treatment-induced testicular dysfunctions demonstrated significant inhibition of pituitary–testicular axis hormone synthesis (diminution serum levels of testosterone, FSH, and LH) associated with spermatogenesis injury improved by low Johnsen scores and increased in testis CD117 expression. Furthermore, superoxide dismutase (SOD) and catalase (CAT) activities, as well as reduced glutathione (GSH) content, were significantly decreased. In contrast, there was a considerable rise in the activity of glutathione S-transferase (GST), glutathione peroxidase (GPx), malondialdehyde (MDA), and protein carbonyl (PCO). Our results established that oral MLT supplementation in LIN-treated rats restored plasma hormone levels and alleviated the adverse cytotoxic effects of LIN. According to the findings, MLT demonstrated potential as an endogenous antioxidant, effectively alleviating linuron-induced testicular oxidative injury.

### Biography

Sakina Chaib is a PhD student in cellular physiology and physiopathologies, she is also a part-time lecturer at the University of Annaba, member researcher of the LBSE laboratory (Laboratory of Environmental Biosurveillance), University of Annaba. She has produced several papers addressing the question of the cytoprotective effect of melatonin on local herbicide-induced gonadotoxicity. In 2023, she published a paper in Springer on the attenuation of oxidative stress in linuron-induced testicular lesions in Wistar rats.



## How to improve health care for women who use drugs? A comparison between Bordeaux and Montreal

**Sarah Perrin**

*ISPED, University of Bordeaux, France*

In France, as in Canada, women who use drugs are in the minority among the care systems, even though drug use has become more feminized in the Western world since the 1990s. This communication aims to understand this reduced recourse to care for women who use drugs, and to propose solutions to improve health care of these women. The results presented are based on 97 interviews carried out with women and men who use drugs and who do not recourse to care, with health professionals and with actors and experts in drug-related public policies, in Bordeaux and Montreal. There are very few single-sex spaces in the two cities, even though we know that they facilitate the venue of female drug users. In Bordeaux, single-sex spaces are in contradiction with the gender blind model linked to French-style republican universalism, while in Montreal, single-sex spaces are encouraged by the community health model but often too little funded. Most of the women met have already felt judged or misunderstood by health professionals who are not specialized in addiction, and this dissuaded them from contacting care structures afterwards. Faced with these elements, peer support, more developed in Montreal than in Bordeaux, appears to be a key resource for encouraging the arrival of women in the structures, with a view to community health. Indeed, to reach a hidden population that avoids the medical environment and institutional devices, it seems useful to reduce the social distance between the worker and the users. However, peer support is still difficult to accept in care structures in Bordeaux, with some professionals reluctant to employ drug users. It is also necessary to rethink gender equality in France, from a gender transformative health perspective, by considering the gender inequalities that mark the trajectories of the women who use drugs.

### Biography

I am currently teaching assistant at ISPED (Institute of Public Health, Epidemiology and Development) and regional coordinator of the TREND system (Recent trends and new drugs) in New Aquitaine (France). I am a Ph.D in sociology, and I defended my thesis in 2022, which focuses on the trajectories of women socially integrated into the worlds of drugs, in Bordeaux and Montreal. Today I work as a sociologist in the field of public health; my areas of specialization are drugs, harm reduction and gender



## ERCC2 rs13181 polymorphism association with Glioma Risk: An update Meta-Analysis

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<sup>1</sup>Department of Biostatistics, School of Health, Kermanshah University of Medical Sciences, Iran

<sup>2</sup>Student Research Committee, Kermanshah University of Medical Sciences, Iran

<sup>3</sup>Medical Biology Research Centre, Kermanshah University of Medical Sciences, Iran

<sup>4</sup>Faculty of Health and Life Sciences, School of Life Sciences, Coventry University, UK

<sup>5</sup>Department of Neurosurgery, School of Medicine, Kermanshah University of Medical Sciences, Iran.

<sup>6</sup>Department of Radiation Oncology, School of Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran

<sup>7</sup>Cellular and Molecular Research Center, Gerash University of Medical Sciences, Iran


<sup>8</sup>Department of Food Science & Technology, Faculty of Agriculture, Ferdowsi University of Mashhad (FUM), Iran

**T**his study investigates how a gene variant called ERCC2 rs13181 polymorphism affects the risk of developing glioma. The findings of the previous studies are often contradictory. Therefore, we have conducted a systematic review and meta-analysis to assess this relationship. Previous studies on this topic are reviewed and analysed using various databases until June 2020. The random effects model was used to analyse the studies and their heterogeneity was investigated with the I<sup>2</sup> index. Data analysis was performed within the Comprehensive Meta-Analysis software (version 2). The total number of studies that focused on patients with glioma was 10. The odds ratio of GG vs TT genotype in patients with glioma based on meta-analysis was 1.08 (0.85-1.37: 95% confidence interval), which indicates the increasing effect of GG vs TT genotype by 0.08. The odds ratio of GG + TG vs TT genotype in patients with glioma was 1.22 (1.38-1.7: 95% confidence interval) based on meta-analysis, which indicates the increasing effect of GG + TG vs TT genotype as 0.22. The odds ratio of TG vs TT genotype in patients with glioma was 1.2 (0.38-1.4: 95% confidence interval), which shows the increasing effect of TG vs TT genotype by 0.2. The odds ratio of G vs T genotype in patients with glioma based on the meta-analysis was 1.15 (1.26-1.4: 95% confidence interval), which indicates the increasing effect of G vs T genotype by 0.15. The odds ratio of GG vs TG + TT genotype in patients with glioma based on meta-analysis was 1.22 (1.33-1.45: 95% confidence interval), which indicates the increasing effect of GG vs TG + TT genotype by 0.22. The results of this systematic review and meta-analysis show that ERCC2 rs13181 polymorphism and its genotypes are an important risk factor for genetic susceptibility to glioma tumour.

## Biography

A highly motivated MA graduate, Shervin Shabani, majored in microbiology at the Islamic Azad University of Urumieh. His skills in working with computers together with his passion for microbiology led him into the Genetics Laboratory of his University. Soon he learned how to use the equipment there and even started teaching other students. As a result, he was given the position of students' supervisor for their laboratory research projects. Working two years as an expert in the Genetics Laboratory exacerbated his enthusiasm for wanting to start his own research studies. This insatiable desire led to publishing several scientific and review research articles in the world's most valid journals. Being extremely diligent and considerably good at teamwork has helped him carry out a successful academic life. His never-ending passion lies in biotechnology and medical genetics.





## **Posttraumatic Growth and its predictors among mothers of neonates with hyperbilirubinemia**

**Simplejit Kaur Dhanoa**

*Associate Professor & Head, Dept. of Psychology, Chandigarh University, India*

Neonatal care is important aspect of parenting. Preterm infants are at higher risk for developmental delays and even suffer from various complications like hyperbilirubinemia. Chronic medical circumstances become distress for primary caregivers. However, coping skills and personality traits promote positive growth after and during those stressful conditions. In this present study caregivers of preterm neonates with severe jaundice were studied to find out the predictors of post-traumatic growth. The sample of 100 mothers was collected with the help of standardized psychological tools. The results of this study reveals that variables such as coping skills, personality traits, family environment and parental stress are act as predictors of post-traumatic growth among mothers of neonates with severe jaundice. Further, suggestions and recommendations were incorporated to prevent caregiver stress at initial stage and also need to promote mental health care at antenatal and postnatal levels.

## Sustained Release Of Propranolol Hydrochloride Laden Biconjugated-Ufasomes Chitosan Hydrogel Attenuates Cisplatin-Induced Sciatic Nerve Damage In Vitro/ In Vivo Evaluation

**Yasmin M Ahmed<sup>1</sup>, Raha Orfali<sup>2</sup>, Doaa S Hamad<sup>3</sup>,  
Mostafa E Rateb<sup>4</sup> and Hanan O Farouk<sup>5</sup>**

<sup>1</sup>Department of Pharmacology and Toxicology, Faculty of Pharmacy, Nahda University, Egypt

<sup>2</sup>Department of Pharmacognosy, College of Pharmacy, King Saud University, Saudi Arabia

<sup>3-5</sup>Department of Pharmaceutics, Faculty of Pharmacy, Nahda University, Egypt

<sup>4</sup>School of Computing, Engineering and Physical Sciences, University of the West of Scotland, UK

Peripheral nerve injuries significantly impact patients' quality of life and poor functional recovery. Chitosan-ufasomes (CTS-UFAs) exhibit biomimetic features, making them a viable choice for developing novel transdermal delivery for neural repair. This study aimed to investigate the role of CTS-UFAs loaded with propranolol HCl (PRO) as a model drug in enhancing sciatica in cisplatin-induced sciatic nerve damage in rats. Hence, PRO-UFAs were primed, embedding either span 20 or 60 together with oleic acid and cholesterol using a thin-film hydration process based on full factorial design (24). The influence of formulation factors on UFAs' physicochemical characteristics and the optimum formulation selection were investigated using Design-Expert® software. Based on the optimal UFA formulation, PRO-CTS-UFAs were constructed and characterized using transmission electron microscopy, stability studies, and ex vivo permeation. In vivo, trials on rats with a sciatic nerve injury tested the efficacy of PRO-CTS-UFA and PRO-UFA transdermal hydrogels, PRO solution, compared to normal rats. Additionally, oxidative stress and specific apoptotic biomarkers were assessed, supported by a sciatic nerve histopathological study. PRO-UFAs and PRO-CTS-UFAs disclosed entrapment efficiency of  $82.72 \pm 2.33\%$  and  $85.32 \pm 2.65\%$ , a particle size of  $317.22 \pm 6.43$  and  $336.12 \pm 4.9$  nm,  $\zeta$  potential of  $-62.06 \pm 0.07$  and  $65.24 \pm 0.10$  mV, and accumulatively released  $70.95 \pm 8.14\%$  and  $64.03 \pm 1.9\%$  PRO within 6 h, respectively. Moreover, PRO-CTS-UFAs significantly restored sciatic nerve structure, inhibited the cisplatin-dependent increase in peripheral myelin 22 gene expression and MDA levels, and further re-established sciatic nerve GSH and CAT content. Furthermore, they elicited MBP re-expression, BCL-2 mild expression, and inhibited TNF- $\alpha$  expression. Briefly, our findings proposed that CTS-UFAs are promising to enhance PRO transdermal delivery to manage sciatic nerve damage

### Biography

Yasmeen Moustafa Ahmed is a lecturer of pharmacology at Nahda University, Beni-Seuif Egypt.. she holds a Ph.D. and a Masters in pharmacology and toxicology from the faculty of Pharmacy Beni-Seuif Egypt. She is a member of the Editorial Board of the Journal of chronic disease research.

## Insulin-degrading enzyme: Roles and pathways in ameliorating cognitive impairment associated with Alzheimer's disease and diabetes

**Yue Tian and Mengren Zhang**

*Department of Traditional Chinese Medicine, Peking Union Medical College Hospital, Peking Union Medical College and Chinese Academy of Medical Sciences, China*

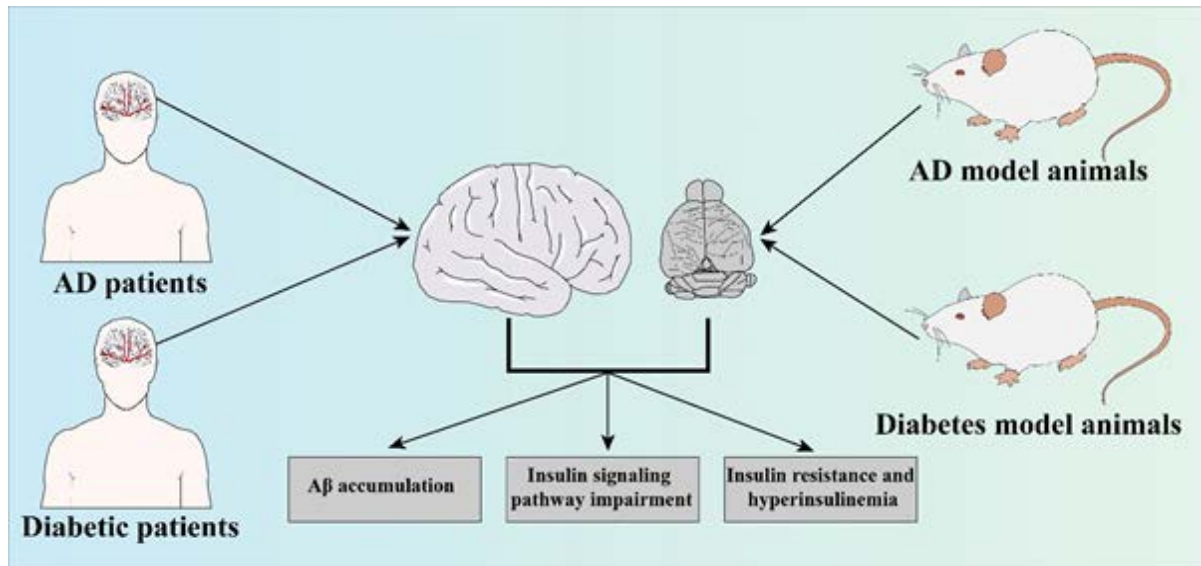
**A**lzheimer's disease (AD) and diabetes cognitive impairment (DCI) exhibit similar pathological characteristics, specifically the excessive accumulation of  $\beta$ -amyloid ( $A\beta$ ) in the central nervous system (CNS). Consequently, AD has been referred to as "type 3 diabetes" by researchers. Insulin-degrading enzyme (IDE) is an enzyme capable of degrading both insulin and  $A\beta$ , prompting extensive investigation into the mechanisms through which IDE can improve these two cognitive disorders.

In terms of basic research, several potential mechanisms have been identified by which IDE improves AD and DCI. These mechanisms include increased expression of IDE in the CNS, facilitating the degradation of  $A\beta$  and thereby reducing its accumulation in the brain.

Furthermore, IDE may ameliorate AD-related cognitive impairments by alleviating neuronal damage, suppressing excessive activation of glial cells, and inhibiting the excessive release of inflammatory factors. In relation to AD-related pathways, IDE may decrease the accumulation of  $A\beta$  in the CNS, subsequently improving AD-related cognitive impairments

through activation of the PI3K/Akt/GSK3 $\beta$ , PPAR $\gamma$ , and AMPK pathways, or inhibition of the ERK/JNK/p38 MAPK and NF- $\kappa$ B pathways. Additionally, in the study of DCI, IDE may improve this condition by activating the PI3K/Akt/GSK3 $\beta$  pathway or inhibiting the Cdk5/p35 and cAMP/PKA pathways, and reducing  $A\beta$  accumulation and neuronal apoptosis in the brains of DCI models.

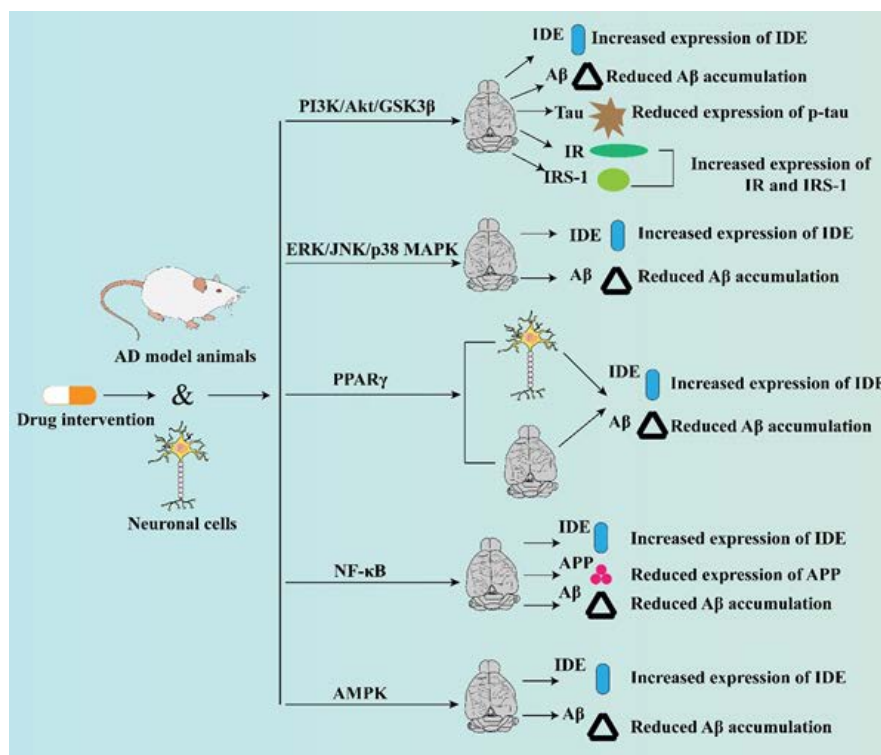
In conclusion, considering the shared pathological characteristics of AD and DCI, as well as the involvement of IDE in  $A\beta$  degradation, IDE emerges as a promising therapeutic target for improving both conditions. However, the underlying mechanisms through which IDE functions still necessitate further research and exploration. We anticipate more innovative research findings regarding IDE in the treatment of AD and DCI, which will potentially expand the range of scientifically effective candidate drugs for clinical treatment.



**Figure 1.** Common features of AD and diabetes-related cognitive impairment.

The accumulation of A $\beta$  in the brain, impaired insulin-related pathways, insulin resistance, and hyperinsulinemia are observed in both AD and diabetes-related cognitive impairment, indicating that these features may be common pathogenic mechanisms in the two conditions.

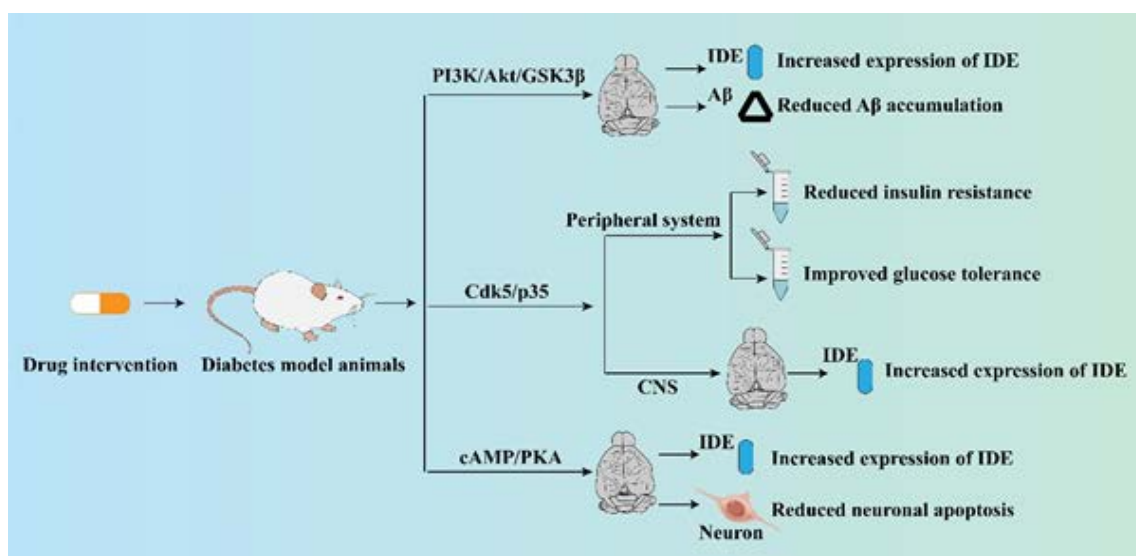
Abbreviations: A $\beta$ : amyloid- $\beta$ ; AD: Alzheimer's disease.



**Figure 2.** Possible signaling pathways involved in IDE-mediated improvement in cognitive impairment in AD models.

PI3K/Akt/GSK3 $\beta$ , ERK/JNK/p38 MAPK, PPAR- $\gamma$ , NF- $\kappa$ B and AMPK signaling pathways may improve cognitive impairment in AD by promoting the expression of IDE in the CNS and the degradation of A $\beta$ .

Abbreviations: A $\beta$ : amyloid- $\beta$ ; AD: Alzheimer's disease; Akt: protein kinase B; AMPK: AMP-activated protein kinase; APP: amyloid precursor protein; ERK: extracellular regulated protein kinases; GSK-3 $\beta$ : glycogen synthase kinase-3 $\beta$ ; IDE: insulin-degrading enzyme; IR: insulin receptor; IRS-1: insulin receptor substrate 1; JNK: c-Jun N-terminal kinase; MAPK: mitogen-activated protein kinases; NF- $\kappa$ B: nuclear factor kappa-B; PI3K: phosphoinositide 3- kinase; PPAR- $\gamma$ : peroxisome proliferator-activated receptor- $\gamma$ ; p-tau: phosphorylated tau.



**Figure 3.** Possible signaling pathways involved in IDE-mediated improvement in cognitive impairment in diabetes models.

## Biography

Yue Tian, aged 28, is currently pursuing a doctoral degree in Integrative Clinical Medicine at Peking Union Medical College. His research primarily focuses on the use of traditional Chinese medicine (TCM) in the prevention and treatment of Alzheimer's disease and cognitive impairments associated with diabetes. He has published three academic papers in this area. In the future, he intends to continue his research, with a specific emphasis on the fundamental and clinical studies of TCM for age-related cognitive impairments. His goal is to promote new developments in the field of foundational scientific research and clinical treatments related to TCM.





## Effect of melatonin on learning and memory in drug-free patients with schizophrenia

Yun Bian<sup>1</sup>, Chen Lin<sup>1</sup>, Botao Ma<sup>1</sup>, Zhixiong Wang<sup>1,2</sup>, Juyan Li<sup>1</sup>, Yu Zhu<sup>1</sup>, Xiaole Han<sup>1</sup> and Fude Yang<sup>1</sup>

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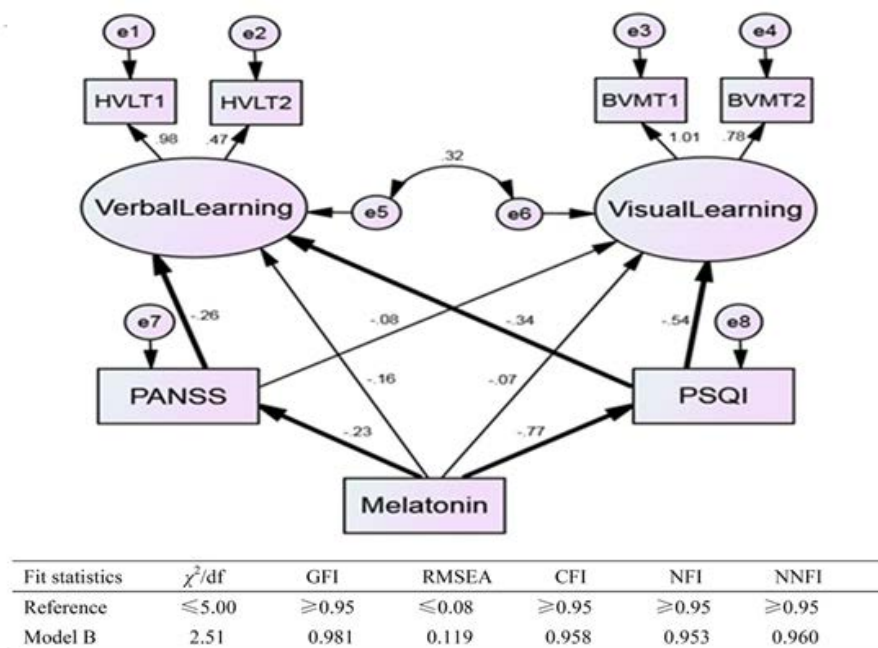
**Objective:** This study aims to elucidate the association paths between melatonin and the learning and memory ability in drug-free patients with schizophrenia.

**Methods:** A total of 108 schizophrenia patients and 109 healthy controls were enrolled in this study. Hopkins Verbal Learning Test-Revised and Brief Visuospatial Memory Test-Revised were used to assess the patient's ability to learn and memory. ELISA was used to measure the melatonin concentration in saliva from all subjects at 02:00 under dim light conditions. Structural equation modelling was performed to examine the relationship between melatonin and the learning and memory ability. The model was further modified and fitted.

**Results:** The results showed that schizophrenia patients had lower levels of melatonin at night compared to healthy controls. Melatonin was associated with performance on tests of learning and memory and indirectly affected learning and memory through psychotic symptoms or sleep quality in drug-free patients with schizophrenia.

**Conclusion:** Melatonin may be an intervention target for improving cognitive function in patients with schizophrenia.





**Figure 1. Structural equation model of melatonin affecting learning and memory**

The standardized regression coefficients between the variables are shown above each path. All significant paths are in bold ( $p < 0.05$ ).

HVLT1: instant recall scores of the Hopkins Verbal Learning Test-Revised; HVLT2: delayed recall scores of the Hopkins Verbal Learning Test-Revised; BVMT1: instant recall scores of the Brief Visuospatial Memory Test-Revised; BVMT2: delayed recall scores of the Brief Visuospatial Memory Test-Revised; PANSS: Positive and Negative Symptom Scale; PSQI: Pittsburgh Sleep Quality Index.

$\chi^2/df$ : chi-square/degree of freedom; GFI: goodness-of-fit index; RMSEA: root mean square error of approximation; CFI: comparative fit index; NFI: normal fit index; NNFI: non-normal fit index.

## Biography

### I. Education

Ph.D. Psychiatry and Mental Health, Peking University, Beijing, July.2022.

M.S. Psychiatry and Mental Health, Peking University, Beijing, July.2014.

### II. Position

Associate chief physician & Director of Psychosomatic Medicine Department, Peking University Huilongguan Clinical Medical School, Beijing 100096, China

### III. Research Project

1. 7254208 Beijing Natural Science Foundation "The influence of left-handed genetic quality and acquired transformation on the epidemiology of schizophrenia" role: PI, Jan.2015-Dec.2016

2. 2015CB856404 (The national "973" Plan) "Neuroimaging mechanism of sleep on cognitive regulation" role: PI of cooperation project, Aug.2016-Nov.2017

3. QML20162002 Beijing Municipal Administration of Hospitals'Youth Programme

"Study on phase II sleep spindle wave as endophenotype of cognitive impairment in schizophrenia" role: PI, Jan.2017-Dec.2018

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1. Yun Bian , Zhi Xiong Wang, Xiao Le Han, et al. Sleep state misperception in schizophrenia: Are negative symptoms at work? Comprehensive psychiatry.2016, 67: 33-38.

2. Chen Lin, Yun Bian (Co first author), Xiaole Han, et al. Gray matter reduction in currently depressed patients of major depressive disorder: a Meta-analysis.Neuropsychiatry. 2017,7(5):640-652.

3. Wang Zhixiong, Lin Chen , Ma Botao , Bian Yun□Corresponding author□. Activities of daily living in hospitalized patients with mental disorders. Asian journal of psychiatry.2018,32:77-78.

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8. Luyuan Bai, Weiye Liang, Yun Bian□Corresponding author□. Effects of Adjunctive Betahistine Therapy on Lipid Metabolism in Patients with Chronic Schizophrenia: A Randomized Double-Blind Placebo-Controlled Study Neuropsychiatr Dis Treat. 2023, 19:453-460.

## Validity and reliability of the Persian version of PRAFAB questionnaire in Iranian women with urinary incontinence

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<sup>3</sup>Pelvic care Unit Maastricht, CAPHRI, Maastricht University Medical Centre (MUMC+), The Netherlands.

**Introduction:** Urinary Incontinence (UI) is a common disorder in women which can affect a person's quality of life. There are several instruments to assess the severity of urinary incontinence. One of the common tools is PRAFAB questionnaire. Therefore, this study was performed with the aim of assessing the validity and reliability of the Persian version of the PRAFAB questionnaire.

**Aim:** We evaluated the Persian version of Protection, Amount, Frequency, Adjustment, Body image (PRAFAB) questionnaire validity and reliability.

**Methods:** First, the English version of the questionnaire was translated into Persian. Second, the psychometric properties of the Persian version were collected in 60 women with urinary incontinence referred to Al-Zahra Hospital by an expert team. Content validity (CV) was evaluated through CV index (CVI) and CV ratio (CVR). Construct validity was evaluated using exploratory factor analysis and reproducibility was tested based on test-retest reliability using intraclass correlation coefficient (ICC). Internal consistency was calculated using Cronbach's  $\alpha$ .

**Results:** The results showed acceptable CVI in relevancy, clarity and simplicity, acceptable CVR for all items, good internal consistency (Cronbach's  $\alpha=0.738$ ) and excellent repeatability (ICC=0.98).

**Conclusion:** The Persian version of the Protection, Amount, Frequency, Adjustment, Body image (PRAFAB) questionnaire has acceptable validity and reliability and in future it can be used as a suitable evaluation instrument to assess urinary incontinence in Iranian women.

### Biography

Zahra Chakeri\*: PhD student, Department of Physiotherapy, Faculty of Rehabilitation Sciences, Tabriz University of Medical Sciences, Tabriz, Iran.



## Infection after surgical implant generation network (SIGN) nailing in treatment of long bone shaft fractures in Ethiopia: analysis of a 4-year results

**Almaw Bitew and Birhanu beza**

*University of Gondar, Ethiopia*

**Background:** One of the challenge to manage long bone fracture is the risk of infection. Intramedullary nailing is the standard treatment of long bone shaft fractures. Infection from the surgical site during orthopedic management is posing postoperative burdens in different perspectives like patient perspectives and healthcare facilities. However, there is limited information on the magnitude of infection in Ethiopia after surgical implant generation network (SIGN) nailing in the treatment of long bone shaft fractures. Therefore, the current study aimed to assess the prevalence of infection in patients with long bone shaft fractures treated with surgical implant generation network (SIGN) nailing.

**Objective:** To assess prevalence of infection in patients with long bone shaft fractures treated with SIGN nailing at Felege Hiwot Referral Hospital from January 1, 2015, to December 31, 2018, Bahir Dar, Northwest, Ethiopia.

**Methods:** This was a retrospective study over a period of 4 years. SIGN surgical-related data, presence or absence of infection from the documented information was collected from the chart/the source. The types of infection were also collected with the standard classification as superficial, deep and deep with osteomyelitis. Age, sex, fracture pattern, nature of fracture, mechanism of injury, prophylaxis antibiotics, nail type, follow-up in weeks and other factors were also extracted from the patients' charts with structured checklist. Data were analyzed with statistical package for social sciences (SPSS) version 23. The analyzed data were presented with texts, tables and a graph.

**Results:** Three hundred and eighty-two long bone fractures were treated by locked SIGN intramedullary nailing during the study period. After screening the inclusion criteria, a total of 311 cases were included in this study. A total of 13 (4.2%) patients who treated with SIGN intramedullary nailing developed infection.



## Modifiable risk factors associated with Post-Operative bleeding and transfusion requirements in Cardiac surgery

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<sup>1</sup>Armed Forces Institute of cardiology/National Institute of heart diseases, Pakistan

<sup>2</sup>Afridi Medical Complex and teaching hospital, Pakistan

**Objectives:** In this study we determine the modifiable factors related to bleeding and transfusion in post-cardiac surgery patients who underwent open heart surgery.

**Methods:** This is a retrospective study that includes two hundred patients who had undergone open heart surgery (OHS) at Northwest General Hospital and Research Center from December 2018 to July 2021. Platelet count and hemoglobin level were measured in the pre-operative period.

**Results:** This study included both male and female patients. Postoperative platelets were counted as follow: 50-100 x10<sup>9</sup> L in 3.0% cases, 101-150 x10<sup>9</sup> L seen in 27.5% cases, and >150 x 10<sup>9</sup> L in 69.5% cases which required transfusion. We have also reported the increased requirement of transfusion of blood and blood products in patients with pre-operative hemoglobin (Hb) < 10 g/dl.

**Conclusion:** Correction of pre-op Hb, post-op platelet count and total bypass time are the significant and preventable parameters in patients undergoing cardiac surgery if proper pre-op assessment of the patient is performed.

**Table-III** Association of Total Bypass time with Post-operative Bleeding.

Post-operative bleeding	Total Bypass time				Total
	<60	61-120	>120	OPCABG	
0-250	5.9%	1.4%			1.5%
251-500	11.8%	17.6%	6.7%	25.0%	17.0%
501-750	41.2%	50.7%	80.0%	55.0%	52.5%
>750	41.2%	30.4%	13.3%	20.0%	29.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%



## Biography

Dr Mujeeb Ur Rehman

- Father's Name Muhammad Noor Khan
- Date of birth 5<sup>th</sup> March 1990
- Nationality Pakistani
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- N.I.C No 21506-4843618-3
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- Marital status Married
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- MS in cardiothoracic surgery (July 2019), Tianjin Medical University General Hospital Beijing China.
- Fellowship in Pediatric and congenital heart surgery (2023), Armed Forces Institute of Cardiology/ National Institute of heart diseases- Rawalpindi, Pakistan
- US Equivalency of MD and MS May 2022.
- Certificate in Health Research: September 2022, Khyber Medical University, Peshawar Pakistan
- Post graduate Additional, Alternate qualifications, as notified by the Pakistan Medical Commission. (August 2019)
- MBBS (June 2015) Jujiang University China
- HSSC (April 2009) B.I.S.E., Peshawar, KPK, Pakistan
- SSC (June 2006) B.I.S.E. Bannu KPK, Pakistan

## Oral hemorrhagic blister and its possible related factors: Analyzes of reported cases in the literature

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**O**ral hemorrhagic blister and its possible related factors: Analyzes of reported cases in the literature

**Objective:** Oral blood blister, also known as angina bullosa hemorrhagica (ABH), is a rare lesion involving the oral cavity and agitates patients due to its dreadful appearance. This review aims to summarize oral blood blister cases in the literature.

**Methods:** This study is based on the PRISMA guideline. An online search was conducted in PubMed/MEDLINE and Scopus databases without any restriction, and 45 articles were included.

**Results:** Oral blood blister was slightly more prevalent in women, with a ratio of 1.09. The patients' average age was 59.93, and more than half of them were in their lives fourth to sixth decades. Half of the lesions were located on the palate, whereas the tongue, buccal mucosa, lips, the floor of the mouth, and uvula were the other common sites, respectively. Almost one-third of the cases were asymptomatic; however, pain, bleeding, and burning sensation were common symptoms in others. Eating trauma was the most relevant causative factor of this entity (57 %), yet no admissible cause was mentioned in 25 % of the cases. Hypertension, diabetes mellitus, and endocrine disease were among the most frequently reported underlying disorders. COVID-19 has been reported in a confined number of cases. In 60 % of cases, no therapeutic intervention was mentioned, while using mouthwash (6.2 %) and topical analgesics (5.1 %) as means of medicament were also mentioned in the literature.

**Conclusion:** Oral blood blister is more common in middle-aged and elderly patients and is slightly more frequent in women. Physical trauma is the major cause of this lesion.

### Biography

Ali Sadeghian is a dentist and researcher graduated from Shahid Beheshti Medical University, Iran, Tehran.



## Adverse Cutaneous reactions to psychotropic drugs

A.El Kissouni<sup>1</sup>, F.Hali<sup>1</sup>, A. Meftah<sup>2</sup>, H.Filali<sup>2</sup> and S.Chiheb<sup>1</sup>

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<sup>2</sup>Pharmacology department, CHU Ibn Rochd, Morocco

**Introduction:** Psychotropic drugs are not without side effects, in particular skin reactions which can sometimes be serious, thus jeopardising the functional and vital prognosis

**Objectives:** highlight the epidemiological and clinical characteristics of severe skin reactions due to psychotropic drugs.

**Materials and methods:** This is a retrospective study conducted over a period of 10 years. It concerned all patients followed for a skin reaction due to a psychotropic drug. The imputability of the psychotropic drug was confirmed by the French methodology of Bégaud et al. Mild skin reactions managed on an outpatient basis were excluded.

**Results:** 41 cases were collected, the mean age was 28.64 years (9-74). 18 cases (43.9%) were taking a psychotropic drug for the first time. The most common psychotropic drugs were: Carbamazepine (n=16), phenobarbital (n=8), lamotrigine (n=5), chlorpromazine (n=4)

The average time between drug intake and onset of symptoms was 14 days (5 days - 60 days) for Dress syndrome, 21 days (2-90 days) for STJ, 7 days for vasculitis.

8 patients developed a side effect after increasing the dose of the psychotropic drug

**Clinical forms were:** DRESS syndrome (n=30) SJS (n=4), overlap syndrome (n=1), drug-induced vasculitis (n=4), SDRIFE (n=1), photosensitivity (n=1).

**Complications were:** functional renal failure (43%), hepatic cytolysis (75%), biological cholestasis (60%), Eosinophilia >1500 was found in 11 patients and was significantly associated with liver damage (p=0.021), carbamazepine was statistically correlated with renal damage and cholestasis (p=0.013); phenobarbital was associated with a risk of hepatic cytolysis (p=0.027)

**Conclusion:** Cutaneous side effects to psychotropic drugs remain rare <2%, In our study, we found that anticonvulsants are the most common cause of skin reactions, particularly if rapid increase in dose, or the combination of several psychotropic drugs. carbamazepine was more likely to cause renal damage and cholestasis, whereas phenobarbital was statistically correlated with hepatic cytolysis.

## Biography

Dr. Asmaa el kissouni is a resident physician in dermatology at the ibn rochd university hospital in casablanca, morocco, a member of the moroccan dermatology society and the Gildi association, which supports patients with dermatological diseases. She is interested in the skin's interaction with other organs and skin manifestations in relation to other organs, hence her latest publications.



## A Case report of neonatal osteopetrosis

**Elias mazrooei rad<sup>1</sup> and Vahideh Hosseinzadeh<sup>2</sup>**

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<sup>2</sup>Pediatric Resident, Mashhad University of Medical Sciences, Iran

**O**steopetrosis is a rare bone disease that occurs due to Failure in bone resorption. Osteoclast dysfunction and persistent calcification of primary chondroids and bones are the cause of the disease. Osteopetrosis is a rare hereditary condition known as abnormal bone resorption. Considering the importance of prompt and timely diagnosis and follow-up and treatment with significant complications, we decided to report a case of neonatal osteopetrosis that it was diagnosed after 12 hours of admission to the neonatal intensive care unit of Imam Reza Hospital. The 7 days old age and male neonate due to abdominal mass and thrombocytopenia was hospitalized. In examinations and tests, hepatosplenomegaly and thrombocytopenia were diagnosed. Finally, the infant was referred to the Neonatal Intensive Care Unit of Imam Reza Hospital in Mashhad at 7 days of age for further evaluation. In Chest x-ray taken due to sepsis workup seen increasing of rib and arm bones density. For diagnosis of osteopetrosis disease ,face x-ray was taken and eye sign detected.in each neonatal with hepatosplenomegaly and thrombocytopenia and incressing of bone densiry in addition role out of neonatal sepsis, in first step should be taken face x-ray for observe sign and osteopetrosis confirme.

## Automatic lung disease classification from the chest X-ray images using hybrid deep learning algorithm

**Abobaker M. Q. Farhan and Shangming Yang**

*School of information and Software Engineering, University of Electronic Science and Technology of China, China*

The chest X-ray images provide vital information about the congestion cost-effectively. We propose a novel Hybrid Deep Learning Algorithm (HDLA) framework for automatic lung disease classification from chest X-ray images. The model consists of steps including pre-processing of chest X-ray images, automatic feature extraction, and detection. In a pre-processing step, our goal is to improve the quality of raw chest X-ray images using the combination of optimal filtering without data loss. The robust Convolutional Neural Network (CNN) is proposed using the pre-trained model for automatic lung feature extraction. We employed the 2D CNN model for the optimum feature extraction in minimum time and space requirements. The proposed 2D CNN model ensures robust feature learning with highly efficient 1D feature estimation from the input pre-processed image. As the extracted 1D features have suffered from significant scale variations, we optimized them using min-max scaling. We classify the CNN features using the different machine learning classifiers such as AdaBoost, Support Vector Machine (SVM), Random Forest (RM), Backpropagation Neural Network (BNN), and Deep Neural Network (DNN). The experimental results claim that the proposed model improves the overall accuracy by 3.1% and reduces the computational complexity by 16.91% compared to state-of-the-art methods.

### Biography

Farhan Abobaker is a software engineering PhD student currently enrolled at the University of Electronic Science and Technology of China. He graduated from Taiz University in Yemen in July 2014 with a Bachelor's degree and Yangzhou University in China in June 2020 with a Master's degree. Farhan is expected to graduate from his PhD program in December 2023.



## The practice of postoperative pain management in Ethiopia and improvement strategies: Results from Ethiopian clinical registries

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Optimal management of pain in surgical patients during the postoperative period is essential for their comfort and overall recovery. This involves assessing the patient's pain levels, identifying the cause of pain, and implementing appropriate interventions to alleviate discomfort. Adequate pain management is crucial in preventing complications such as delayed healing and the development of chronic pain conditions. However, in low-resource settings, the availability of resources and trained healthcare professionals for pain assessment and management may be limited. This can result in insufficient pain control, adversely affecting the patient's recovery process.

In Ethiopia, a low-resource setting in East Africa, the practice of pain management is often suboptimal due to various factors. These include limited access to pain medications, healthcare providers' lack of knowledge about pain assessment and management, and cultural beliefs that discourage the expression of pain. As a consequence, patients may experience unnecessary suffering, negatively impacting their overall quality of life.

Data from the national perioperative and injury registry network in Ethiopia reveals concerning statistics. Approximately 30% of patients who undergo surgery do not receive adequate postoperative pain follow-up and assessment. Moreover, only 26% of patients receive postoperative pain management, and even fewer receive appropriate pain medications. Standard medications for postoperative acute severe pain, such as weak opioids, acetaminophen, and diclofenac, are often prescribed without proper grading of pain, follow-up, and assessment. This lack of individualized care can lead to inadequate pain relief and possible complications, which is also currently under investigation.

It is vital for healthcare providers to prioritize postoperative pain management and ensure that patients receive personalized treatment plans based on their specific needs and pain levels. Furthermore, implementing regular follow-up appointments and assessments can help identify any issues or concerns related to pain management, allowing for timely interventions and improved patient outcomes.

## Biography

Fitsum Kifle is a lead clinical researcher at Debre Berhan University Asrat Woldeyes Health Sciences Campus, project Network for Perioperative and Critical Care ([www.n4pcc.com](http://www.n4pcc.com)). He has collaborated on various national and international research projects in the field of health sciences, particularly in acute care with expertise in establishing registries, conducting systematic reviews, clinical trials, data analysis, and publishing research findings. With over 20 publications, Fitsum is currently leading several national projects, including the national surgical outcome study, improving stillbirth data systems, and enhancing surgical, injury, and critical care data systems in Ethiopia and Africa through the collaborative research network, African Perioperative Research Group. He has received multiple grants and is working towards completing his PhD in Global Surgery from the University of Cape Town. FK also contribute to advancing the field of health sciences research through mentorship of students and supervision.



## Capillary leak syndrome due to Russell's viper envenomation

**Dr. Hariharan A S and Major G Shivkumar**

*Government Villupuram Medical College and Hospital, India*

**Objectives:** To describe the clinical profile and various morbidity and mortality predictors in patients with Idiopathic Systemic Capillary Leak Syndrome (ISCLS) due to the Russell's viper envenomation.

**Methods:** Study Type- Observational Case Series

Study Period- January 2022 to September 2022

Inclusion Criteria- All adult patients admitted in Medicine department with confirmed history of snake bite (*Daboia Russelii*), who develops Capillary Leak Syndrome, which is diagnosed by the criteria suggested by Thomas and Kumar et al.

Total Number - 10 Results:

A total of 10 patients were managed in the hospital, as a case of ISCLS because of Russell's viper envenomation during the specified period. Progressive parotid swelling, thrombocytopenia, hypoalbuminemia, and hypotension are the major sinister morbidity and mortality predictions among them.

**Conclusion:** Snake bite is one among the neglected tropical diseases, which may lead to an array of clinical manifestations. ISCLS is an ominous complication of Russell's viper envenomation. Early identification of this entity is utmost essential to decrease the mortality and morbidity. This study is mainly aimed to create awareness among the physicians for early diagnosis of this devastating complication with the help of basic clinical and laboratory profile. Abstract should give clear indication of the objectives, scope, results, methods used, and conclusion of your work. One figure and one table can be included in your results and discussions.

### Biography

I am Dr. Hariharan A.S., completed my MBBS degree from Madras Medical College, Chennai (2013-2019) and completed my M.D degree in General Medicine in Government Villupuram Medical College and Hospital. Being with keen interest in toxicology, published a work in Russell's viper Envenomation and been working in toxicology for further works.

## Defuzzification process and its applications in multi criteria decision making problems

**Jagadeeswari Murugan**

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Numerous research papers and several engineering applications have proved that the fuzzy set theory is an intelligent effective tool to represent complex uncertain information. In fuzzy multi-criteria decision-making (fuzzy MCDM) methods, intelligent information system and fuzzy control-theoretic models, complex qualitative information are extracted from expert's knowledge as linguistic variables and are modeled by linear/non-linear fuzzy numbers. In numerical computations and experiments, the information/data are fitted by nonlinear functions for better accuracy which may be little hard for further processing to apply in real-life problems. Hence, the study of non-linear fuzzy numbers through piecewise linear functions of interval/triangular/trapezoidal fuzzy numbers have attempted by different methods in the past years. But it is noted that the triangular/trapezoidal approximation of nonlinear fuzzy numbers has more loss/gain of information. Therefore, there is a natural need for a better piecewise linear approximation of a given nonlinear fuzzy number without losing much information for better intelligent information modeling. On coincidence, a new notion of Generalized Hexagonal Fuzzy Number has been introduced by Lakshmana et al. in 2020. Therefore, approximation of nonlinear fuzzy numbers into the hexagonal fuzzy numbers which includes trapezoidal, triangular and interval fuzzy numbers as special cases of Hexagonal fuzzy numbers with less loss/gain of information than other existing methods is attempted. Since any fuzzy information is satisfied fully by its modal value/core of that concept, any approximation of that concept is expected to be preserved with same modal value/core. Hence, a procedure for approximating a non-linear fuzzy number into a new Hexagonal Fuzzy Number that preserves the core of the given fuzzy number is proposed using constrained nonlinear programming model and is illustrated numerically by considering a parabolic fuzzy number. Furthermore, the proposed method is compared for its efficiency on accuracy in terms of loss of information. Finally, the applicability of the proposed method is illustrated through the Group MCDM problem using an index matrix (IM).

### Biography

I Dr. M. Jagadeeswari graduated in Mathematics from Vellalar College for Women, Erode, M. Sc in Mathematics from Kongu Arts and Science College, Erode, M. Phil in Mathematics from Sri Vasavi College, Erode. I worked as Lecturer and Assistant Professor at Erode Kongu College of Polytechnic, Sri Vasavi College, Erode respectively. I have been awarded a Rajiv Gandhi National Fellowship by University Grants Commission during my M. Phil program. Then I defended my Ph. D at National Institute of Technology, Tiruchirappalli. Since 2021 I am working as an Assistant Professor at National Institute of Technology, Calicut, Maulana Azad National Institute of Technology, Bhopal, Vellore Institute of Technology, Vellore. I have published eight research articles in SCI, SCIE, Scopus indexed journals. I am serving as a reviewer for seven international SCI, SCIE, ESCI journals. I have taught several courses such as algebra, calculus, allied mathematics, business mathematics, discrete mathematics, basic statistics, mathematics for data science. Fields of research interest: Fuzzy mathematical modelling, fuzzy logic and its applications, techniques, neutrosophic set theory, fuzzy optimization, fuzzy graphs.



## Pain matters in assisted dying approaches

**Juergen Dankwort**

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Vancouver, Canada*

*Associate, University of West Virginia Research Center on Violence, USA*

Pain experienced by persons seeking voluntary assisted dying (VAD) has understandably been a principal driver ever since the concept of establishing such a service provision was first introduced in the Netherlands, Belgium, and the Northern Territories of Australia. Over the decades such a provision has now been advanced by a worldwide right-to-die movement resulting in both growing acceptance and opposition with its rapid development. Movement societies and organizations now number over 80 from around the world, many, however, beset with formidable challenges that raise profound ethical, moral, and legal challenges. We focus on a prevailing legislative regime that is typically set up after an absolute prohibition on assisted suicide has first been successfully stricken or mitigated, often by appellants suffering intolerably from a protracted condition or illness and seeking their right to an assisted death. This model is contrasted with an alternative approach that holds out greater support for persons experiencing pain where a governmental authority has not defined the highly normative field of the actual practice through legislation. The development and contested expansion of voluntary assisted dying in Canada is selected as characteristic of the former model, and the medico-legal landscape in Switzerland is discussed, offering an alternative approach that has now been given an added legal foundation by a European constitutional court decision on assisted dying. We critically examine implications of these differing paths for any society or organization considering preliminary steps to have a regime for VAD created and accepted, taking into account the crucial matter of experienced pain and opposition to institutionally propose major social policy change impacting personal autonomy..

### Biography

Dr. Juergen Dankwort, PhD, MSW

Dr. Juergen Dankwort received his undergraduate and master's degrees at McGill University, applying his community organizing skills in developing support for anti-poverty, child- protection and family violence initiatives, additionally working as a therapist within the Quebec medico-social network. He obtained his doctoral degree from the Université de Montréal in social work in 1994. He served on the Senate-appointed Canadian Panel on Violence Against Women, developed effective curricula for offender programs, conducted program evaluations, and published extensively on those topics. He has taught social policy, clinical social work, sociology, media and social movements courses as permanent faculty at the University of Houston (TX), and at Kwantlen Polytechnic University in British Columbia. Juergen identifies as a researcher and human rights activist, is an Associate with the University of West Virginia's Center on Violence Research, serves on the Board of the British Columbia Humanist Association, and coordinates the Canada chapter of Exit International.

## Towards acute pain assessment index during anesthesia from salient features of EEG signals using artificial intelligence

**M. N. Nashid Rahman<sup>1</sup> and Md. Asadur Rahman<sup>2</sup>**

<sup>1</sup>National Electro-Medical Equipment Maintenance Workshop & Training Center, Ministry of Health & Family Welfare, Bangladesh

<sup>2</sup>Military Institute of Science and Technology, Bangladesh

The expression of emotion can be hidden but the corresponding functionality of the brain cannot. Functional brain imaging is therefore getting more and more popular for understanding the connectivity of the whole psychophysiological relations with the brain. Electroencephalogram or EEG is a low-power, lightweight, and portable multichannel functional brain imaging modality with exceptionally high temporal resolution. This powerful tool becomes an essential part of anesthesia monitoring during operation along with its bi-spectral index. Several recent research works also showed the significance of this tool in pain level measurement. Our recent research outcomes showed that during the operation, the state of anesthetic depth (for general anesthesia (GA)) can be classified and predicted the transition levels of state with more than 90% accuracy from the salient features of the EEG signal. For that proposed model we utilized MUSIC (Multiple Class Signal Classification)-based feature extraction from the EEG signal and artificial neural network. During this research work, we have found an interesting band of EEG power in MUSIC-based power spectra that can be correlated with the transition pain of the anesthetic patient during the surgery. Although the patient does not feel any pain when the surgery starts due to GA, a pattern of power spectral density is initiated in the EEG signal. This is a source of communication of pain to the brain which is accepted by the brain with different reflexes as the patient is not feeling anything. This acute pain pattern in EEG spectra is not regular in all the patient's cases. This irregular pain pattern of EEG-MUSIC spectra has been modeled with long short-term memory (LSTM)- a recurrent AI model. The proposed model provides Acute Pain Assessment Index (APAI) which has been validated with sufficient dataset. However, to get a robust subject-independent APAI a big dataset is needed.

### Biography

M. N. NASHID RAHMAN received the B.Sc. degree from the Department of Electrical and Electronic Engineering, Rajshahi University of Engineering and Technology (RUET), Bangladesh, in 2011. He received his M.Sc. degree from the Department of Biomedical Engineering, Military Institute of Science and Technology (MIST), Dhaka, in 2023. He is currently working as Technical Manager (Training) in National Electro-Medical Equipment Maintenance Workshop & Training Center, Ministry of Health & Family Welfare Dhaka, Bangladesh. His research interests include EEG-based functional brain imaging, Anaesthesia Monitoring through

EEG, Artificial Intelligent, Remote Maintenance of Medical Devices, and Implantable Medical Equipment.





## Integrative approaches in psychiatry: Bridging science and clinical practice

**D. Živković and M. Živković**

*University of Kragujevac, Serbia*

Psychiatry is undergoing a paradigm shift, recognizing the intricate interplay of biological, psychological, and social factors contributing to mental disorders. As a deeper understanding of these multifaceted conditions emerges, the demand for integrative approaches that link cutting-edge scientific knowledge with practical, patient-centered care becomes evident. This conference paper explores the concept of integrative approaches in psychiatry, aiming to bridge the gap between scientific advancements and clinical practice. Through a comprehensive review of current literature and empirical studies, we examine key developments in psychopharmacology, neuroscience, and psychotherapeutic modalities. We highlight the importance of personalized treatment strategies that consider individual variations in drug response and explore the neurobiological underpinnings of mental disorders to inform innovative interventions. Furthermore, we delve into the effectiveness of various psychotherapeutic modalities, including cognitive-behavioral therapy (CBT), psychodynamic therapy, and mindfulness-based approaches. Additionally, we analyze the role of complementary and alternative therapies in enhancing traditional treatments, providing insights into holistic patient care. Addressing access and affordability challenges in mental health services, we discuss the integration of technology, such as telepsychiatry and digital health solutions, to reach underserved populations and improve treatment outcomes. Ethical considerations and the need for culturally competent care in diverse communities are central to our examination. By fostering dialogue between researchers and practitioners, this paper aims to translate research findings into clinical best practices, ensuring that patients receive the most effective and compassionate care. We explore strategies for collaborative care models that involve patients, families, and communities in the treatment process.

In conclusion, the integration of scientific advancements with clinical practice in psychiatry is essential to provide more effective, accessible, and patient-centric treatment approaches. By embracing an integrative framework, mental health professionals can empower individuals on their journey to mental well-being and improve the overall quality of psychiatric care.

## Biography

Dubravka P. Zivkovic was born on April 27, 2001, in Kragujevac, Serbia. Dubravka's academic journey reflects her dedication and passion for psychology. Throughout her studies, she has consistently maintained high grades, exemplifying her commitment to academic excellence. Her thirst for knowledge and inquisitive nature have been instrumental in expanding her understanding of various psychological theories and research methodologies. Beyond excelling in the classroom, Dubravka has actively sought opportunities to engage with the broader academic community by participating in numerous conferences. Her proactive approach to conference involvement demonstrates her eagerness to learn from established experts, share her insights, and network with like-minded individuals. Beyond her academic achievements, Dubravka's genuine passion for helping others and promoting mental well-being is evident through her volunteer work in various community mental health initiatives. Her altruistic endeavors demonstrate a well-rounded approach to her professional development, reflecting a commitment to translating academic knowledge into real-world impact.

## Irritable bowel syndrome in Egyptian medical students, prevalence and associated factors: A cross sectional study

Elkadeem M<sup>1</sup>, El Sharawy S<sup>1</sup> and Amer I<sup>2</sup>

<sup>1</sup>Department of Tropical Medicine and Infectious Diseases, Faculty of Medicine, Tanta University, Egypt

<sup>2</sup>Department of Hepatology, Gastroenterology and Infectious Diseases, Faculty of Medicine, Kafr El Sheikh University, Egypt

**Introduction:** irritable bowel syndrome is a recurrent chronic gastrointestinal functional disorder. Despite it is not dangerous; it carries significant feedback on self-confidence and quality of life. Medical students are expected to develop irritable bowel syndrome because they are subjected to stress due to over academic pressure. The objectives were to investigate irritable bowel syndrome prevalence, and to detect the related risk factors in this specific group of Egyptian people.

**Methods:** this cross-sectional study performed in two faculties of medicine in Nile Delta, Egypt. It had been built on self-administered questionnaires including Rome III criteria for diagnosis of irritable bowel syndrome, as well as several questions for gathering socio-demographic information and manifestations suggesting irritable bowel syndrome.

**Results:** fifty (27.5%) of 182 evaluated medical students achieved criteria of irritable bowel syndrome, 64% of them were mixed type. Irritable bowel syndrome had a significant relationship with coffee, milk products, fewer vegetables, and fruits intake ( $P=0.034$ ,  $P=0.044$ ,  $P<0.001$  respectively). Depression, anxiety, and food intolerance were detected to be significantly related to irritable bowel syndrome ( $p<0.001$ ,  $p=0.005$ ,  $p=0.04$ ) respectively.

**Conclusion:** it was demonstrated that many Egyptian medical students were suffering from irritable bowel syndrome. Some dietary habits, anxiety, and depression of the students could be risk factors related to development of irritable bowel syndrome.

## Cannabidiol loaded extracellular vesicles alleviate paclitaxel induced peripheral neuropathy

**Mandip Singh Sachdeva**

*Professor and Section Leader, College of Pharmacy and Pharmaceutical Sciences, Florida A&M University, USA*

**C**hronic paclitaxel (PTX) treatment causes excruciating pain in cancer patients, limiting its use in cancer chemotherapy. Herein, neuroprotective potential of synthetic cannabidiol (CBD) and CBD formulated in extracellular vesicles (CBD-EVs) isolated from human umbilical cord derived mesenchymal stem cells were studied against PTX-induced neuropathic pain (PIPn) in C57BL/6J mice. EVs and CBD-EVs particle size, surface roughness, nanomechanical attributes, stability, and release studies were investigated. CBD-EVs treatment significantly improved mechanical and thermal hypersensitivity ( $P < 0.001$ ) as compared to EVs or CBD alone. PTX-treated mice's dorsal root ganglions and spinal homogenates had mitochondrial dysfunction which was significantly improved by CBD and CBD-EVs by regulating the AMPK pathway ( $P < 0.001$ ). Blocking studies with 5HT1A receptors and AMPK demonstrated that CBD had no effect on PIPn neurobehavioral or mitochondrial function. Our results suggest that CBD-EVs can be a novel therapeutic option for the treatment of PIPn and CBD treatment activates AMPK axis in regulating PIPn.

### Biography

Mandip Singh Sachdeva got his M.Sc. and Ph. D. of Biopharmaceutics from Dalhousie University, Canada respectively in 1986 and 1989. He then worked with SynPhar laboratories in Edmonton, Canada as a Group Leader, from 1989-1993 and then moved to academia as an Assistant Professor, Pharmaceutics at Florida A&M University in 1993 and got promoted to Full Professor in 2002. Presently he is the Section Leader of Pharmaceutics at Florida A&M and has won many honors and awards and some of them are, Novapharm Award for the 1989-1990 for Excellence in Biopharmaceutics, AAPS Fellow Award 2007, Davis Productivity Award from the State of Florida, 2009, 2011 and 2014, Research Excellence Award 2011 from FAMU, and Distinguished Researcher Award in 2017. He was also selected as a Fulbright Fellow 2014-15 and again in 2022-23. He was bestowed with the Elizabeth Hurlock Beckman Award in 2020, which is awarded to mentors for making stellar difference in the community.



## Is the novel suspension exercises superior to core stability exercises on some EMG coordinates, pain and range of motion of patients with disk herniation?

**Mohammad Reza Fadaei Chafy,  
Yasser Mohebbi Rad and Alireza Elmieh**

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Islamic Azad University, Iran*

**Objectives:** Information about comparing the effectiveness of exercise methods on management of disk herniation is limited. The aim of this study was to compare the effect of two programs of suspension and core stability exercises on some electromyography (EMG) coordinates, pain and range of motion of patients with disk herniation.

**Methods:** Thirty-two men with disk herniation participated in this clinical trial study which was randomly divided into three groups of suspension exercises (n: 12, age:  $34.25 \pm 8.81$ , BMI:  $24.01 \pm 2.7$ ), core stability exercises (n: 10, age:  $35 \pm 10.3$ , BMI:  $25 \pm 2.27$ ) and control (n: 10, age:  $34.4 \pm 6.67$ , BMI:  $23.76 \pm 1.45$ ). Electrical activity of rectus abdominis, internal and external oblique and erector spinae muscles was measured by superficial EMG, back pain by McGill Pain Questionnaire and range of motion by Modified Schober test, one day before and immediately after of intervention period. The experimental groups performed an 8-week training period while the control group was only followed up. Data were analyzed using paired sample t test and analysis of covariance test and statistical significance was set at 0.05.

**Results:** Suspension group showed significant improvement in EMG of rectus abdominis, internal and external oblique muscles (respectively,  $p = 0.030$ ,  $p = 0.017$ ,  $p = 0.022$ ) and pain ( $p = 0.001$ ) compared to core stability group; but there was no significant difference between two groups in EMG of erector spinae muscle and range of motion. Changes in both training groups were significant in all variables compared to control groups ( $p < 0.05$ ).

**Conclusion:** Our findings showed that although both exercises were effective in patients with lumbar disk herniation, but the effectiveness of suspension exercises in increasing muscle activation and reducing pain was more pronounced than core stability exercises. Iranian Registry of Clinical Trials (IRCT): IRCT20191016045136N1.

**Table 1:** Description of variables and results of paired t-test

Variable	Suspension group	Core stability group	Control group
Age (year)	34.25±8.81	35.00±10.30	34.4±6.67
High(cm)	178.75±9.83	181.60±8.64	178.40±7.16
Weight(kg)	76.16±2.65	83.10±15.01	75.50±3.86
BMI(kg/m <sup>2</sup> )	24.01±2.70	25.00±2.27	23.76±1.45

\*p <0.05 cm: centimeter, Kg: kilogram, kg/m<sup>2</sup>: kilogram/square meters

**Table 2 :** Description of variables and results of paired t-test

Variable	Groups	Pre	Post	Paired t test	Sig
EMG of erector spinae (mV)	Suspension	0.45 ± 0.05	0.47 ± 0.04	- 3.630	0.004*
	Core	0.44 ± 0.05	0.46 ± 0.04	- 4.129	0.003*
	Control	0.44 ± 0.03	0.44 ± 0.04	1.152	0.279
EMG of ext.oblique (mV)	Suspension	0.47 ± 0.05	0.62 ± 0.07	- 6.246	< 0.001*
	Core	0.44 ± 0.05	0.54 ± 0.06	- 4.400	0.002*
	Control	0.46 ± 0.03	0.43 ± 0.04	- 0.185	0.858
EMG of int.oblique (mV)	Suspension	0.44 ± 0.03	0.65 ± 0.09	- 7.411	< 0.001*
	Core	0.43 ± 0.05	0.54 ± 0.09	- 5.754	< 0.001*
	Control	0.46 ± 0.04	0.46 ± 0.04	- 2.203	0.055
EMG of rectus abdominis (mV)	Suspension	0.43 ± 0.05	0.59 ± 0.02	- 8.847	< 0.001*
	Core	0.43 ± 0.03	0.52 ± 0.06	- 5.533	< 0.001*
	Control	0.45 ± 0.03	0.46 ± 0.04	- 1.365	0.206
Pain	Suspension	33.66 ± 9.28	17.08 ± 6.14	8.269	< 0.001*
	Core	34.10 ± 8.10	24.70 ± 6.78	6.363	< 0.001*
	Control	33.10 ± 5.60	33.00 ± 5.88	0.142	0.891
Flx ROM (cm)	Suspension	5.10 ± 1.20	7.46 ± 1.43	- 6.535	< 0.001*
	Core	5.63 ± 1.00	7.44 ± 1.23	- 6.250	< 0.001*
	Control	5.35 ± 1.11	5.27 ± 1.11	0.443	0.688
Ext ROM (cm)	Suspension	1.97 ± 0.43	3.06 ± 0.79	- 12.902	< 0.001*
	Core	2.09 ± 0.44	2.92 ± 0.53	- 4.104	0.003*
	Control	1.96 ± 0.17	2.17 ± 0.67	- 1.148	0.280

\*p <0.05 cm: centimeter, mV: millivolt





## Developing human capabilities for digital transformation in supply chains: An Industry 5.0 perspective

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*International Management Institute Kolkata, India*

The understanding of required skills for supply chain professionals especially in the context of industry 5.0 is evolving with rapid speed. Along with that, ability to attract, develop and retain supply chain professional, who can drive organization's strategy is crucial to be successful and to remain competitive. Thus, it is important that right mix of employees as per the changing requirements are ready to take over future responsibilities. The present study is an attempt to identify and develop the right capabilities for supply chain professionals in the context of industry 5.0. To achieve the goals, initially skills and capabilities are identified with extensive review of literature and discussions with industry leaders in manufacturing industries. Data were collected from sixteen manufacturing companies. For identifying the right skills, analytical hierarchical process (AHP) was applied to identify the skills and the degree of importance of each skill in the context of industry 5.0. AHP helped in prioritization of skills of supply chain human capital. AHP results had identified managerial skills as the most important human capital followed by operational skills and advanced technical Skills. The next objective was to identify the relationship and the patterns, thus, DAMATEL was applied.

### Biography

Dr. Soni Agrawal holds doctorate in Management from IIT, Kharagpur. She specializes in HR and has rich industry-academia experience. Prior to joining academics, she had worked with FMCG, ITES companies on strategy and HR. In her academic experience she holds leadership positions as dean executive development and chair to various committees

Her areas of research interests are employee engagement, green human resource management, ESG, Sustainability, performance management, training, and industrial relations, HR for new age organizations, etc. She is a corporate trainer and had trained senior and mid-level executives in the area of HR Analytics, motivation, negotiation and conflict management skills and performance management. Some of the companies include CESC, PCBL, Oxford University Press, India Post, LIC, etc.



## Diagnosing the undiagnosed Arthritis & Treating it- the gout

**Suresh Babu Gangireddi<sup>1</sup> and Naresh Kumar Eamani<sup>2</sup>**

<sup>1</sup>M S Multispecialty Hospital, India

<sup>2</sup>BIRRD Hospital, India

**Background:** A substantial portion of gout patients have normal serum urate levels during an acute attack, Although gout is the most common inflammatory arthritis, it is still frequently misdiagnosed. This unique characteristic of gout makes it one of the most challenging arthritis to be diagnosed

**Objectives:** In the current study, we discuss 2 case reports wherein we have utilized additional imaging modality as an adjuvant in diagnosing the acute gout episodes.

### Case reports

**Case 1:** A 44 yr old male patient came to OPD with c/o acute onset pain in right ankle. He had history of trauma to the ankle 15 days back due to bike kick start rod, back kick injury. Pain following injury was 4/10 on VAS score, Following trauma the patient took treatment for quack for 2 days after which he was asymptomatic for 10 days. Pain recurred on about 12th day following injury, but this time pain severity was 8/10 on VAS score. Pain started after patient went out for a long drive, and had hot fomentation to the effected ankle. S uric acid levels were normal, with elevated CRP & marginal leukocytosis, with all investigations being normal. USG of affected joint was done, gout diagnosis was made and treatment was started online of acute gout, patient recuperated to his normal condition within 10 days.

**Case 2:** A 60 yr old male was brought to OPD with right ankle pain and swelling, he had similar episodes in the past for which he took consultation from a local physician, on examination his ankle appeared to be deformed with foot deformities. His blood investigations revealed normal s uric acids with elevated CRP, x ray foot and ankle revealed gross destruction of ankle and mid tarsal joint. USG ankle and foot was done in this patient which elicited characteristic features to aid in diagnosis of gout. Treatment was started along the long, patient recuperated to his pre existing status with deformity reminiscent.

**Conclusions:** Additional imaging modality (USG) increases the diagnostic accuracy in acute gout, which can subsequently reduce the incidence of recurrent gouty attacks and its complication like gouty arthritis and related systemic complications.

## Biography

Dr Suresh Babu Gangireddi is an orthopedic surgeon and Rheumatologist, he is an expert in USG guided interventional pain management and cellular therapeutics ( Regenerative medicine). He has several national and international publications. His work has been recognized widely across india and has received several awards from various organizations for his outstanding contribution in the field of orthpedic rheumatology, cellular therapeutics and rural healthcare in india. He has done is MS in orthopedics from S V MEDICAL COLLEGE, Tirupati and subsequently received his training in the field of arthroscopy, orthopedic rheumatology, regenerative medicine and interventional pain management. His first innovation journey started in his student days when he designed and applied "home – made VACS (vaccum assisted closure system) dressing" for a cost less than \$2. Augmented prolotherapy is second such innovation by Dr Suresh, to harvest maximum regenerative capacity of cartilage with little investment. He has devised a protocol for the treatment of osteoarthritis knee, which enables every physician to make sure that the patient gets maximum benefit for that stage of OA KNEE- he named it Pithapuram protocol. MSC's Impregnated platelet Plug is yet another achievement which enabled him treat AVN femur patients with sustained release MSC autologous scaffold. He is currently, managing director, M S multispecialty hospital, SUMANVI healthcare & research Pvt Ltd. Founder of Gangireddi Foundation, an NGO working for upliftment of rural healthcare in india.

## A mathematical model for the secretion of cortisol in response to human stress

**A. Manickam<sup>1,2</sup>**

<sup>1</sup>*School of Advanced Sciences & Languages, VIT Bhopal University, India*

<sup>2</sup>*Institute for the Future of Knowledge, University of Johannesburg, South Africa*

**M**athematics has always benefited from its engagement in the advancement of science. Mathematical models are created to examine a certain real-world system or phenomena. Graphical, symbolic, simulation, and experimental constructs are all included. Existing mathematical models can be associated with a specific real-world occurrence and utilized to research it. However, mathematical models are frequently created particularly to explore a certain phenomenon. Starting with a real-world phenomenon, one can mathematically represent it by using an existing model or creating a new model. On the other hand, the phenomenon can be replicated experimentally or through simulation.

Mathematical modeling identifies and formalizes the mathematical relationships that characterize the internal structure of the circumscribed system. A model is seen as an abstract instrument for system representation, allowing for the imitation and prediction of the system's future behavior. We deal with fluctuating variables in biological sciences, which makes constructing mathematical models that mimic reality more difficult. In such cases, incorporating chance factors or random variables into the model will improve it and bring it closer to reality. Because human stress reaction is a complex event, a mathematical model is developed to represent such occurrences in order to attain elaborate models containing interdependent chance factors. A computer plays an important role in mathematical modelling of complicated systems. The analytical mathematical methods are supplemented by computer simulation. A good model combines multiple seemingly unrelated phenomena into a single mechanism. When applied to the area of medical sciences, namely psych neuroendocrinology, this means that a good mathematical model offers a probable unique neuro-biological process at the root of distinct symptoms. Most extant mathematical models in this field predict the levels of Adrenaline, Noradrenaline, and Cortisol only when certain drugs are administered, implying that these models are phenomenological. In this lecture, I would like to deliberate upon the applications of mathematical modeling of real life problems arising in population dynamics, epidemics, and drug kinetics using appropriate mathematical formulations.

## Study of $K^*(892)^0$ and $\phi(1020)^0$ meson production in $p - p$ , $p - Pb$ and $Pb - Pb$ collisions at LHC energies

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<sup>1</sup>Department of Physics, International Islamic University Islamabad, Pakistan

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In this paper, we investigated the production of  $K^*(892)^0$  and  $\phi(1020)^0$  meson yields in  $pp$  and  $Pb - Pb$  collisions at  $\sqrt{s} \text{ NN} = 2.76 \text{ TeV}$  in the rapidity range of  $|y| < 0.5$ . In addition to this, we also examined  $K^*(892)^0$  and  $\phi(1020)^0$  meson production in  $p - Pb$  collisions at  $\sqrt{s} \text{ NN} = 5.02 \text{ TeV}$  in the rapidity range of  $-0.5 < |y| < 0$ . The  $K^*(892)^0$  and  $\phi(1020)^0$  meson yields are studied as a function of  $p_T$ . The ratio and the Nuclear Modification factor of particles yields are also analyzed in this paper. The PYTHIA8, EPOS-LHC and EPOS-1.99 are the event generators used for simulations. The aim of using these event generators is to check for their validity for strange particles production at various LHC energies. We also used PYTHIA8 CR Mode2 to see its result in comparison with PYTHIA8 default model. Transverse momentum  $p_T$  ranges for  $K^*(892)^0$  and  $\phi(1020)^0$  mesons production in  $pp$  collisions are  $0 < p_T < 14 \text{ GeVc}^{-1}$  and  $0 < p_T < 20 \text{ GeVc}^{-1}$ , respectively. Similarly for  $K^*(892)^0$  and  $\phi(1020)^0$  meson analysis in heavy-ion  $Pb - Pb$  collisions at

$\sqrt{s} \text{ NN} = 2.76 \text{ TeV}$  in  $p_T$  range of  $0 < p_T < 20 \text{ GeVc}^{-1}$  is considered for both mesons and likewise in the  $p - Pb$  collisions at  $\sqrt{s} \text{ NN} = 5.02 \text{ TeV}$  distributions were plotted for  $K^*(892)^0$  and  $\phi(1020)^0$  in the  $p_T$  values of  $0 < p_T < 16 \text{ GeVc}^{-1}$  and  $0 < p_T < 14 \text{ GeVc}^{-1}$ . PYTHIA8 default model gave higher predictions for all kinds of interactions of system. But for  $\phi(1020)^0$  meson in  $Pb - Pb$  collisions, PYTHIA8 CR Mode2 described the ALICE data very well. However, EPOS-LHC and EPOS-1.99 did not give good results as compared to the PYTHIA8 default model. It seems that all of the Monte Carlo simulation codes provided very good predictions for the particle ratios. In case of  $R_{AA}$ , the EPOS-LHC model gave good prediction for  $K^*(892)^0$  while for  $\phi(1020)^0$  meson the PYTHIA8 CR Mode2 provided higher prediction very close to the ALICE data.

### Biography

I am Alamgir khan, a PhD research student in the Department of Physics, International Islamic University Islamabad, Pakistan. My PhD project is related to Experimental particle physics / Heavy ion Physics (QGP). The Title of my PHD thesis is "The Study of  $K^*(892)$  and  $\phi(1020)$  meson production in Hadron-Hadron, Hadron-Nucleus and Nucleus-Nucleus collisions at the LHC and RHIC energies". I worked on the events generators such as EPOS-LHC, EPOS-1.99, HIJING and also on PYTHIA. I have already three publication in the field, also my two paper have been submitted for its publication.



## Role of Cultured Skin Fibroblasts in Regenerative Dermatology

**Mohammad Ali Nilforoushzadeh**

*Research Center of Legal Medicine Organization, Iran*

The skin, as the largest organ, covers the entire outer part of the body, and since this organ is directly exposed to microbial, thermal, mechanical and chemical damage, it may be destroyed by factors such as acute trauma, chronic wounds or even surgical interventions. Cell therapy is one of the most important procedures to treat skin lesions. Fibroblasts are cells that are responsible for the synthesis of collagen, elastin, and the organization of extracellular matrix (ECM) components and have many vital functions in wound healing processes. Today, cultured autologous fibroblasts are used to treat wrinkles, scars, wounds and subcutaneous atrophy. The results of many studies have shown that fibroblasts can be effective and beneficial in the treatment of skin lesions. On the other hand, skin substitutes are used as a regenerative model to improve and regenerate the skin. The use of these alternatives, restorative medicine and therapeutic cells such as fibroblasts has tremendous potential in the treatment of skin diseases and can be a new window for the treatment of diseases with no definitive treatment. No Level Assigned This journal requires that authors assign a level of evidence to each submission to which Evidence-Based Medicine rankings are applicable. This excludes Review Articles, Book Reviews, and manuscripts that concern Basic Science, Animal Studies, Cadaver Studies, and Experimental Studies. For a full description of these Evidence-Based Medicine ratings, please refer to the Table of Contents or the online Instructions to Authors)

### Biography

Dr. Ali Mohammad Ali Mohammadi

Year of birth: 1977

Education: Forensic medicine specialist

### Academic Records:

Degree level of university, place of study, end date

1- Doctor of Medicine, Iran University of Medical Sciences,

2- Specialized of Forensic Medicine of Tehran University of Medical Sciences

### work experience:

On the right side of the workplace, start date, end date

1- Doctor and lecturer at Hamadan University of Medical Sciences 9/26/1386 3/26/1388

2- Forensic Medicine Expert of Hamedan province

3- Forensic Medicine Expert of Tehran Province

4- Training Experts of the legal Medicine Organization of Iran

5- Head of Forensic Education and Research Department, legal Medicine Organization of Tehran Province.



## Women tolerate disrespect and abuse care during childbirth in public health facilities in Tigray, Ethiopia

Teferi Gebru Gebremeskel<sup>1,3</sup>, Elsa Tesfa Berhe<sup>1</sup>,  
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<sup>2</sup>Departments of Epidemiology and Biostatistics, College of Health Sciences, Aksum University, Ethiopia

<sup>3</sup>Discipline of Public Health, Flinders University, Australia

**Background:** The study aims to assess the magnitude and factors associated with disrespect care during childbirth in public health facilities in Tigray, Ethiopia.

**Methods:** A health facility-based cross-sectional supplemented by the qualitative study was conducted from April to May 2020 among childbirth women. We included 415 participants and recruited via a systematic random sampling technique. We applied bivariable and multivariable logistic regression to determine predictors for neglected non-consented and non-confidential care component of disrespect or abuse. The in-depth interview was analyzed using content analysis.

**Results:** Among the participants, 82.4%, 78.6%, and 56.9% of them had neglected care, non-consented care, and non-confidential care among childbirth mothers respectively.

Being parity (AOR: 5.19, 95% CI (2.90-29.59)), and staying for one day in a health facility (AOR: 0.23, 95%, CI (0.07-0.74)) predicted non-confidential care; educational states (AOR: 0.37, 95%, CI (0.18-0.78)) , mode of delivery (AOR 3.79, 95% CI 1.42-10.09), sex of skill providers(AOR: 0.56, 95%, CI (0.34-0.93)), no of delivery in health facility(AOR: 1.89, 95% CI (1.03-3.47)) predicted non-consented care, and history ANC (AOR: 8.10, 95% CI (1.33-49.51)), and governmental employ (AOR: 0.24, 95% CI (0.07-0.78)) predicted neglected care during child birth. The qualitative component also suggested that parity and sex of skilled provider affected neglected care, stay at a health facility and no deliver in the health facility affected non-consented care and mode of delivery affected non-confidential care during childbirth.

**Conclusion:** The status of disrespect and abuse care during delivery was high. Parity and staying for one day in a health facility predicted non-confidential care; educational states, mode of delivery, sex of skill providers, no of delivery in health facility predicted non-consented care, and history ANC, and governmental employ predicted neglected care during childbirth. Therefore, policy makers should consider the above group of women to address disrespect and abuse care during childbirth.

## Biography

I am Teferi, a Ph.D. student at Flinders University, Adelaide, Australia, and an Assistant Professor at the Aksum University of Ethiopia. I completed my BSc in Midwifery at Jimma University, and my MPH in Reproductive and Child Health at the University of Gondar. I have been worked, as a Consultant, Researcher, Principal Investigator, and Project Coordinator across various projects, such as Global One Health, Flinders University AFRICA CDC Centres for disease control and prevention safeguard African health, Temple University of Philadelphia (USA) and the National Cancer Institute "Pascal" Italy and have had international research collaborations. I have a strong research track record, having published more than 45 papers in reputable journals.



## Knowledge and attitudes of nurses towards pain management at Edward Francis Small Teaching Hospital, Banjul

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<sup>2</sup>Edward Francis Small Teaching Hospital, The Gambia

**Background:** Pain is known to affect a person's physical, mental health, and quality of life. Therefore, its management and control is a very important goal in patient care. Inability to adequately assess, manage patients' pain and intervene accordingly has an impact on patients' quality of life.

**Aim:** To investigate the knowledge and attitude of nurses towards pain management at the Edward Francis Small Teaching Hospital (EFSTH), in The Gambia.

**Methods:** Descriptive cross-sectional study design was used. A sample of 115 nurses was recruited using the convenience sampling method. Nurses' Knowledge and Attitudes Survey Regarding Pain (NKASRP) was used to assess the knowledge and attitude of pain among nurses. Cronbach's alpha coefficient for this instrument was 0.73. Data were analyzed using the Statistical Package for the Social Sciences software (SPSS, version 20). Descriptive statistics, chi-squared test, and regression analysis were used to analyse the data using SPSS version 20.0. Approval for the study was granted by the EFSTH Research Review Board.

**Results:** One hundred and fifteen nurses filled and returned the questionnaire giving a response rate of 79 %. The mean age of study participants was 29.39 years (SD  $\pm$  6.3) and years of working experience was 5.17 years (SD  $\pm$  5.0). The mean total score of the NKASRP was 50.0 (SD  $\pm$  12.3). The majority of the nurses had inadequate knowledge (60.9 %) and an unfavorable attitude (69.6 %) towards pain management. Logistic regression analysis showed nurses working in the accident & emergency department are more likely to have adequate knowledge ( $p < 0.05$ ), and BSc degree nurses are more likely to have a favorable attitude towards pain management ( $p < 0.05$ ).

**Conclusion:** Nurses have inadequate knowledge and unfavorable attitude towards pain management and this continues to be a challenge in health care facilities in The Gambia.

## Biography

Date of Birth: 28/06/1992 Place of Birth: Okeigbo, Ondo State

Position/Title: Graduate Assistant, The University of The Gambia, Department of Nursing and Reproductive Health

## Education/Training

Institution and Location	Degree	Completion Date MM/YY	Field of Study
The University of The Gambia, The Gambia	BSc	05/2016	Nursing and Reproductive Health
The University of The Gambia, The Gambia	MSc	04/2023	Community Health Nursing

## A. Personal Statement

I had my nursing training at the University of the Gambia where I was recalled in 2018 to serve as a graduate assistant. I currently assist with lecturing at the Department of Nursing, University of The Gambia. I also work as a Senior Nursing Officer and unit head in the largest surgical ward at the only referral and teaching hospital in The Gambia, EFSTH. This ward admits patients with ENT (ear, nose, and throat), vascular, maxillofacial, and plastic surgical conditions. Contributions to science have included six peer-reviewed articles and I serve as a reviewer for the International Journal of Africa Nursing Sciences.



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