PGC
Precision Global Conferences

Joint Event on

3rd Edition of International NEUROLOGY CONFERENCE and 2nd Edition of PSYCHIATRY and ADDICTION World Conference

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1 NETHERAVON RD, SINGAPORE 508502

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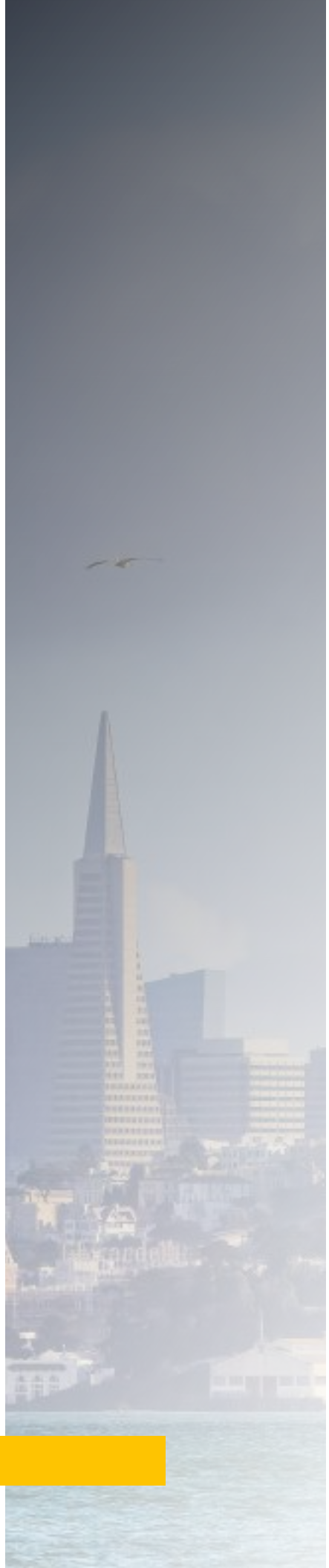
About Precision Global Conferences

Precision Global Conferences is a highly established scientific conference organizer. We take high integrity in conveying your achievements to the world and emphasize your incredible work and scientific contribution. Precision global conferences have developed the progression, broadcast, persistence, research, and development activities in cancer, neurology, and nursing science,

We support the beacon of quality research works and efforts of academicians, researchers, scientists, doctors, and all the future young to be experts to confide their outstanding works fearlessly. Our primary goal is to make health care accessible and understandable to people. We are ecstatic to pass on the ray of research, developments, and cutting-edge therapies worldwide. Hence, we are here to organize and conduct highly esteemed conferences.

This conference will emphasize the outstanding works and their medicinal consequences through hybrid presentations. If you're searching for a perfect podium that can reflect your professional ethics and voice your appointment, we are here with the best team, welcoming your honourable presence.



DAY 1

Joint Event on
3rd Edition of International
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and
2nd Edition of
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World Conference

KEYNOTE PRESENTATIONS

The Quest to Understand Alzheimer's Disease and Find New Modifying Agents

Anthony Tsarbopoulos*

National and Kapodistrian University of Athens Medical School, Department of Pharmacology, Greece

Neurodegenerative disorders such as Alzheimer's Disease (AD) and Parkinson's Disease are persistent, progressive diseases, and they are associated with abnormal accumulation and aggregation of disease-specific proteins and peptides and inclusion bodies in selected brain regions. AD is the most common form of diagnosed dementia, and it is associated with a decline in cognitive ability and premature death. AD is the sixth leading cause of death in the USA, and it has been a significant public health problem for which there is currently no disease-modifying treatment. This is primarily due to the non-definitive hypothesis regarding the root cause of this disease. It has been proposed that the beta-amyloid peptide (Aβ), abnormal tau protein, or both play a critical role in AD development, leading to the formation of senile plaques and neurofibrillary tangles, thus making them promising targets for next-generation drug therapies. To date, there has been a growing knowledge of the underlying cause of AD and multiple active clinical trials for potential treatments.

In this presentation, recent progress in understanding AD pathogenesis will be discussed, with an emphasis on the amyloid cascade hypothesis and the Aβ aggregation mechanism. Natural products with neuroprotective activities are believed to hold significant promise in preventing or treating AD, primarily through inhibition of the Aβ oligomers formation which are most toxic amyloid species. Our approach combines in vitro screening followed by in vivo evaluation of several bioactive antioxidants as novel aggregation inhibitors. Electrospray ionization-ion mobility spectrometry- mass spectrometry (ESI-IMS-MS) study of the Aβ (1-40): crocin samples combined with the TEM study reveals a substantial perturbation of the typical amyloid fibril forming pathway and alteration in the monomer/oligomer distribution of Aβ (1-40) induced by the crocin interaction. Our findings highlight the utility of dietary antioxidant screening for identifying lead compounds as a promising approach to prevent amyloid toxicity and provide protection against Alzheimer's disease (AD).

Biography

Tsarbopoulos Anthony is a Professor at the National and Kapodistrian University of Athens (NKUA) Medical School, Greece, and the Director of the Bioanalytical Department at The Goulandris Natural History Museum. He has a background in biomedical mass spectrometry, with a focus on applying advanced analytical chemistry in both preclinical and clinical studies, as well as in protein-ligand interaction studies. He received his BS degree in Chemistry from NKUA and his PhD in Analytical Chemistry from Michigan State University. He was a Senior Research Fellow at the Mayo Medical School and then a Group Leader in the Structural Chemistry Department of Merck/Schering-Plough Research Institute (1988-1998). He has over 110 publications, with more than 3,900 citations (h-index: 36), and has made over 180 presentations at international conferences.

How Do We Treat Patients on Opioid Treatment Programs for Cannabis Use Disorder in Australian Public Clinics?

James Blogg*

Clinical Director, Alcohol and Other Drug Services, SNSWLHD, Australia

Background: High rates of patients engaged in opioid treatment programmes (OTP) also suffer from cannabis use disorder (CUD). Treatment options are limited, with weaning off or detox options having high relapse rates. Australia has developed a medical model for prescribing medicinal cannabis (MC) to support a range of conditions, including chronic pain (cancer & non-cancer), anxiety, and insomnia. Approvals for prescriptions from private prescribers have dramatically shifted over the past 8 years from oral oils containing cannabidiol (CBD) to dried herb containing delta-9 tetrahydrocannabinol (THC). Currently, 745 MC products are available in Australia on prescription, categorized by the Therapeutic Goods Administration (TGA) according to their respective levels of CBD and THC.

The TGA supports prescribers through two parallel systems:

•Authorized prescribing using “established use” for oral oils and capsules

•Detailed (Special Access Scheme) applications for all product categories

Purpose:

Patients presenting for treatment with MC in the public health system are generally not supported by State or Territory Health Authorities. Clinicians can apply to their local Drug and Therapeutic Committee (DTC) to help their patients by applying for individual patient use. This approval process must be completed for every patient and coincides with the DTC’s meeting schedule (or is supported by out-of-session DTC approvals), which is impractical. Applications to add MC products to local formularies have not been supported, and this process is unlikely to be useful due to the fluctuating nature of product supply and frequent changes in producers and suppliers. In the Southern NSW Local Health District (SNSWLHD), OTP patients with CUD usually also smoke tobacco and/or use tobacco with cannabis. These patients report symptoms that would qualify for the use of MC under the established use criteria. In many parts of the District, Indigenous groups also experience high rates of CUD.

Approach:

Extensive consultations were conducted at the state level with pharmacists and addiction specialists, including the Chief Addiction Medicine Specialist from the Ministry of Health. SNSWLHD’s Chief Pharmacist was supportive of the initiative, as clinics are held in outpatient departments, and MC is dispensed at community pharmacies at no cost to the LHD.

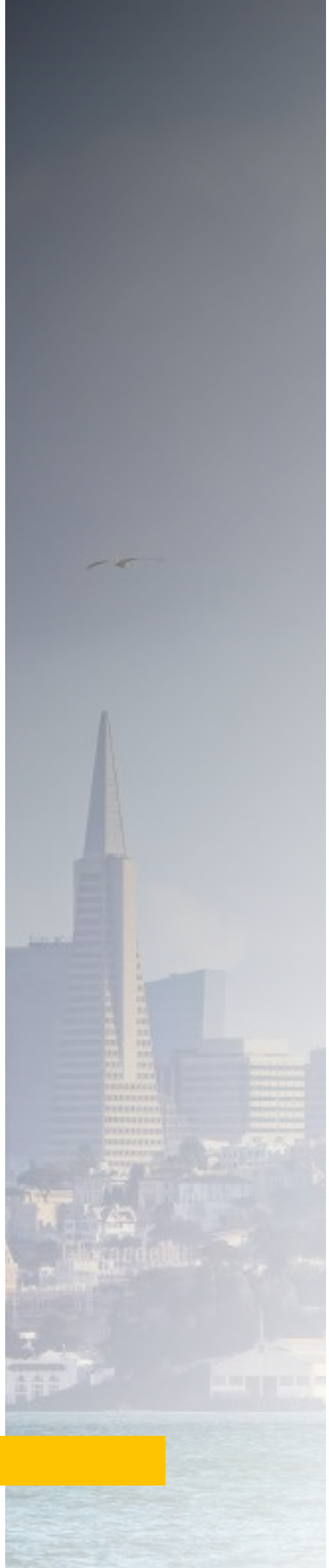
Outcome/Impact

The Chief Pharmacist recommended that an application be made to the DTC to support prescribing of MC to treat CUD in existing OTP patients (and for selective Addiction Medicine referrals from local practitioners). This application was favorably received and has enabled SNSWLHD to become the first public site approved to support MC prescribing in NSW, Australia’s most populous state. The program embraces harm reduction principles and emphasizes smoking cessation. To meet this objective, patient assessment includes monitoring carbon monoxide levels as a proxy for harmful smoking. Patients are offered comprehensive support with nicotine replacement therapy and/or nicotine vapes or other pharmacological options. There are 300 OTP patients in SNSWLHD, 28 of whom have received MC for CUD. Four

patients have requested THC vapes to assist in managing their chronic pain; 24 have been exclusively managed with oral oil. Bega Valley has the highest rate with 11 patients on the program, including three patients weaning off MC and entering rehab, and another 2 weaning off THC and are being maintained on CBD. Financial support has been received for some patients' MC regimens from local Indigenous health services, social support organizations, and private health insurance. Conclusion: MC prescribing in Australia is uniquely medicalized, with prescribing essentially limited to the private sector, which limits access to public patients with complex needs. SNSWLHD plans to expand coverage of this service by enhancing access through additional prescribers, aiming to address all forms of substance use in our patients.

Biography

Dr James Blogg has worked in injecting drug use and blood-borne viruses for over 30 years. He began work in Africa in HIV prevention, then worked in prevention and care for people who inject drugs in Australia. After 8 years in Indonesia as 'Harm Reduction Advisor', he returned to Sydney as Clinical Director, Population Health, Justice Health and Staff¬ Specialist, Drug Health Services. Currently, he's the Clinical Director, Alcohol and Other Drugs, SNSWLHD. James has published a range of Public Health issues, including refugee health, mapping injecting drug use, and prevention of COVID in the NSW prison system.



DAY 1

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ORAL PRESENTATIONS

Music Training in Cochlear Implant Users: A Randomized Crossover Study

Fawen Zhang[1]* Aura Maria Vargas, Steven Cahn, Emily Green, Sam Kroeger, Grace Rhein, Mehraban Salaryfar, Karlee Seybold and Tyler Steinkoenig

[1]Department of Communication Sciences and Disorders, University of Cincinnati, USA

A cochlear implant (CI) is an effective prosthetic device that enables individuals with severe or profound hearing loss to regain hearing ability. Most post-lingually deafened adult CI users can achieve satisfactory speech recognition performance in quiet environments. The performance of CI users declines dramatically in challenging listening tasks that rely heavily on the auditory processing of sound frequencies, such as speech perception in noisy environments and music perception. Music training can enhance the neural representation of fundamental acoustic features in music and speech stimuli, and improve cognitive functions required for speech and music perception. One major issue in music training studies involving CI users is that most studies have employed experimental designs with insufficient scientific rigor, such as simple group and pre-post treatment designs. This study was designed to investigate the effects of music training on auditory function using a rigorous, randomized, crossover design. We will use functional near-infrared spectroscopy (fNIRS), a non-invasive optical neuroimaging technique, to examine auditory cortex activation in a portion of CI participants and demonstrate the effects of music training on brain activity in response to sounds. Method. The target number of participants was 12. These CI users were post-lingually deafened native English speakers. All participants were randomly assigned to two groups: Group 1 underwent a 1-month Music Training program (MT) followed by a 1-month washout period (no training was allowed) and then a 1-month Control Training program (CT). Group 2 received the same training, with the order of MT and CT reversed. All participants were assessed at 5 time points (T1-T5) with behavioral tasks in Angel Sound software and the five-item version of the Speech, Spatial, and Qualities of Hearing Scale (SSQ5). Both MT (attentive music listening and singing along) and CT (art, cooking, or knitting) training programs were created using online materials that were cognitively engaging and enjoyable. fNIRS data were collected from some CI users. Results. Non-fNIRS data showed a trend that the 1-month MT training resulted in some improvement in hearing ability, as assessed by certain tasks (e.g., frequency discrimination, gap detection, melodic contour identification). SSQ scores are relatively stable over time, indicating that the SSQ is not a sensitive tool for assessing music training benefits. fNIRS data collection and processing are ongoing. The results will demonstrate brain plasticity in CI users following music training.

Biography

Fawen Zhang is a Professor of Audiology in the Department of Communication Sciences and Disorders at the University of Cincinnati. Between 1989 and 2022, she received her medical degrees in Medicine and Otolaryngology and practiced as an otolaryngologist in China. Between 2002 and 2007, she received a PhD in Audiology and completed a 2-year postdoctoral training program in the United States. Since 2007, she has been a faculty member at the University of Cincinnati.

Exploring the Multidimensional Clinical Diagnostic Value of αSyn-QSAA: From Cutaneous Pathology to Peripheral Blood Biomarkers

Pingyi Xu[1*] and Tingting Gan

[1] The First Affiliated Hospital of Guangzhou Medical University, China

Detection techniques for pathological α-synuclein (αSynP), such as Real-time quaking-induced conversion (RT-QuIC), have been applied in the diagnosis of neurodegenerative diseases. However, limitations remain in genotyping, the sensitivity of peripheral biomarkers, and the standardization of detection systems. This study systematically evaluates the diagnostic efficacy of the novel αSyn-Quiescent seed amplification assay (QSAA) in skin, serum, and lymphocytes, and explores its association with genotypes and disease progression.

We analyzed total α-synuclein (αSyn) and αSyn oligomer levels in skin samples (n = 400) and serum samples (n = 200) from a cohort comprising individuals with GBA/LRRK2-mutant Parkinson's disease (PD), sporadic PD, multiple system atrophy-parkinsonian (MSA-P/MSA-C), dementia with Lewy bodies (DLB), and healthy controls. Compared to traditional αSyn-RT-QuIC, QSAA demonstrated higher sensitivity (92.1% vs. 78.6%, $p<0.001$) and genotype specificity (seeding dose SD_{50} = $10^{4.2}$ in GBA-mutant groups vs. $10^{3.7}$ in LRRK2 groups, $p=0.008$). Cryo-electron microscopy revealed that αSyn fibrils from GBA-mutant patients exhibited a left-handed superhelical conformation (diameter: 8.2±0.3 nm), whereas LRRK2 groups showed a straight filamentous morphology (diameter: 6.5±0.2 nm). αSyn-QSAA seed concentration significantly correlated with motor symptoms (UPDRS-III: $r=0.68$, $p<0.001$).

For lymphocytes, magnetic bead-sorted $CD4^+$T/$CD8^+$T/$CD68^+$ monocytes/$CD56^+$NK cells pretreated at pH 6.8 and 60°C for 30 minutes with one mM $S_2O_4^{2-}$ achieved a QSAA positivity rate of 91.3% (vs. 47.2% in untreated controls, $p<0.001$), with 82.4% detection consistency in samples stored >10 months.

These findings suggest that:

1.αSyn-QSAA enables precise genotype-conformation-clinical phenotype correlations in cutaneous pathology, offering a new dimension for individualized diagnosis.

2. The serum and lymphocyte QSAA system overcomes limitations in peripheral biomarker detection, improving sensitivity by 3-5-fold;

3. Conformational differences revealed by cryo-EM may provide a structural biological basis for disease subtyping.

Biography

Pingyi Xu, Professor of Neurology, The First Affiliated Hospital of Sun Yat-sen University; Professor and Director of Neurology, The First Affiliated Hospital of Guangzhou Medical University, Ph.D. Supervisor/Postdoctoral Mentor, Guangzhou High-Level Talent. Council Member, Chinese Society for Neuroscience. Specializes in the diagnosis and treatment of central neurodegenerative diseases, complex neurological disorders, and rare neurological diseases. Has led or participated in formulating clinical practice guidelines for these conditions. Principal Investigator of multiple national-level research projects and National Natural Science Foundation of China (NSFC) grants.

Holds two national invention patents. Published 168 papers (75 SCI-indexed), with 2,903 citations (2023.

A Nationwide, Real-world, Cross-Sectional Survey on Epilepsy Outpatient Profiles and their Treatment Among Indian Neurologists and Neurosurgeons – Results from the Empire Survey

Ashley Suares*[1], Akshay Nabar, and Madhumita Panda

[1]Medical Affairs, Cipla Ltd, Mumbai, India

Background and Aim: Despite high burden and morbidity, pan-India data on patients' profiles and how specialists treat various types of epilepsy are scarce. Hence, this survey.

Methodology: Cross-sectional questionnaire-based survey digitally conducted among consenting 156 neurologists and 41 neurosurgeons approached pan-India.

Results: Respondents' mean practice experience was ~11.2 years. They encountered more generalized (55.33%) than partial seizures (44.67%) with clear male preponderance across both seizure types (61.4% and 72.60% respectively). Newly diagnosed cases mostly (52.8%) belonged to the 10-25 years' age group. For generalized seizures, levetiracetam (47.20%) and sodium valproate (39.10%) were most common choices among first-line monotherapy as also as first-line add on drugs (28.4% and 25.8% respectively, followed by clobazam – 16.80%). Clobazam (16.7%) and again levetiracetam (15.2%) were the most preferred second-line adjuvants. In case of partial seizures, oxcarbazepine (50.8%) and levetiracetam (26.9%) were the drugs of choice as first-line monotherapy as also as add-on to it (35% and 18.7% respectively). Lacosamide (20.3%) and oxcarbazepine (15.2%) stood out as second-line add-on options. In the special consideration sub-group of women with epilepsy, levetiracetam (81.2%) again outscored its alternatives including lamotrigine (45.2%), oxcarbazepine (21.8%) and brivaracetam (16.7%).

Discussion: Levetiracetam is a preferred molecule of both neurologists and neurosurgeons as first-line monotherapy as also first and second add-on to it, useful across epilepsy patient profiles – generalized, partial and women. This is followed by valproate and clobazam (as first-line and its add-on and second add-on respectively) for generalized epilepsy. In partial epilepsy, oxcarbazepine is preferred (as first-line and its add-on) besides lacosamide (second add-on). Indian specialists see more generalized than partial epilepsy, with clear male preponderance in their day-to-day practice, suggesting possible healthcare inequities, with adolescents and young adults most frequently afflicted.

Conclusion: The survey has provided insights into current usage and place in therapy of various antiseizure medications across India.

Biography

Dr. Ashley Suares is a Medical Advisor at Cipla, based in Mumbai. He holds a bachelor's degree in pharmacy and a Doctor of Pharmacy degree. With over eight years of experience in medical affairs, he has worked across multiple therapeutic areas such as neurology, psychiatry, pediatrics, and gastroenterology. Dr. Ashley has presented multiple posters at neurology conferences with a particular emphasis on epilepsy and clinical insights.

Situational Analysis of Togo's First Pneumococcal Meningitis Epidemic in 2023

Alassani Issifou*[1], Nikiema pessinaba Christelle[2], ETOH Mawuli Gaga[2], Ouro- Kavalah Farihétou[2], Halatoko Wemboo[2], Aflagah Mawougnon[3], Akator Komla Biova[3], Azanman Selome Julie[1], Anani Joel[1] and Siaka Conde[1]

[1]World Health Organization, Togo
[2]Division de la Surveillance Intégrée des Urgences Sanitaires et de la, Togo
[3]Direction Régionale de la Santé des Savanes

Introduction: Meningitis is a major public health problem in Togo, which records cases every year with the occurrence of meningococcal outbreaks. In 2014, PCV13 was introduced into the routine EPI. In 2023, the country notified its first pneumococcal meningitis outbreak in the Oti- Sud district. The aim of the present study is to analyze this epidemic.

Methods: This is a descriptive cross-sectional study based on epidemiological surveillance data from the Oti-Sud district (population: 125699 inhabitants), analyzed using Epi-info 7.2.6.0 software. The interval of confidence used is 95%, with a significance level of less than 0.5%.

Results: The district crossed the epidemic threshold in week 4 of 2023. A total of 149 cases of meningitis were registered, with a cumulative attack rate of 118 per 100,000 inhabitants. The median age was 15 years [11-24 years]. The 5-14 years age group was the most represented (64/149 or 42.95%, IC95% = [34.88-51.31]). Children under 5 years were less affected (6%). The M/F sex ratio was 1.07. Only 3 children under 10 years were vaccinated with PCV13.

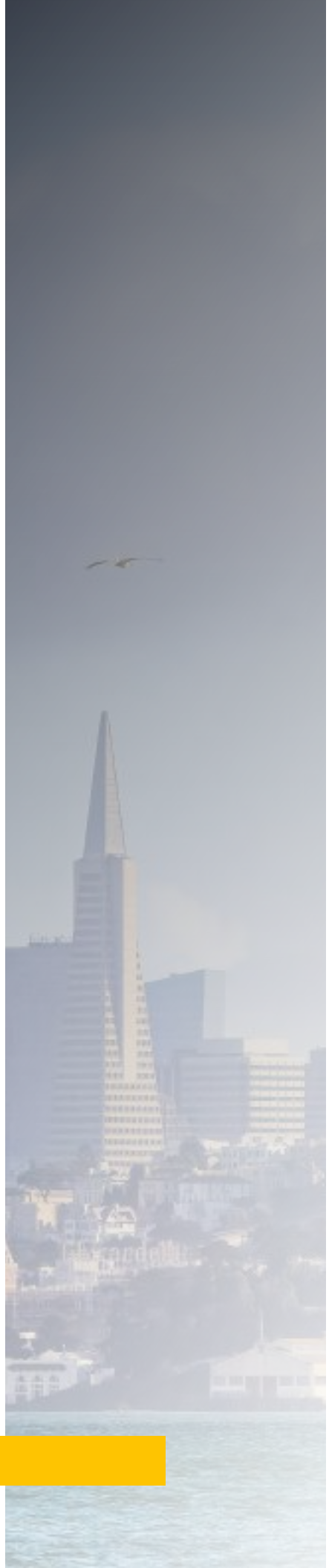
Streptococcus pneumoniae was isolated (culture, PCR) in 23 of 128 samples taken (18%), threst of samples were negative. The setotyping on 17 cases of Sp have given 11 serotypes 1, 2 serotypes 5 and 4 are no serotype. Four cases of sequelae (headache (1), hypoacusis (1), concentration (1) and motor deficit (1)) were recorded among confirmed cases (17.39%) and referred for appropriate care. The case-fatality rate was 8.05%.

The main response interventions that have helped to control the epidemic were early case detection, quality of care, risk communication and community engagement, supported by the SURGE and EMTs deployed.

Conclusion: The first outbreak of pneumococcal meningitis was brought under control, but it highlights the evolving epidemiological profile of pathogens affecting preparedness. The deployment of SURGE and EMTs improved the quality of case management, including sequelae.

Biography

Dr Issifou ALASSANI is from Togo. He has a medical doctorate and is a specialist in Public Health. He has 15 years of experience in public health in his country. He currently works at the WHO Country Office in Togo, where he is responsible for country emergency readiness.



DAY 1

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POSTER PRESENTATIONS

Factors Affecting the Experience of Suicidal Thoughts Among Korean Adolescents Under Significant Stress: Based on The Korea Youth Risk Behavior Survey

Boram Chae[1*] and Jongha Lee[1*]

[1]Department of Psychiatry, Korea University Ansan Hospital, Ansan, Republic of Korea

Adolescence is a critical period of transition characterized by rapid physical and psychological changes, which often lead to stress and depressive symptoms. The increased vulnerability to stress during this stage is linked to suicidal ideation, a key concern in adolescent mental health. This study aimed to identify risk factors for suicidal ideation in Korean adolescents, focusing on those under significant stress and depressive symptoms. We utilize the Korea Youth Risk Behavior Survey (KYRBS) data involving 619,331 nationally representative middle and high school students aged 12–18 in South Korea. Stratified multi-cluster sampling was employed. Statistical analyses, including Rao-Scott chi-square tests and multiple logistic regression, were conducted to identify factors associated with suicidal thoughts among them. The examined variables included gender, academic performance, economic status, health perception, dietary habits, physical activity, and violent experience. The study revealed significant associations between suicidal ideation and factors such as gender, city size, school grade, perceived academic performance, perceived economic status, self-perceived health, body image perception, breakfast frequency, sweetened beverage consumption frequency, fast food consumption frequency, caffeine intake frequency, physically active days, walking days, participating physical education, effort to control weight, sleep satisfaction, alcohol consumption days, smoking days, time spent studying on weekdays, time spent studying at weekend and violence experience ($p<0.001$). Among those, females, low academic performance, negative perceptions of health, experiencing violence, and fast-food consumption were found to have higher odds of suicidal thoughts. The study highlights the need for tailored intervention strategies in Korea that address these risk factors, taking into account cultural and societal influences. Despite the study's limitations, including its cross-sectional design and the lack of data on sexual minorities, it highlights critical areas for future research and intervention to reduce adolescent suicide risks and improve mental health outcomes.

Biography

Boram Chae: She works as a Clinical Assistant Professor in the Department of Psychiatry at Korea University Ansan Hospital. She is a Member of the Korean Neuropsychiatric Association, a Member of the Korean Academy of Child and Adolescent Psychiatry, and a Member of the Korean Academy of Sleep Medicine.

Jongha Lee: He is an Associate Professor in the Department of Psychiatry at Korea University Ansan Hospital. He is a Director at Ansan Suicide Prevention Center and worked as a Director at the Student Mental Health Support Center. He is a Member of the Korean Neuropsychiatric Association, a Member of the Korean Academy of Child and Adolescent Psychiatry, and a Member of the Korean Academy of Adolescent Psychiatry.

Effectiveness of Combination Therapy of Donepezil and Choline Alphoscerate on Behavioral Psychological Symptoms In Alzheimer's Disease

Kang Joon Lee*

Inje University Ilsanpaik Hospital, Department of Psychiatry, Republic of Korea

Background: Alzheimer's disease is a progressive neurodegenerative disorder that not only causes disorders in neurocognitive functions such as memory, attention, and executive function, but also exhibits various behavioral and psychological symptoms such as agitation, aggression, depression, anxiety, and wandering. In particular, behavioral psychological symptoms of dementia (BPSD) place a severe physical and mental burden on patients and their caregivers. It has also been reported that a decrease in acetylcholine, a significant cause of cognitive impairment, is associated with BPSD. That choline alfoscerate, either alone or in combination with acetylcholine esterase inhibitors, shows an enhancing effect on cholinergic neurotransmission, thereby reducing BPSD. In this study, the impact of donepezil monotherapy and donepezil and choline alfoscerate combination therapy on behavioral and psychological symptoms of Alzheimer's disease was compared.

Methods: This study was a prospective, randomized, open-label study for 12 weeks, among those who visited the Department of Psychiatry and Dementia Clinic at Inje University Ilsan Paik Hospital, 128 people aged 60 years or older who met the diagnostic criteria for 'neurocognitive impairment caused by Alzheimer's disease' defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). According to randomization, 64 patients were administered donepezil, and 64 were administered donepezil and choline alphoscerate for 12 weeks. The Korean Neuropsychiatric Inventory (K-NPI) and Geriatric Depression Scale were evaluated at baseline, week 4, and week 12. The Mini-Mental Status Examination (MMSE), Global Deterioration Scale (GDS), and Alzheimer's Disease Assessment Scale-Cognitive Subscale (ADAS-Cog) were evaluated at baseline and week 12. Those who met the following conditions were excluded from the subjects - those diagnosed with dementia caused by other causes other than AD, those with a history of head trauma or brain injury, those with other neurodegenerative diseases (Parkinson's disease, Huntington's disease, etc.), patients with a history of drug abuse or other medical problems that may impair cognitive function, and patients with concomitant psychotic or mood disorders. The t-test was used for statistical analysis between the two groups, and the chi-square test was used for categorical variables. R version 4.3.1 (R Foundation for Statistical Computing, Vienna, Austria) was used. This study was approved by the Institutional Review Board (IRB) committee and conducted.

Result: This analysis included 41 donepezil-administered patients (mean age = 82.2 years, 34.1% male) and 42 donepezil and choline alphoscerate combined-administered patients (mean age = 80.3 years, 45.2% male), and there was no statistically significant difference in age and education level in the two groups.

In each group, there were no statistically significant differences in MMSE-K, GDS, Geriatric Depression Scale, Global NPI severity and frequency, caregiver distress, and NPI sub-items between baseline and 12 weeks. In the cognitive domain, there was no statistically significant difference between the two groups in any sub-item of the ADAS-Cog at baseline or at week 12.

Patients assigned to receive donepezil and alphoscerate, compared with those assigned to receive donepezil alone, showed no significant improvement in global NPI severity and frequency, caregiver distress, the sub-items of NPI, the Geriatric Depression Scale, MMSE, GDS, and ADAS-Cog scores after 12 weeks of treatment.

Conclusion: There was no significant difference in improved behavioral psychological symptoms between donepezil and choline alphoscerate combination therapy and donepezil monotherapy. Additionally, there was no difference between the two groups in terms of improving cognitive function. Large-scale clinical studies on Alzheimer's disease patients are needed to verify the effectiveness of choline alphoscerate combination therapy in the future.

Biography

Dr. Kang Joon Lee is a Professor of Psychiatry at Inje University Ilsan Paik Hospital. With over 25 years of experience, he specializes in geriatric psychiatry and psychosomatic medicine. He serves as Vice President of the Korean Association for Geriatric Psychiatry and the President of the Korean Psychosomatic Society. He has contributed to textbooks on geriatric psychiatry and psychosomatic medicine and has published books for the public, including a dementia care guide. His work bridges clinical care, education, and research to advance mental health for older people.

Association Between C-Reactive Protein (CRP) and Antidepressant Treatment Response in Patients with Major Depressive Disorder

Hyun Kim*

Department of Psychiatry, Ilsan Paik Hospital, Inje University, Republic of Korea

Abstract: Major depressive disorder (MDD) is one of the most common psychiatric disorders. It is not only associated with a high risk of suicide and ischemic heart disease, but also closely linked with stress, immunity, and inflammatory reactions. C-reactive protein (CRP), a marker of systemic inflammation, has been suggested to correlate with treatment outcomes in depression. This study aimed to investigate whether baseline CRP levels are associated with and predictive of treatment response in patients with depressive symptoms.

Methods: This study selected 60 patients aged 19 and above who were diagnosed with major depressive disorder (MDD) according to the DSM-5 criteria. CRP was measured prior to medication, and SSRI escitalopram was administered for 8 weeks. Depression scale assessments, including the 17-item Hamilton Rating Scale for Depression (HAMD-17) and the Patient Health Questionnaire-9 (PHQ-9), were performed before and after administration at the 8-week mark. A multivariable logistic regression analysis was conducted to evaluate the predictive value of CRP for treatment response, adjusting for age and sex.

Results: A total of 38 people were analyzed (15 men and 23 women), with a mean age of 60.55±15.16 years. Both PHQ-9 and HAM-D showed statistically significant improvement after 8 weeks($p<0.05$).

CRP was not significantly associated with treatment response in either PHQ-9 (OR = 2.13, p = 0.791) or HAM-D (OR = 0.006, p = 0.341).

Conclusions: Baseline CRP levels were not significantly associated with depressive symptom improvement and showed limited predictive utility for treatment response. Further studies with larger samples and additional biomarkers are warranted.

Biography

Hyun Kim is Professor of Psychiatry at the Inje university Ilsan Paik hospital in South Korea. He received a bachelor's, master's, and doctoral degree in Medicine from Korea University in Seoul, South Korea. He is interested in Mood disorders, Schizophrenia, Psychosomatic medicine, and Dementia research.

The Effect of Repeated tDCS Combined With taVNS on Enhancing the Abilities Against Mental Fatigue

Xufeng Liu[1*] and Xiuchao Wang[1*]

[1]Department of Military Medical Psychology, Air Force Medical University, China

Background: Personnel in special occupations generally need to continuously maintain a high level of cognitive control and attention and respond quickly to unpredictable stimuli at daily work. This continuous high mental workload (HMW) and stress state can lead to the occurrence of Mental fatigue (MF). Currently, an increasing number of studies are using transcranial direct current stimulation (tDCS) to intervene in MF; however, the effects of this intervention are mixed. Researchers believe that such results may be due to the vast majority of studies having only one intervention. It was shown that tDCS combined with transcutaneous auricular vagus nerve stimulation (taVNS) produced a significant synergistic effect on brain responses. Thus, repeated tDCS combined with taVNS may have great potential to enhance individual cognitive performance and resistance to MF. However, there is no empirical evidence for the effects of repeated tDCS combined with tAVNS and tDCS on enhancing individual resistance to MF. Therefore, this study aims to explore the short- and long-term effects of repeated tDCS combined with taVNS and tDCS on enhancing individual resistance to MF, to provide preliminary programmatic and empirical evidence for the application of neuromodulation to the anti-MF aspects of individuals.

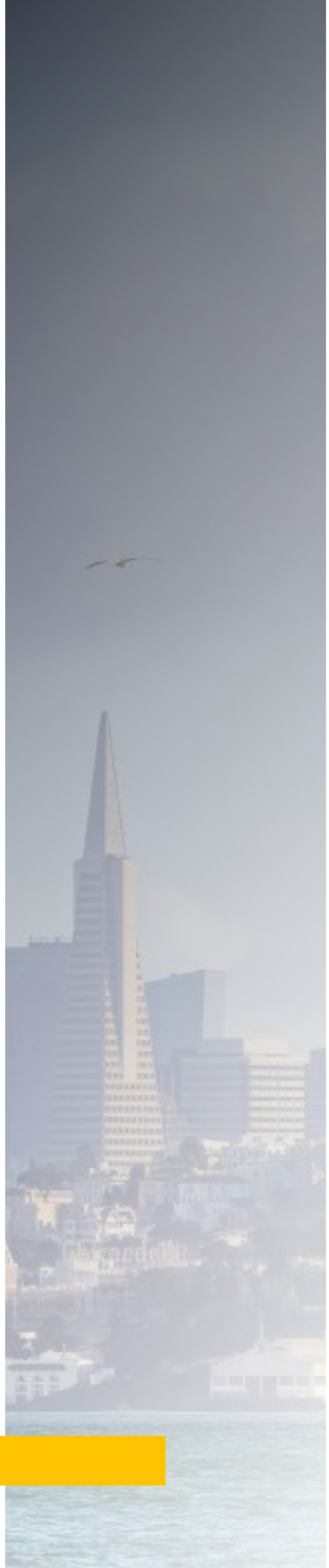
Methods: A randomized, double-blind, sham-stimulation-controlled experimental design was used. Seventy-two young male adults were randomized to the tDCS combined with tAVNS group (n = 24), the tDCS group (n = 24), and the sham stimulation group (n = 24) and received the corresponding repetitive stimulation intervention method (2 stimulations per day for 3 days, with two stimulations per day spaced at least 4 hours apart, each stimulation being 30 min). Cognitive tasks and subjective scales were assessed at four time points: before the intervention (1 day after the intervention, 1 week after the intervention, and 1 month after the intervention). The data were analyzed using a repeated measures ANOVA.

Results: The tDCS combined with taVNS, tDCS, and Sham repetitive stimulation methods were all effective in reducing the incremental subjective MF generated during task performance, enhancing the number of correct trials, and maintaining some long-term effects. tDCS combined with the taVNS method was more effective in enhancing the number of correct trials than the tDCS and Sham schemes.

Conclusion: Repeated tDCS combined with taVNS can be a significant intervention to enhance resistance to MF and cognitive abilities in individuals.

Biography

Xufeng Liu, Professor of the Department of Military Medical Psychology, Air Force Medical University. He has been engaged in psychology teaching and scientific research for 31 years. The research fields are applied psychology and cognitive psychology, and the research directions are psychological selection and evaluation, as well as mental health promotion. He has published 78 SCI/SSCI papers, been authorized 18 patents, and obtained 28 software copyrights.



DAY 2 (Virtual)

Joint Event on
3rd Edition of International
Neurology Conference
and
2nd Edition of
Psychiatry and Addiction
World Conference

KEYNOTE PRESENTATIONS

A Cross-Sectional Study to Explore Quality of Life Among Greek Mental Health Professionals and the Role of Social Support and Spiritual Needs

Paraskevi Theofilou*

Hellenic Open University, School of Social Sciences, Greece

This research aims to investigate the effect of social support and spiritual needs on the Quality of Life of mental health professionals in Greece. A quantitative cross-sectional survey was conducted on 97 mental health professionals of various specialties. The QoL10 questionnaire assessed the Quality of Life, the MSPSS for social support, and the SpNQ for spiritual needs. The survey results showed that the participants' Quality of Life was generally good, with an average value of 3.72 on a scale of 1-5. Social support was significantly and positively correlated with Quality of Life ($r = 0.565$, $p < 0.001$), whereas spiritual needs showed no significant correlation. Linear regression analysis revealed social support as the only significant predictor of quality of life (QoL). Sociodemographic characteristics were not found to be significantly related to Quality of Life, although there were indications of a possible association with gender and marital status that need further investigation. In conclusion, social support is an essential protective factor for the quality of life and mental health of mental health professionals. Future perspectives include continuing the research in a larger and more representative sample and investigating additional factors that may influence the Quality of Life of this occupational group.

Biography

Post Doc Researcher (2016-2018, University of Peloponnese, Department of Nursing, Sparta, Greece) Ph.D. in Health Psychology (Panteion University of Social and Political Sciences, Department of Psychology, Athens, Greece) Ph.D. in Personnel Management (University of Peloponnese, Department of Nursing, Tripoli, Greece) M.Sc. Health Services Management (Frederick University, School of Health Sciences and School of Law and Business Administration, Cyprus) M.Sc. Social exclusion, minorities and gender (Panteion University of Social and Political Sciences, Department of Sociology, Athens, Greece) Social Administration - Management of Health Services (National School of Public Administration, Athens, Greece) B.Sc. in Psychology (Panteion University of Social and Political Sciences, Department of Psychology, Athens, Greece) B.Sc. in Social Work (Technological Educational Institute of Athens, Athens, Greece)

Scalp Acupuncture with Functional Electrical Stimulation for the Treatment Children with Autism spectrum. disorder

Zhenhuan LIU*

Nanhai Maternity and Children Hospital Affiliated to Guangzhou University of Chinese Medicine, China

Objective: To investigate the effect of and Acupuncture on brain plasticity and motor development in children with cerebral palsy. Investigate effect on mechanism of apoptosis of brain nerve cells, regulating the expression of neurotrophic factors, promoting the remodeling of nerve synaptic structure and motor development in young rats with cerebral palsy. Two: To evaluate the effect and mechanism of acupuncture on cerebral palsy. Three: The nerve repair effect of acupuncture on cerebral palsy.

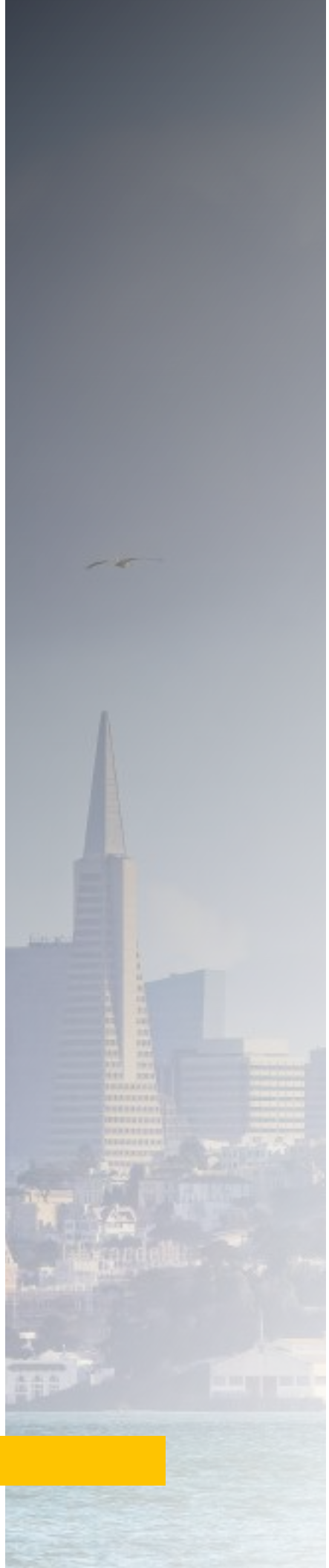
Methods: In this study, 146 cases of brain injury and 1078 cases of cerebral palsy were included by randomized controlled study with ICF Gross motor function measure , Peabody fine motor function, Gesell, muscle tension, joint activity, activity of daily living transcranial doppler,, skull B ultrasound, Brain Nuclear Magnetic Resonance Imaging MRI, Positron Emission Tomography SPECT, Diffusion tensor tractography evaluation method.

Results: the recovery rate of extracellular space (92.3%) was significantly higher than that of the control group (70.8%) (P <0.05), Transcranial Doppler, TCD total efficiency (79.3%) was significantly higher than that in the control group (51.8%) (P <0.05). Acupuncture to promoting the development of neurological and cognitive movement under 6 months children, effectively reduce the neurological sequelae. The total effective rate of the children with cerebral palsy was 87% in the acupuncture group, which was significantly higher than that of the control group (P <0.01). The total effective rate of Brain MRI was 59.55% in the acupuncture group and 13.25% higher than that in the control group (P <0.01). The total effective rate was 91.3% in the 1 year follow-up group, which was significantly higher than that in the control group (P <0.01). the FA value of white matter fiber bundle was significantly higher than that of acupuncture at 60 times (P <0.05). The recovery rate of ultrasonous brain injury (86.7%) in acupuncture group was significantly higher than that in control group (64.4%) (P <0.05). The recovery rate of brain SPECT in the acupuncture group was 96.4%, which was significantly higher than that in the control group (P <0.01).

Conclusion: Acupuncture rehabilitation not only promotes the development of white matter and gray matter in children with cerebral palsy, but also promote the brain function of children with cerebral palsy remodeling and compensation, and promote social adaptation, language and other cognitive function development, children with cerebral palsy movement and Fine motor function development and recovery, improve the children's self-care ability.

Biography

Zhenhuan LIU, professor of pediatrics, Pediatric acupuncturist, Ph.D., tutor. He has been engaged in pediatric clinical and child rehabilitation for 40 years. Led the rehabilitation team to treat more than 40,000 cases of children with intellectual disability, cerebral palsy, and autism from China and more than 20 countries. More than 26800 children's deformities returned to school and society and became self-sufficient. The rehabilitation effect ranks the international advanced level. Vice-chairman of the Rehabilitation Professional Committee, Children with Cerebral Palsy, World Federation of Chinese Medicine Societies. Visiting Professor of Chinese University of Hong Kong in recent 10 years. He is most famous pediatric neurological and rehabilitation specialists in integrated traditional Chinese and Western medicine in China. He has edited 10 books. He has published 268 papers in international and Chinese medical journals



DAY 2 (Virtual)

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3rd Edition of International
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and
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ORAL PRESENTATIONS

The Relationship Between ADHD and Addictive Behaviours, A Review

Hamidreza Rahmanian[1*] and Amirhosein Banki

[1]Southwest London & St. George's Mental Health NHS Trust, London, UK

Although attention-deficit hyperactivity disorder (ADHD) has long been thought to be a disabling and common disorder that occurs only in childhood, more recent research, including prospective longitudinal follow-up studies, suggests that ADHD persists into adulthood in a high proportion of cases (1). Attention-deficit hyperactivity disorder is a serious risk factor for comorbid psychiatric disorders including substance misuse, antisocial personality disorder, and affective disorders (1). the presence of ADHD complicates the treatment of the addiction (2). Moreover, the correlation between ADHD, impulsivity symptoms, and behavioural addictions such as internet and shopping addiction highlights the necessity of managing ADHD symptoms in adults, particularly when coupled with substance use disorders (3). Research also suggests a bidirectional relationship between ADHD and addictive behaviours, with ADHD symptoms potentially contributing to the development of substance dependence and behavioural addictions (4). Chronic use of addictive substances has been observed to exacerbate ADHD symptoms like poor impulse control (5). In adults, the use of stimulants in comorbid ADHD and SUD has always been challenging because of their addictive properties, which carry a greater risk of misuse, especially in individuals with a history of stimulant/cocaine abuse. Concerning treatment management, in clinical practice, an important distinction is between ADHD subjects with and without stimulant/cocaine addiction (6). The complexity of the relationship between ADHD and addiction is underscored by studies emphasizing the role of ADHD in both the development and severity of addictive behaviours (7), (8), often leading to a faster progression from mild to severe substance use disorders (9). In terms of management plan, routine screening is recommended for ADHD in adolescent patients in substance abuse treatment and for SUD in adolescent patients with ADHD in mental healthcare settings (10). Long-acting stimulants are recommended as the first line treatment of ADHD in adolescents with concurrent ADHD and SUD, and pharmacotherapy should preferably be embedded in psychosocial treatment. (10).

In conclusion, the current literature supports the association between ADHD and addictive behaviours, emphasizing the need for conducting a comprehensive assessment and tailored interventions to address ADHD symptoms as well as addictive behaviours for enhancing outcomes and effectively managing both conditions.

Biography

I am a consultant psychiatrist and an associate clinical director for Sutton community mental health services within South West London and St George's NHS trust, and I am also an honorary senior clinical lecturer at St George's, University of London. I am also a clinical and educational supervisor for foundation, GP, core and higher trainees in psychiatry. Through the past few years, I have developed a special interest in medical education. To sharpen my teaching skills, I completed a certificate in essential skills in medical education at Dundee university. In recent years, I have been actively involved in both undergraduate and post graduate teaching.

I have recently completed the Developing Teaching course to further improve my knowledge and skills about teaching and learning within the context of higher education and in particular, in the area of medicine.

Moderator Roles of Shame and Impulse Control in the Relationship Between Negative Affect and Substance Abuse

Ayça Gürsoy[1*], Ümmü Melike Doğan, Prof. Dr. Tülin Gençöz

[1]Department of Psychology, Psychoanalytic Track of Clinical Psychology Program, Middle East Technical University, Ankara, Türkiye

Substance use has become increasingly prevalent worldwide, with significant implications for both individuals and society. The rise in global drug users, which saw a 20% increase in the past decade, and has reached 292 million in 2022, underscores the urgency for in-depth understanding on risk factors of addiction. Modern psychiatry categorizes addiction as a medical condition, primarily focusing on biological, environmental, and developmental factors. Lacanian psychoanalysis, on the other hand, offers a valuable perspective by exploring the impact of societal influence and how it shapes the new psychic structures. Melman's concept of new psychic structures addresses the limitlessness and constant pursuit of pleasure that emerges due to the dominance of technology and neoliberal policies in contemporary discourse.

The aim of this study was to examine the moderate roles of shame and impulse control in the relationship between negative effects and substance abuse, within the framework of the Lacanian psychoanalytic perspective. The participants were 100 adults, 91% of whom reported prior substance use and 7% reported themselves as currently addicted to a substance. The analysis was conducted using Hayes Process Macro for Moderation Analysis with two Moderators (i.e., Model 2), where the moderators were feelings of shame and impulse control. Regarding shame, analysis revealed that higher feelings of shame were more strongly associated with addictive behavior. On the other hand, surprisingly, high impulse control was more strongly associated with the severity of addiction. These findings were discussed within the context of repression and the Lacanian concept of jouissance. This perspective has the potential to deepen our understanding of the causes of addiction and provide valuable information for intervention studies on addiction.

Biography

Ayça Gürsoy completed her undergraduate studies in Psychology at Bilkent University. During this time, she interned at the French Lape Psychiatric Hospital, gaining early clinical experience. She went on to earn her master's degree in clinical psychology from Middle East Technical University (METU), where she worked as a supervised psychologist at the Ayna Clinical Psychology Support Unit. Her master's thesis focused on the psychoanalytic interpretation of marijuana addiction in young adults. Currently, she is pursuing a Ph.D. in Clinical Psychology at METU, while working as supervisor. Her clinical practice and academic research are grounded in Lacanian psychoanalytic theory

Assessment of Serum Lipid Profile in Patients with Parkinson's Disease

Neha Giridhar Patil[1*] and Anoop Joseph[2]

[1]Department of Internal Medicine, Father Muller Medical College Hospital, India

[2]Associate Professor, Department of Internal Medicine, Father Muller Medical College Hospital, India

Introduction: Parkinson's disease (PD), the second most common neurodegenerative disease in the world, has no satisfactory treatment impeding the disease progression. Evidence suggesting derangement in lipid metabolism preceding Lewy body formation is an evolving topic of research in the field of neurology. Therefore, an attempt to recognise the serum lipid trends in patients with PD can pave way not only in better understanding and reinforcement of the role of lipids in PD, but also in formulating newer treatment options for the same.

Materials and Methods: This case-control study assessed serum lipid levels and co-related it with disease severity in 45 cases and 45 matched controls enrolled at a tertiary hospital in Dakshina Kannada. Patients with secondary Parkinsonism, drugs and diseases significantly modifying the serum lipid levels were excluded from the study. Individual matching was undertaken. Every case was matched with a control considering age ±5 years, gender, BMI ±3kg/m2, Hypertension- systolic blood pressure ±10mmHg, and HbA1c ±1%. Fasting serum lipid profile levels comprising of total cholesterol, triglycerides, LDL-C, HDL-C, VLDL and serum TC-HDL ratio were estimated for both the groups. Disease severity was assessed using modified H and Y stage. ROC curve was drawn to assess the predictive potential.

Results:

• Most patients belonged to the age group of 61-70 years (42.22%); and the male gender (64%). 51.11% of the patients had hypertension; 60% had type 2 diabetes. The mean duration of illness was 4.11 years.

• There was no statistical difference between cases and controls with respect to age, gender, BMI, HbA1c levels and Systolic blood pressure values, reinforcing adequacy of matching.

• Females with PD had significantly higher levels of total cholesterol and LDL. The TC-HDL ratio was significantly higher in overweight and obese individuals with PD.

• Patients with PD had significantly lower levels of total cholesterol (187±47.29), HDL-C (43.76±16.38), LDL-C (112.34±37.85) as compared to the total cholesterol, HDL-C and LDL-C levels in the controls (214.09±38.11; 53.04±14.36; 131.13±35.01 respectively). There was no statistically significant difference in the triglyceride levels, VLDL, and TC-HDL ratio between the cases and the controls.

• Modified H and Y score was used to assess the disease severity. Patients were distributed along all stages.

• Patients with Type 2 diabetes had higher median disease stage (3) compared to the non-diabetics (2.5).

• A statistically significant negative association was found between total cholesterol and LDL levels with severity of PD.

• The ROC for various lipid parameters demonstrated a negative predictive potential for triglycerides, VLDL, and serum TC-HDL ratio, however these findings were not statistically significant.

• The ROC demonstrated nil predictive potential of total cholesterol, LDL and HDL in predicting the disease, with p value <0.05.

Conclusion: Our study found lower lipid levels (TC, HDL-C, and LDL-C) in patients with PD. Lower TC and LDL-C levels were found with increasing disease severity. These findings, consistent with studies done in other parts of the world can have a causative or curative potential. Further research establishing stronger association between serum lipids and Parkinson's disease can pave way into better understanding of dysfunction of lipid metabolism in the brain. It opens the path for dietary modifications and treatment options in either slowing disease progression or finding a cure for PD by targeting the pathology rather than treating the symptoms. Our study is one of the pioneer studies establishing an association between serum lipids and Parkinson's disease in India.

Biography

Dr. Neha Giridhar Patil, born in Karnataka, India, is a research enthusiast and has presented papers and won awards in numerous national and international medical conferences. She has seven publications in indexed journals and continues her research with passion. Her work includes studies in febrile neutropenia and induction outcome in leukaemia, masquerades of lymphoma, paediatric anaemia, diagnosis of COVID-19, antenatal detection of hemoglobinopathies and preventing thalassemia births, among others. She is an aspiring physician, currently a final year resident and commits herself to patient care. She is also a debater, explorer, and a national level bronze medallist in chess. She aspires to present her work to the global medical community and contribute to new ideas and developments in any small way possible.

Application of Artificial Intelligence Methods in Predicting the Likelihood of Intracranial Aneurysm Rupture to Support Clinical Decision-Making

Justyna Fercho[1,2,3*], Julia Zakaszewska[4], Piotr Fonferek[4], Katarzyna Konieczna[4], Hanna Lisowska[4], Jakub Sadowy[4], Daria Binerowska [4], Maciej Pestka[4], Michalina Dudra[5], Weronika Jagieło[5], Klaudia Kokot[5], Dariusz Szplit[6], Jacek Szypenbejl[1], Tomasz Szmuda[3,7], Mariusz Siemiński[1], Patryk Jasik[4,8]

[1]Department of Emergency Medicine, Medical University of Gdańsk, University Clinical Centre in Gdańsk, Poland. [2]Neurosurgery Department, 10th Military Clinical Hospital with PolyClinic SPZOZ in Bydgoszcz, Poland. [3]Neurosurgery Department, Luxmed Hospital in Gdańsk, Poland. [4]Faculty of Applied Physics and Mathematics, Gdańsk University of Technology, Poland. [5]Students' Scientific Circle of Emergency Medicine, Medical University of Gdańsk, Poland. [6]Department of Innovation, Analytics, and Medical Technology Implementation, Medical University of Gdańsk, Poland. [7]Neurosurgery Department, Medical University of Gdańsk, University Clinical Centre in Gdańsk, Poland. [8]BioTechMed Center, Gdańsk University of Technology, Poland.

Background: Intracranial aneurysms affect approximately 8% of the population, with a high incidence of subarachnoid hemorrhage. This study analyses clinical data to investigate the risk factors associated with intracranial aneurysm rupture. The research utilizes a comprehensive dataset from the University Clinical Center in Gdańsk (UCCG), encompassing records from 2,095 patients hospitalized for both unruptured and ruptured aneurysms since 2006. The collected dataset was carefully prepared using data filtering, cleaning, standardization, imputation, and aggregation methods. We conducted a multivariate and multidimensional exploration statistical data analysis to differentiate between patients with ruptured and unruptured aneurysms, identifying key risk factors for aneurysm rupture. Finally, several machine learning models, including LightGBM, XGBoost, and Tab Net, were trained, optimized, and validated to achieve the best possible efficacy in estimating the likelihood of aneurysm rupture .

Results: The average intracranial aneurysm rupture probability, as measured on the test dataset using trained ML models, ranges from 57.2% to 92.2%. In turn, sensitivity, which in binary classification describes the percentage of actual positive cases (aneurysm rupture cases) correctly identified by the model, ranges from 0.61 to 1.0 in our study, indicating promising potential for clinical application. Based on the explainable AI methods, we suggest several features that significantly influence our ML models' predictions, i.g. glucose, platelets, creatinine, sodium, and patient age.

Conclusion: To the best of our knowledge, this is the first attempt to estimate the likelihood of intracranial aneurysm rupture based on routine laboratory test results and ML models. This study shows possible solutions to enhance diagnostic capabilities based on basic laboratory and clinical data collected routinely during hospitalization. This approach improves intracranial aneurysm patient outcomes and reduces healthcare costs associated with aneurysm management. .

Biography

Dr. Justyna Fercho is a dedicated neurosurgeon currently specializing at the 10th Military Hospital in Bydgoszcz, Poland. She graduated from the Medical University of Gdansk in 2021 and earned her Ph.D. in 2024, focusing on the integration of inertial sensors and telemedicine in managing spinal pathology. Over her three-year research career, Dr. Fercho has coordinated and co-researched multiple clinical trials in neurosurgery and transplantation, contributing to 21 publications in reputable journals. Renowned for her empathy and commitment to patient care, she has received positive feedback from colleagues in interventional radiology while managing patients with cerebral vascular conditions. An energetic and ambitious professional, Dr. Fercho continually seeks to enhance her skills through training and international internships. Fluent in English, French, and Spanish, she embodies the values of hard work and adaptability in the fast-paced medical environment.

Secondary Benefits of Microsurgical Intervention on the Vertebral Artery (V1 Segment) Q2 for Refractory Vertebrobasilar Insufficiency: Alleviation of Parkinsonism-Like

Mehmet Erkan Ustun[1]*, Efecan Cekic, Mehmet Besir Surme , Fatih Akbulut and Rustem Ozturk

[1]Department of Neurosurgery, Private Clinic, Turkey

Objective: The objective of this study was to investigate the outcomes of microneurosurgical interventions on V1 segment of the vertebral artery in patients with refractory vertebrobasilar insufficiency (VBI) due to dolicoarteriopathy and external compressions and to assess the secondary benefits of Parkinsonism-like symptoms.

Methods: Retrospective analysis encompassed 101 patients treated for vertebral artery dolicoarteriopathy or compression-related refractory VBI from 2016 to 2023. Of these, 16 patients exhibited drug-resistant Parkinsonismlike symptoms. The diagnostic evaluation included cerebral computed tomography/magnetic resonance angiography or digital subtraction angiography and brain computed tomography or magnetic resonance perfusion studies, corroborated by preoperative and 6- and 12-month postoperative Movement Disorder Society-Unified Parkinson's Disease Rating Scale Part 3 assessments. Data were analyzed through Turkey's "E-nabız" system, employing Stata16 for statistical scrutiny.

Results: A significant reduction in Movement Disorder Society-Unified Parkinson's Disease Rating Scale scores was observed (preoperative: 26.75 10.91; 6 months: 23.09 9.24; 12 months: 22.5 8.73; $P < 0.001$). Postoperative follow-up denoted that 43.7% of patients ceased medication and 50% reduced antiparkinsonian drugs. The microneurosurgical approach resulted in complete remission of VBI-related symptoms in 84.6% of patients, with the rest showing partial or marked improvement. At 6 months postoperation, perfusion studies revealed posterior border zone or cerebellar perfusion enhancements in 81% (13 out of 16) of patients, with full symptom resolution, while the remaining 19% (3 out of 16) showed partial perfusion and clinical improvements, particularly in regions supplied by the posterior cerebellar artery or posterior inferior cerebellar artery. The absence of operative mortality and minimal transient morbidities underscored the procedure's safety.

Conclusions: Microneurosurgery for vertebral artery anomalies in refractory VBI patients, particularly those with concomitant parkinsonian-like syndromes, has demonstrated potential in symptom remission and medication reduction.

Biography

Department of Neurosurgery, Private Clinic, Turkey.

DTI-Guided Exoscopic Excision of Low-Grade Gliomas: Laying the Foundation for BCI Integration in Perioperative Neurosurgical Care

Usman Ahmad*

Associate Professor, Neurosurgery Unit-II, Punjab Institute of Neurosciences, Pakistan

Background: Low-grade gliomas (LGGs) pose significant challenges in neurosurgical management due to their infiltrative nature and proximity to critical brain structures. Recent advancements in Diffusion Tensor Imaging (DTI) have revolutionized the visualization of white matter tracts, enabling surgeons to navigate these complex landscapes with greater precision. This abstract examines the integration of DTI-based excision techniques for LGGs as a crucial step towards the broader application of Brain-Computer Interfaces (BCIs) in neurosurgery.

DTI facilitates a comprehensive understanding of the relationship between tumor architecture and neural pathways, thereby significantly improving surgical outcomes. By employing DTI-guided surgical planning, neurosurgeons can minimize neurological deficits and enhance the extent of resection, which is pivotal for patient prognosis thus establishing a foundation for incorporating BCIs to further enhance surgical capabilities.

Methodology: A prospective study was conducted at Neurosurgery Unit-II of the Punjab Institute of Neurosciences, Lahore, over a one-year period from November 2023 to October 2024. A total of 25 patients meeting the inclusion criteria were included in the study. Prior to surgical intervention, all patients underwent MR imaging utilizing a neuronavigation protocol and Diffusion-Tensor Imaging. Outcomes were analyzed based on key metrics: (a) Extent of resection, (b) Functional outcomes, and (c) Patient survival, with follow-up evaluations at immediate post-operation, one month, and three-month intervals.

Results: The study included 25 patients, consisting of 14 males (56%) and 11 females (44%), with ages ranging from 18 to 60 years. Pre-operative imaging, along with Diffusion Tensor Imaging (DTI), was utilized to plan surgical corridors based on the involvement of white matter tracts, with the aim of maximizing resection while preserving white matter tracts. Gross total resection was achieved in 19 patients (76%), while 6 patients (24%) underwent subtotal resection. Post-operatively, neurological deficits were observed in 5 patients (20%), with 3 patients (60% of deficits) experiencing motor weakness, 1 patient (20% of deficits) experiencing speech difficulty, and 1 patient (20% of deficits) experiencing visual disturbance. These deficits showed significant improvement by the 3-month follow-up.

Conclusion: In conclusion, the utilization of Diffusion Tensor Imaging (DTI) in the excision of low-grade gliomas not only enhances surgical outcomes but also represents a significant advancement towards leveraging Brain-Computer Interfaces (BCIs) in neurosurgery. This multidisciplinary approach has the potential to redefine surgical paradigms and improve the quality of life for patients undergoing treatment for brain tumors

Biography

Associate Professor, Neurosurgery Unit-II, Punjab Institute of Neurosciences, Pakistan

Exploring the Relationship Between Quality of Life and Depression: Health Promotion Needs for Omani Patients Living with Epilepsy

Jhansi Rani Natarajan[1*], Mickael Joseph[2] and Abdullah Al Asmi[3]

1Assistant professor, University of Buraimi, Oman
2Assistant professor, Sultan Qaboos University, Oman
3Neuro consultant, Sultan Qaboos University Hospital, Oman

Background: According to the World Health Organization, epilepsy affects approximately 50 million people worldwide, making it one of the most prevalent neurological disorders (WHO, 2019). This condition impacts individuals across all demographics, including age, race, socioeconomic status, geographic location, and gender (Beghi, 2020). Epilepsy poses significant physical, psychological, social, and economic challenges for patients, their families, and society as a whole (Akosile et al., 2021). Health-related quality of life (HRQOL) is a crucial factor in the management of epilepsy, as studies have consistently shown that people living with epilepsy tend to report a lower quality of life compared to other patient groups (Akosile et al., 2021; Edefonti et al., 2011). Epilepsy impacts various aspects of a patient's life, including physical health, mental health, social function, and energy levels (WHO, 2019). A study conducted by Al-Asmi et al. (2012) on 150 Omani patients with epilepsy revealed that 27% experienced depression, while 45% suffered from an anxiety disorder.

Purpose: This study aims to examine the relationship between perceived health-related quality of life and depression among Omani patients living with epilepsy.

Method: A descriptive cross-sectional study was conducted among 238 patients attending the neurology wards or outpatient departments of two tertiary care hospitals in Muscat, Oman. Using simple random proportionate sampling, data were gathered from patients with epilepsy who volunteered to participate. The self-reported questionnaire collected demographic and clinical information and included the Quality of Life in Epilepsy Inventory (QOLIE-31) and the Neurological Disorders Depression Inventory for Epilepsy (NDDI-E).

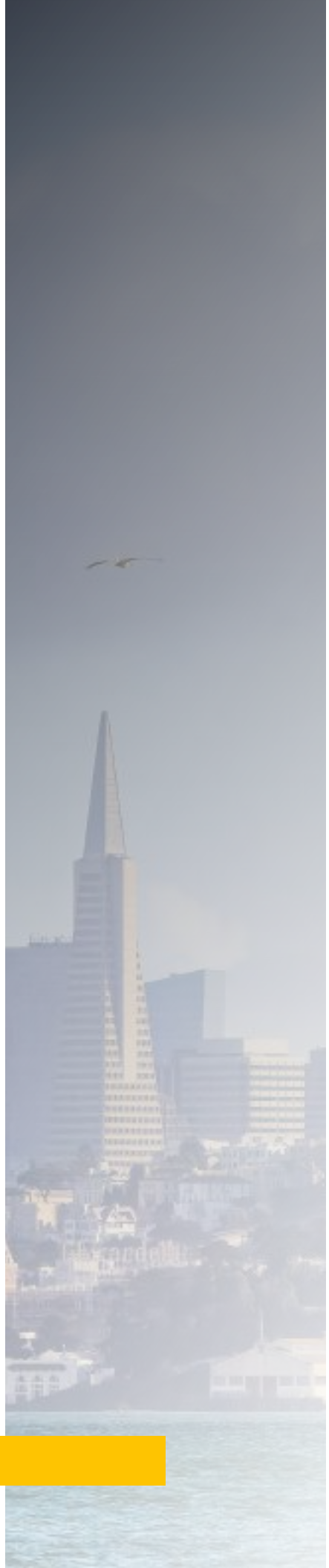
Results: Most participants were male (60.8%), with an average age of 31±11.569. A majority (55%) experienced generalized seizures, and 50.8% had idiopathic epilepsy. The mean quality of life score was 53.56±15.929, suggesting a moderate level of quality of life. Additionally, 34.9% reported experiencing depression due to epilepsy. A statistically significant, strong correlation was found between depression and quality of life scores ($p<.05$).

Conclusion: Patients with epilepsy in Oman report moderate HRQOL levels and commonly experience depression associated with their condition.

Implications for practice Health promotion activities for epilepsy patients including self management education, regular exercise, mental health support, medication adherence assistance, nutritional guidance, stress-reduction workshops, vocational training, public awareness initiatives, and routine quality of life assessments can significantly enhance their overall well-being, reduce the frequency and impact of seizures, and help mitigate the effects of depression and anxiety.

Biography

Dr. Jansi is a highly experienced nurse educator with a diverse background in teaching nursing students across India and internationally. Currently she is working as an Assistant Professor in the University of Buraimi, Oman. Her research interests encompass nursing education, particularly in areas such as simulation, flipped classrooms, and addressing incivility as well as nursing practice, with a focus on improving the health-related quality of life (HRQOL) for patients with chronic illnesses. Her work has led to numerous publications in Scopus-indexed journals and presentations at prestigious international conferences.



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KEYNOTE PRESENTATIONS

Neurophysiological Grading Tool of Ulnar Nerve Entrapment Across Wrist and Across Elbow with Case Presentation

Salim Hirani*

Neurophysiology Department, Ysbyty Gwynedd Hospital, Bangor, North Wales, UK

Ulnar nerve entrapment across the elbow (UNEAE) and across wrist (UNEAW) is the second most common entrapment of the hand after carpal tunnel syndrome. There are few gradings available for UNEAE and lesser in UNEAW.

The aim of this research is:

1. To create a clinically appropriate ulnar nerve entrapment grading tool to covers both area of entrapment in one research paper.

2. To see the relation of sensory nerve involvement across wrist with the entrapment across elbow and to evaluate its effectiveness in terms of compatibility with previous research, without any invasive tests like needle EMG examination.

3. To identify the lesion below and across wrist in terms of to support the clinical Physiologist (CP) to grade them properly and also help the consultant in deciding to treat with conservative or surgical treatment.

4. To compare the recording from the first dorsal interosseous (FDI) muscles with the abductor digiti minimi (ADM) muscle to see which muscle is more sensitive and shows early changes in ulnar nerve entrapment.

The proposed revised grading system is based on more nuanced, descriptive categories, ranging from "normal", "early", "mild", "moderate" and "severe". To create full grading system of UNEAW and UNEAE some additional category of clinical grading is therefore proposed.

What will audience learn from your Presentation:

My presentation is interested in those who are involved in recoding Neurophysiology nerve as well as those surgeons, who are involved in hands surgery. This will give them information to decide a conservative or surgical treatment is needed if they can follow the information. My presentation will help those who are interested in joining the Neurophysiological field or surgical field in future. My grading will give them a precise lesion of entrapment in a simpler way and make their job easy.

Biography

Salim Hirani has been working in the Neurophysiology field for more than 30 years. He did is Neurophysiology course from United Kingdom. He works in different countries and can speak 4-5 languages. His three papers were already published i.e. Refine Grading of Carpal Tunnel syndrome in BMC journal in 2019, Neurophysiological Grading tools of ulnar nerve entrapment across elbow in Journal of Neurology, Neurological Science and Disorders in 2023 and third paper of Neurophysiological Study for Ulnar Entrapment at Wrist (meddocsonline.org) in Journal of Psychiatry and Behavioural Sciences in June 2023

Determinants Of Neurological Recovery Following Traumatic Spinal Cord Injuries

Wagih El Masri*

Clinical Professor, Keele University Emeritus, Consultant Surgeon in Spinal Injuries & AH Orthopedic Hospital, UK

Traumatic Spinal Injuries can present with or without neural tissue damage. Both the force and the direction of the impact determine the presence or absence of neurological damage. The principles of management of the injured spine and of the patients with or without neural tissue damage are very different and are likely to have an impact on the neurological and a range of other outcomes of the management. Traumatic spinal cord (tSCI) or cauda equina injuries (tCEI) are life-changing events with medical, physical, psychological, social, financial, vocational, environmental & matrimonial effects. The combination of small incidence (10-50/million population), consequent pan-physiological impairment, multi-system malfunction, sensory impairment/loss, multiple disabilities, together with their non-medical effects impose challenges to patients and clinicians alike. This challenge is magnified during the transitional period between the spinal and autonomic areflexia (shock) and the return of these reflexes. During this period, which lasts a few days to weeks, the patient is at a much higher risk of a range of complications than following the return of autonomic and spinal reflex activity. Fortunately, with simultaneous adequate management of the injured spine together with each of the effects of cord damage, by a knowledgeable well-trained and experienced team of clinicians and health care professionals; almost all complications can be prevented or diagnosed and treated before deterioration, morbidity and neurological deterioration occur.

Neurological Recovery is not uncommon following tSCI & tCEI, is predictable and depends on:

- The quality of management of the multisystem physiological impairment and malfunction to prevent systemic and iatrogenic complications that cause further non-mechanical damage to neural tissues by destabilizing the Physiologically Unstable Injured neural tissue
- The adequacy of the management of the Biomechanical Instability of the injured spine to prevent further mechanical damage of the neural tissue from bony or ligamentous structures
- The presence or absence of clinical signs of sensory or sensory motor sparing at and below the level of injury.

Early prediction of ambulation is important to patients and family members. Neurological Recovery is not uncommon following tSCI & tCEI, is predictable and depends on the method and quality of management of the multisystem physiological impairment and malfunction as well as that of the spinal injury. In the mid-sixties Frankel and colleagues made an astute observation that with good conservative management of the injured spine and the multisystem malfunctions, patients presenting within 15 days of injury with complete motor paralysis, but sensory sparing made spontaneous motor recovery from reactivation of the myotomes adjacent to the functioning dermatomes irrespective of the radiological presentation on Xray's on admission and on discharge. The same observations, including observations on the discrepancy between the CT and MRI scans and the neurological presentation have since been repeatedly confirmed by many other international groups.

The prognostic indicators of neurological recovery, its extent and the factors that prevent recovery or cause neurological deterioration as well as the role of CT and MRI will be discussed. In the last four decades, routine surgical stabilization and decompression have been carried out on patients with and without traumatic cord damage supported by claims that surgical intervention is necessary to prevent neurological deterioration and enhance recovery. The rationale and evidence for justifying these claims will be discussed and compared with those of the simultaneous Active Physiological Conservative Management the injury and each of the Multisystem physiological malfunctions caused by the cord damage.

Biography

WEM trained in the specialty of spinal injuries at Stoke Mandeville, Oxford, Guys Hospitals & the USA between 1971 and 1983. To date he has personally treated 10,000 patients with traumatic Spinal, Spinal Cord and Cauda Equina Injuries.

WEM developed and led the Midland Centre for Spinal Injuries (MCSI) between 1983 & 2014. He took responsibility for the management of the injured spine, the multisystem impairment and malfunction as well as the range of non-medical and physical effects of cord injury in the acute,

subacute, rehabilitation phases as well as in the long term. WEM lectured worldwide in developed and developing countries.

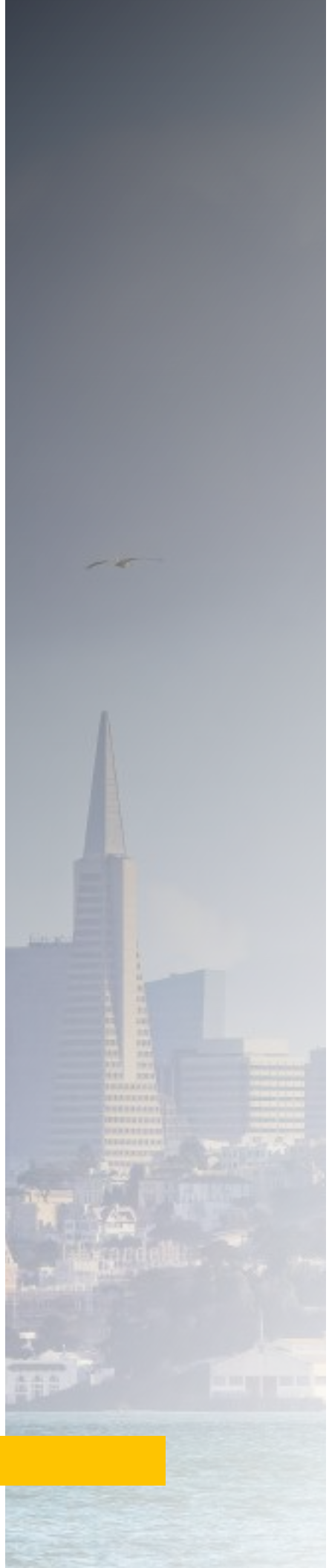
He contributed to the literature with over 150 publications. He published his observations on the prognostic indicators of neurological recovery following Traumatic Spinal Cord Injuries and Introduced the concept of "Physiological Instability of the Injured Spinal Cord" and its influence on clinical management and outcomes.

WEM demonstrated that with simultaneous Active Physiological Conservative Management of all the physiologically impaired and malfunctioning systems of the body together with the injured spine neurological improvement/recovery occurs in most patients irrespective of the degree of Biomechanical Instability, Canal encroachment or Cord Compression. He raised about six million pounds from charity to rebuild and furnish the MCSI as well as develop two bungalows for transitional housing of patients from hospital to home.

He is a Peer reviewer for several Journals.

WEM held the offices of: President of the International Spinal Cord Society, Chairman of the British Association of Spinal Cord Injury Specialists and Executive Member of the BSRM. Founder Member and trustee of SPIRIT Educational Charity in Spinal Injuries and Trans house Charity that provides interim accommodation between hospital and home for patients. He was Advisor to WHO 's & Co-author of the WHO International Perspectives on Spinal Cord Injury, which was published in 2013, Member of the NICE Guideline Developing Group in spinal injuries. He received several awards including: the Medal of the International Spinal Cord Society, National Hospital Doctor Team Award for Innovation, Paul Harris Fellowship of the Rotary Club, Outstanding achievement award from the Chinese Society of Spinal Injuries, Outstanding Consultant

Achievement award by the Spinal Injury Association, Hon. Presidency of the Romanian Spinal Cord Society. He was commended in the House of Lords on two occasions. WEM 's is an advocate for the demonstration of evidence based clinical management, the right of the patient to make a fully informed choice between the various methods of treatment including that of the injured spine. He strongly advocates for the management of patients by knowledgeable, well trained, experienced Clinicians and a team of Health Care professionals in Specialized Spinal Cord Injury Centers with a fit for purpose infrastructure from the early hours or days following injury to enable the team to meet all the medical and non-medical needs of patients with such rare and complex conditions.



DAY 2 (Virtual)

Joint Event on
3rd Edition of International
Neurology Conference
and
2nd Edition of
Psychiatry and Addiction
World Conference

ORAL PRESENTATIONS

Addressing Hydrocephalus in Africa: Challenges and Way Forward

Mohamad Assker1*, Burhan Kantawala, Maha Khattab, Shaima O. Elawad, Batoul Cherri, Abubakar Nazir, Magda Wojtara, Olivier Uwishema

[1]Department of Radiology, Sheikh Khalifa Medical City, Abu Dhabi, UAE

Hydrocephalus occurs when the cerebrospinal fluid (CSF) accumulates in the cerebral ventricles. This is due to either obstruction in the CSF flow, decreasing its absorption by the arachnoid villus to the Dural venous sinuses, or increasing production of the CSF. The most disproportionately and severely affected by the disease consequences are African children. This is because of the high incidence of postinfectious hydrocephalus and spinal dysraphism compared with other world children. The health care system in Africa has access to 488 neurosurgeons which represents less than 1% of the global neurosurgeons, thus pediatric hydrocephalus is considered an emerging public health problem in Africa because of the difficulty of the patient's access to proper care. Numerous studies conducted in Africa have revealed a significant imbalance in the distribution of neurosurgical resources across the continent. Specifically, South Africa and North Africa collectively account for 86% of the total practicing neurosurgeons, indicating a pronounced concentration of these specialized medical professionals in these regions. Having an abundance of case studies regarding hydrocephalus is vital to increase our awareness and understanding. Hydrocephalus should gain more priority by current policymakers as an important health concern. This may be achieved by proper resource allocation to ensure better quality means of diagnosis, intervention, and rehabilitation.

Biography

Mohamad Assker is a radiology professional affiliated with Sheikh Khalifa Medical City in Abu Dhabi and the University of Sharjah. His expertise spans cardiothoracic imaging, neuroradiology, and general radiology. Assker's contributions to the medical field are recognized through his publications, which have garnered over 40 citations on Scholar. His work reflects a commitment to advancing diagnostic imaging and enhancing patient care in the UAE's as well as global healthcare systems.

Treating Headaches with Anticoagulants: A Case Report and Review

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[1]Unity Point Clinic, Des Moines, USA

Objective: To increase awareness and improve the management of migraines associated with antiphospholipid syndrome (APS) and antiphospholipid (aPL) antibody positivity, particularly in patients with non-revealing imaging studies, as this condition remains under recognized even among neurologists and headache specialists.

Background: Neurological symptoms, including refractory headaches, can be a manifestation of APS or aPL positivity. Despite normal or inconclusive imaging findings, some patients experience migraine-like headaches that are resistant to conventional treatments but show significant improvement with anticoagulation. However, this unique disease mechanism remains poorly understood and is often overlooked, even by neurologists and headache specialists. We present a case of a young woman with an intense, new-onset migraine-like headache, unresponsive to standard therapies, yet successfully treated with anticoagulation.

Methods: A 22-year-old woman with a history of joint pain, myalgia, dysuria, and fatigue presented with new-onset, migraine-like headaches with aura. She had no prior thrombotic events, neurological disorders, or neuropsychiatric symptoms and had never been pregnant. Her family history was notable for systemic lupus erythematosus.

Neurological examination revealed absent deep tendon reflexes in the upper extremities, decreased pinprick sensation in the left face and arm, and a rash on her hands resembling livedo reticularis. Brain MRI, MRA, and MRV were performed to evaluate secondary causes of headaches but were inconclusive. Despite the absence of clear radiologic abnormalities, autoimmune and infectious disease workups revealed elevated anticardiolipin IgM antibody titers (21 MPL), suggesting aPL positivity.

Initial treatment with indomethacin and a steroid taper failed to relieve symptoms. However, a trial of low-molecular-weight heparin (Lovenox) led to complete resolution of her headaches. She was subsequently transitioned to long-term anticoagulation with warfarin, with sustained symptom relief.

Conclusions: The pathophysiological basis for the dramatic response of migraine-like headaches to anticoagulation in APS/aPL-positive patients remains unclear. Importantly, even in cases where imaging studies do not reveal significant abnormalities, anticoagulant therapy may still provide substantial clinical benefit. However, the optimal duration of anticoagulation therapy in these patients is unknown, necessitating individualized treatment decisions and close follow-up. Notably, this phenomenon remains largely unrecognized, even among neurologists and headache specialists, leading to potential delays in diagnosis and treatment. Untreated migraines in APS/aPL patients can worsen, potentially mimicking transient ischemic attacks or strokes. Given the significant impact of migraines on quality of life, healthcare providers should consider APS/aPL evaluation in patients with refractory headaches and explore anticoagulation as a therapeutic option when appropriate. Further research is warranted to better define the role, duration, and mechanisms of anticoagulation therapy in this patient population.

Biography

Stroke Medical Director, Baylor Scott and White Hospital, McKinney, TX Board-certified Vascular Neurologist, Hospital Neurologist with a passion for improving patient outcomes. Possess extensive knowledge and experience (+7 years) in treating strokes, aneurysms, and other vascular conditions. Successfully implemented a continuity of care clinic for hospital-discharged patients requiring general and vascular neurology services. Experience in the Stroke certification process and review committee. Recognized for outstanding patient outcomes and excellence in patient care. Active member of professional organizations AAN, AHA, AES, ACNS, WSO. Experience leading education programs in Stroke Code process, Neurological emergencies, and teaching role in an ACGME-accredited residency program. Dedicated to advancing the field of vascular neurology through ongoing clinical research trials and education initiatives.

Whispers of the Mind: Voice as a Digital Biomarker for the Future of Psychiatric Diagnosis

Yunhan Lin* and Weihua Yue

Psychiatric Department, Peking University Sixth Hospital, Beijing, China

As the field of psychiatry evolves in the era of precision medicine and digital innovation, there is a growing demand for tools that are non-invasive, scalable, and capable of capturing mental states with greater objectivity and continuity. Among emerging approaches, voice analysis is increasingly recognized as a promising digital biomarker for psychiatric disorders, particularly for conditions such as depression, where subjective self-reporting and clinical rating scales often dominate diagnostic processes.

Human voice is deeply intertwined with affective, cognitive, and physiological processes. Subtle variations in prosody, pitch, speech rhythm, and articulation can reflect mood disturbances, psychomotor retardation, and cognitive dysfunctions. In recent studies, voice-derived features have demonstrated potential in detecting depressive symptoms, tracking clinical progress, and even differentiating diagnostic categories. These findings suggest that voice, an everyday and natural behaviour, may offer a powerful window into mental health status—one that is cost-effective, remote-capable, and patient-friendly.

We find a series of findings from recent voice-based depression detection studies. These include analyses of temporal, spectral, and prosodic features from a diverse group of participants across age groups and clinical profiles. Preliminary results indicate that certain acoustic features are consistently associated with different dimension of depression, such as pause duration, pitch variability, and speech rate irregularities. These features may not only serve as markers for diagnosis but also provide insights into underlying psychopathological mechanisms.

Beyond individual features or models, we will emphasize a crucial next step in this line of research: the construction of voice-symptom association networks. Rather than treating voice features as isolated predictors, we propose mapping them onto specific clinical symptoms—such as anhedonia, psychomotor slowing, or cognitive impairment—based on structured assessments and clinical interviews. This network-based approach aims to bridge the gap between data-driven signal processing and clinically interpretable symptom domains, facilitating integration with existing diagnostic frameworks like the DSM or ICD.

Moreover, we will address the implications of voice analysis in real-world psychiatric practice, including its potential use in early screening or relapse monitoring. We will also reflect on ethical and methodological considerations, such as privacy, generalizability across languages and cultures, and the need for transparent, clinically validated models.

This work position as an accessible, and objective biomarker with significant potential to augment traditional psychiatric diagnosis. By combining computational insights with clinical expertise, and by anchoring acoustic patterns to symptom-level interpretations, we envision a future where voice can help close the gap between subjective experience and measurable psychiatric insight.

Biography

Yunhan Lin is a M.D. candidate at Peking University, with six years of clinical experience in psychiatry at Peking University Sixth Hospital. Research focuses on the vocal characteristics of depression and the development and validation of voice-based diagnostic models. Combining clinical expertise with computational approaches, she aims to bridge the gap between objective digital markers and psychiatric symptomatology.

Radiosurgery for trigeminal neuralgia secondary to epidermoid cyst of the cerebellopontine angle: a case report.

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[1]Instituto Mexicano del Seguro Social. Hospital de Especialidades Puebla, México

Introduction: The epidermoid cyst is the third most common benign tumor of the cerebellopontine angle, accounting for 4% of lesions at this level. These tumors can remain silent for years, implying their diagnosis in advanced stages, where they manifest as headache, trigeminal neuralgia, and cochleovestibular involvement. Its treatment is resection, which is difficult in its entirety due to its growth pattern and difficult surgical access, as well as high morbidity due to the adherence of the capsule, which is generally incomplete and with sequelae.

Objectives: A 31-year-old patient who presented trigeminal neuralgia in 2017, not controlled by medication, was diagnosed with a T1 and 2 MRI sequence of epidermoid cysts in the right cerebellopontine angle, treated with incomplete resection in 2017 without clinical improvement. He was subsequently treated with 50GY IMRT radiotherapy in 25 fractions in December 2022 with partial improvement. Four months later, due to an increase in neuralgia, he was considered a candidate for re-irradiation using radiosurgery.

Methods: After 13 months of receiving IMRT, in January 2024, radiosurgery treatment was indicated to the right trigeminal nerve at a dose of 85 Gy with a 90% isodose line at a volume of 0.034 cm3 using a linear accelerator with 6MV photons, receiving a 45 Gy (V45 Gy) 0.01 cm3 stem and V15 Gy <0.5 cm3. With the treatment, he showed an improvement of at least 70% of symptoms at one month.

Results: The patient was evaluated monthly for 9 months, presenting significant improvement of up to 90% of neuralgia, presenting vestibular neuritis during the same, which was completely controlled with medications.

Conclusion: The use of radiosurgery for pain control in refractory trigeminal neuralgia is a form of treatment that can be considered first-line given the success rate and low morbidity. It is possible to control pain from the beginning, and a high percentage of patients do not require medication after treatment.

Biography

Graduated in 2006 as a surgeon and midwife from the Be emerita Autonomous University of Puebla, Mexico. Studied specialty in Internal Medicine and later graduated as a doctor specializing in Radiation Oncology from the National Autonomous University of Mexico. Completed a fellowship in radiosurgery at the University Hospital from Geneva, Switzerland in 2018. Since 2013, has worked at the Mexican Social Security Institute, in charge of head and neck cancer and central nervous system tumors, gynecological cancer and the radiosurgery clinic. Medical Director of private center of radiotherapy in Puebla, member of medical societies, professor of the radiotherapist course and adjunct professor in the medical oncology residency. Speaker and lecturer at various conferences and author of various research publications

Combined tDCS and Interactive Exergaming Intervention for Cognitive Fatigue and Balance in Multiple Sclerosis: A Six-Case Subtype-Based Study

Saba Hassanvandi[1]* and Mojtaba Khaksarian[2]

[1]Assistant professor, Department of Educational Sciences, Farhangian University, Iran

[2]Associate Professor of Neuroscience, Department of Physiology, Lorestan University of Medical Sciences, Iran

Background: Cognitive fatigue and balance disturbances are persistent challenges in individuals with multiple sclerosis (MS), significantly affecting functionality and quality of life. Non-invasive neuromodulation, such as transcranial direct current stimulation (tDCS), and immersive digital exergaming are emerging interventions in neurorehabilitation. However, evidence on their combined impact, especially across MS subtypes, remains limited.

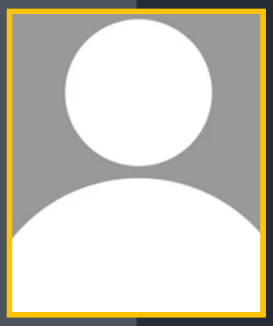
Materials and Methods: This case study included six MS patients, four with relapsing-remitting MS (RRMS) and two with secondary progressive MS (SPMS). Each participant completed 10 sessions of anodal tDCS (2 mA, 20 minutes) over the left dorsolateral prefrontal cortex, followed by 30 minutes of interactive exergaming, over a two-week period. Cognitive fatigue and balance were measured using the Fatigue Severity Scale (FSS) and Berg Balance Scale (BBS) at three time points (pre, post, and 1-month follow-up). Qualitative data were collected via semi-structured interviews and therapist observation logsand analyzed thematically.

Results: All participants experienced subjective and objective improvements in fatigue levels, with more pronounced improvements in RRMS cases. Balance enhancements were substantial in RRMS and moderate but stable in SPMS cases. Qualitative themes included increased body awareness, emotional engagement, and enhanced treatment motivation. No adverse effects were observed.

Conclusion: The integration of tDCS and exergaming appears feasible, safe, and potentially effective for fatigue and balance management in MS. Subtype-specific differences suggest the need for tailored therapeutic strategies. This preliminary report supports further randomized investigations.

Biography

Dr. Saba Hassanvandi earned her Ph.D. in Psychology from Alzahra University, one of Iran's leading academic institutions. Since 2023, she has been a recognized member of the National Elites Foundation (affiliated with Farhangian University). She currently serves as an Assistant Professor at Farhangian University in Tehran. Dr. Hassanvandi's research encompasses a broad range of topics within psychology, including neurocognition, health promotion, mental health, psychiatric disorders, stress, quality of life interventions, psychometrics, rehabilitation, and attention-deficit/hyperactivity disorder (ADHD). Her scholarly work has also been presented at national and international conferences, reflecting her active engagement with the global research community. In addition to her research, Dr. Hassanvandi is a committed educator and mentor. She teaches courses in clinical psychology, psychopathology, and educational psychology, and supervises graduate students in their research endeavors. Her dedication to improving individual and family well-being through research, clinical practice, and education has earned her multiple accolades, including the Distinguished Research Young Assistant Professor award.



Artificial General Intelligence-Based Rational Behavior Detection Using Cognitive Correlates for Tracking Online Harms

Shahid Naseem

Department of Information Sciences, Division of Science and Technology, University of Education, Township, Lahore, Pakistan

Expert systems possess human-like expertise for data analyzing as well as for decision-making. These systems are suitable in a situation, where a high level of uncertainty exists. In expert systems, for protecting sensitive information, various encryption techniques such as classical encryption and quantum encryption are used. In these systems, Artificial Intelligence (AI) is used to analyze the data at runtime and to detect unauthorized users in the early stage especially for tracking online harms. These systems are not completely secured, because the encryption techniques have some loopholes such as the algorithm's short life expectancy and less computation power. An unauthorized user destroys the precious data, as well as the system, might access these loopholes. As the confidentiality and integrity of expert systems are threatened by intrusions and real-time attacks related to privacy and cyber-security, there is a need for proposing novel methodologies to predict future attacks and identify new threat patterns. To analyze the behavior of the intruder and overcome the encryption weaknesses, this paper presents an Artificial General Intelligence based Rational Behavior Detection Agent (AGI-RBDA). The proposed system possesses human-like rationality for protecting the information like a human mind. It is exposed that the human mind does not apply any kind of encryption technique; instead, it used various cognitive correlates such as intention, perception, motivation, emotions, and implicit and explicit knowledge for the secrecy of sensitive information. In the end, the behavior of different cognitive correlates is exposed and stimulated.

Biography

Department of Information Sciences, Division of Science and Technology, University of Education, Township, Lahore, Pakistan

Teaching Neurological Emergencies through Simulation

Abhishek K. Gupta[1*], Mohamed Elriedy[2], Sharon Kilkie[3]

[1]MBChB, Department of General Internal Medicine, Epsom and St. Helier NHS Hospital NHS Trust

[2]MBBS, Anesthetic Department, Director of Simulation, School of Medicine, University of Nottingham

[3]Simulation and Clinical Skills Trainer, University Hospitals of Derby and Burton NHS Trust

Simulation is widely considered an effective teaching strategy for medical students. However, in literature, neurology-themed simulation remains limited and less prominent in comparison to conditions from other specialties. Simulation provides students a chance to emulate real-world scenarios they will encounter in their clinical practice in a safe environment. High-fidelity simulation aims to replicate these real world situations through replication of the environment and resources that are available.

In UK medical schools, a phenomenon of 'neurophobia' has been coined by medical educators, with students often expressing fears around neurology due to difficulty in understanding anatomy or having less experience and teaching in the management of neurological conditions.

Recognising this challenge, coupled with the knowledge of the benefits simulation provides to medical students, we developed a novel ward-based simulation training programme with a focus on three common acute neurology presentations to Accident and Emergency departments in the United Kingdom.

Methods: Scenarios were developed in conjunction with a neurology registrar and utilised current national guidelines. The scenarios were designed to replicate the workings of a hospital, hence required a vast array of equipment. The scenarios were designed to challenge students, with in-built distractions and hurdles. Third-year medical students were recruited to act as the patient and were given a brief. The scenarios were aimed at the foundation year 1 doctor level (equivalent to first year intern) for fifth-year medical students to practice as.

Each scenario ran in parallel, with three actors on a mock ward in the simulation centre. Two fifth-year students would be called in by a nurse (member of the simulation centre team) who provided a handover for an acute neurological emergency.

Prior to the simulation, students were given a tour of the centre. We collected a pre-simulation questionnaire asking students about their confidence and skill level in neurological assessment and management on a Likert scale rating. This was compared with post-simulation ratings alongside data collection on comfort and free-text opinions on simulation.

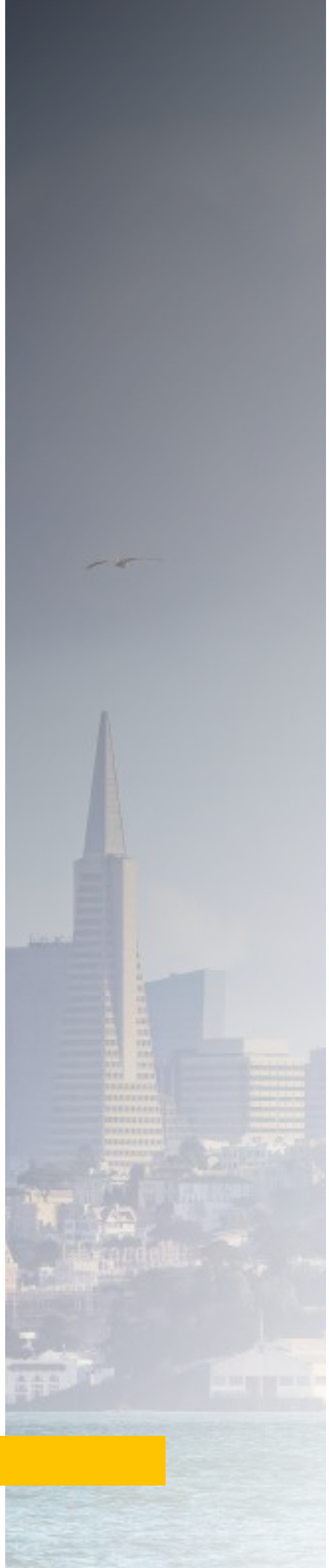
Results: In the first round of simulation, 16 students took part. The Likert scale used considered 1 as strongly disagree and 5 as strongly agree. There was a significant difference in reported confidence in recognising acute neurological deterioration and deficit prior to the simulation ($M=2.625$, $SD=0.93$) after the simulation ($M=3.875$, $SD=0.70$); $t(15)=-5.84$, $p=0.00003$. All students agreed or strongly agreed that simulation is a good way to learn. Further, there was a significant improvement in confidence when managing neurological emergencies before the simulation ($M=2.375$, $SD=0.72$) and after the simulation ($M=3.8125$, $SD=0.66$); $t(15)=-6.45$, $p=0.00001$.

Discussion: Whilst the data set shows improved self-rated confidence in neurological assessment and management, free text reviews suggested students would want more of these simulations in their learning and that it improved their confidence. We tried to create an environment which is true to the UK medical system, with CT scans requiring vetting from on-call radiology and nurses being unavailable to help. In teaching hospitals, ward-based simulation provides increased likeness to working in resource-depleted systems and encourages professionals to rely on bedside examination and tests over imaging and blood results.

The data set is a small sample size and we are continuing to provide this simulation, collecting more data from students. Further, assessing confidence in neurological management when these students start working, sometime after the simulation would provide better quality data on the long-term impact of this teaching. This project is also limited to one centre and would benefit from reaching wider audiences. Further data is required to assess the true impact of ward-based simulation.

Biography

Dr Abhishek K. Gupta is an Internal Medicine Trainee at Epsom and St Helier Hospitals NHS Trust, where he is rotating through various medical specialties. He previously completed an Academic Foundation Programme in Medical Education through which he has received a Postgraduate Certificate in Medical Education from Swansea University alongside extensive experience in teaching medical students both via tutorials and through bedside teaching with patients. He is a member of the Academy of Medical Educators UK. Abhishek is working towards pursuing Neurology as a career, which is sparked by his interest in the brain and its mysteries and through the completion of an intercalated BSc in Human Neurosciences.



DAY 2 (Virtual)

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3rd Edition of International
Neurology Conference
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Psychiatry and Addiction
World Conference

POSTER PRESENTATIONS

Beyond the Diagnosis: Rethinking Psychiatric Training for Complex Comorbidity and Recovery

Niharika Tekchandani*

Psychiatry, KMPT, NHS, UK

Statement of the Problem: Psychiatrists increasingly care for individuals with overlapping psychiatric disorders, physical comorbidities, and social vulnerability — including those with addiction histories. Yet training remains siloed, with limited preparation for managing the complexity, risk, and ethical tension these patients often present. This case-based reflection explores how gaps in psychiatric training undermine recovery and continuity of care, especially for patients with high-risk multimorbidity and treatment resistance.

Methodology & Theoretical Orientation: The case involves a 69-year-old woman detained under the Mental Health Act with treatment-resistant schizophrenia, diabetes, chronic kidney disease, and vascular disease. Her psychiatric admission was marked by treatment refusal, fluctuating capacity, and delayed medical escalation. Despite involvement from multiple specialties, her physical condition deteriorated on the ward and she later died following emergency transfer. Her trajectory exemplifies the gaps between mental and physical health services, and the limitations of training when faced with complex comorbidity.

Findings: Surveys show only 34% of psychiatry trainees feel confident managing physical health, and fewer than 30% feel prepared for end-of-life care. These deficits are especially critical for clinicians treating patients with addiction or high medical risk, where timely, coordinated action is essential. Current training fails to prepare psychiatrists to manage frailty, navigate best interest decisions, or lead integrated multidisciplinary teams.

Conclusion & Significance: As addiction and psychiatric complexity increase, training must evolve. This case calls for psychiatric education that prepares clinicians to manage comorbidities, ethical conflict, and risk with confidence. A recovery-oriented model must embed trauma-informed care, physical health literacy, and cross-sector collaboration — core competencies for the future of psychiatry and addiction medicine.

Biography

Dr Niharika Tekchandani is a Foundation Year 1 doctor on psychiatry rotation at KMPT, with interests in forensic children's psychiatry and holistic, person-centered care. This abstract draws on inpatient experience to explore how we can better address multimorbidity, frailty, and ethical complexity in recovery-focused practice.

Hsa_Circ_034367 Regulates the Progression of Shh-Type Medulloblastoma Through the Has-Mir-17-3p/Dicer1 Axis

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[1]Department of Pediatric Neurosurgery, Xinhua Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, 200092, China

Background: Medulloblastoma is the most common malignant brain tumor in children, but its pathogenesis is unknown and there is a lack of early diagnostic markers or effective therapeutic targets. circRNA is a class of endogenous non-coding RNAs that regulate gene expression in eukaryotes. Hsa_circ_034367 is a newly discovered circRNA highly expressed in SHH-type medulloblastoma. The role and mechanism of CircRNA in SHH-type medulloblastoma remain to be further elucidated.

Methods: After ethical approval, several samples of medulloblastoma were obtained in our hospital, and adjacent tissues were obtained at the same time. By whole transcriptome sequencing and bioinformatics analysis, circRNA with high expression was screened. The expression pattern of hsa_circ_034367 in medulloblastoma was detected by Sanger sequencing and Northern blots. Real-time fluorescence quantitative PCR was used to detect the expression of hsa_circ_034367, has-miR-17-3p and DICER1. Lentivirus-infected medulloblastoma cell lines daoy and uw228 were constructed, and cell proliferation, migration, invasion and apoptosis were detected by MTT assay, colony formation assay, trans well assay, Celltier-GLO fluorescence cell viability assay and flow cytometry. In addition, the interaction between hsa_circ_034367, has-miR-17-3p and DICER1 was examined by dual luciferase reporting assay and RNA drop-down assay. DICER1 protein expression was detected by Western blot. To investigate the role of hsa_circ_034367 in the growth of medulloblastoma tumors in vivo by patient-derived tumor xenograft (PDX) model.

Results: Hsa_circ_034367 was overexpressed in medulloblastoma tissues and cells, and its silence could inhibit the proliferation, migration and invasion of medulloblastoma and accelerate cell apoptosis. Has-miR-17-3p can be wiped by hsa_circ_034367 sponge, and its overexpression can inhibit the progression of medulloblastoma. Further experiments showed that the has-miR-17-3p inhibitor reversed the negative regulation of hsa_circ_034367 knockdown on medulloblastoma cell progression. In addition, DICER1 is the target of has-miR-17-3p, and its downregulation can inhibit the progression of medulloblastoma cells. Overexpression of DICER1 reversed the inhibitory effect of has-miR-17-3p on the progression of medulloblastoma cells. Animal experiments showed that hsa_circ_034367 gene knockout can effectively inhibit cell apoptosis.

Conclusion: hsa_circ_034367 and DICER1 can inhibit medulloblastoma tumor growth. These data suggest that circRNA is a potential target for controlling the proliferation of SHH-type medulloblastoma.

Biography

Yafei Wang, M.D., studied Pediatric Neurosurgery at Xinhua Hospital, Shanghai Jiao Tong University.

Taurine Alleviates Hippocampal Transcriptomic Alterations Induced by Heat Stress in Mice

Ruixi Ming*, Bin Li

Institute of Comparative Medicine, College of Veterinary Medicine, Yangzhou University, Yangzhou, Jiangsu, China

Heat stress (HS) profoundly disrupts thermoregulation, physiological functions, and behavior, leading to various adverse health outcomes. The central nervous system is particularly vulnerable to HS, which can impair brain structure and function, trigger neuroinflammation, and induce cognitive deficits. Previous studies have established that the hippocampus plays a critical role in learning, memory, stress responses, and the pathophysiology of mood disorders.

In this study, we investigated the effects of HS by comparing the hippocampal transcriptomes of HS-exposed mice with those of control mice. The results showed that HS did not significantly alter the number, function, distribution, or types of single nucleotide polymorphisms (SNPs) or insertions/deletions (InDels) in the hippocampus. However, HS markedly affected gene expression profiles. Transcriptome sequencing identified 210 differentially expressed genes (DEGs) in the hippocampus of HS-exposed mice, including 72 upregulated and 138 downregulated genes.

Gene Ontology (GO) analysis indicated that these DEGs are involved in hippocampal responses to various stimuli—such as chemical agents, oxygen-containing compounds, and peptide hormones—as well as in metabolic processes, including arachidonic acid metabolism, olefinic compound metabolism, and lipid metabolism. For instance, DEGs such as Card14, Ntrk1, Lcn2, Irs4, Cyp2c70, Hamp, Ambp, Gh, and Mup19 exhibited significant differential expression, suggesting these genes may play essential roles in regulating hippocampal function following HS and highlighting potential directions for future research.

Additionally, we examined the protective effects of taurine pretreatment on hippocampal gene expression following HS. The sequencing data showed that taurine alleviated HS-induced changes in 40 DEGs. GO analysis further revealed that taurine modulated 12 DEGs—Ccn1, Egr2, Fos, Arc, Banp, Egr1, Klf2, Egr4, Nfya, Clec14a, Lcn2, and Plin4—which are associated with cognitive function, transcriptional regulation, and vascular development.

Among these, Lcn2 was previously shown in our studies to participate in HS-induced neuroinflammation. In the HS mouse model, taurine modulated hippocampal inflammation by upregulating neuronal PAS domain protein 4 (Npas4) and downregulating Lcn2, thereby promoting the recovery of cognitive function.

Collectively, these findings underscore the potential of taurine as a multi-target modulator against HS-induced cognitive impairments and provide a theoretical foundation for developing taurine-based preventive strategies for at-risk populations.

Biography

Ming Ruixi, male, is a master's student (Class of 2024) at Yangzhou University and holds a Bachelor of Science degree from Changzhou University. His current research focuses on exploring the molecular mechanisms underlying neurodegenerative diseases. He has passed the laboratory operation assessment. He contributed to experimental work and data processing for Prof. Li Bin's research on m6A-mediated neuroinflammation mechanisms. As the Co-first author of two manuscripts under peer review.

Disrupted Topology of Superior Frontal Gyrus in Patients with Remitted Major Depressive Disorder and their Siblings: Potential Endophenotype of Vulnerability?

Zhi-Peng Guo[1*], Chun-Hong Liu

[1]Beijing Hospital of Traditional Chinese Medicine, Capital Medical University, Beijing 100010, China

Abnormalities in topological architecture of brain functional network have been extensively reported in major depressive disorder (MDD). However, it is unclear whether these abnormalities are also present in remitted MDD (rMDD) and their siblings, which may be crucial in revealing the endophenotype of MDD. The present study aims to characterize the topological alterations in patients with rMDD and their siblings. We investigated the topological architecture of functional network in sixty-seven patients with rMDD, 50 unaffected siblings of rMDD patients, and 63 healthy controls (HCs) by using graph theory and network-based statistics (NBS) analysis. Correlation analysis was also performed between network metrics and neuropsychological scores as assessed by clinical scales.

Compared to the siblings and HCs, rMDD patients exhibited significantly decreased clustering coefficient and local efficiency (Eloc). Both rMDD patients and the siblings showed decreased degree centrality in the left superior frontal gyrus (SFG) compared to the HCs. NBS analysis revealed that rMDD patients exhibited significantly reduced connectivity between default mode network (DMN)-frontoparietal network (FPN), DMN-cingulo-opercular network (CON), and FPN-CON compared to HCs. In comparison to the siblings, rMDD patients showed reduced connectivity between DMN-CON, and FPN-CON. The correlation analysis revealed a negative correlation between Eloc and Stroop-C in the rMDD group and the DC of left SFG was negatively correlated with the random errors of Wisconsin Card Sorting Test. The finding of decreased DC of SFG may represent an endophenotype of vulnerability in MDD, and the remaining findings may be seen as scarring following prolonged disease states, which may aid in the identification of high-risk individuals for MDD and early intervention.

Biography

Zhi-Peng Guo was a PhD student of Beijing Hospital of Traditional Chinese Medicine, Capital Medical University. He has published more than 11 papers in reputed journals

Relationship Identification Between Triggers and Changes in the Brain and the Overall Human Electrophysiology During Migraines

Dominic Sandell[1]*, Jonah DeMatto, Gianpiero Lara, Jasmine Rosales, Legacy Wilson, Alesha Fleming

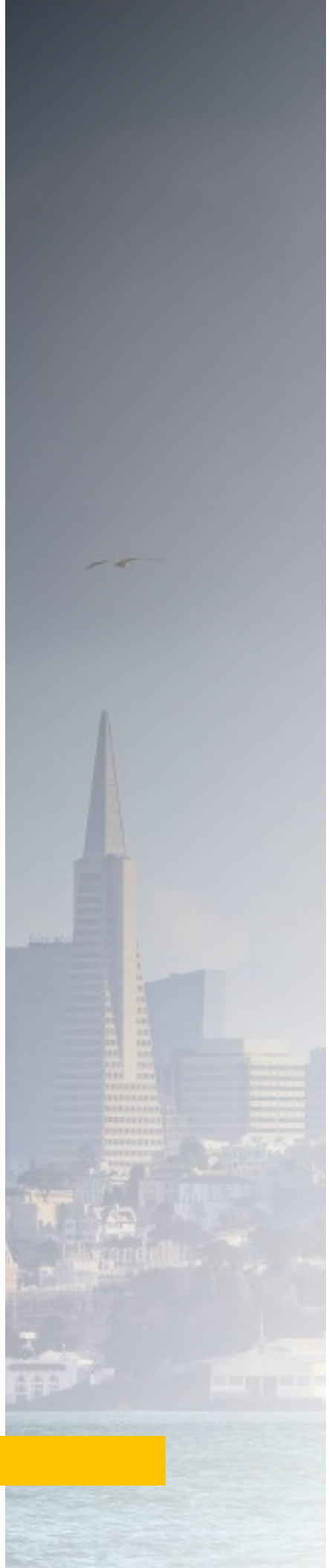
[1]Department of Human Factors and Behavioral Neurobiology, Embry-Riddle Aeronautical University, Daytona Beach, Florida, USA

One of the most common neurological conditions in the world is migraines; nearly 1/4 of the working population suffers from this condition and exhibits a large variety of triggers. The current treatment method for migraines uses few different medications for all migraines, regardless of triggers. Our hypothesis is that there is a specific relationship between the triggers of migraines and the electrical changes in the brain during migraines. It is known that there are electrical occurrences in the brain during migraines; it is unclear if there are different changes for different triggers. The study incorporates two different data collection methods: electrophysiological tests (Electroencephalogram (EEG), Electrocardiogram (ECG), Galvanic Skin Response GSR, and pulsometer) that record the unique electrical signals of the body and brain, and surveys that will record daily exposures and experiences to extrapolate possible triggers. The participants will be 88 individuals from Embry-Riddle, incorporating men and women who do and do not experience migraines using the ratio of men to women who experience migraines and men to women ratio at ERAU. The low participant count and small population are made for by the large variety of data collected. This research is set to significantly increase the quality of life of the billions of individuals who experience

migraines: migraines can cause excruciating pain, hypersensitivity, hallucinations, and more. The study is currently underway with participant recruitment. If unique electrical changes were identified during migraines by specific triggers, it would be necessary for specific treatment for those triggers.

Biography

Mr. Dominic Sandell is an undergraduate student at Embry-Riddle Aeronautical University studying Aerospace Physiology, focusing on human physiology and pre-med. His academic goals are to get my M.D/Ph.D in Neurology, focusing on chronic pain conditions and external factors. He created the presenting project two years ago and has been developing it since. He has also worked on research ranging from pharmaceuticals, biochemical nano-synthesis, fatigue, and the effects of hypoxia.



DAY 3 (Virtual)

Joint Event on
3rd Edition of International
Neurology Conference
and
2nd Edition of
Psychiatry and Addiction
World Conference

ORAL PRESENTATIONS

Retraining Musicians with Task-Specific Focal Dystonia: Neurophenomenological Analyses of Two Cases

Sang-Hie Lee[1]*, Juan Sanchez-Ramos[2], Nancy Burns[3], Saida Omarova[4]

[1]Stephanie Carey, PhD, Research Professor of Mechanical Engineering and Director of the Centre for Assistive, Rehabilitative, and Robotics Technologies

[2]University of South Florida, Tampa. School of Music, School of Music. USF (University of South Florida)

[3]University of South Florida, Tampa. Department of Neurology, Neurology Department, Morsani College of Medicine,

4University of South Florida, Tampa. Student Health Centre. of Morsani Collge of Medicine and Clinical Professor of Student Wellness Centre, USF

Among the common musicians' playing-related pain and injury, musculoskeletal disorders (tendonitis, tenosynovitis), nerve-related symptoms (carpal tunnel, thoracic outlet syndrome), performance anxiety, and task-specific focal dystonia, the latter of which is the least understood by the performing artists and healthcare professionals. Neurophysiological evidence has demonstrated that extensive training and excessive practice can yield maladaptive changes in certain neural networks, leading to task-specific focal dystonia. We encountered four musicians affected by task-specific focal dystonia among skilled musician samples in our hand biomechanics study (N=31) and School of Music-sponsored Musician Triage (N=6). Mindfulness training with biomechanical and ergonomic pedagogy has shown promise in modifying neurological behavior patterns. In this chapter, we document the progressive effects of mindfulness mental training and mind-body integrative pedagogy in rehabilitating two dystonic musicians, whose subjective lived experience and the pedagogue's interactive observations are structured into Varela's phenomenological narrative and create intersubjective and communal validation.

Approach: The sessions consist of deep breathing, in-the-moment focus, anatomical and proprioceptive awareness, and deliberate slow playing, applying hand biomechanics and ergonomic technique, we call the finger-walk technique.

Results: Musicians showed progress in rehabilitation after a few sessions. Sustained and permanent behavioral change will require an extended second-person neurophenomenological retraining to increase awareness and proprioception.

Implication: Our experience of fully restored playing in a few sessions may require a more extended period of the two-person method to sustain the mind-body behavior pattern. A third-person method using an external feedback device that sends signals to muscle-brain activity can strengthen long-term neurophenomenological change. We further imply in an environment where musician curricula are quantity-oriented with little focus on proprioceptive qualitative awareness, the phenomenological process developed in our dystonic rehabilitation process would work well in preventive training for all healthy musicians at the collegiate pre-professional training.

Biography

Sang-Hie Lee, Professor of Music at the University of South Florida, is a teacher, performer, researcher, author, and administrator. She authored 74 scholarly publications, presented 85 conference papers, keynotes, hosted seven international conferences, and performed numerous solo and chamber-music concerts in the USA, South Korea, China, Serbia, Brazil, Italy, and Canada. Lee is the author/editor of Scholarly Research for Musicians: A Comprehensive Strategy (Learning Solutions Division, The McGraw-Hill, 2012, 2013 and Routledge 2017), and Scholarly Research in Music: Shared and Disciplinary-Specific Practices, 2nd Edition (Routledge 2022), and the chief editor of Perspectives in Performing Arts Medicine: A Multidisciplinary Approach (Springer 2020).

Accelerated Repetitive Transcranial Magnetic Stimulation for Severe Dementia - Case Report

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[1]AA NeuroSpa Brain Rejuvenation Centers Inc., USA

Alzheimer's Disease (AD) is a neurodegenerative disease that leads to progressive cognitive decline involving multiple domains. Repetitive transcranial magnetic stimulation (rTMS) has been an established treatment for mood disorders, most notably treatment of resistant major depressive disorder. Numerous clinical trials have shown rTMS to be an effective treatment for individuals with AD. Majority of rTMS trials for treatment of AD applied high-frequency (>10 Hz) stimulation parameters over span of several weeks (e.g., 4-6 weeks). We report case report of 77-year-old patient with severe Alzheimer's disease who underwent 50 sessions of intermittent theta burst stimulation (iTBS) rTMS over 10 days. Cognitive assessment using Mini-Mental State Examination (MMSE) showed improvement by 6 points from baseline at end of treatment.

All rTMS treatment sessions were applied using a figure-of-eight coil (CloudTMS Neurosoft Ltd, Russia) under MRI-navigation (Neural Navigator, Brain Science tools, Netherlands).

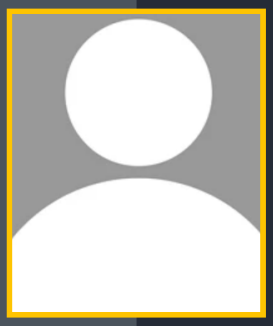
The patient underwent five daily sessions of rTMS with a 30-minute break in between each session. Cortical targets included the left and right dorsolateral prefrontal cortex (DLPFC), superior parietal lobule (SPL), and precuneus.

One month follow-up post treatment showed sustained effects of rTMS as the patient was able to recall family member's names and began engaging in daily activities again.

To our knowledge, this is first case report of the application of iTBS over span of 10 days for treatment of AD with significant results.

Biography

Dr. Elahi attended UCLA and the University of Pittsburgh where he earned his bachelor's degree in neuroscience and his medical degree from the University of Pittsburgh School of Medicine. Dr. Elahi is board certified in neurology by the American Board of Psychiatry and Neurology (AAPN). Dr. Elahi has been involved in clinical and basic science research throughout his career, including principal investigator in NIMH & NIH sponsored work. Dr. Elahi has presented his work in several peer-reviewed publications, book chapters, professional meetings, and invited lectures. Most recently, Dr. Elahi has committed most of his work to developing modern neuromodulation strategies for the treatment of various neurological disorders.



A Typical Presentation of Miller Fisher Syndrome: A Case Report and Review of Literature

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[2]Department of Neurology, Rashid Hospital, Dubai, United Arab Emirates

[3]Department, Affiliations or Organisation, City, state, Country, Email address, Phone

Miller Fisher syndrome (MFS) is a well-recognized, but rare variant of Guillain-Barre syndrome (GBS) and is typically characterized by the classic triad of ophthalmoplegia, ataxia, and areflexia. Here we report a case with an atypical presentation of Miller Fisher syndrome that presented with an incomplete triad of ataxia and areflexia without ophthalmologia accompanied by mild proximal limb weakness and distal sensory involvement.

Clinical presentation: A 65-years-old Arab man presented with a 2 week history of acute onset progressive unsteadiness of gait, associated with headache and numbness in all four extremities. He had history of a recent upper respiratory tract infection 2 weeks prior to the onset of his symptoms. He also had been vaccinated for the influenza one month back. Clinical examination showed intact higher mental functions, normal cranial nerves including extra-ocular movements and optic fundi, mild proximal muscle weakness in the lower limbs and graded distal sensory impairment for pin prick and joint position sense. There was generalized areflexia. There was mild appendicular ataxia and definite gait ataxia. CSF analysis showed albumin cytological dissociation. Nerve conduction study revealed mixed (axonal and demyelinating) motor

polyneuropathy severely affecting lower limb nerves and cranial nerves. Ganglioside Profile was negative for GM1 and GQ1b antibodies. He improved completely after being treated with five sessions of plasma exchange.

Conclusion: Miller Fischer syndrome should be considered in all patients who present with acute onset progressive ataxia, given its excellent response with treatment. A complete triad of ataxia, areflexia and ophthalmoplegia may not be present in all patients. High index of suspicion at presentation helps proper evaluation and early initiation of treatment to have excellent outcomes

Biography

Dr. Mohammed Abubaker Elnager Madani, graduated 2002 from formerly university of Bahr El Ghazal currently Bahri university, finished internal medicine residency at 2011—from Sudan Medical specialization board ,worked as specialist internal medicine in Dubai hospital united Arab Emirates from 2012 till 2017 and became consultant internal medicine –on 2017 and joined sheikh Khalifa medical city , Ajman till current date. Im adjunct professor of internal medicine, internal medicine department Ajman University. I published ---case study -about neurological manifestation of dural sinus thrombosis among Sudanese patients in the ALshaab teaching hospital in Sudan Journal of Medical Sciences 2012.

Working Together To Deliver Person-Centred Care Within The Stepped Care Model: An Australian Multidisciplinary Perspective

Shingai Mareya[1]*, Lin Zhao, Mimmie Claudine Watts, Michael Olasoji

[1]Federation University Australia, Australia

The relatively new Australian stepped care model (SCM) in primary mental health care aims to provide a structured, accessible, and flexible framework for addressing mental health issues. This study examines the perspectives of multidisciplinary mental health professionals on the implementation and effectiveness of the SCM, forming a subset of a broader research project.

An exploratory descriptive qualitative methodology was utilised, involving interviews with nine participants, including mental health nurses, psychiatrists, an occupational therapist, a psychologist, a social worker, and a care coordinator. Data were analysed using reflective thematic analysis, identifying four key themes: collaborative approach, flexible and personalised care, complexities of navigating the model, and stories of success: positive client outcomes.

The findings reveal that the multidisciplinary nature of the SCM supports a holistic approach to mental healthcare, providing comprehensive and patient-centred support. Flexibility and personalisation within the SCM allow it to address diverse patient needs effectively, leading to enhanced outcomes and satisfaction. However, workforce shortages and systemic barriers pose significant challenges to its implementation. Participants noted that navigating the SCM is complex, highlighting the need for improved coordination and more precise guidelines to facilitate smoother transitions between care levels. Despite these challenges, the SCM has successfully improved mental health outcomes.

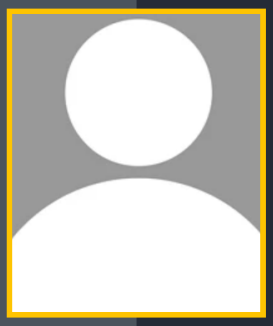
In conclusion, the SCM is a promising approach to primary mental health care, focusing on tailored, multidisciplinary care. Addressing workforce shortages, improving coordination, and refining service delivery is essential to maximise its potential and ensure sustainable mental health services in Australia. Future research with larger sample sizes and quantitative data is recommended to further evaluate the SCM's effectiveness and guide policy and practice improvements.

Biography

Shingai is a dedicated mental health researcher and Doctor of Philosophy candidate who focuses on developing innovative, evidence-based mental health care solutions. With extensive experience as a mental health professional and qualifications in project management and public health, Shingai is passionate about early intervention and integrated primary mental health care systems.

Their work is driven by a commitment to delivering timely, evidence-based health initiatives tailored to the unique needs of diverse populations. Shingai values stakeholder collaboration, guided by principles of mutual respect, equality, impartiality, and accountability.

Through his research and professional practice, Shingai seeks to transform mental health care systems by fostering strong relationships and responsiveness to the needs of individuals and communities. His goal is to create sustainable, person-centred solutions that enhance the quality of mental health care across settings.



Evaluation Of The Eco-Emotions Related to Climate Disturbances and Study Of Associated Adaptation Strategies, Within The Undergraduate Student Population, Following The Teaching Unit «Issues of The Socio-Ecological Transition» of The University of Franche Comté

Nathalie Rude*

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Introduction: Eco-emotions are distinguished by their positive or negative polarities and their propensity to induce behaviors of action or inaction. There is therefore a real interest in exploring the links between emotional regulation and the ability to cope with anxiety induced by the environmental crisis: verbalize your emotions by addressing friends, a mental health professional or family members, or regulate emotions through sports or meditation activities that release tensions and reconnect with the present, etc.

It is therefore relevant to seek a better understanding of how these different models of emotional regulation evolve, interact with each other and could be vectors of risky use in the current context of climate change.

Objectives: The main objective of the ECOP study is to model the links between eco-emotions and the development of coping strategies among students participating in the EU TSE of the UFC. We will then study the eco-emotions reported by the EMEAS (10) and the ICE (11) Emotional Impact Scales, according to the different adaptation strategies reported by the Brief COPE (adaptation strategy assessment) questionnaires (12), ASSIST (screening tool for substance use disorders) (13,14), CEBRACS (Questionnaire of the Assessment of Recovery Needs and Support of Health Behaviours) (15) and SCOFF (screening of eating disorders) (16).

Secondary objectives are: a) Determine the observed prevalence of eco-emotions, according to EMEAS and AIC dimensions.

b) Model coping strategies by type of eco-emotions. This includes the study of observed differences in the presence or absence of addictive behaviours (ASSIST, CEBRACS, SCOFF), according to socio-demographic variables, as well as the ability to cope with or regulate emotions (Brief Cope) and to project oneself into the future (EMEAS and ICE). ECOP will also measure the impact of the EU (before/after) on eco-emotions and adaptation strategies.

c) Determine the collective or individual environmental actions of students, from the eco-emotion scales (EMEAS, ICE) and semi-directed interviews.

d) Confirm, in the target population, the psychometric validity of the scales used in ECOP (EMEAS, ICE, Brief COPE, ASSIST, CEBRACS, SCOFF).

e) Evaluate the correlation between scales used to distinguish concepts studied.

f) Analyze observation of student/teacher interactions during EU TSE learning.

g) Analyze the evolution of the answers, distinguishing the possible different profiles of the scores of the questionnaires (by dimension), according to the 3 years of education observed.

Scientific interests: There is a real interest in exploring strategies for adapting to eco-emotions induced by environmental awareness, as this is a societal issue for all generations (17). This awareness can come from the information and knowledge available to citizens (big data) without interaction. On the other hand, scientific knowledge from interactive learning should reduce the anxiety-generating effects of a worrying future. We will then measure the interactions

between students and teachers, rarely studied in the literature on the socio-ecological transition (TSE). Psychiatrists advise to verbalize your emotions with the entourage, a health professional or regulate your emotions by activities that release tensions and reconnect to the present (sports, relaxation, environmental prevention,...). They suggest engaging in constructive individual or collective environmental actions (18), alongside social and community support (19).

It is therefore relevant to seek a better understanding of how the different adaptation models evolve, are associated and could be factors or not of risky uses in the context of climate change, or more precisely, an unstable planetary system and a dysfunctional societal system. Today, but especially for future generations, researchers and caregivers must be prepared to assess this complex phenomenon of eco-emotions and provide support to those who cannot cope with climate anxiety and grief (1).

General assumptions: The better understanding of eco-emotions and their influence on behaviour should make it possible to find an adapted response to this new form of stress, both from an individual, societal and health point of view.

Eco-emotions do not always lead to illness, but they can cause unpleasant feelings in the face of scientific knowledge of overstepping the limits of the planet's equilibrium and the social inertia felt, to a deterioration of mental health leading to addictive behaviour. Therefore, a better understanding of eco-emotions and associated adaptive behaviours could help to explore prevention approaches from an individual, societal and health perspective. Explaining the impact of eco-emotions on dysfunctional behaviors and encouraging people to regulate them could be one way to deal with the foreseeable increase in this phenomenon. The accompanying tracks would be a priori oriented towards resistance, resilience and constructive collective actions. Our research area is offered by the Teaching Unit (TU) on the "socio-ecological transition" (TSE) of the University of Franche Comté (UFC). Assessing the impact of TU TSE on students' eco-emotions would help to improve learning. In addition, the evaluation of the EU by students themselves and the analysis of student/teacher interactions would optimize pedagogy and a fortiori the prevention of eco-emotions. This TU is composed of 6 training chapters (courses and tutorials):

1. Introduction – presentation with a systemic approach to the IPCC reports and climate mural
2. Climate – findings, pollution, impacts,...
3. Resources – energy, food, ...
4. Biodiversity – decline, migration, species extinction,...
5. One health or environmental health – impacts of climate change on the health of living organisms, emergence of zoonoses, health crises,...
6. Just transitions and social equity – economic, legal, social approach

Expected outcomes: This research will take stock of the influence of current and future climate conditions on students' mental health following this training, in order to consider ways of preventing eco-emotions. The development of a subjective measure of eco-emotions will allow to explore the impact of this training on the positive and negative eco-emotions of informed students. Additional information on the perceptions of trainers will complement the observations.

We also record and analyze the verbal interactions during classes between students and teachers with the dual objective of corroborating the qualification of eco-emotions expressed by respondents (questionnaires, interviews) and thus optimize the educational aspect and, a fortiori, the prevention of eco-emotions.

We also want to highlight the adaptation strategies put in place by students to face a worrying future. In particular, assess the relationship between the eco-emotions of the population observed with the implementation of individual or collective actions and/or addictions (alcohol, drugs, games and food).

Biography

Université of Franche Comté, France

Neuroplasticity-Driven Cognitive Intervention for Opioid Addiction: A Randomized Controlled Trial

Jinyan Guo[1*], Jiaming Ji[1], Jinyu Liu[1], Ziqing Hei[1], Chaojin Chen[1], Weifen Yao[1]

[1]Department of Anesthesiology, The Third Affiliated Hospital of Sun Yat-Sen University, China

Purpose: Opioid use disorder (OUD) is distinguished by its high relapse rates and intricate neuropsychological mechanisms, with conventional therapies exhibiting limited efficacy. The present study aims to evaluate the effectiveness of a neuroplasticity-targeted cognitive intervention (NCI) in enhancing executive functioning, mitigating impulsivity, and preventing relapse, thereby contributing to the advancement of neuroscience-informed strategies in addiction psychiatry.

Method: A 12-week randomized, double-blind controlled trial was conducted at the Third Affiliated Hospital of Sun Yat-sen University. The study population comprised 120 participants (N=120) who had been diagnosed with OUD according to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) and had undergone detoxification. These participants were randomly assigned to either the NCI group (n=60) or the cognitive behavioral therapy (CBT) group (n=60).The NCI protocol included:

1.Adaptive cognitive training: Dynamic N-back and modified Iowa gambling tasks to strengthen prefrontal-striatal circuitry;

2.Real-time fMRI neurofeedback: Targeting dlPFC-NAc functional connectivity to modulate reward-related neural activity;

3.Virtual reality-based episodic future thinking: Simulating adverse consequences to improve decision-making.

4.Outcomes included neuroimaging (resting/task fMRI), impulsivity (BIS-11), relapse rates, and social function at baseline, post-intervention, and 6-month follow-up.

Results:

1.Neuroplasticity: NCI significantly enhanced dlPFC-NAc connectivity (Δ=0.32, $p<0.001$), correlating with reduced impulsivity (BIS-11↓38.7%, $p<0.01$).

2.Cognitive Gains: NCI outperformed CBT in delayed discounting (2.1 vs. 0.8-fold improvement, $p=0.007$) and working memory accuracy (+19.3%, $p<0.01$).

3.Relapse Reduction: NCI group exhibited lower 6-month relapse rates (31.7% vs. 56.4%; HR=0.52, 95%CI 0.32–0.85).

4.Dose-Response: Neurofeedback duration inversely predicted NAc activation ($r=-0.71$, $p=0.003$), confirming intervention specificity.

Conclusion: This trial demonstrates that NCI induces sustained neurobehavioral improvements in OUD by augmenting prefrontal regulation and attenuating hyperactive reward processing.

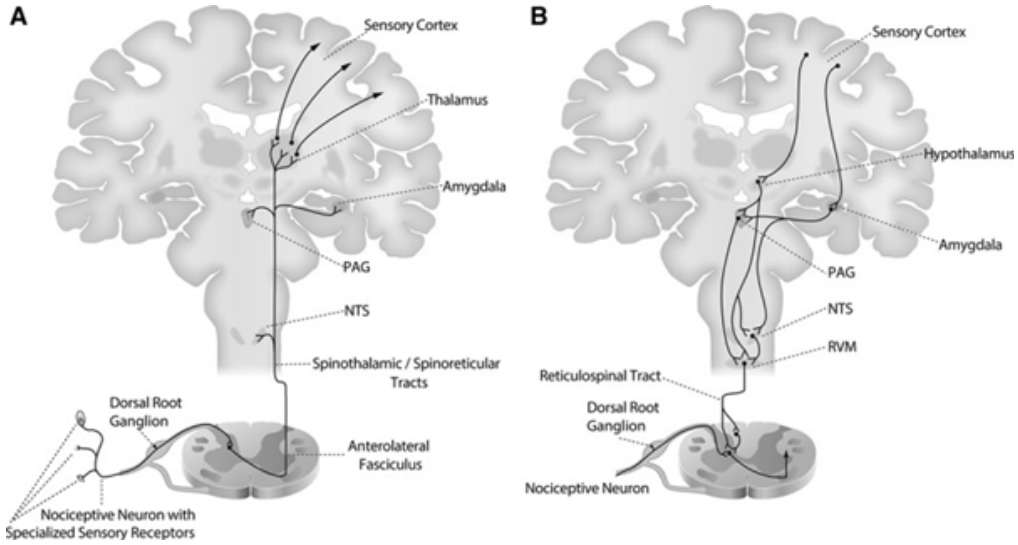

Figure 1: Ascending and descending nociception pathways

Biography

Ph.D. in Cognitive Neuroscience, Sun Yat-sen University, Research Focus: Neuroplasticity-driven interventions for addiction psychiatry, integrating fMRI neurofeedback and cognitive remediation to address opioid use disorder (OUD). Recipient of the National Natural Science Foundation of China Young Scientist Award (2023) for pioneering work in neurocognitive addiction therapies.

Looking For Research to Modify the Conceptual and Practice Framework of Substance Abuse Rehabilitation

Chi-man Tsui*

Department of Rehabilitation Sciences, The Hong Kong Polytechnic University

Every individual has his own volition in life that something is wished to be achieved sometime and somewhere across the lifespan. There is certain meaning of substance use in the mind of those who may want to try some substance. They expect to get something from the use and at the same time they may also anticipate that something bad would result from it. Perhaps upon some consideration, they have finally chosen to attempt to adopt substance use behaviors (though it may not be the best option).

Over time, they have become addicted to substance use. Such abuse probably starts affecting their execution and/or fulfillment of the internalized life roles. The short-term and/or long-term impacts may either be reinforcing or threatening their substance abuse behaviors. Continuation of the abuse may help them more justifiably keep being relieved from the obligations to take up and satisfy the roles which they have been struggling with. In contrast, the emerging negative consequences from the abuse may start alarming them that they may no longer be able to bear anymore. They may then be urged to evaluate their meaning of substance use and hence re-interpret and/or re-value what the use actually means to them. Wish for change may then be initiated.

Nevertheless, even when a change is really desired, it may or may not lead to engagement in rehabilitation due to various reasons. If the rehabilitation is eventually not opted, they may in turn keep letting the impacts of substance abuse reinforce or threaten their abuse behaviors. Even when they finally choose to be engaged in the rehabilitation, they may get support but meanwhile face obstacles too during the process. They should thus be guided to look for and achieve their volition in life which is not “substance dependent” through continuously identifying the internal and/or external factors affecting their capabilities for so and analyzing the dynamics among them.

A conceptual and practice framework of substance abuse rehabilitation has been developed in Hong Kong to delineate and illustrate the above concepts and then guiding the practices for several years. The outcomes are encouraging. Research is needed to modify the framework to further enhance the effectiveness of the interventions in Hong Kong and elsewhere..

Biography

Dr Chi-man Tsui is an occupational therapist by training. He obtained a bachelor’s degree in occupational therapy in The Hong Kong Polytechnic University and returned to complete his PhD in rehabilitation sciences after getting a master’s degree in medical sciences in The University of Hong Kong. Specialized in psychiatry, Dr Tsui’s clinical experience has been supporting his extensive teaching in undergraduate and postgraduate levels in lecturing, research supervision and clinical placement supervision. Dr Tsui has published articles in psychiatric rehabilitation. With enthusiasm in translational research, Dr Tsui is devoting to enhancing clinical outcomes in evidence-based rehabilitation to benefit people with various needs.

The Selfishness of Adolescents Overrules Cooperation in Social Dilemmas

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State Key Laboratory of Cognitive Neuroscience and Learning & IDG/ McGovern Institute for Brain Research, Beijing Normal University, Beijing, China

Background: Cooperation skills are crucial for individual success in society. While research has often shown that adolescents exhibit fewer cooperative behaviours than adults in social dilemmas, the computational processes underlying such behavioural variations remain underexplored. Previous studies concluded that adolescents may have a deficiency in forming appropriate expectations of others' cooperative intentions due to underdeveloped mentalizing abilities (Theory of Mind); however, another possibility is that they may simply be driven by a selfish motive to exploit others.

Methods: To this end, the present study used a repeated version of the Prisoner's Dilemma Game (rPDG) to compare cooperative behaviours between adolescents (n = 127) and adults (n = 134). Participants were cooperating with a computer-simulated partner during rPDG (Figure 1a-c). Computational models with different assumptions were constructed and compared to explore the mental processes underlying cooperative decisions, ultimately testing the hidden variables that drive behavioral variations between adolescents and adults.

Results: Consistent with previous research, adolescents exhibited less cooperation compared to adults, particularly following their partner's consistent cooperation (Figure 1d). Computational modelling revealed that the social reward model with asymmetric reinforcement learning algorithm provided the best explanation for the behaviours of both adolescents and adults (Figure 2). The best-fitting model revealed that, compared to adults, adolescents applied a higher positive learning rate (α+) and a lower negative learning rate (α-) when updating their expectations of partners' cooperation intention, and exhibited less social preference (ω) for mutual cooperation (Figure 3). In line with our hypothesis, adolescents did not exhibit inappropriate expectations regarding their partner's cooperative intentions compared to adults (Figure 4a-d); however, they perceived less intrinsic reward for reciprocity (Figure 4e-f).

Conclusion: The lower levels of cooperation observed in adolescents stem from a selfish motive to exploit others, rather than a deficiency in mentalizing or learning during social interactions. These findings have implications for educational approaches and strategies aimed at fostering cooperative behaviours in adolescents.

Biography

Prof. Chao Liu he expertise in Social Affective and Cognitive Neuroscience. Dr. Liu's research focuses on social, affective, and cultural neuroscience. Specifically, he is interested in: i) The role of emotion in morality and altruism; ii) The neural mechanisms of human interpersonal behaviours, such as cooperation, competition, and negotiation. iii) The neural correlates of the Linguistic Relativity Hypothesis, particularly how English and Chinese languages influence cognitive functions and social behaviours in English and Chinese speakers.

Application and Efficacy Analysis of Ommaya Reservoir Implantation Combined with Sequential Repeated Intrathecal Chemotherapy with Pemetrexed in the Treatment of Leptomeningeal Metastasis from Non-Small Cell Lung Cancer

Chen YANG[1*], Xiaoli LI, Juanjuan LIU, Deheng LI, Ning ZHANG

[1]Department of Oncology, Fudan University Cancer Hospital Minhang Branch, Shanghai,China

Leptomeningeal metastasis from non-small cell lung cancer (LM-NSCLC) is a severe complication of advanced disease, and the prognosis is very poor. This study examined the feasibility of Ommaya reservoir implantation to conduct intraventricular chemotherapy.

Objective:

To evaluate the efficacy of intrathecal chemotherapy with pemetrexed via Ommaya reservoir in patients with LM-NSCLC, in combination with palliative systemic treatment, including immune checkpoint inhibitor and/or bevacizumab. Overall survival (OS), response rate, and adverse events associated with the procedure and drug administration were assessed. LM were assessed according to the Response Assessment in Neuro-Oncology (RANO) criteria.

Methods:

Twenty-three patients with LM-NSCLC underwent Ommaya reservoir implantation between January 2023 and September 2024. One patient (4.3%) underwent revision surgery due to malfunction and infection. Twenty-three patients received intrathecal chemotherapy with pemetrexed (50mg days 1 and 8, every 3 weeks). The median OS was 10.0 months (95% confidence interval 8.4-11.6 months). RANO-assessed response rate was 78.2% (18/23). The most common adverse event was myelosuppression (n=10; 43.4%).

Conclusion:

Ommaya reservoir implantation combined with sequential repeated intrathecal chemotherapy with pemetrexed is an effective treatment option for patients with NSCLC-LM.

Keywords:

Ommaya reservoir, leptomeningeal metastasis, non-small cell lung cancer, intrathecal chemotherapy

Biography

Dr. Chen YANG works as an attending physician in the Department of Oncology, Fudan University Cancer Hospital Minhang Branch, Shanghai. Dr. YANG got the Doctor degree of Oncology in Fudan University in 2011. He was a visit scholar in Department of Hematology/Oncology in Columbia University Medical Center, New York, in 2017-2018. He majors in the treatment of breast cancer, lung cancer and metastatic brain cancer.

Online Gambling: Understanding the Role of Mental Health and Coping Strategies

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Online gambling has become an increasingly prevalent behavior with significant implications for individuals' mental health. This study aims to examine the relationship between online gambling involvement, mental health status, and coping strategies among adults. Utilizing a quantitative approach, data were collected from 357 active online gamblers through a standardized online questionnaire. The findings reveal a positive correlation between the intensity of online gambling and symptoms of mental health issues, including anxiety and depression. Furthermore, maladaptive coping strategies, such as avoidance and escapism, were more commonly employed by individuals with higher levels of gambling involvement. Escapism and avoidance coping strategies have been studied extensively and conceptualized as motives to play. These results underscore the need for early psychological interventions and the promotion of adaptive coping mechanisms to mitigate the negative mental health consequences of online gambling. The evidence also has important implications for developing more effective prevention programs.

Biography

Completed her undergraduate and postgraduate education at the Faculty of Psychology, Gadjah Mada University, Yogyakarta. 1n 2012, she continued her doctoral studies at Education and Rehabilitation Psychology, University of Leipzig, Germany. The presenter has the opportunity to take part in international seminar activities and also published several academic writings published abroad such as in Portugal, Netherland and Germany. At present, she is one of the teaching staff in the Faculty of Psychology Jakarta State University.

Novel Drugs for Stroke and Clinical Neurological Development

Omar F. Carrasco*

Innovation and Development, Silanes Laboratories, Mexico City, Mexico

Stroke remains a leading cause of disability and mortality worldwide, necessitating the development of novel pharmacological interventions. Traditional treatments, including thrombolytics (e.g., alteplase) and antiplatelet agents, have demonstrated efficacy but are limited by time-dependent administration, risk of hemorrhage, and variable patient response. Recent advancements in neuroprotection, neurorepair, and targeted molecular therapies offer new avenues for stroke management. This review evaluates emerging drug candidates and their impact on clinical neurological development.

Methods

A systematic review was conducted using PubMed, Scopus, and clinical trial databases to identify studies published between 2015 and 2024. The inclusion criteria encompassed preclinical and clinical trials evaluating novel stroke therapeutics. The selected drugs were categorized based on their mechanisms of action, including neuroprotective agents, anti-inflammatory compounds, and regenerative therapies. Data extraction focused on efficacy, safety, and translational potential compared to standard treatments.

Results

Several promising agents have emerged in stroke therapeutics. Neuroprotective drugs such as NA-1 (nerinetide) have shown potential in reducing ischemic damage by inhibiting postsynaptic density protein-95 interactions, though clinical results remain mixed. Anti-inflammatory agents, including fingolimod and interleukin-1 receptor antagonists, have demonstrated improved outcomes by mitigating secondary brain injury. Regenerative therapies, such as stem cell-derived exosomes and granulocyte colony-stimulating factor, have exhibited neurorestorative effects in preclinical models. Novel thrombolytics like tenecteplase have demonstrated higher clot dissolution efficiency and a more favorable safety profile compared to alteplase, with extended therapeutic windows and reduced risk of intracranial hemorrhage.

Conclusions

Compared to standard treatments, novel stroke therapeutics offer significant advantages in efficacy and safety. While traditional thrombolytics such as alteplase remain the cornerstone of acute ischemic stroke treatment, newer agents like tenecteplase show superior fibrinolytic properties and extended treatment windows. Neuroprotective and anti-inflammatory drugs, though promising, have yet to surpass the clinical efficacy of reperfusion therapies but may provide adjunctive benefits. Regenerative strategies represent a paradigm shift, offering long-term functional recovery that conventional treatments lack. However, the full clinical translation of these novel drugs depends on large-scale trials validating their superiority over existing therapies. Future research should focus on personalized treatment approaches integrating pharmacogenomics and biomarker-based patient stratification to optimize stroke management.

Biography

Dr. Omar F. Carrasco is a physician and pharmacologist with a doctorate in biomedical sciences from the UNAM School of Medicine. With 17 years of experience as a professor and researcher in pharmacology, he has made significant contributions to the field. His work includes multiple publications in indexed scientific journals, contributions to book chapters, and authorship of two books. Dr. Carrasco's expertise lies in advancing pharmacological research and education, shaping the next generation of medical professionals and scientists.

Melatonin for Sleep Problems in Children with Neurodevelopmental Disorders: A Systematic Review and Meta-analysis

Taris Radifan[1]*, Putri Amelia[1], Lowilius Wiyono[1], Nadzila Anindya Tejaputri[1], Salsabiila Maryam[1]

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Sleep problems are frequently observed in children with neurodevelopmental disorders, often leading to issues with learning, behavior, and increased stress for the family. Melatonin is a key hormone produced by the pineal gland at night, helping to regulate sleep-wake cycles and induce sleepiness. Research shows that children with neurodevelopmental disorders might have irregular melatonin production. Melatonin is used to treat sleep problems, though only a few studies have examined its effectiveness in children. This study aims to evaluate the effectiveness of melatonin in children with neurodevelopmental disabilities who experience sleep disturbances.

Methodology

We searched articles from the Cochrane Library, PubMed, Scopus, ScienceDirect, and ProQuest, based on predetermined inclusion criteria. We screened, selected relevant studies, and extracted data. The quality of each study was assessed using the Cochrane risk-of-bias tool for randomized trials and the Newcastle-Ottawa Scale for observational studies. The statistical analysis was performed using Review Manager 5.4.

Results & Discussion

We identified 11 studies, including 2315 patients with a variety of neurodevelopmental disorders, including ASD, ADHD, intellectual disability, and cerebral palsy. Melatonin significantly improves total sleep time by 32.03 minutes ($p < 0.001$) and reduces sleep latency time by 23.8 minutes ($p<0.001$) in children with neurodevelopmental disorders. Other sleep parameters showed little to no significant improvement. Most studies reported mild to moderate adverse effects, including irritability, drowsiness, rash, and abdominal discomfort.

Conclusion

Melatonin significantly improves total sleep time and reduces sleep latency in children with neurodevelopmental disorders.

Biography

A General Practitioner currently practicing medicine in a hospital in urban Jakarta, passionate about neurology and global health.

Generational Dynamics in Masculinity: The Role of Gender Role Discrepancy and Social Media Addiction in the Psychological Distress of Men with Social Phobia

Sabina Lissitsa[1*] and Maya Kagan[2]

[1]School of Communication, Ariel University, Ariel, Israel
[2]School of Social Work, Ariel University, Ariel

This study investigates how gender role discrepancy (GRD) and social media addiction mediate the relationship between social phobia and psychological distress across generational cohorts X, Y, and Z. With societal norms around masculinity evolving and technology increasingly pervasive, the research explores the interplay of these factors among 700 Israeli men aged 18–63. The findings highlight critical insights into the persistence of traditional gender norms and their psychological impacts across generations, with a particular focus on the effects of social media addiction.

Using an online questionnaire, data were collected and analyzed to assess social phobia, GRD, social media addiction, and psychological distress. The results indicate similar patterns across generations, with social phobia significantly predicting psychological distress in all cohorts. Positive correlations were observed between social phobia and GRD, GRD and social media addiction, and social media addiction and psychological distress. Notably, GRD significantly influenced psychological distress in Generations X and Y but was non-significant for Generation Z, suggesting a gradual loosening of rigid masculine ideals in the youngest cohort.

Generation X exhibited the lowest levels of social phobia, GRD, and social media addiction, which aligns with their upbringing during a time of entrenched traditional masculinity and limited technological engagement. However, their adherence to stoicism and hegemonic norms exacerbates the psychological toll of failing to meet these ideals. Generation Y, shaped by transitional masculine norms and early social media adoption, reported higher GRD and psychological distress. Generation Z, immersed in digital technology and more flexible gender norms, demonstrated the highest levels of social media addiction, emphasizing their reliance on these platforms for validation and self-expression.

The mediation analysis revealed nuanced interrelations. Social media addiction intensifies the impact of GRD and social phobia on psychological distress, creating a feedback loop exacerbated by constant online comparison and validation-seeking behaviors. Generation Z's non-significant correlation between GRD and psychological distress indicates the potential mitigating effects of fluid and inclusive masculine identities fostered online.

These findings underscore the enduring influence of traditional gender norms on mental health despite generational shifts toward flexibility. The research highlights the role of social media in perpetuating or alleviating psychological distress, depending on its use. Tailored interventions addressing GRD and promoting healthier social media habits are crucial. For Generation X, reducing stigma and encouraging emotional expression may alleviate distress tied to GRD. For Generations Y and Z, fostering digital literacy and resilience in navigating online environments is imperative.

By exploring the generational nuances in masculinity and mental health, this study contributes to understanding how societal and technological changes shape psychological outcomes. It highlights the importance of developing inclusive policies and mental health strategies that address the intricate interplay between social expectations, digital engagement, and mental well-being.

Biography

Prof. Sabina Lissitsa, PhD, is an Associate Professor and Dean of the School of Communication at Ariel University, Israel. She also heads the MA Program in Communication, Information, and Governance. Her research intersects media studies, digital inequality, generational cohorts, and social stratification, with a focus on the psychological effects of media consumption and technology use across diverse populations. Prof. Lissitsa's work examines intergroup relations, STEM education, and the role of social media in shaping societal attitudes and mental health outcomes, offering impactful insights into contemporary global challenges.

Beyond Substance: Dopamine, Habit, and the Rise of Behavioral Addictions

Zoe Wyatt*

Wyatt-Potage Consulting, Australia

As society becomes increasingly interconnected and reliant on technology, a new landscape of behavioural addictions is emerging, driven by the brain's dopamine reward system. This presentation explores the mechanisms behind behavioural addictions—compulsive behaviours that don't involve substances but still impact mental health profoundly. From social media and gaming to food and shopping, these "everyday" behaviours can lead individuals down a path of dependence and distress. Drawing from recent research, this session will examine how dopamine-driven rewards shape habitual behaviours and may escalate into addiction. We'll discuss the unique challenges behavioural addictions pose, including their subtle onset, the normalization of such habits, and the difficulty in breaking these cycles. Practical strategies for identifying and managing behavioural addictions will be highlighted, emphasizing how mental health professionals can support clients in understanding and addressing these compulsive patterns. Attendees will gain insight into the neural pathways that fuel behavioral addictions and explore effective interventions to foster healthier habits. This session aims to enhance clinicians' ability to recognize and treat behavioral addictions as a critical component of modern mental health care.

Biography

Dr Zoe Wyatt is an Australian Mental Health Social Worker with a clinical background in trauma and addictions. With a trauma-informed approach to mental health, Dr. Wyatt combines evidence-based practices with insights drawn from over a decade of experience in diverse settings. Originally from Melbourne, she spent five years in Southeast Asia working as a trauma and addictions therapist in Thailand while conducting her Doctoral research in Cambodia, where her PhD explored resilience and recovery from trauma. Dr Wyatt has provided guidance and strategic consultation to leaders across various industries, including Fortune 500 companies, supporting them in addressing mental health and wellbeing challenges within their organizations. She regularly presents at international conferences, focusing on practical, research-informed strategies to support trauma recovery and resilience.

Factors that impact adherence to physical exercise in individuals with chronic pain

João Rafael de Oliveira Rocha da Silva*

Hospital das Clinicas of the Faculty of Medicine of the University of São Paulo HC-FMUSP, Brazil

Chronic pain is defined as persistent pain for more than three months, resulting in changes in the functional synaptic network of the brain and its gray matter dimensions, causing hypersensitivity to a nociceptive stimulus and increased excitability of the nodal stress mechanism, causing the individual to remain in a state of alert (hyperactivation of the sympathetic nervous system) in normal daily activities, increasing their level of stress, anxiety, and fear.

It can be classified as primary with no known etiology or secondary pertinent to a specific pathological process and clinical diagnosis.

Despite the high relevance of studies that address the importance of exercising in these individuals, their understanding of the correct assessment and prescription during clinical practice still does not seem very clear.

Scientific evidence is focused on establishing which exercise modality would be most suitable; however, we observed a lack of information on recurrent neurofunctional and biomechanical changes in this population, which we can classify as a pathological pattern that should not be neglected. In previous studies, we observed that it directly impacts cardiac rehabilitation and adherence to physical exercise, significantly increasing disability and mortality in the population.

We also observed that individuals with chronic pain present patterns of changes in motor control and kinesiophobia, with chronic low back pain and knee osteoarthritis being the most frequent causes of disability, directly impacting cardiac rehabilitation due to the difficulty in obtaining adequate adherence to physical exercise.

Both pathologies mentioned are very relevant in literature and clinical practice. However, any type of chronic musculoskeletal pain can lead the individual to functional disability since musculoskeletal pain in the lower and upper limbs directly impacts gait, work activities, and physical activities in the practice of exercises and activities of daily living.

In previous studies, it was possible to observe the pathophysiology of chronic pain being responsible for altering the neuromuscular reflex, causing changes in motor control due to several factors such as muscular inhibition, muscular rigidity, body perception deficit, and sensorimotor system changes.

Biography

Pt. João Rafael Rocha da Silva has been a clinical physiotherapist for over 15 years, with a postgraduate degree in rehabilitation applied to sport from the Department of Orthopedics and Traumatology at the Escola Paulista de Medicina CETE- UNIFESP, also having a postgraduate degree in Improvement in assessment and interdisciplinary treatment in Pain at the Hospital das Clínicas of the Faculty of Medicine of the University of São Paulo HC-FMUSP.

He is a researcher with published studies and a scientific reviewer. He is a specialist from the National Council of Physiotherapy and the Brazilian Society of Sports Physiotherapy and Physical Activities. He is a member of the Brazilian Association of Trauma and Orthopedic Physiotherapy. He has worked as a sports physiotherapist in large rehabilitation centers in Brazil and several international events. He has worked with Olympic athletes and has a clinical practice treating pain.

He owns the Connect Life Institute, a center dedicated to treating pain, preventing injuries, and improving performance.

Art Therapy Autobiographical Intervention for Addiction Treatment in Tanzania

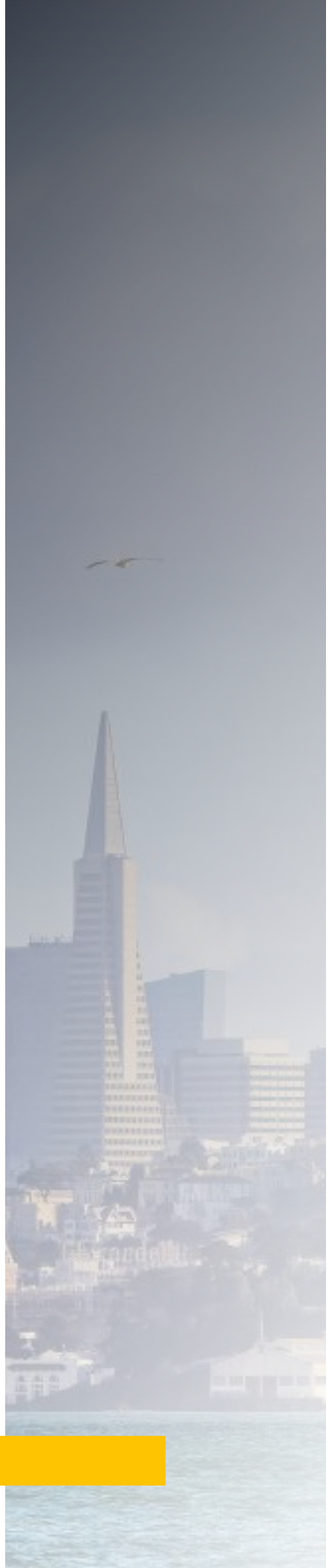
Paola Luzzatto

Art Therapist, Italy

An autobiographical, narrative art therapy approach to treat drug addiction was co-developed at the Methadone Clinic of Muhimbili National Hospital, Dar-es-Salaam, Tanzania. The l0-session art therapy intervention included a group of 7 men. The protocol, as illustrated with a case example, suggests that it could help resolve deep-seated pain, decrease shame, and increase self-esteem.

Biography

Paola Luzzatto has a degree in Philosophy (Italy) and a Ph.D. in Comparative Religions (Nigeria). She trained in Art Psychotherapy at Goldsmith College, University of London. She worked as Senior Art Therapist with adult psychiatric patients (including Alcohol, Drug and Eating Disorders) in West Lambeth Health Authority, London, for eight years. She then moved to New York, and she worked with cancer patients at the Sloan-Kettering Cancer Center for ten years: for this work she received the 2004 Clinical Award from the American Art Therapy Association. More recently, she was Honorary Lecturer for five years in the Dept of Psychiatry, Muhimbili University, Dar es Salaam, Tanzania. There she developed two innovative art therapy protocols, in the fields of Addiction and of Trauma. Both protocols have been published and are now applied also in Europe. Paola Luzzatto has published articles on her clinical work in professional journals; a book on the Austrian artist Suzanne Wenger; a textbook on Art Therapy for Italian students; and two books for children on African mythology. She now lives in Italy.



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POSTER PRESENTATIONS

Dynamic Network Reconfiguration and Directed Influences in Cocaine Use Disorder: A Multilayer Graph Analysis and Regression Dynamic Causal Modeling Study with rTMS Interventions

Tianyue Cong*

[1]Division of Social Science, University of Chicago, USA

Objectives

This ongoing study investigates how dynamic and directed resting-state connectivity underlie inhibitory control deficits in cocaine use disorder (CUD) and how rTMS modulates these pathways. Specifically, it tests whether altered dynamic connectivity patterns predict lower drift rates and more impulsive thresholds from Hierarchical Drift Diffusion Modeling (HDDM) on the Go/No Go task, and whether rTMS-driven changes in top-down connectivity improve inhibitory performance.

Methodology

Using the cross-sectional SUDMEX-CONN dataset, I will first apply a multilayer network approach to derive graph-theoretical metrics (e.g., flexibility, temporal variability) that capture time-varying connectivity reconfigurations. Meanwhile, I will leverage regression Dynamic Causal Modeling (rDCM) to provide directed connectivity estimates between fronto-parietal and fronto-striatal regions. These metrics will be correlated with HDDM-derived parameters to elucidate how inhibitory control differs between CUD patients and healthy controls. In the longitudinal extension using the SUDMEX-TMS dataset, I will track CUD participants undergoing active or sham rTMS across five time points, assessing whether changes in dynamic and directed connectivity predict improvements in inhibitory control.

Expected Results

I anticipate that preliminary cross-sectional analyses will reveal reduced flexibility in frontoparietal hubs and weaker top-down connectivity (PFC→striatum) among CUD participants. These disruptions are expected to correlate with lower drift rates and more impulsive decision thresholds in HDDM. In the longitudinal phase with rTMS, I predict that active stimulation (vs. sham) will lead to enhanced frontostriatal directed connectivity and increased time in a "control-dominant" dynamic state, paralleling gains in inhibitory performance.

Conclusion

If supported, these results highlight the critical role of flexible, top-down pathways in regulating inhibitory responses. They reinforce notions of flexible hubs and salience-network switching, wherein rapid network reconfiguration is vital for suppressing prepotent actions. Practically, this work may guide personalized neuromodulation strategies demonstrating that rTMS-induced changes in dynamic and directed connectivity can be harnessed to improve evidence accumulation and decision caution.

Biography

I am currently a second-year master's student in Computational Social Science at the University of Chicago. I am interested in combining theory-driven and data-driven approaches to achieve a more naturalistic, multimodal assessment of psychopathology. On the theory-driven side, I study cognitive and affective dysfunctions in real-life scenarios, with a focus on naturalistic decision-making, mental maps, and reward generalization. I also explore spontaneous thought dynamics using think-aloud fMRI, attractor-state modeling, and semantic network analysis to uncover psychiatric relevance. On the data-driven side, I am interested in leveraging multimodal ethological data (behavioral, speech, physiological, neuroimaging, bioinformatics), alongside advanced multimodal fusion techniques, to identify early warning signals, develop multimodal biomarkers, and personalize treatment strategies.

Network Analysis of The Interaction of Psychological and Behavioural Indicators During Drug Addiction Rehabilitation and Their Impact on Recovery Outcomes

Chen Jiawei[1]*, Tatjana A. Shilko, Wei Chen, Tian Ying

[1]Shenyang Normal University & Tomsk State University, China

Objective: To explore the interaction of psychological and behavioral indicators among drug addicts during the detoxification period and their impact on rehabilitation outcomes using a network analysis model, providing a basis for precise intervention and recovery of drug addicts.

Methods: A cross-sectional study was conducted, using convenience sampling to recruit 323 drug addicts from a drug rehabilitation center in Liaoning Province from June 2024 to September 2024. The Physical Activity Rating Scale (PARS-3), Craving Scale, Addiction Severity Index (ASI), Self-Rating Anxiety Scale (SAS), Behavioral Inhibition/Activation System Scale (BIS/BAS), and Social Support Scale were used for the survey. The BIS/BAS includes four factors: "Reward Responsiveness", "Drive", "Pleasure Seeking", and "Inhibition System Factor". The Social Support Scale comprises three factors: "Objective Support", "Subjective Support", and "Utilization of Support".

Results: Network analysis revealed strong correlations among "reward response", "drive", "pleasure seeking", "inhibition system factor", "objective support", and "subjective support". "Reward response", "drive", "pleasure seeking," and "subjective support" were identified as central symptoms in the network. "Reward response" and "Drive" are susceptible to the influence of network fluctuations. The symptom "subjective support" had the highest predictability, and "subjective support" had the highest expected influence, suggesting that this factor may have a substantial direct or indirect impact on other factors and is a key node in intervention strategies. The accuracy and stability of the network were tested and found to be good, indicating that the network model is reliable.

Conclusion: This study utilized symptom network analysis to explore the symptom network of drug addicts during the detoxification period. It suggests that in the intervention process, it is essential to preemptively disrupt the strong connections between symptoms with the strongest relationships and highest predictability to enhance intervention efficiency. "Subjective support" is the most central symptom in the network. The results of this study can inspire interventions for drug addicts, indicating that in the detoxification and intervention work for drug addiction, attention should be focused on the subjective support status of drug addicts. Therefore, in the detoxification intervention for drug addiction, on the one hand, more social support is needed. On the other hand, more family support and emotional warmth should be provided to enhance the effectiveness of the recovery from drug addiction. Limitations of this study: (1) This study is a cross-sectional study of the sample population, lacking long-term longitudinal observation of the sample group. (2) The reliance on self-reported data from subjects limits the authenticity and reliability of the results. (3) The sampling did not implement random sampling.

Biography

Chen Jiawei (1990-), male, Han Nationality, from Jinzhou, Hubei province, PhD student, School of Sports Science, Shenyang Normal University and Tomsk State University, research direction: Sports and health promotion.

Microglial Polarization and Metabolic Reprogramming: Implications for Neurodegenerative Disease Progression

Ran Gao[1*], Ya Gao[2], Wenting Su[1], Renxi Wang[1]

[1]Beijing Institute of Brain Disorders, Laboratory of Brain Disorders, Ministry of Science and Technology, Collaborative Innovation Center for Brain Disorders, Capital Medical University, Beijing 100069, China

[2]Department of Cardiology, The Second Medical Centre, Chinese PLA General Hospital, Beijing, 100853, China

As the resident macrophages of the brain, microglia are crucial immune cells specific to the nervous system. They continuously monitor the microenvironment and initiate immune responses, playing a key role in various neurodegenerative diseases. During the disease process, microglia exhibit multiple phenotypes, and upon activation, they differentiate into either the pro-inflammatory M1 phenotype or the anti-inflammatory M2 phenotype. Immune regulatory molecules, such as cytokines and chemokines, secreted by microglia, play a pivotal role in shaping brain development, sustaining the neural environment, and mediating responses to injury and subsequent repair processes. However, in recent years, the role of metabolic reprogramming in both normal microglial function and neurodegenerative diseases is also becoming increasingly recognized. Upon activation, triggered by brain injury, infection, or neurodegenerative diseases, microglia typically shift their metabolic pathways from oxidative phosphorylation to glycolysis. This shift facilitates rapid energy production but may also enhance pro-inflammatory responses. This review aims to summarize and discuss the critical roles of metabolic reprogramming and polarization in the function of microglia, as well as their involvement in neurodegenerative diseases

Biography

Gao Ran, a PhD candidate at Capital Medical University in Beijing, specializes in neuroimmunology and focuses her research on the mechanisms of action and clinical therapies between microglia and neurodegenerative diseases, as outlined in this abstract. In the context of chronic neuroinflammation, the polarization and metabolic changes in microglia become increasingly pronounced. This article aims to summarize the key roles of metabolic reprogramming and polarization in microglial function, as well as their implications in major neurodegenerative diseases. The findings hold significant clinical relevance, particularly in the field of neurological disord

Toll-Like Receptor 4 (TLR4) Promotes DRG Regeneration and Repair After Sciatic Nerve Injury via the ERK-NF-κB Pathway

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[1]Medical School of Nantong University, Jiangsu People's Republic of China

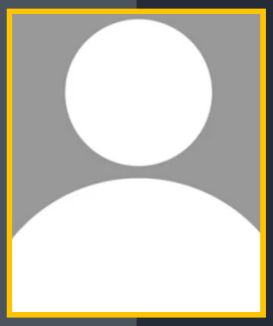
[2]School of Public Health, Nantong University, Nantong, Jiangsu People's Republic of China

Previously, we found that the expression of Toll-like receptor 4 (TLR4) is altered after sciatic nerve injury, and its differential expression plays a key role in recovery. However, the mechanisms by which TLR4 affects neuronal function in the dorsal root ganglion (DRG) have not been thoroughly evaluated. The objective is to determine TLR4 expression in DRG tissues after sciatic nerve injury and to explore the effects of TLR4 knockdown and overexpression in the DRG on neuronal function and nerve regeneration in rats in vivo and in vitro. We established a model of nerve injury and utilized molecular biology and cell biology experiments to explore the molecular mechanisms by which TLR4 in the DRG affects sciatic nerve restoration and regeneration after injury, verified the localization of TLR4 in DRG neurons. Investigated pathways that are related to apoptosis or nerve regeneration by which TLR4 regulates the function of DRG neurons. TLR4 expression was upregulated in the DRG tissues of rats after sciatic nerve injury.

TLR4 overexpression promoted axon regeneration and inhibited apoptosis in dorsal root ganglion (DRG) neurons. TLR4 promoted the regeneration of axons and the recovery of motor and sensory functions in the sciatic nerve after injury in vivo. The data showed that TLR4 may regulate the function of DRG neurons and promote nerve repair and regeneration through the ERK and NF-κB signaling pathways in both in vivo and ex vivo settings. The study suggests that TLR4 may regulate the function of DRG neurons and promote nerve regeneration by affecting the ERK and NF-κB signaling pathways.

Biography

I graduated from Shandong Agricultural University in China with a bachelor's degree and from Tianjin Medical University in China with a master's degree. I have been engaged in research on the repair of central nervous system injury. Currently, I am pursuing a doctoral degree at Nantong University in China, with a focus on researching peripheral nerve injury and regeneration.



Work-Family Conflict and Perceived Work Ability among Doctors in a Tertiary Hospital

Irin Hossian[1*], Jayasree Saha[2]

[1]Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh

[2]National Institute of Preventive and Social Medicine, Dhaka, Bangladesh

Background: According to the World Health Organization, Bangladesh has the second-lowest number of doctors per 10,000 people among the South Asian nations, at 5.26 per 10,000 people. A high workability index score is significantly associated with decreased family conflict; therefore, the present study aimed to assess the relationship between work-family conflict and workability among doctors in tertiary hospitals.

Methods: This cross-sectional study was conducted at Dhaka Medical College and Hospital (DMCH) in 2022. A total of 422 doctors were selected as study participants using a convenience sampling method. Data were collected through face-to-face interviews using a semi-structured questionnaire, the Work and Family Conflict Scale (WAFCS), and the Work Ability Index (WAI).

Results: The majority (44.9%) of the doctors were under 30 years of age, and 50.1% were female. About 68.2% were married. The maximum and minimum scores for work-to-family conflict among doctors are 35 and 15, and for family-to-work conflict are 30 and 10. Out of 437 participants, 69.3% had good work ability, 21.3% had moderate work ability, 8.7% had excellent work ability, and 0.7% had poor work ability. A significant association was observed between work-to-family conflict and work ability, as well as between family-to-work conflict and work ability, using the Pearson correlation test.

Conclusion: To provide quality healthcare services to the citizens of Bangladesh, work-family conflict among doctors should be minimized, and the work ability of the physicians should be given the highest priority.

Biography

Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh

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