JOINT EVENT

26th Edition of International Conference on

Clinical Psychology and Neuroscience

&

24th International Conference on

Neuroscience and Neurochemistry

July 23-24, 2018 Birmingham, UK

Workshop

Day 1

Linda Sage, J Neurol Neurosci 2018, Volume 9
DOI: 10.21767/2171-6625-C2-011

Linda Sage

Successful Mindset Ltd., England

Overcome compassion fatigue and burnout

Compassion fatigue puts healthcare workers and patients at risk. Everyday care workers struggle to function in care giving environments that present heart wrenching emotional challenges. Compassion fatigue (CF) the profound emotional and physical erosion takes place when helpers cannot refuel and regenerate. Helping professionals open their hearts and minds to clients/patients. This empathy makes helpers vulnerable to be profoundly affected and possibly damaged. Burnout physical and emotional exhaustion is experienced when there is low job satisfaction, feeling powerless and overwhelmed. Signs of CF and burnout: overtaxed by work, showing similar symptoms to traumatized clients; difficulty in concentrating, intrusive imagery, feeling discouraged, hopelessness, exhaustion, irritability, high attrition (helpers leaving) and negative, dispirited, cynical workers remaining in the field, boundary violations which affect the workplace and create a toxic environment. Factors in CF and burnout of the individual: Life circumstances, coping style, personality type. Life stressors i.e. taking care of both young children and aging parents, in addition to managing a heavy and complex workload. Helpers are not immune to pain in their own lives; they can be vulnerable to life changes such as divorce and addictions. Helpers often do work, others don't want to hear about; spend time caring for people who are not valued or understood in society, homeless, abused, incarcerated or chronically ill. The working environment is often stressful and fraught. The work is very stressful, clients/patients who are experiencing chronic crises, difficulty in controlling their emotions, or who may not get better. What can be done? Working in a healthy organization; access to supportive; flexible management; reduction of trauma exposure; ongoing staff education; timely and good quality supervision and; reducing hours of working directly with traumatized individuals. Personal strategies are strong social support, home and work; increased self-awareness regular self-care. Making life changes, prioritize personal health/wellness develop stress resiliency skills.

Recent Publications

1. Caring for the Caregiver(2017) ISBN/13: 978-1974635658 ISBAN- 10:1974635651
2. Linda Sage, 2015, From a Whale to a Woman ISBN/EAN13: 1502564459 / 9781502564450
3. Bob Garvey, Paul Stokes, David Megginson 2018, Coaching and Mentoring Theory and Practice, Case Study 16.7 -Pgs 290-292
4. Linda Sage, 2017, Journal of Nursing & Healthcare (2017)
5. Overcoming Compassion Fatigue, Journal of Nursing
6. Linda Sage, 2017, Reset Your Mindset for Success, E-Book, bit.ly/LSebook.

Biography

Linda Sage has her expertise and passion in improving personal psychological health and wellbeing. Her significant list of global clients, range from hospitals, educational institutions, prisons and corporate entities; throughout UK, US, Europe & Middle East. In all caring environments the professionals are less likely to care for themselves; changing that mindset is at the core of author's message. It is possible to be, done and have everything you want, by helping others and looking after yourself. An international speaker, author, trainer and mentor, with decades of experience and knowledge, energize any event and attendees. Her simplified message of self-worth, instantly effects all levels of personnel, to achieve, do and be more with a positive frame of mind; demolishing the irrational fears, phobias, beliefs and habits that compassion fatigue can compound. Building a more resilient person provides the individual, employer and patient/client a much more competent and confident professional.

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Scientific Tracks & Abstracts

Day 1

Sessions

Neuroscience and Neurological Disorders | Clinical Psychology | Advances in Neurological Disorders | Clinical Neuropsychology | Psychotherapy | Humanistic Psychology | Developmental Psychology | Abnormal Psychology | Occupational Psychology

Session Chair
Courtland C Lee
The Chicago School of Professional Psychology, USA

Session Co-Chair
Vivian V Lee
Johns Hopkins University, USA

Session Introduction

Title: **The effect of the C.O.M.E program for people with mental and/or drug disorders to live a more independent life**
Nikolaus Blatter, University of Innsbruck, Austria

Title: **Prospective memory and its association with frontal lobe functioning in schizophrenia and bipolar disorder**
Natasha Yasmin, University of Birmingham, UK

Title: **Scale-up! A novel method to study reciprocal real-time processes during patient-therapist interactions**
Peter Hilpert, University of Surrey, UK

Title: **Laughter is the best therapy**
Robert MacDonald, Liverpool John Moores University, UK

Title: **A Neuropsychological test (CKPT: Color Word Pick-out Test) to be able to detect the slight disorder of prefrontal lobe: Classify the level of the preclinical stage of dementia**
Takaki Shimura, Sosei Group Corporation, Japan

Title: **Caffeine prenatal exposure caused persistent alterations in astrocyte morphology in experimental models**
Owolabi Joshua Oladele, Babcock University, Nigeria

Title: **Effect of Levetiracetam monotherapy on cardiovascular risk factors in children with epilepsy: A prospective study**
Achilleas Attilakos, National and Kapodistrian University of Athens, Greece

Title: **Yoga: An ancient mind-body therapy for cardiovascular prevention and rehabilitation**
Satish Patil, Shri B M Patil Medical College - BLDE University, India

Title: **Somatoform disorders in out-patient psychiatric setting: An overview**
Yousif Ali Yaseen, University of Duhok, Iraq

Nikolaus Blatter et al., J Neurol Neurosci 2018, Volume 9
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The effect of the C.O.M.E program for people with mental and/or drug disorders to live a more independent life

Nikolaus Blatter, Harald R Bliem and **M Mag Silvia Blatter**
University of Innsbruck, Austria

In Austria many service provider offers a home treatment service. However, in most concepts housing depends on treatment. The innovation of the home treatment service in Vorarlberg since 2015 is that the home treatment is separated from housing. The long term-study started in the year 2016 and includes 52 probands from four service providers which offer a home-treatment for people with mental or drug disorders and other social needs. Based on the theoretical foundation of Housing First and Treatment First we developed the C.O.M.E Program which contains Cooperation, Observation, Mutual-support and Evaluation. The focus of the study is to evaluate if the C.O.M.E Program supports the service provider in their (daily) care-work and secondly, if it detects the individual-focused care supports the clients to gain a life with more autonomy, increase permanent housing, decrease stays in hospital, improve a long-term mental stability and encourage them in the development of alternative assistance for mutual support. To implement the program it was necessary to introduce the service provider into the theoretical, differences and practical aspects of Housing First, Treatment First and the purpose of the C.O.M.E Program. A crucial part of the data collection is done by the assessment sheet which is scored at least one time a week and correspond with the hometreatment basic learning skills which the caregiver try to convey the clients. For further analysis the items of the assessment sheet are combined to four dimensions: houshold management, personal hygiene, activity (social), psychosocial-stability. Over a time-period of 40 weeks we found that continuous abstinence from drugs and alcohol is another important criterion for a better cooperation between client and caregiver, but it is not necessarily a requirement to get a care-giver-support. The execution is designed and conducted that the clients are demanded as much as possible and as less as necessary in their daily life. Finally, it is necessary to keep the contact, even if the client denies the contact.

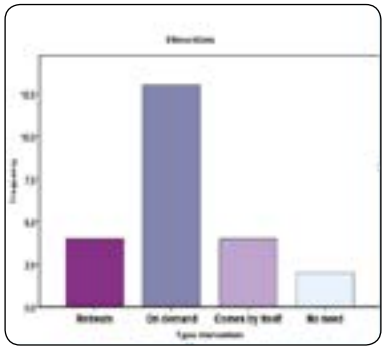

Figure 1: Shows on the y-axis the frequency of the Intervention or contacts of one client over a 40 week period. The x-axis describes the types of Interventions. In times of crisis,relapeses or withdrawal, the care-giver increase the frequency of Interventions and hold at least contact on a low level.

Recent Publications

1. Pearson, C., Montgomery, A.E., Locke, Gretchen. (2009). Housing stability among homeless individuals with serious mental illness participating in housing first programs. In Wiley Inter Science [Electronic Version]. Journal of community psychology, 77 (3), 404-417.
2. S. E. Collins, D. K. Malone, S. L. Clifasefi and J. A. Ginzler, "Project-Based Housing First for Chronically Homeless Individuals With Alcohol Problems: Within-Subjects Analyses of 2-Year Alcohol Trajectories," vol. 102, no. 3, 2012.
3. Johnson, S. & Teixeira L. (2010). Staircases, Elevators and Cycles of Change – "Housing first" and other housing models for homeless people with complex support needs. London: Crisis. ISBN: 978-1-899257-63-8
4. Sahlin I (2002) The staircase of transition: survival through failure. Innovation, European Journal of Social Research 18(2):115-135.

5. Tsemberis S (2010) Housing first: the pathways model to end homelessness for people with mental illness and addiction manual. In European Journal of Homelessness 5(2):235-240.

Biography

Nikolaus Blatter Past Professional experience (2002-2015): Psychiatric-hospital Baumgarnter Höhe in Vienna; homeless-shelter in Vorarlberg; Supervisor of a small-care-unit for homeless clients with mental illness and drug diagnoses; Professional experience: Since 2015 he/she is working as Psychologist in the Government of Vorarlberg, Department for Community Psychiatry and Drug help. Working topics: individual case planning, detection from unmet-needs especially the support from severe mental ill clients in various treatment-sectors (homeless, community psychiatry, drug…); participation in the creation of the Vorarlberger-psychiatric-report. His/her research topics: as a PhD Student since 2016 to evaluate the home-treatment support in the federal state Vorarlberg; Detection of over-, under- and lack of supply in community psychiatry, drug help and adjacent areas (homeless, nursing…).

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Notes:

Natasha Yasmin, J Neurol Neurosci 2018, Volume 9
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Prospective memory and its association with frontal lobe functioning in schizophrenia and bipolar disorder

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Background & Aim: Prospective memory (PM) deficit have been well documented in schizophrenia so far, but there is a lack of research evidence of PM functioning in bipolar disorder and its relationship with frontal lobe functioning. Both group share similar clinical symptoms and cognitive profiles, depicting impairments in memory and frontal lobe functions like planning/ executive functioning and attention and concentration, and these aspects are found to be significantly related to aspects of PM functioning. The study therefore aimed to investigate event-based (EB) and time-based (TB) PM functioning in schizophrenia and bipolar disorder, and its association with frontal lobe functioning.

Methodology: To assess PM functioning, an experimental task incorporating both event- and time-based prospective memory was developed and administered on 30 schizophrenics and 30 bipolar patients, and on 30 non-psychiatric individuals (control group). To further examine the relationship of PM and frontal lobe functioning, participants were also assessed using neuropsychological tools, viz, Tower of London(TOL), N-Back Test and Triads Test.

Findings: Patients with schizophrenia and bipolar disorder were found to have impaired PM functioning when compared to control group. The results also support the importance of frontal lobe process like planning, attention, and working memory in having a significant effect on prospective remembering.

Significance: Impairments in frontal lobe functioning is commonly found in patients with schizophrenia and bipolar disorder. The current study showed that PM deficits are also found in the same population and it shares a significant relationship with frontal lobe impairments. This emphasizes the need to include assessment of PM functioning as a cognitive marker for these populations to prevent future cognitive and frontal lobe impairments. There is also a need for conducting additional research for developing rehabilitation methods for the same in these clinical populations to improve their quality of living and a better rehabilitation prognosis.

Recent Publications

1. Yasmin N and Khan W (2017) Character strengths and subjective well-being: An exploratory study of Indian youth. Indian Journal of Positive Psychology 8(2):174-177.
2. Yasmin, N. & Pandey, R. (2018). Prospective memory functioning in patients with schizophrenia and bipolar disorder: A comparative study. Applied Cognitive Psychology, 1-12.

Biography

Natasha Yasmin is a registered Clinical Psychologist from India currently working on her PhD research project at University of Birmingham, UK. She has both clinical and research experience in the field and has worked with a wide range of the population. She is particularly interested in cognitive neuropsychology and rehabilitation and is currently in the process of developing a novel clinical therapeutic intervention for a couple with brain injury. She wants to indulge her passion for research and implicate it in her clinical work.

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Peter Hilpert, J Neurol Neurosci 2018, Volume 9
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Scale-up! A novel method to study reciprocal real-time processes during patient-therapist interactions

Peter Hilpert
University of Surrey, UK

Problem: All evidenced-based psychotherapeutic treatments rely on human interactions. However, the major reason for the disappointing progress in understanding human interactions is the lack of methods enable mechanistic inferences of how the behavior of one person (e.g., therapist) influences the internal state and behavioral response of the other person (e.g., patient). The current gold-standard method (i.e., observation technique) is not only expensive and time-consuming but provides such spares data that it forced the field to examine just how the frequency of behavior predicts later symptom changes (e.g., more alliance during a session predicts later symptom changes). This completely ignores the essence of psychotherapy – how patient and therapist influence each other moment-to-moment.

Solution: To overcome the current limitation, we test a novel method using engineering technology to extract behavior (i.e., para-verbal stress cues) in high temporal resolution. This intensive data enables us to test the co-regulation process using dynamical systems modeling.

Design: In a patient-therapist sample (353 sessions) and a sample of couples (N=189), we found not only that people do co-regulate each other during interactions but that these co-regulation process changes within an interaction.

Significance: The utilization of such a novel method has far-reaching implications. For example, a common problem is that in a psychotherapy study with 100 participants (each 20 sessions) not all interactions can be coded because of costs (e.g., 2,000 hours video, coding cost $120,000). Computational methods can extract behavior fast, reliable, and cheap from high-quality audio and video sources allow future research to scale up. This opens up new possibilities for interventions and training evaluations.

Biography

Dr. Hilpert develops next-generation methods to study social interactions. He was awarded with two grants from the Swiss National Science Foundation (SNSF) to develop this novel method at the University of Washington in collaboration with Prof. Atkins (Psychiatry and Behavioral Sciences). Currently, he was awarded a career grant (SNSF) and works for the University of Bern and Zurich and is a lecturer for advanced statistics at the University of Surrey. He uses engineering method to extract behavior (mainly facial and vocal signals) in high temporal resolution (HTR), combines this with factors we already can extract in HTR (physiology, emotions) and use advanced quantitative methods (e.g., dynamical systems modeling, deep learning) to compute self-regulation and co-regulation processes in couples and patient-therapist interactions. Three papers are currently under resubmission based on this method in leading journals (JCCP, Psychological Science).

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Notes:

Robert G MacDonald, J Neurol Neurosci 2018, Volume 9
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Laughter is the best therapy

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"The most honest form of art is comedy." Lennie Bruce. My name is Doctor Robert, who actually featured in The Beatles, Revolver Album. He was a Psychiatrist in New York City who prescribed uppers and downers to the stars. I have written two books "Design for Dementia." and have contributed to "Essential Nursing for Mental Health Care and "Dementia Care a Practical Guild" My research Question is: Can comedy push the boundaries of mental health and challenge the stigma? Thank You for your kind invitation to your Birmingham conference. I am a mental patient and have been sectioned under the Mental Health Act. This presentation is both tragic and comedic. It's bi-polar…just like me. Its manic and depressive…most of all it's my lived experience. I have been bi-polar since the age of 19. During this period I have experienced a number of episodes and I have been hospitalised under the Mental Health Acts. Normally, all my performances are for Mental Health Charities. I believe in the demystification of Mental Health. I have never addressed such a group of "Clinical Psychologists and Neuroscientist's". Whatever our discipline we all must talk about Mental Health and challenge the stigma that the 1.4 the population experience. Let's put mental health under the spotlight because increasingly it affects young children and young people. It's probably not really on the NHS radar? This presentation was first presented during World Mental Health Week 2017 for a Symposium of Psychologists, Mental Health Nurses, The International Day of Midwifes and The Laughter house Comedy Store. The highest, literary, was at Millbank Tower, 30 floors up in Westminister for the BRE (Building Research Establishment). For me the only way to survive mental illness is with humour and comedy. I am actually a fully qualified Architect and The Design Champion for MerseyCare NHS Foundation Trust. I intend to talk about my lived experience of my bi-polar disorder. I suggest that clinical professionals need to understand more deeply, the nature of the bi-polar condition and draw lessons for their practice. Many Thanks for listening to me.

Image from "Design for Dementia" 2010 Halsall & MacDonald and the role of Jungian Psychology and Connecting Minds

Recent Publications

1. "Design for Dementia" (2016) Bill Halsall and Dr Rob MacDonald, 2 volumes.
2. Eyes of the Skin (1996) Juhani Pallasmas, a gift from the late Clare Wrigley.
3. Prescription for Psychiatry (2014) Peter Kinderman.
4. Andrew Soloman "Ted Talks" on Depression.
5. Development of Sand Tray Therapy and used with people living with Dementia (1956) Carl Jung.

Biography

Doctor Robert Garsden MacDonald RIBA, ARB, PFRSA, is Reader in Architecture, LJMU. Rob researches and teaches Architecture and design for mental illness and dementia. He applies his lived experience of Mental Health Facilities to the future design of new spaces for health and wellbeing. He was presented with The Roscoe Citizenship Award by Lord David Alton for Life Long Services to Mental Health.

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Takaki Shimura et al., J Neurol Neurosci 2018, Volume 9
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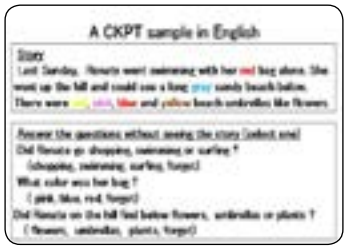
A neuropsychological test (CKPT: Color Word Pick-out Test) to be able to detect the slight disorder of prefrontal lobe: Classify the level of the preclinical stage of dementia

Takaki Shimura[1], **Eriko Okuyama**[2] and **Hironori Osugi**[3]
[1]Sosei Group Corporation, Japan
[2]Hamamatsu Photonics, Japan
[3]Josai International University, Japan

Final goal of this research is to classify the levels of preclinical stage of dementia. A neuropsychological test named CKPT (color word pick-out test) was invented for the purpose under the consideration that the test should be able to detect the slight disorder of prefrontal lobe. The test was composed of two tasks. At the first task, a subject reads a story including color words which are printed by different color, picking-out them and checking if the meaning of the color and printed color is correspondent or not. It is an application of Stroop effect. For the second task the subject answers the questions about the episode of the story without seeing it. Namely he must pick-up color words and memorizes the episode of the story simultaneously. Prefrontal lobe measurements using near infrared spectroscopy recognize that CKPT activated prefrontal lobe more than Kawashima arithmetic drill, recalling 5 numbers in order and recalling 5 numbers in inverse order. Comparison of Ritchie check list, MMSE (mini mental state examination), FAB (frontal assessment battery), WCST (Wisconsin card sorting test) was done for the ordinary elderly as criterion-related validity of CKPT. Correlation between CKPT and WCST was recognized. And also the shape of the histograms of CKPT and WCST showed normal distribution. CKPT and MMSE were applied to the abnormal elderly whose MMSE was under 27. Their score of CKPT remained almost under the average-1.5SD. About 5000 elderly took CKPT and the results were used to make the criterion of CKPT. Now we would like to get some collaborating partners who want to translate CKPT in other language.



Recent Publications

1. Jack Jr C R, Knopman D S, Jagust W J, et al., (2010) Hypothetical model of dynamic biomarkers of the Alzheimer's pathological cascade. Lancet Neurol 9:119-128.
2. Stroop J R (1935) Studies of interference in serial verbal reactions. Journal of Experimental Psychology 18(6):643-662.
3. T Shimura et al. (2009) Prefrontal lobe measurement using near infrared spectroscopy- evaluation of early detection methods and rehabilitation methods of dementia 107-118.
4. E Okuyama et al (2013) Analysis of criterion-related validity of CKPT. Journal of Japan society for early stage of dementia 6 (1):90-97.

Biography

Takaki Shimura worked in the field of Biomedical Engineering at Fujitsu Laboratories Ltd., developing and researching ultrasound imaging, MRI, bio-magnetics measurement by SQUID, X-ray imaging by flat panel detector, remote health care system by TV telephone and so on from 1969 to 2000. He worked at Tokai University as a Professor, researching mainly BME on dementia, such as the prefrontal lobe imaging using infrared spectroscopy and neuropsychological tests for early stage of dementia from 2000 to 2007. He founds daycare service houses at Sosei Ltd to apply his inventions of the brain rehabilitation to the elderly by himself since 2009. He is the Engineering Fellow of the Japan Society of Ultrasound in Medicine, the President of Japan Society for Early Stage of Dementia formerly and the chairman of BME on Dementia Group of the Japanese Society for Medical and Biological Engineering.

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Owolabi Joshua Oladele et al., J Neurol Neurosci 2018, Volume 9
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Caffeine prenatal exposure caused persistent alterations in astrocyte morphology in experimental models

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[1]Babcock University, Nigeria
[2]Yale University, USA
[3]University of Liberia, Liberia
[4]Olabisi Onabanjo University, Nigeria

There are concerns over the consumption of caffeine during pregnancy and early years of life due to the susceptibility of the brain to the stimulant. The aim of this investigation is to assess the effects of pre and postnatal caffeine ingestion on the development of the frontal cortex of mice models. A total of 32 (n=32) adult mice (*Mus musculus*) were recruited primarily for the study. They were divided into four groups labelled A, B, C and D which include the Control, Low-Dose, Medium-Dose and High-Dose groups respectively. Treatment duration had Phase I and Phase II to assess pre and postnatal effects respectively. In Phase I, Groups B, C and D were given 10mg/kg, 50mg/kg 120 mg/kg body weight of water-dissolved caffeine respectively while Group A animals served as the control. Mating was allowed and the pregnant female mice were administered caffeine from the day 0 (E0) of pregnancy until parturition. Half of the offspring were sacrificed at birth. The remaining offspring from the Phase I experimental animals were recruited into the phase II for postnatal caffeine administration. Phase II [postnatal] treatment started from parturition until postnatal Day 35 marking the average age of puberty. Brain specimens were excised and processed at the end of Phase I and Phase II. Histo and immunochemical properties of the frontal cortex were demonstrated using the Feulgen DNA and GFAP techniques. High caffeine dosage administration during pregnancy produced general cytological and histoarchitectural disruptions and distortions that affected glia as well as other cell types. Cell staining patterns are largely heterogeneous as much as they are in morphological appearances. Astrocytes, staining positive for GFAP, had altered morphologies. Processes are quite sparse and hardly readily observable. These observations indicate possible limitations or retardations in astrocyte differentiation as a result of caffeine effects.

Recent Publications

1. Owolabi J O, Olatunji S Y and Olanrewaju A J (2017) Caffeine and Cannabis Effects on Vital Neurotransmitters and Enzymes in the Brain Tissue of Juvenile Experimental Rats. Ann Neurosci. 24:65–73.
2. Owolabi Joshua O, Olatunji Sunday Y, Olanrawaju John A and Ajibade Testimony P (2017)
3. Caffeine exposure at puberty: effects on hippocampal structure, neurochemistry and short term memory in experimental wistar rats. Annals of Experimental Biology 5(3):37-43.
4. Owolabi Joshua Oladele, Olatunji Sunday Yinka, Olanrawaju John Afees and Jimoh-Enesi Queen Amina (2017) Brain-choroid plexus chemistry changes linkable to caffeine ingestion and accompanying short-term memory disturbances in experimental models. American Journal of Laboratory Medicine 2(4):45-58.
5. Owolabi Joshua Oladele, Olatunji Sunday Yinka, Olanrawaju John Afees and Jimoh-Enesi Queen Amina (2017) Histomorphological observations of caffeine and honey effects on choroid plexus. iosr jnhs. journal of nursing and health science (IOSR-JNHS). 6(5):58-66.
6. Olatunji Sunday Yinka, Owolabi Joshua Oladele and Olanrewaju Afees John (2017) Excessive oral intake caffeine altered cerebral cortex histoarchitecture and cell morphologies in adult mice. Anatomy Journal of Africa. 6(1):856-861.

Biography

Owolabi Joshua Oladele has completed his PhD in the field of Anatomy and Neuroscience, with special research focus of toxicology and teratology associated with psychoactive substances. He also has an MBA with specialisation in Clinical Research Management. He has more than 80 publications including articles in reputed journals and books..

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Achilleas Attilakos et al., J Neurol Neurosci 2018, Volume 9
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Effect of levetiracetam monotherapy on cardiovascular risk factors in children with epilepsy: A prospective study

Achilleas Attilakos[1], Argiris Dinopoulos[1], Maria Paschalidou[1], Maria Tsirouda[1], Alexia Prasouli[2] and **Anastasia Garoufi[3]**
[1]Attikon University General Hospital, Greece
[2]Institute of Child Health, Greece
[3]Panagiotis and Aglaia Kyriakou Children's Hospital, Greece

Statement of the Problem: Long-term treatment with some older antiepileptic drugs, including sodium valproate and carbamazepine, may lead to hyperhomocysteinemia or dyslipidemia. Levetiracetam (LEV), a newer broad spectrum antiepileptic agent, appears to be well tolerated with mild adverse effects. However, in contrast with the older antiepileptic drugs, the effect of LEV on cardiovascular risk factors is not yet sufficiently investigated.

Purpose: The purpose of this study was to investigate prospectively the short and long-term effect of LEV monotherapy on serum lipid profile, thyroid hormones levels and homocysteine metabolism in children with epilepsy. The study population consisted of 32 children (18 females, 14 males, mean age 5, 94±4, 1 year, and range 1-15 years) that were treated for new-onset epilepsy with Lev monotherapy. Serum total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C), triglycerides (TGs), apolipoprotein A-I (apo A-I), apolipoprotein B (apo B), lipoprotein (a) [Lp(a)], free thyroxin (FT4), thyrotropin (TSH), folate (s-F), vitamin B-12 (s-B12) and plasma total homocysteine (p-tHcy), were evaluated before and at 2, 6 and 12 months of LEV monotherapy.

Findings: TGs were significantly decreased at 6 and 12 months of LEV treatment (p=0.030 and p=0.001, respectively). P-tHcy was significantly decreased at 2 months of treatment (p=0.031). There were no significant alterations in the other parameters during the study. Mean value of drug dosage (mg/Kg) was 18.1±7.1 at 2 months, 20.8±10.1 at 6 months and 19.8±11.2 at 12 months of LEV treatment.

Conclusion & Significance: In contrast with older antiepileptic drugs, long-term LEV monotherapy in children with epilepsy does not cause adverse alterations on serum lipids, homocysteine and thyroid hormones; therefore, LEV may be considered as a safer alternative drug for the prevention of cardiovascular complications in adult life.

Recent Publications

1. El-Farahaty RM, El-Mitwalli A, Azzam H, Wasel Y, Elrakhawy MM and Hasaneen BM (2015) Atherosclerotic effects of long-term old and new antiepileptic drugs monotherapy: a cross-sectional comparative study. J Child Neurol 30:451-7.
2. Kim DW, Lee SY, Shon YM and Kim JH (2013) Effects of new antiepileptic drugs on circulatory markers for vascular risk in patients with newly diagnosed epilepsy. Epilepsia 54:e146-9.
3. Belcastro V, Striano P, Gorgone G, Costa C, Ciampa C, Caccamo D, Pisani LR, Oteri G, Marciani MG, Aguglia U, Striano S, Ientile R, Calabresi P and Pisani F (2010) Hyperhomocysteinemia in epileptic patients on new antiepileptic drugs. Epilepsia 51:274-9.
4. Yılmaz U, Yılmaz TS, Akıncı G, Korkmaz HA and Tekgül H (2014) The effect of antiepileptic drugs on thyroid function in children. Seizure 23:29-35.
5. Shih FY, Chuang YC, Chuang MJ, Lu YT, Tsai WC, Fu TY and Tsai MH (2017) Effects of antiepileptic drugs on thyroid hormone function in epilepsy patients. Seizure 48:7-10.

Biography

Achilleas Attilakos is a Pediatrician. He works as an Assistant Professor of Pediatrics at "Attikon" Hospital-National and Kapodistrian University of Athens, Greece. He is a General Pediatrician, interested in childhood dyslipidemia, primary pediatric care and antiepileptic drug safety.

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Yoga: An ancient mind-body therapy for cardiovascular prevention and rehabilitation

Satish G Patil
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Yoga is an Indian ancient system of life-style having a psycho-somatic-spiritual discipline that helps to achieve a harmony between our mind, body and soul. Similar to the clinical psychology, yoga focuses on intellectual, emotional, social and behavioral aspects of human functioning. Its mind-body techniques relax mind and body, reduce stress and anxiety, and culminate happiness and well-being. Emotional disturbances, stress, anxiety, depression, sedentary life, lack of sleep, unhealthy diet contribute to the development of cardiovascular (CV) disease. Autonomic imbalance/dysfunction, impaired endothelial function/dysfunction and arterial stiffness are the emerging major mechanisms for CV morbidity and mortality. Though autonomic nervous system (ANS) plays a central role in maintaining CV homeostasis, but CV health is controlled and determined by both ANS and endothelial system. It has been shown that endothelial function and ANS are interrelated and involve complex interactions between two systems. Endothelial dysfunction with decreased bioavailability of nitric oxide and ANS imbalance/dysfunction (often co-exist) are the predisposing factors or early indicators and antecedents for the development of CV disease including metabolic syndrome and diabetes. Therefore, enhanced endothelial function and reduced sympathetic activity appears to be protective against CV disease. In this presentation, role of yoga as a mind-body medicine in cardiovascular prevention and rehabilitation (focusing mainly on non-traditional risk factors) will be discussed. We and other researchers have demonstrated that yoga practice can enhance bioavailability of nitric oxide and endothelial function; reduce arterial stiffness; and shift the autonomic balance towards parasympathetic dominance in subjects with CV risk. It reduces heart rate and myocardial work load, and improves diastolic function of heart in elderly individuals. Recently, in another study we observed a restoration of autonomic balance towards parasympathetic dominance and reduction in insulin resistance in non-diabetic and normotensive offspring of type-II diabetic parents, suggesting that regular practice of yoga may prevent the future development of diabetes or CV risk in children of diabetic parents. Oxidative stress being one of the major pathway for reduction of bioavailability of NO and endothelial dysfunction, effect of yoga program on oxidative stress was investigated to understand the mechanism of yoga on CV health. In this study, a significant reduction in oxidative stress and enhancement in antioxidant defense (superoxide dismutase, glutathione) was observed. An ongoing study has shown effectiveness of yoga on cardiac rehabilitation in patients with acute myocardial infarction. Available data shows that yoga is an effective mind-body medicine that can protect the CV system by enhancing endothelial function and optimizing autonomic balance. However, in future yoga based clinical trials are warranted for better understanding of yoga effects and its psychophysiological mechanism on CV health.

Biography

Dr Satish G. Patil is Assistant professor of Human Physiology in BLDE (Deemed to be University) Shri B. M. Patil Medical College, Hospital & Research Centre, India. He is Assistant Director of Central Research Laboratory of BLDE University, India. His field of research interest is "Integrative cardiovascular and yoga psychophysiology". He has published about 21 papers in Medical journals of repute. He has contributed chapters for two books. He has presented research paper/ talk in many scientific meetings such as AHA scientific meeting, Phoenix, USA; European Union Geriatric Medicine Society congress, Venice, Italy; Euro-India International conference, India; Tulane University, New Orleans, US; WHO workshop in Morarji Desai National Institute of Yoga, New Delhi, India etc. He is recipient of Sri Ram Murthy Memorial Award (India); Young Scientist Award (India); Best paper award (Italy).

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Yousif Ali Yaseen, J Neurol Neurosci 2018, Volume 9
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Somatoform disorders in out-patient psychiatric setting: An overview

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Background: This study aimed at assessing the prevalence and risk factors of Somatoform disorders (SDs), their types and common presenting symptoms of conversion disorder (CD).

Patients & Methods: This study had been conducted at outpatient Psychiatric Clinic in Azadi Teaching Hospital, Duhok City, in which 637 patients were selected randomly. (SCID-I/P) (Version 2.0) was applied to diagnose patients with SDs. (SPSS), version 21, was used for data analysis.

Results: The prevalence of SDs appeared to be (24%). CD comprised the vast majority of SDs 75.82%, followed by somatization disorder 7.84% and undifferentiated SD 5.22%. Most of the cases were females (75.85%), the result showed high statistical significant association of the gender to SD (p-value<0.001). Majority of the cases were from the youngest age group (15-25 years), they comprised (60.1%), the association of the age to SD appeared statistically significant too (p-value=0.024). Although, more than two-third of the cases were from lower educational levels (illiterate and primary educational level) (67.3%), more than fifty percent were married (52.3%), majority were housewives (39.2%) and more than half of the cases were from urban areas (52.3%), but no significant association were found between SD and educational level, marital status, occupation, and residence (p-values were 0.218, 0.659, 0.072, 0.090 respectively). Regarding the symptomatic presentation of CD, vast majority of the cases presented with seizure which comprised (81%), followed by motor symptoms which comprised (17.2%), and sensory symptoms which constituted (1.7%) only.

Conclusions: The prevalence of SDs appeared high; the vast majority cases of SDs were CD. The risk factors for SDs included being female and young. Regarding the presenting symptoms of CD, seizures comprised the vast majority.

Biography

Yousif Ali Yaseen is awarded F.I.B.M.S in Psychiatry from Iraqi Board for Medical Specializations, Iraq. He holds a Bachelor in Medicine & General Surgery (M.B.Ch.B.) from College of Medicine, University of Duhok, Iraq. He has extended his valuable service as Senior Psychiatrist in Psychiatric Department , Azadi Teaching Hospital-Duhok. Currently, he is working as an Assistant Professor for branch of Psychiatry in University of Duhok. His international experience includes various programs, contributions and participation in different countries for diverse fields of study. His research interests reflect in his wide range of publications in various national and international journals. He is a Consultant Psychiatrist at UNHCR and GIZ in collaboration with DGoH- Duhok. He is a Member of the founding body of the Kurdistan Psychiatric Association (KPA) in 2017.

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Notes:

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26th Edition of International Conference on

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Neuroscience and Neurochemistry

July 23-24, 2018 Birmingham, UK

Workshop

Day 2

Sheena Vella, J Neurol Neurosci 2018, Volume 9
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Sheena Vella

Migrants Resource Centre, London

Innovating healthcare delivery for newly arrived migrants through community participation, visual expressions of people's stories and learning alliance

Migratory experiences often exacerbate the mental health care needs of vulnerable migrants and refugees. Mental health services access and provision, therefore, need to be adaptive to the specific needs of these populations. Thus, development and promotion of these types of services require that migrants be not only at the heart of physical and mental health delivery models but also be able to influence them. My Health project, a thirty-six months initiative oriented to identify health needs of newly arrived migrants – women and children in various European cities, is implementing innovative participatory methodological strategies. The aim is to move from a consultative process to a more participatory and inclusive one in the access/provision of health services. Preliminary findings regarding the innovative strategies used by My Health, namely community participation activities, visual expressions of people's stories and a stakeholder learning alliance, show that professionals involved are increasingly aware of a) the need to develop better networks with diverse communities, b) the importance of conscious participatory design that moves beyond consultation with migrants through research, and c) the need to recognise and bolster the role of migrant professionals. Furthermore, by using pictograms health and mental health professionals are mastering new ways to communicate effectively using images, reducing a high reliance on verbal language. Lastly through the learning alliance, professionals and researchers are becoming aware of how involving a more comprehensive network can increase the impact of their work on a broader range of stakeholders. Overall both the intended and unintended results of the innovative strategies used by My Health—an initiative supported by the European Commission, so far are demonstrating creative ways to be used when engaging with mental and physical service delivery for newly arrived migrants.

Biography

Sheena Vella, MSc. is a social and cultural psychologist and has worked in the field of migration for the past 7 years in Malta and the U.K. Her photovoice research on the social representations of asylum seeking and the future in Malta was awarded a distinction from the Institute of Social & Cultural Psychology at the London School of Economics & Political Science. She has worked at the University of Malta, within government open centres for asylum seekers, and the NGO and voluntary sector. She is currently co-ordinator of the Integration and Community Development activities at Migrants Resource Centre in London. She is particularly interested in empowerment and development models of migrant and refugee women, development of transcultural competencies and social justice.

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Scientific Tracks & Abstracts

Day 2

Clinical Psychology 2018 & Neurochemistry 2018

Sessions

Neuroscience and Neurological Disorders | Clinical Psychology | Advances in Neurological Disorders | Clinical Neuropsychology | Psychotherapy | Humanistic Psychology | Developmental Psychology | Abnormal Psychology | Occupational Psychology

Session Chair
Courtland C Lee
The Chicago School of Professional Psychology, USA

Session Co-Chair
Vivian V Lee
Johns Hopkins University, USA

Session Introduction

Title: Role of adipokines in enhanced pain and inflammation in a rodent model of obesity
Sharron Dolan, Glasgow Caledonian University, UK

Title: Psychological impact of HIV/AIDS stigma among women of African origin in Germany: What can we learn from their stories?
Joyceline Ntoh Yuh, University of Oldenburg, Germany

Title: Role of neuro endocrine system on the function of male accessory reproductive glands (MARG) in a cotton bug Serinetha augur (Fabr) Coreidae: Hemiptera
Parasuraman Baskar, Public Health & Preventive Medicine, India

Title: Confirming the recessive inheritance of SCN1B mutations in developmental epileptic encephalopathy
Wafaa Ramadan, King Faisal Specialist Hospital and Research Center, Saudi Arabia

Sharron Dolan et al., J Neurol Neurosci 2018, Volume 9
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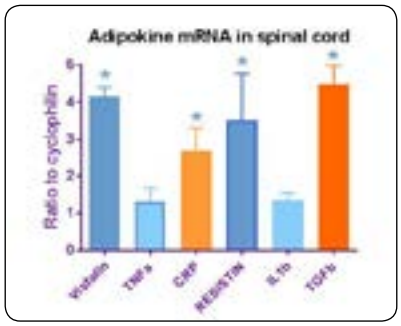
Role of adipokines in enhanced pain and inflammation in a rodent model of obesity

Sharron Dolan and **Nasser M Alorfi**
Glasgow Caledonian University, UK

Obese individuals are more likely to be affected by chronic pain, however, the biological mechanisms underpinning this comorbidity are not known. A causal link may be dysregulated secretion of inflammatory adipokines both from expanding adipose tissue and centrally. The aim of this study was to characterize altered pain processing and changes in inflammatory cytokine expression in spinal cord in rodent models of obesity. Responses to thermal and mechanical stimulation of the hind paw were assessed in adult male Wistar rats fed a high fat diet (HFD; 22%) or normal diet for 16 weeks (n=6/group) in absence of inflammation, and then in response to intradermal hind paw injection of carrageenan (3%; 50µl), a model of acute inflammation. Spinal cord was collected and adipokine mRNA expression, cholesterol and triglycerides (TAGs) measured using real-time PCR and ELISA. Rats fed a HFD gained significantly more weight than controls (502 ± 12g vs. 444 ± 7g; P<0.01), and displayed plasma hyperinsulaemia and hypercholesterolaemia (both P<0.05 vs. controls) but normoglycaemia. Acute nociceptive responses were unchanged in obese rats but they displayed potentiated mechanical and thermal hyperalgesia and increased paw edema (all P<0.05 vs. lean controls) in response to carrageenan. Significant changes in levels of resistin C reactive protein, TGFβ and visfatin (but not IL1β or TNFβ) were detected in obese rat spinal cord. The increased pain and inflammation in obese rats fits with the hypothesis that obesity is a chronic low-grade inflammatory disorder, producing a state where responses to inflammatory challenge are potentiated. The altered adipokine profile observed suggests adipokines may be useful biomarkers for monitoring initiation and progression of pain with obesity, or even be involved in the development of co-morbid pain in obese individuals.



Real-time PCR analysis of adiopkine mRNA in spinal cord from HFD fed rats and control rats (n =6/group). Target mRNA are expressed relative to housekeeping gene cyclophilin. Data are expressed as mean ± SEM. * p <0.05.

Recent Publications

1. Iannitti T, Graham A and Dolan S (2015) Adiponectin mediated analgesia and anti-inflammatory effects in rat. PLoS One 10(9):e0136819.
2. Soffientini U, Dolan S and Graham A (2015) cytosolic lipid trafficking proteins stard4 and stard5 modulate hepatic neutral lipid metabolism: implications for diabetic dyslipidemia and steatosis. Journal of Diabetes & Metabolism 6:558.
3. Soffientini U, Caridis A-M, Dolan S and Graham A (2014) Intracellular cholesterol transporters and modulation of hepatic lipid metabolism: implications for diabetic dyslipidemia and steatosis. Biochimica et Biophysica Acta 1842(10):1372-82.
4. Goldie M and Dolan S (2013) Bilobalide, a unique constituent of Ginkgo biloba, inhibits inflammatory pain in rat. Behavioral Pharmacology 24:298-306.
5. Iannitti T, Graham A and Dolan S (2012) Increased central and peripheral inflammation and inflammatory hyperalgesia in Zucker rat model of leptin receptor deficiency and genetic obesity. Experimental Physiology 97 (11): 1236-45-

Biography

Sharron Dolan is a Senior Lecturer in Pharmacology and Assistant Head of the Department of Life Sciences at Glasgow Caledonian University. After completing her PhD in Neuropharmacology at University of Stirling with Dr Peter Cahusac, she took up a BBSRC funded Post-Doctoral position with Professor Andrea Nolan at Glasgow University's Veterinary School, working to characterize the spinal mechanisms of inflammatory pain and analgesia. She took up a tenured post as lecturer at GCU in 2004. Her research over the past 20 years has focused on understanding the neuronal mechanisms of pain and inflammation and more recently focused on mechanisms underlying co-morbid pain with diabetes and obesity.

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Joyceline Ntoh Yuh, J Neurol Neurosci 2018, Volume 9
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Psychological impact of HIV/AIDS stigma among women of African origin in Germany: What can we learn from their stories?

Joyceline Ntoh Yuh
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Reports from Germany (2012-13) points a 70% increase in heterosexual transmission with about 40-50% from Sub Saharan Africa marking new diagnosis especially in women. HIV-related stigma among African women is rather complex using the intersectionality framework for analysis, which distinguishes the subjective experiences and realities of women's lives, not just as a single category stemming from a gender-based research critique. Meanwhile, HIV-stigma denotes the link between sero-status and negative behaviors toward people who are seropositive. Stigma thus reflects guilt, shame, denial, prejudice, discrediting, discrimination, stereotypes, denial, rejection and self-blame. African women are particularly vulnerable to stigma due to various factors often undermined or neglected. It is imperative to mention that women are generally susceptible to infection due to biological and other socio-cultural reasons, which eventually positions them into a high risk category. Furthermore, women tend to be negatively perceived when infected and labeled promiscuous for transmitting the virus to their partners, without knowing the transmission dynamic. Stigma further constrains relationships within families and communities. This in the long term results into secrecy affects infection status disclosure and seeking of the much needed support services. This highlights the link between HIV and mental health because people living with HIV are prone to mental problems compared to the others. Thus, their psychological and social wellbeing becomes essential just as their physical health. HIV-related stigma further complicates the overall wellbeing of these women in realizing their potentials in life, which tends to hamper their productivity and sense of purpose. The in-depth study of six women shows the dilemmas and challenges faced by seropositive women in the face of HIV, dealing with disclosure issues, anxiety, depression, social isolation, stress, fear and rejection. This convenient sample examines how psychological impact continues to affect sero-positive women negatively in living fulfilled lives while impacting on their unfulfilled sexual satisfactions due to continuous use of condoms and other related anxieties. At times, such insecurities become overwhelming, pushing them to neglect their self-esteem as women. Interpretative phenomenological analysis here aims to gain deeper understanding from participants' perspectives on how they manage to make opinions and viewpoints of their own experiences, events and social world. It is then vital to provide lived experiences and interpretations in own terms, than simply attributing to pre-existing theoretical preconceptions, by getting details of each case than general claims (ibid).

Biography

Joyceline Ntoh Yuh is a Feminist and Doctoral candidate in the University of Oldenburg, Germany. She holds an MA in Women & Gender Studies from the ISS Erasmus University Netherlands. Her research interest includes HIV/AIDS related issues, Psychology, Gender, Sexual and Reproductive health. Since 2006, she took keen interest in the field of HIV/AIDS were she researched on the impact of HIV on agriculture affecting mostly women with the UN FAO gender unit (Italy), mainstreaming HIV policies in UNFFE Uganda, HIV stigma & child bearing in Africa and currently facilitates workshops with MA students in the area of gender, sexuality & HIV/AIDS. She is also a Reviewer in the *Journal of AIDS Clinical Research & STD* (USA) and works as a counseling volunteer in the AIDS Help NGO, Germany.

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Parasuraman Basker, J Neurol Neurosci 2018, Volume 9
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Role of neuro endocrine system on the function of male accessory reproductive glands (MARG) in a cotton bug *Serinetha augur* (Fabr) Coreidae: Hemiptera

Parasuraman Basker
Public Health & Preventive Medicine, India

The neuroendocrine complex of adult insects consists of neurosecretory cells (NSC) of the brain, corpora cardiaca (CC), and corpora allata (CA). Following the pioneering work of Weyer (1935) in honeybees, several investigators have been explored on the histomorphology of NSC, CC and CA in many orders of insects including in hemipteran insects. The present study is dealt the regulatory mechanism of the male accessory reproductive glands (MARG) of a hemipteran cotton pest *Serinetha augur*. Histological and electrophoretic studies were made to understand the interrelationship of the neuroendocrine complex (NEC) and the MARG of the insect. The brain of *Serinetha augur* is divisible into three regions, namely proto-deuto and tritocerebrum. Protocerebrum lies at the anterior region, deutocerebrum is in the latero mid region and tritocerebrum is in the latero posterior region of the brain. The neurosecretory cells (NSC) in the brain complex have been arbitrarily classified into four types (A, B, C and D) and are connected by pars intercerebralis. NSC in this region is distinguished as median neuro secretory cells (MNC). Among NSC identified in three regions of the brain of *Serinetha augur* A is found larger (13-18 microns) which is located in tritocerebrum with weak reaction of chrom alum haematoxylin and phloxin (CAHP) due to lower concentration of neurosecretory materials. The type B are 10-12 microns situated in protocerebral region with higher concentration of neurosecretory materials. C and D are moderate and weak reaction respectively with aldehyde fuchsin (AF) and CAHP indicate lesser amounts of neurosecretion. On the regulation of the MARG, it was understood that CA took part directly for its maturation and function. It was proved by the experiments of gonadectomy and extirpation of the MARG. Besides, electropherogram of brain complex in pre and post mating insects showed the quantitative changes of protein. This observation further supports the view that NSC in brain complex has a regulatory role in the MARG which has varieties of vital functions in sperm transfer activities.

Biography

Parasuraman Basker had been awarded Doctoral degree in zoology from Annamalai University, Tamil Nadu, India. Following it he was Research Associate in ICAR and UGC research projects on the fauna of Carabids (Coleopteran Insect) in South India and mosquito cytogenetics in the University of Agricultural Sciences, Bangalore and Bangalore University respectively. Subsequently, he was posted as Senior Entomologist in 1995 in the Department of public Health and Preventive Medicine through Tamil Nadu Public Service Commission (TNPSC). In his credit 33 Research Abstracts presented in 8 International and 25 National Conferences since 1983. 21 research papers have been published in reputed national and international journals. He visited Canada, Malaysia, Morocco, Singapore and Spain as presenters with the Government of India Travel Grants (CSIR, INSA, ICMR and NRHM).

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Wafaa Ramadan et al., J Neurol Neurosci 2018, Volume 9
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Confirming the recessive inheritance of *SCN1B* mutations in developmental epileptic encephalopathy

Wafaa Ramadan[1], Nisha Patel[1], Shamsa Anazi[1], Amal Y Kentab[2], Fahad A Bashiri[2], Muddathir H Hamad[2], Lamya Jad[3], Mustafa A Salih[2], Hessa Alsaif[1], Mais Hashem[1], Eissa Faqeih[3], Hanan E Shamseddin[1] and **Fowzan S Alkuraya[1,4]**

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Introduction: Dominant *SCN1B* mutations are known to cause several epilepsy syndromes in humans. Only two epilepsy patients to date have been reported to have recessive mutations in *SCN1B* as the likely cause of their phenotype. Here, we confirm the recessive inheritance of two novel *SCN1B* mutations in five children from three families with developmental epileptic encephalopathy. The negative clinical exome in one of these families highlight the need to consider recessive mutations in the interpretation of variants in typically dominant genes.

Materials & Methods: We conducted autozygosity mapping and a multi-gene panel in five children with epileptic encephalopathy from three unrelated consanguineous families with normal parents.

Mutation Analysis: In family one and three the same splicing variant was identified (NM_001037.4:c.449-2A>G). In family two a missense homozygous *SCN1B* variant (NM_001037.4:c.355T>G:p.Y119D) was identified with high pathogenicity scores using *in silico* prediction tools (PolyPhen (0.997), SIFT (0) and CADD (27)). These variants were completely absent in >7,000 Saudis screened for these genes using exome sequencing and gene panel testing. They were also absent in ExAC.

Conclusion: Although dominant mutations are the typical class of mutations in *SCN1B* in the context of epilepsy, recessive mutations in this gene have also been reported, albeit very rarely (two patients to date). The negative clinical exome in one of these families highlight the need to consider recessive mutations in the interpretation of variants in typically dominant genes.

Biography

Wafaa Ramadan has completed her MBBS degree this June at the age of 24 years from AlFaisal University, Riyadh, KSA. She has a diploma in clinical research activities and a certificate for one year training in developmental genetic department. Dr. Wafaa graduated with first honor degree and has the award of being best intern of the year. She has three papers published, she is the first author in the one she's presenting. Her field of interest is neurology and neuroscience and her work is dedicated towards it.

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