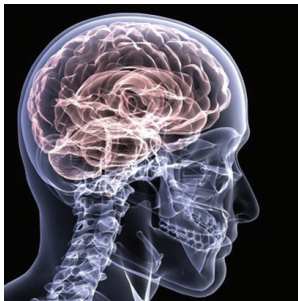


Workshop

Health & Neuroscience 2019



International Conference on
Health Care and Neuroscience

April 08-09, 2019 | Zurich, Switzerland

Games for patient engagement and empowerment in Neurological Rehab

Lucia Pannese and Antonio Ascolese

Imaginary srl, Italy


One of the issues with neurological rehabilitation is a strong lack of adherence, with adverse effect on patients' condition leading clearly to a poor quality of life, but also to increased socio-economic burdens for the system. There is globally a clear need for a solution that is scalable; practical and non-intrusive for the patient; that operates from a clinic, as well as remotely from the patient's residence (allowing for continuity in training, reducing visits to the clinic and overall expense to healthcare system and patient's families); that allows different specialists working with the same patient to enter a "care network"; that monitors motivation of the patient allowing for intelligent adaptation of the treatment based on feedbacks; provides supportive patient feedback to re-engage, motivate and keep them involved etc. The question in this context is how to motivate and empower neurological patients to adhere to their therapy and actively participate in a process instead of suffering from it: we have a strong experience with serious games and virtual tutoring approaches that we will share in this interactive workshop. Creating our REHABILITY system through the last

7 years, which addresses the above mentioned issues, we conducted several research activities in Europe and SE Asia; based on our findings as well as on participants' experiences, we will involve attendees in activities and discussions to share views and imagine how rehabilitation processes need to change to support a behavioral change in patients and what role games can have into virtual tutoring. The workshop will welcome professionals and stakeholders with different profiles, in order to consider many different perspectives in our discussion and the REHABILITY system will be available during the workshop.

Speaker Biography

Lucia Pannese graduated in Applied Mathematics, has more than 20 years managing experience in innovation & research projects with special focus on digital interactive technologies to deliver user experiences. In Feb 2004 funding partner of imaginary, where she covers the role of CEO and research director, she is heavily involved in European research around enabling technologies, specifically Serious Games, gamification and digital interactive technologies for learning, training and behavioral change across several sectors, particularly health & care and training. With numerous publications, she is often involved in international conferences and organizing local as well as international events.

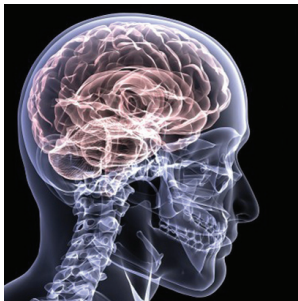
e: lucia.pannese@i-maginary.it

 Notes:

Scientific Tracks & Sessions

April 08, 2019

Health & Neuroscience 2019



International Conference on
Health Care and Neuroscience

April 08-09, 2019 | Zurich, Switzerland

Post rehabilitation impact on Syrian refugees with lower limb amputation

Rima Naimi

Relief International, USA


Turkey hosts more Syrian refugees than any other country. As of May 2017, more than three million Syrian refugees were registered with the Government of Turkey. A large number of the refugees have settled in Turkey's south eastern provinces of Şanlıurfa, Hatay and Gaziantep. The 2017 Humanitarian Needs Overview (HNO) reports that trauma is a leading cause of mortality and morbidity in Syria: 30% of trauma cases result in a permanent disability requiring long-term rehabilitation care. Similarly, among 25,000 injured Syrians assessed, 67% had sustained injuries directly related to the crisis. Of these injuries, 53% were due to explosive weapons. Moreover, 15% of the victims of explosive weapons had undergone amputations. Relief International is supporting the National Syrian Project for Prosthetic Limbs in Reyhanli (Turkey) in terms of organizational capacity building funded by ECHO. Responding to the critical, lifesaving rehabilitation needs among all refugees eligible for services by the Government of Turkey, the center is providing 180 prosthetic devices to refugees with lower limb amputations

with capacity of 12 devices. Nearly 90% of the beneficiaries are war-related injuries, out of them 10% are females. Post rehabilitation impact on Syrian refugees with lower limb amputation is seeking to collect and analysis of information provides a gathered from the beneficiaries through surveys and focus group discussions that includes quantity and quality indicators that aim to monitor the functional improvements by using functional independence measure and amputee mobility predictor during assessment, discharge and follow up session after 45 days of discharge date.

Speaker Biography

Relief International is a non-profit organization whose sole mission is to reduce human suffering. It responds to natural disasters, humanitarian emergencies and chronic poverty. It is non-sectarian and non-political. It was founded in 1990 in response to the devastating. Relief international which is a leading non-profit organization working in roughly 20 countries to relieve poverty, ensure well-being and advance dignity. We specialize in fragile settings, responding to natural disasters, humanitarian crises and chronic poverty. Relief International combines humanitarian and development approaches to provide immediate services while laying the groundwork for long-term impact.

e: rima.naimi@ri.org

 Notes:

A race against time: Review of Pediatric status Epilepticus diagnosis and management

Ersida Buraniqi

Mayo Clinic, USA

Objective: To identify factors associated with in-hospital mortality in neonates and children undergoing continuous electroencephalography (cEEG) monitoring in the intensive care unit (ICU).

Methods: We performed a retrospective observational study in patients from birth to 21 years of age who underwent clinically indicated cEEG in the ICU from 2011 to 2013. The main outcome measure was in-hospital mortality.

Results: Six-hundred and twenty-five patients (54.2% male) met eligibility criteria, of whom 211 were neonates (55% male, 24.8% premature) and 414 were pediatric patients (53.9% male). Electrographic seizures occurred in 176 patients (28.2%) and status epilepticus (SE) occurred in 20 (11.4%). The time from ICU admission to cEEG initiation was 16.7 (5.1-94.4) h. Eighty-nine patients (14.2%) (30 [14.2%] neonates, and 59 [14.3%] pediatric patients) died in the hospital. In neonates-after controlling for gender and prematurity-independent factors associated with mortality were prematurity (odds ratio [OR] 2.63, 95% confidence interval [CI] 1.06-6.5, $p = 0.037$), presence of status epilepticus (SE); OR 8.82, 95% CI 1.74-44.57, $p = 0.008$), and time from ICU

admission to initiation of cEEG (OR 1.002, 95% CI 1.001-1.004 per hour, $p = 0.008$). In pediatric patients-after controlling for gender and age-independent factors associated with mortality were the absence of seizures factors associated with mortality were absence of seizures (OR = 4.3, (95% CI: 1.5-12.4), $p = 0.007$), the presence of SE (OR 7.76, 95% CI 1.47-40.91, $p = 0.016$), and the time from ICU admission to initiation of cEEG (OR 1.001, 95% CI 1.0002-1.001, per hour, $p = 0.005$).

Significance: Both presence of electrographic SE and time from ICU admission to cEEG initiation were independent factors associated with mortality in neonates and pediatric patients with cEEG in the ICU.

Speaker Biography

Ersida Buraniqi has completed her MD at the Istanbul Faculty of Medicine, in Turkey, and her postdoctoral studies in Epilepsy and Clinical Neurophysiology at Boston Children's Hospital and Harvard Medical School in Boston, USA. She is now a Child Neurology Resident at the Mayo Clinic in Minnesota, USA. She has presented her scientific work in more than 20 national and international conferences and meetings, and has been serving as an editorial board member of scientific journals.

e: ersidaunivers@gmail.com

 Notes:

Dad, Dementia, Ageless Grace and Me

Jo Brizland-Cullen

Ageless Grace Brain Health, UK

A Daughter's journey whose Dad succumbed to an aggressive form of dementia, difficulty in getting a confirmed diagnosis and lack of specialised support to enable him to live well at home with Dementia as the disease progressed. How could we issue for people with Dementia and their families approaching end of life in a person-centred way. The impact of Dementia on 3 generations of family.

A Daughter's Mental Health History, early stage Menopause, and fears of Dementia leading to an aborted suicide attempt, subsequent recovery generating 'Hope' for people 'living with' or 'at risk' of Dementia, through challenging attitudes to Mental health issues, increasing awareness of 'self-care' techniques including Tantra Yoga practice which is thousands of years old, the original 'mind, body & spiritual practice'.

Buddha was asked, "What have you gained from meditation?" He replied, "Nothing!", however Buddha said, "let me tell you what I lost: Anger,

Anxiety, Depression, Insecurity, Fear of Old Age and Death."


Jo's learning of Ageless Grace, a cutting-edge Brain-Body Fitness Program based on Neuroscience and Play, and quest to understand if this may have helped improve her Dad's journey.

Jo will be sharing her own benefits from practice of 'Tantra Yoga' and 'Ageless Grace' and sharing Case Studies from Ageless Grace clients with Dementia living in other countries around the world.

Speaker Biography

Jo Brizland-Cullen has worked 30 years with older people to improve health, life & wellbeing. She is a Qualified Healthy Hips & Hearts (including Fall prevention) teacher, Gym Instructor, Tai Chi for Arthritis Instructor, Level 3 Adapted Physical Activity for Disabled People & GP Referral Programme Consultant, British Association of Cardiac Rehabilitation Level 4 Instructor, Kundalini Tantra Yoga Teacher and Ageless Grace Trainer & Educator. She managed a Hospital Discharge, Aftercare & Reablement team which won a Hospital Award for 'team contribution to outstanding patient care'.

e: agelessjbc@gmail.com

 Notes:

Nose-to-Brain nerve growth factor delivery: A promising and safe strategy to protect the CNS

Alberto de Bellis

Maria Rosaria Maglione Foundation onlus, Italy

Nerve growth factor (NGF) is the Founding Member of the neurotrophins family of proteins, known for playing a critical protective role in the development and survival of sympathetic, sensory and basal forebrain cholinergic neurons in mammals, including humans. NGF has a neuroprotective action in Alzheimer's and Parkinson's disease, as showed by several studies in animal models and humans. NGF can be delivered to the CNS via nasal route and has a neuroprotective action in case of neurodegenerative diseases and brain injury. Furthermore, recent studies have shown an active link between the nasal pathway and the spinal cord in the delivery of NGF to the CNS, thus demonstrating the neuroprotective ability of NGF to support injured neurons in a mouse model of spinal cord injury. Intranasal delivery of NGF has so far been sufficiently investigated in animal models and only recently in humans, as demonstrated in a recent study on long-term intranasal administration of NGF in two patients affected by Frontotemporal Dementia associated with corticobasal syndrome (FTD/CBS) and in another study on intranasal administration of NGF in a Brain Injury. These studies demonstrated the neuroprotective role of NGF administered nasally. Intranasal administration is the most

effective and non-invasive way to deliver NGF to the CNS. These neuroprotective properties of NGF make it a strong candidate for the future treatment of neurodegenerative diseases and other pathologies of CNS (brain injury, spinal cord injury, ischemic damage) when administered via nasal route. NGF would not be able to cure the FTD/CBS but these observations support the hypothesis that NGF slows down the usual decline of the disease. However, these studies reinforce the concept that neurotrophins are able to reach and protect the CNS via nasal route and open the way for new lines of research. Hence, these findings suggest the ability of NGF to protect CNS neurons when administered via nasal spray.

Speaker Biography

Alberto de Bellis is a Neurosurgeon and the Founder and Chairman of Maria Rosaria Maglione Foundation onlus, non-profit organization for Neuroscience based in Naples-Italy. The MRM Foundation runs in honor of the founder's mother, Maria Rosaria Maglione, who suffers from Frontotemporal Dementia. The activity of the MRM foundation is mainly aimed at research and health care for neurodegenerative diseases, brain tumors and spinal cord injury and in support of partner foundations operating in Kenya-Africa, such as the Gallmann Memorial Foundation and the African Neurological Diseases Research Foundation. The main research activities of the MRM foundation are focused on the study of the Nerve Growth Factor and its possible neurotherapeutic applications.

e: albertodebellis@hotmail.com

 *Notes:*

Transfusion and morbi-mortality factors: An observational descriptive retrospective pediatric cohort study

Claudine Kumba, Fabiola Cresci, Camille Picard, Cécile Thiry, Souha Albinni and Gilles Orliaguet
Necker Enfants Malades University Hospital, France

Background: Intraoperative and postoperative morbi-mortality factors are multiple in pediatric patients. Studies in pediatric cardiac surgery and intensive care patients have identified transfusion as one independent factor among others. There is not a lot of data concerning transfusion related morbi-mortality in other pediatric patients fields like neurosurgery, abdominal and orthopedic surgery. These were investigated.

Objectives: To identify morbi-mortality risk factors in intraoperatively transfused and not transfused pediatric patients in neurosurgery, abdominal and orthopedic surgery.

Design: Retrospective observational descriptive pediatric cohort study.

Setting: Monocentric pediatric tertiary center, Necker Enfants Malades University Hospital Paris, from 1 January 2014 to 17 May 2017.

Patients: 594 patients with mean age of 90.86 ±71.80 months were included. Inclusion criteria were the presence or the absence of transfusion in the intraoperative period in neurosurgery, abdominal and orthopedic surgery patients. Exclusion criterion was transfusion in the postoperative period until discharge from hospital.

Main outcome measures: Primary outcome was mortality and secondary outcome was morbidity in transfused and non transfused patients. Mortality

was assessed by deaths occurring intraoperatively or postoperatively during the entire hospitalisation. Morbidity was assessed by intraoperative, postoperative complications, repeat surgery, length of stay in the intensive care unit, in the hospitalisation ward, total length of stay in hospital and length of mechanical ventilation.

Results: Multivariate analysis revealed that ASA score was the independent risk factor for mortality (odds ratio 28.78, p-value<0.001). Transfusion (p-value<0.01), emergency surgery (p-value<0.05), type of surgery (<0.01), age (<0.05) and prematurity (<0.001) were independent risk factors for morbidity.

Conclusions: Patient outcome can be improved by applying specific preventive measures on each risk factor.

Speaker Biography

Claudine Kumba graduated as a Medical Doctor in 2001 and completed her specialisation in Anaesthesiology in 2006 at the Free University of Brussels (ULB, Université Libre de Bruxelles). She has a Paediatric Anaesthesia specialisation graduation since 2010 from the University of Aix-Marseille, Marseille, France. She has a Critical Care Medicine specialisation graduation since 2014 from the University of Montpellier, Montpellier, France. She is a paediatric anaesthesiologist in Necker Enfants Malades University Hospital, in Paris, France. She has 12 publications and 17 citations. She is a member of the European Society of Paediatric Anaesthesiology (ESPA), the French Society of Anaesthesia and Critical Care (SFAR, Société Française d'Anesthésie-Réanimation) and the French Association for Paediatric Anaesthesiologists and Intensivists (ADARPEF, Association d'Anesthésistes et Réanimateurs Pédiatriques d'Expression Française) and the Belgian Association for Paediatric Anaesthesiology (BAPA).

e: claudine.kumba@gmail.com

Nutrition for optimal sports performance

Sherif Azmy Rizkalla

Nasser Health Institute, Egypt

Choosing the right foods, fluids and supplements can help athletes perform at their best. To help an athlete reach peak performance, dietitians work with athletes to plan for:

1. Adequate energy from food
2. Enough fluids to keep the body hydrated
3. The right balance of nutrients

Meeting energy needs during activity will help athletes

1. Replenish glycogen stores
2. Provide protein to build and repair tissue
3. Provide essential fatty acids

Registered dietitians, particularly those with an expertise in sports nutrition, are uniquely equipped to provide nutrition advice to athletes. They can work with athletes to help them achieve peak performance by learning:

1. What to eat and drink before, during, and after exercise
2. How to use nutrition to help with performance and improve recovery time

3. When to use sports drinks instead of water

4. How to prevent dehydration

5. If certain vitamin or mineral supplements are needed.

6. That ergogenic [performance enhancing] aids should be used with caution only after careful screening for safety.

7. How to reduce their risk of contracting illnesses such as gastroenteritis or upper respiratory tract infections from the foods they eat (and the utensils used to cook them)

Speaker Biography

Sherif Azmy Rizkalla had the honour to start Nutrition & Pain Management Clinics in more than 5 hospitals-of which Nasser health Institute was the greatest. He was the Sports Nutrition Consultant of the Egyptian Modern Pentathlon Team (from 2004-2012 and made New Swimming Olympic records in Beijing 2008 & UK 2012 with C.Amr Elgezairy) and he was the Sports Nutrition Consultant of All Egyptian Olympic Teams Qualified for UK 2012. Now He is an Executive Board Member in UAMS (Union Affricane de Medicine du Sport), also World Society of Sports, Exercise Medicine (WSSEM) Founding Board Member, UKAD-Accredited Advisor, USADA-HealthPro Certified, WADA-Sport Physician's tool kit Certified and FIFA Diploma in Football Medicine which gives him a great opportunity to serve his country & many other countries giving awareness educational lectures about the importance of healthy nutrition & the hazards of doping for athletes.

e: sherifrizkalla@hotmail.com

 Notes:

Investigation of the levels of blood MDA, GSH and NO in Alzheimer

¹Aysel Güven, ²Kezban Yildiz Dalginli, ²Hacer Çulhaoğlu, ²Nergis Hüseyinoğlu and ²Selen İlan Alp

¹ Başkent University, Turkey

² Kafkas University, Turkey

The focus of this dissertation is the research of MDA, GSH and NO levels in the blood of Alzheimer patients. 15 healthy individuals and 15 Alzheimer patients living in Kars between the ages 65 to 79 were selected for the dissertation. Before taking blood samples from patients who were diagnosed with Alzheimer at Kafkas University Medicine School Neurology Center, they were applied Standardized Mini Mental State Examination (SMMSE) and Clinical Dementia Rating (Berg L 1984). In the next step, erythrocyte GSH and plasma MDA, NO levels were checked. The statistical difference between the healthy individual and Alzheimer

patient Group erythrocyte GSH ($p < 0.01$) and plasma MDA ($p < 0.01$), NO ($P < 0.01$) levels were plausible. As a result, it was observed that Alzheimer disease caused lipid peroxidation and as a conclusion significantly increased the MDA, GSH and NO levels in the blood of Alzheimer patients. AH'da part of the study, NO level of the brain related to learning and memory can be increased by the nNOS and iNOS was concluded.

Speaker Biography

Aysel Güven is a lecturer at Başkent Üniversitesi working in Pathology Laboratory Bağlıca Campus. She received her PhD in 2000 from Kafkas University, Turkey and masters from Firat University in the year 1993.

e: ayselguven@hotmail.com



Notes:

Title: What is 'Ageless Grace Brain Health' - Audience participation of practice in a fun filled engaging session

Jo Brizland-Cullen | Ageless Grace Brain Health | UK

Title: Happy booster-how positive attitude promotes health, reduces stress, enhances performance, accelerates success, and boosts happiness

Cheryl Wang | Fuzhou University | China

What is 'Ageless Grace Brain Health'- Audience participation of practice in a fun filled engaging session

Jo Brizland-Cullen

Ageless Grace Brain Health, UK

(Physical Activity) Audience Participation of Ageless Grace® Brain Health Fitness: Experience Ageless Grace® Brain Health Fitness by taking part in a demo class. Ageless Grace® Brain Health Fitness, a brain-body program based on stimulation of neuroplasticity to support cognitive health and activate all five primary functions of the brain.

The program uses 21 physical "games" called "tools" that are based on the cutting-edge concept of neuroplasticity - the ability of the brain to change structurally and functionally.

The Benefits of Ageless Grace® Brain Health Fitness: Each tool addresses a primary factor commonly related to physical aging. All the tools stimulate and utilize the five functions of the brain - Strategic Planning, Memory and Recall, Analytical Thinking, Creativity and Imagination and Kinaesthetic Learning.

From birth through mid-teens, the brain is busy creating a complex web of neural pathways, however functional and cognitive skills that were developed through traditional childhood games, sports and leisure activities are typically no longer explored in adulthood when we tend to practice only what we like to do and what we do best. Ageless Grace® Brain

Health restores and maintains neural pathways and stimulates the creation of new ones. The tools activate the core of the body, including the internal organs and systems, such as the Respiratory System, Endocrine System, and Digestive System, also Mindfulness and Breathing Relaxation Techniques. The program is practiced in a chair, to cause the brain to figure out how to do these activities seated rather than standing. Performing the tools in a chair works the core, also affects physical skills, such as balance, stability, range of motion, etc. People of all ages and abilities (including children) can perform the movements, including those with weight and joint issues, diabetes and other challenges such as those in wheelchairs etc.

Speaker Biography

Jo Brizland-Cullen has worked 30 years with older people to improve health, life & wellbeing. She is a Qualified Healthy Hips & Hearts (including Fall prevention) teacher, Gym Instructor, Tai Chi for Arthritis Instructor, Level 3 Adapted Physical Activity for Disabled People & GP Referral Programme Consultant, British Association of Cardiac Rehabilitation Level 4 Instructor, Kundalini Tantra Yoga Teacher and Ageless Grace Trainer & Educator. She managed a Hospital Discharge, Aftercare & Reablement team which won a Hospital Award for 'team contribution to outstanding patient care'.

e: agelessjbc@gmail.com

 Notes:

Happy booster-how positive attitude promotes health, reduces stress, enhances performance, accelerates success, and boosts happiness

Cheryl Wang

Fuzhou University, China

Watching my obese and diabetic patients struggling with body weight and blood sugar control, I saw how important it is to encourage them to practice positive attitude in their daily lives. The biggest challenge for most obese and diabetic patients is not the body weight or blood sugar control, but the rebound afterwards. With comprehensive interventions, more and more obese patients are able to lose weight. Yet, it takes much more effort to maintain the desired body weight afterwards. This makes them more frustrated and stressed out. Their stress hormone cortisol goes up. Excessive cortisol increases fat production and thus further weight gain, which, in turn, becomes a vicious cycle. I keep encouraging my patients using positive attitude to adjust their mood, boost their immunity, regain their strength to fight back. Those well-compliant ones reached a better long-term effect. Simply, with positive attitude, we secrete more “happy hormones” and less stress hormone, thus lose more weight and be able to maintain the desired body weight afterwards.

My practice is not alone. Addiction becomes a huge burden of our society and it is extremely worrisome in the adolescents. Over 20 million Americans, almost 10 percent of the population are alcohol or illicit drugs abuse or dependent, which is responsible for over 100, 000 deaths every year, and an overall annual cost over 400 billion dollars in the United States. Physician and scientists at the Harvard Mahoney Neuroscience Institute did a study in adolescents with addiction. It suggested that positive attitude and laughter enhances immunity and increase resistance to addiction. Simply, addiction is a hunger for pleasure. It is a brain problem involving

changes of the mesolimbic dopamine system, which activated pleasure and reward circuits. These circuits are located at the nucleus accumbens and amygdala. Their changes cause psychological, behavioral and social problems. This can be viewed and tracked with PET scan. The PET scan studies conducted at Osaka University suggested that positive expression such as laughter and smile is associated with improved cognitive function. Laughter makes people feel good, brings pleasure and thus may diminish the need and crave for substance. Study from CDC suggested that optimism has positive impact on personal recovery and mental health after disaster. Furthermore, laughter enhances immunity, stimulates circulation, augments cardiovascular and pulmonary function, improves depression, moderates anxiety, alleviates pain and helps smoking cessation. This is now called positive psychotherapy (PTT).

Speaker Biography

Cheryl Wang earned her MD at Binzhou Medical College, MSc., Endocrinology and metabolism, internal medicine in Shanghai Second Medical University (now Shanghai Jiaotong University), PhD in Science, Endocrinology and metabolism, internal medicine at PLA medical college. She did internal medicine residency and trained as an Endocrinologist in Donying People's Hospital, China, did surgery residency at Mount Sinai and Rutgers in the United States. She was awarded numerous times for variety of accomplishment, three KL2s from NIH, the first place award at UTHSCSA research day, Federation Medical Golden Prize scholarship, scholarship for many times, excellent student almost every academic year, excellent student officer awards, excellent female student nominee, excellent graduation award, and many awards for mathematics, speech, and variety of contests.

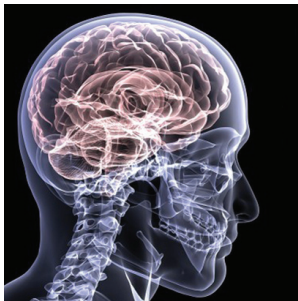
Above all, she had accomplished her masterpiece, her hard-won wisdom, “happy booster-how positive attitude promotes health, reduces stress, enhances performance, accelerates success and boosts happiness”, the best of America and Chinese best, the most positive energy ever, and a Nobel Prize “Winner-to-be”.

e: dr.doc.cheryl@hotmail.com

Scientific Tracks & Sessions

April 09, 2019

Health & Neuroscience 2019



International Conference on
Health Care and Neuroscience

April 08-09, 2019 | Zurich, Switzerland

Improving awareness and adherence to medications amongst heart failure patients is the most cost effective way of reducing healthcare costs

Syed Raza¹, Mazhar Mahmood² and Sameena Razzak²

¹Leighton Hospital, UK

²Medical Resident, Awali Hospital, Bahrain

Background: Heart Failure (HF) is a common medical condition and an important public health issue. This carries with it high mortality and frequent hospitalization. There is generally high re-admission rate and patients of heart failure tend to have a duration of stay in the hospital. Heart failure management is costly and puts a burden on healthcare budget. Lack of awareness of different aspects of management of heart failure leads to poor adherence to treatment which further adds to the healthcare cost. Despite a number of evidence based medications being available, the utilization are not always satisfactory.

Objective: We conducted a study to explore patients' understanding and adherence to Heart Failure (HF) medications at a general hospital setting.

Materials and Methods: We prospectively studied from January 2016 till December 2017, 196 patients (outpatients plus inpatients) of HF at our hospital. The information was gathered by oral interview as well as using questionnaire.

Results: There were 110 male and 86 female patients with average age of 54 years. The majority of patients (78%) were in NYHA class II and III and 72% of patients were from Outpatient visits. 15% of patients stopped or reduced the dose of diuretics on their own as they thought they didn't need them anymore or they were thought to interfere in their life style. 36% patients believed that ACE Inhibitors or ARBs were for blood pressure and therefore they had either stopped or were intending to stop. 43% patients were not keen on taking beta-blocker because of fear of various side effects and 12% of them already stopped the beta-

blocker on their own. 56% of patients did not like the idea of increasing the dose of ACE Inhibitor, ARBs or beta-blocker to the maximum, mainly out of fear of side effects. In addition, 54% of the patients reported that they were not informed by the prescribing physician regarding the purpose and benefits of up titrating the dose of these medication. Patients were ignorant of the role of different HF medications such as Aldosterone antagonists(86%), ACE Inhibitor or ARBs (76%), Beta blocker(70%). None of the patients who were on Ivabradine knew the role of the drug in HF but at the same time were not informed of any known side effects.

Conclusion: Inadequate understanding and poor adherence to medications is a common problem among heart failure (HF) patients. as shown in our study. Inadequate adherence leads to increased HF de-compensation, reduced exercise tolerance, poor quality of life and higher risk for hospital admission and death. They all lead to increase in heart failure treatment and management costs.

Speaker Biography

Syed Raza graduated from Aligarh University in India in 1993. After completing his postgraduate degree in Medicine from the same university, he moved to the UK for higher specialist studies. He successfully completed MRCP and CCT and later also awarded Fellow of the Royal College of Physicians of Edinburgh. He was awarded professor John Goodwin prize for outstanding performance in Diploma Cardiology exam at Hammersmith Hospital, University of London in 2001. He is Fellow of American College of Cardiology, American College of Chest Physicians as well as Fellow of European Society of Cardiology. He is currently serving as consultant in Cardiology at Mid Cheshire Hospitals, NHS trust, UK. He is the educational coordinator and examiner for MRCP exam for the Royal College of Physicians of Edinburgh.

e: syedraza621@gmail.com

Call for neater team healthcare for diabetic foot

Cheryl Wang

Fuzhou University, China

Regardless of enormous effort we put, diabetic foot remains challenging for physicians, surgeons, scientists, patients, and the society. Diabetic foot is a complicated pathogenesis progress, with nerve, vessels, local pressure, inflammation and infections involved. Better blood sugar control, local debridement, wound care, and tissue regenerative are quite essential for better outcome. Neater team healthcare is essential to prevent leg amputation. Better diabetes control effort shall be carried by diabetologists, patients, nutrition, diabetic educators and family and social support. Positive attitude and stress management can be practiced by patients, family, psychiatrists, psychologists, activists, social workers. The local necrotic tissues, infections, inflammation and other insults block the oxygenation and nutrition of the vessels and tissues, and as such prevent the wound from healing. Thorough debridement carried by wound care nurses, surgeons, and practitioners shall lay a whole picture of the patient's situation, as well as the local blood supply and infections, cautions shall be paid for the direction of tunnels and oozing to make sure excessive discharge drained well, to offer a fresh, better oxygenated, and relatively healthier setting that promotes the growth of new tissues and vessels. Tips like avoiding pressure/weight on the foot, elevation of the lower limbs, comfort and fit footwear and shoes, regular self-checking of the feet with/without mirror shall reminded and urged by patients themselves, the family, nurses and physicians. Vascular surgeons may do their best to reconstruct the blood supply. Orthopedic surgeons may take effort to salvage as neat as possible.

Stem cell bioengineering can be applied for tissue and vessel regeneration after the debridement, with a

nice scientific team work consist of bioengineers, cell scientists, immunologists, bioconduct companies, pharmacists, physical therapists, experts for regenerative medicine etc. Mesenchymal derived stem cells (MDSC) and adipocytes derived stem cells (ADMS) can be autologous or endogenous. Endogenous stem cells and tissue-engineered implant can be applied with immunopression with scalable tech using biconstruct transplantation. Exosome from stem cells culture media is found rich in MALAT1 that is essential for wound healing. Local injection of neural growth factor (NGF), TPO, soluble stem cell recruitment factors (SDF-1), inflammation-modulators, progenitors, nitrate oxide (NO), hypoxia indicible factor (HIF-1a) can promote the growth of vessels, angiogenesis, and the regeneration of the tissues. Local light energy can also be used for better outcome. No man can move the mountain along. With neater team healthcare, not only it will benefit diabetic foot, but wound care and regenerative medicine of any kind.

Speaker Biography

Cheryl Wang earned her MD at Binzhou Medical College, MSc., Endocrinology and metabolism, internal medicine in Shanghai Second Medical University (now Shanghai Jiaotong University), PhD in Science, Endocrinology and metabolism, internal medicine at PLA medical college. She did internal medicine residency and trained as an Endocrinologist in Donying People's Hospital, China, did surgery residency at Mount Sinai and Rutgers in the United States. She was awarded numerous times for variety of accomplishment, three KL2s from NIH, the first place award at UTHSCSA research day, Federation Medical Golden Prize scholarship, scholarship for many times, excellent student almost every academic year, excellent student officer awards, excellent female student nominee, excellent graduation award, and many awards for mathematics, speech, and variety of contests. Above all, she had accomplished her masterpiece, her hard-won wisdom, "happy booster-how positive attitude promotes health, reduces stress, enhances performance, accelerates success and boosts happiness", the best of America and Chinese best, the most positive energy ever, and a Nobel Prize "Winner-to-be".

e: dr.doc.cheryl@hotmail.com

Management of febrile children is an intrinsic aspect of pediatric practice

Sherif Ibrahim Hussein Bakir

Emirates Hospital, UAE

Febrile children account for 15% of emergency department visits and outcomes range from the presence of serious bacterial infection to benign self-limited illness. A clinically significant fever in children younger than 36 months is a rectal temperature of at least 100.4°F (38°C). Axillary, tympanic, and temporal artery measurements have been shown to be unreliable. 15–18 Neonates whose parents report a clinically significant fever may have a serious bacterial infection, even if they do not have a fever at the time of their initial medical evaluation. The evaluation of febrile children younger than 36 months has long presented the challenge for physicians of ensuring that children with serious bacterial infection are appropriately identified and treated, while minimizing the risks associated with invasive testing, hospitalization, and antibiotic treatment. The epidemiology of febrile illness in children has changed dramatically with the introduction of several vaccines targeted at this age group, and with the use of antibiotic prophylaxis during childbirth. Because of this, earlier guidelines have been questioned. This article focuses on previously healthy febrile children younger than 36 months. Those with significant pre-existing conditions (e.g., prematurity, immune compromise) should be evaluated on a case-by-case basis. The oral and rectal routes should not routinely be used to measure the body temperature of children aged 0–5 years. In infants under the age of 4 weeks, body temperature should be measured with an electronic thermometer in the axilla. In children aged 4 weeks to 5 years, healthcare professionals should measure body temperature by one of the following

methods:

- Electronic thermometer in the axilla
- Chemical dot thermometer in the axilla
- Infrared tympanic thermometer

Forehead chemical thermometers are unreliable and should not be used by healthcare professionals.

Reported parental perception of a fever should be considered valid and taken seriously by healthcare professionals.

- Clinical red flags for serious infection in children more than one month:
- Global Assessment: Parental Concerns, Physician instinct
- Child behavior: Changes in crying pattern, Drowsiness, Consolability, Moaning
- Circulatory or Respiratory: Crackles, Cyanosis. Decreased breath sounds. Poor peripheral circulation, Rapid breathing, Shortness of breath
- Other Factors: Decreased Skin elasticity, Hypotension, Meningeal irritation, Petichial rash, Seizures, Unconsciousness.

Speaker Biography

Sherif Ibrahim Hussein Bakir is a Consultant Pediatrician at Emirates hospital clinics in Fujairah since February 2017 till now. He has 35 years of experience in Neonatology, Pediatric Allergy, immunology and General Pediatrics. He completed his MD pediatrics at Cairo university in the year 1998 and Msc. Pediatrics at Azhar university in 1984. MBBCh AIN Shams University 1979. EAACI membership (European Academy of Allergy and clinical immunology) Egyptian Neonatology society Egypt.

e: drsbakir2002@gmail.com

Coordination Dynamics Therapy to repair the human CNS and measure repair progress

Schalow G

Tartu University, Estonia

Coordination dynamics therapy (CDT) is a movement-based learning therapy with which it is possible to partly repair the human CNS. Following CNS injury, the phase and frequency coordination of CNS self-organization becomes impaired and has to be repaired. This can be achieved by exercising coordinated arm and leg movements on a special CDT device. Further, creeping, crawling, walking, running, jumping and other movements have to be trained so that other parts of the brain can take function over by plasticity. Most CNS injuries, malformations and degeneration can be treated, including spinal cord injury, brain injury, cerebral palsy and Parkinson's disease. By learning transfer from movements, vegetative and higher mental functions can be repaired including impaired urinary bladder functions (continence). The repair progress can be measured objectively by movement pattern change when exercising on a special CDT device. When performing the different coordinated arm and leg movement patterns, imposed by the device, the

computer quantifies the arrhythmicity of exercising of the patient by a single value. Plotting these values over months and years during treatment, repair progress can be made visible objectively.

Speaker Biography

Schalow G studied electronics (Dipl Ing, 1963) and worked 2 years as a technical engineer at Bosch Electronics. Afterwards he studied theoretical physics at the Free University of Berlin (1970) and worked at the Hahn-Meitner-Institute for Nuclear Physics and promoted in 1973 (PhD). From 1975 to 1977, he was post doc with Katz, Huxley and R Miledi at the Institute of Biophysics, University College London. At the Saarland University from 1977 to 1983, he was assistant at the physiological institute and studied medicine (MD). From 1985 to 1992, he was research assistant at the Ernst-Moritz-Arndt-University of Greifswald (neurosurgery, pathology, neuro-traumatology). From 1992 to 1998, he was leading doctor for clinical research at the Swiss Paraplegic Center Nottwil. From 1998 to 2003, he was working in the field of neuro-traumatology at Tampere and Turku University, Finland. From 2003, he was guest professor at Tartu University (Estonia) and afterwards private researcher because human neurophysiology and clinical research in not organized. He has 100 publications in the fields of human neurophysiology and clinical research and can partly repair the human brain.

e: g_schalow@hotmail.com

Role of modified barium swallow pre and post VitalStim therapy in the rehabilitation of the swallowing mechanism

Mufeed Al Jeady

Dallah Hospital, Saudi Arabia

In MBSS the following are evaluated, delay in oropharyngeal swallowing phase, closure of epiglottis, laryngeal elevation, passage of contrast behind the epiglottis that denoting penetration, presence of aspiration and presence residual barium after swallowing. After VitalStim therapy, all patients underwent the same assessments and also underwent a functional swallowing follow up survey months (range, 1 to 6 months) after their therapy to assess whether the improvement was worthwhile and sustained. From June 2014 to April 2016, 73 patients with dysphagia were included in our study. All the patients underwent pre-therapy evaluation by speech-language pathologists, including clinical evaluation of swallowing and modified barium swallow study (MBSS). In this study 73 patients showed radiological findings denoting neurological swallowing disorders, 65 patients (89%) showed delay in oropharyngeal swallowing phase, weak laryngeal elevation found in 58 patients (79%), 68 patients (93%) showed aspiration and 70 cases (96%) showed penetration and incomplete closure of the epiglottis. Presence residual barium after swallowing within the vallecula was seen in 68 patients (93%). 52 of the 73

patients (71%) demonstrated complete improvement in their swallowing at first follow up study after VitalStim therapy. 21 of the 73 patients (29%) showed some improvement and needed another therapy sessions and in the next follow up study 15 cases showed complete improvement. However, 7 cases of the 21 patients categorized as having severe dysphagia before therapy, only 2 of 7 showed improvement, and these patients still required a feeding tube for adequate nutrition, however, the 5 of 7 showed complete improvement after another session of therapy. In conclusion, modified barium swallow is valuable in the rehabilitation of patient with swallowing disorders helps speech pathologist to identify and modify swallowing abnormalities as well as management program. VitalStim therapy is a safe and effective treatment for patients suffering with the swallowing difficulties.

Speaker Biography

Mufeed Al Jeady, consultant swallowing and speech pathologist and rehab programs manager for stroke and TBI units. The first certified vital stim therapy instructor in middle east. He has published many papers in a reputed journals and conducted a lot of swallowing training courses in vitalstim therapy as well as research in swallowing field and rehabilitation.

e: jeadymm@hotmail.com

Progressive cavitating Leukoencephalopathy in an infant baby: A case report

Rayya A Almarwani

King Faisal Specialist Hospital and Research Center, Saudi Arabia

Cavitating leukoencephalopathy is a group of disorders caused by multiple mitochondria dysfunction syndrome (MMDS). Multiple genetic mutations have been identified in its etiology including a mutation in the IBA57 gene on chromosome 1q42. We present the case of a 5-month-old boy who was diagnosed with progressive cavitating leukoencephalopathy at King Faisal specialist Hospital, Riyadh city, Saudi Arabia. The patient presented with frequent excessive crying since birth. He also had a history of abnormal movement described as tonic spasm of the upper limbs for few second, delayed developmental milestones, and regression of the achieved milestones. Neurological examination of the patient was positive for horizontal eye nystagmus and optic nerve atrophy, exaggerated

gag response, spastic tone that was more prevalent in the upper limbs, and bilateral clonus. The patient showed abnormal findings on MRI including cavitation and cystic leukodystrophy, and homozygosity mapping showed the IBA57 gene mutation. The patient died at the age of 7 months from progressive respiratory failure. MMDS is a rare condition, and according to available data, this case of MMDS is the first to be reported in Saudi Arabia and in the Gulf region.

Speaker Biography

Rayya A Almarwani is senior pediatric neurology resident at King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia. She has completed her medical school 2014 from Faculty of Medicine, Tabuk University.

e: rayya.aljohani@gmail.com

CABG in diffuse coronary artery disease

Shyam K Ashok
KIMS Hospital, India

Statement of the problem: In India 2.78 million death are due to Cardiovascular diseases of which 50 % are due to CAD. Peculiarities of CAD patterns in Indian patients- Younger age at presentation, high incidence of DVD and TVD, diffuse involvement, distal disease and significant LV dysfunction at presentation

Diffuse CAD: Length of significant stenosis > 20 mm, multiple significant stenosis (> 70% narrowing) in the same artery separated by segment of apparently normal vessel and significant narrowing involving the whole length of coronary artery.

Methodology: We in our institute, perform OP CAB and use LIMA and veins as conduits to perform the surgery. Once the conduits are harvested, we heparinize with I.V. Heparin 3 mg/Kg given to achieve an ACT >300. Using the octopus as stabilizer, we perform an endarterectomy of the LAD first and then use a vein patch to cover the defect. LIMA is then used to anastomose the LAD on the vein patch. Veins are used to bypass the LCX and RCA, as deemed appropriate. The proximal ends of the vein grafts are anastomosed to Ascending Aorta with side clamp and heart beating. Intra op we start Lomodex infusion 20ml/hr which is continued for 24 hours and the inotropes used are Adrenaline and

Dobutamine as and when necessary. Postoperatively aspirin 75mg is given and Heparin infusion started after 6hours to maintain ACT of around 150 for 24 hours. Patients are usually extubated after 4 hours provided they are hemodynamically stable. Anticoagulation by Acitrom is commenced orally from day 1 to maintain an INR of 2 for 3 months.

Result: Out of the 20 patients in last 18 months outcomes have been excellent with no in-hospital mortality or cerebrovascular incidents.

Conclusion: Off pump CABG with coronary endarterectomy offers a good solution to the problem of diffuse coronary artery disease.

Speaker Biography

Shyam K Ashok is a Consultant in Cardiac Surgery, After completing his MBBS and MS in General Surgery, he did his MCh in CVTS from Seth GS Medical College, Mumbai in 2008. He later joined Narayana Hrudayalaya, Bangalore in 2008, which a 1000 bedded hospital executing close to 600 open heart surgeries in a month. He worked as a Fellow in Adult Cardiothoracic department in Royal Melbourne Hospital, Australia, which is the second largest Cardiothoracic unit in the whole of Australia. After working in Australia for 2 years he rejoined Narayana Hrudayalaya, as Consultant Cardiothoracic Surgeon in 2012 and worked there till 2015. He has independently performed about 1000 open heart surgeries, consisting of Coronary Artery bypass surgeries and Valve Replacements. His area of interest is Coronary Artery bypass, especially Total Arterial Revascularization. He joined Aster CMI Hospital in Feb 2016 as Consultant Cardiothoracic Surgeon.

e: shyams2u@yahoo.co.uk

Successful management of dislodged stent in distal left main: A case report

Mirwias Amiri, Khatira Zaheen, Razmi Rahman
Amiri Medical complex, Afghanistan

Introduction: Stent dislodgement in the coronary arteries during percutaneous coronary intervention is a rare but potentially fatal complication. The incidence of SD is reported 0.9 to 8.3%. Factors that increases chance of stent entrapment during PCI is tortuosity of coronary arteries, calcified lesions, passage through a previous deployed stents, and other common causes include poor support of the guiding catheter, sharp angle proximal to the lesion, as well as use of longer stents

Many different retrieval techniques of dislodged stents have previously been reported which include the use of balloon catheters, basket devices, loop snares, twisted wires, etc., with a high success rate in emergency cases when time is crucial and because percutaneous retrieval is a time-consuming procedure, the crushing of an entrapped and dislodged stent against the wall has been proposed as alternative option. And lastly the stent-crush exclusion technique, whereby a second stent is used to crush the detached stent along the wall of the vessel. We report a case of stent dislodgment during PCI to ostial circumflex coronary artery with more sharp angle and a previously deployed stent in left main coronary artery.

Case report: A 69-year-old male patient was admitted to our hospital with the symptoms of effort angina for last 3 months. He was ex-smoker and non diabetic, and reported previous treatment for high blood pressure and dyslipidaemia, he had underwent coronary angioplasty and stenting to left main to LAD and to RCA in another center abroad 11 months back. An electrocardiogram at admittance showed the sinus rhythm with no

specific ST segment and T-wave changes. Physical examination showed arterial blood pressure 124/65 mmHg and a pulse rate of 63bpm. Transthoracic echocardiography revealed no regional wall motion abnormality with left ventricular ejection fraction 60% and grade I LV diastolic dysfunction. In view of his exertional anginal symptoms despite optimal medical anti-anginal treatment, he was planned for check coronary angiogram. His coronary angiogram revealed patent stent (left main to left anterior descending coronary artery, patent RCA stent), whereas a severely ostial disease of non dominant but large size circumflex coronary artery (CX), and the right coronary artery (RCA) were without significant disease. Left coronary system was engaged with JL4–7 Fr guiding catheter and coronary wire Fielder FC was advanced through the ostial LCX lesion to distal segment. Several sequential balloon predilatations (low profile balloon 1.1 x 10mm at 18atmosphere and Sprinter Legend 2.0 x 10 mm at 14 atmosphere) in the Left main to ostial LCX done with TIMI-III flow, while trying to cross the stent 2.5 x 12mm DES through the previously deployed left main to LAD stent with a sharp angle between left main and LCX and tortuous proximal segment of LCX, stent dislodged in the bifurcation of LM to LCX. The patient compained on intense chest pain and suddenly developed severe bradycardia (30 beats per minute) with a drop in blood pressure to 60/40 mmHg. The flow in LCX was disturbed but there was TIMI-III flow in LAD, As we could not pull back the stent which was stucked with the previously left main stent and in sharp angle of ostial LCX, and on the other hand we lose the guide wire in the target vessel, we re-wired the lesion and decided to crush

the unexpanded dislodged stent against the wall in the distal left main and ostio-proximal LCX with 2 x 10mm balloon inflating it up to 16atm, This resulted in a rapid blood flow restoration in LCX (TIMI-III), thought there was some plaque shifting in the ostial LAD then crushed with a stent 2.5 x 12mm (DES) at 14atm, with a good TIMI-III flow, another coronary wire BMW was advanced in left main to LAD and final kissing balloon done with 3.5 x 13mm non complaint balloon in left main to LAD and 2x 10mm balloon in LCX at 12atm. Meanwhile application of atropine and normal saline infusion resulted in hemodynamic stabilization of the patient. The final angiographic result was optimal with uneventful later in hospital course. The patient was discharged on day 3rd. A follow-up during the next three months showed good patient health with the absence of ischemic symptoms. Coronary angiography was performed after three months which showed patent all stents.

Discussion: Stent entrapment and dislodgement in the left main coronary artery is an extremely rare but a serious and life threatening complication which may cause hemodynamic instability, intracoronary thrombosis, stent embolization, myocardial infarction and eventually death. The incidence of SD during PCI has been decreased, from 8.3% twenty years ago to currently 0.02%. According to the previous published literature data, the most common cause of stent dislodgement during PCI is attempt to deliver a stent through a previously deployed stent and pull-back. In our case, Probably, the most important causes of stent loss were the previously deployed stent in left main and sharp angle between the left main and LCX as well as tortuosity of LCX. Hemodynamic state of the patient after stent dislodgement is important factor for its management technique as well as the coronary flow in the vessel with entrapped and unexpanded stent. In case of hemodynamically

unstable with compromisation of the coronary flow after SD during PCI, as in this reported case, it is crucial to promptly reestablish the coronary flow and stabilize the hemodynamics first. Furthermore, in such a case of hemodynamically unstable patient sometimes trying to retrieve the dislodged stent specially when the stent is entrapped in the angle of left main with a previously deployed stent and left circumflex, as in our case, can be more problematic and life – threatening. So, in this particular situation the only way to go further with the procedure was to crush the dislodged stent with the balloon and then with a stent against the wall of coronary artery. However, this technique has not been widely accepted for the left main and proximal LCX because it may pose later an increased risk for both stent thrombosis and restenosis due to excess metal layer. In our case, none of the mentioned techniques for retrieving a dislodged stent were possible, due to presence of previously deployed left main stent and the very sharp angle of ostial LCX, other than this, there was possible risk of embolization of the unexpanded stent in LAD and losing its flow which further could deteriorate patients hemodynamics. So, it was safer approach to crush the dislodged stent with balloon and then with a stent.

Conclusion: Stent dislodgment during percutaneous coronary intervention can be successfully managed with different methods. Our case demonstrated that one of the safe and effective option for management of hemodynamically unstable patient is balloon crushing of entrapped and dislodged stent in the distal left main and ostial left circumflex coronary artery. In compare with the other recommended stent retrieval techniques which is time consuming in such emergency situation where establishing coronary blood flow and stabilizing patient's hemodynamic is crucial. It should always be kept in mind that the presence of previously deployed stent and an angulated and tortuous segments of

Health Care and Neuroscience

April 08-09, 2019 | Zurich, Switzerland

the coronary arteries may reduce the possibility and success of stenting with a higher rate of stent dislodgement despite adequate lesion preparation before stent delivery.

Speaker Biography

Mirwais Amiri had completed 6 months Residence in Orthopedics at LRH Peshawar, Pakistan and then 1 year in Cardiology at PGMI

HMC, Peshawar, Pakistan. He has later joined Afghan National Army Hospital (Late Sardar Mohammad Dawood Khan Hospital) in Medicine Department and then got opportunity to go to Escorts Heart Institute & Research Centre, New Delhi, India where he successfully completed three years tenure and did Fellowship in Noninvasive Cardiology and then rejoined Cardiology Department of Late Sardar Mohammad Dawood Khan Hospital (Afghan National Army Hospital).

e: drmirwaisamiri@gmail.com

The importance of multiple intelligence, emphasizing Constructive Emotional Intelligence (CEI) in the healthcare environment

Olessia Gorkovenko

UNISA, South Africa

In this presentation, the aim is to identify the criteria to predict motivational and personality properties of individuals with their surrounding environment, based on specific characteristics of each person and to describe their workplace environment based on Multiple Intelligence, emphasizing constructive emotions and spirituality. This approach will create a more positive communication pattern and “effective healthcare environment”, increasing multiple regulations and resiliencies. In a good-workplace employers are helped to respond to each other and thereby meet each other’s psychological work-related needs. Multiple Intelligence and specifically constructive emotional aspect at the workplace is therefore effective not only in healing employers’ connections but is also therapeutic for the individual’s psychopathology including self-growth. When it comes to describing the variety of the reasons why people work, it can be illustrated as in the pyramid of Maslow (1960), shelter and food, clothing and transportation, socialization and need for love, money and need for self-actualization. For the social psychologist and the psychologists of religion, the previous description will not be accurate or enough. Instead, we need to know what social and mental factors regulate why people are going to work, solve or unsolve their work-related problems, improve their healthcare environment so as their identity and maintain it. I believe that knowledge about these things can help us to create a healthier, more productive work environment, can provide the psychological module for the improvement of work performance and to reduce conflicts, stress

and fear, dissatisfactions or unhappiness of the work choices. Believing in what you are doing and the emotional feeling of happiness is paramount in achieving a better working environment. Workers are more likely to pursue transcendent goals, cultivate trust, become a team player, create a healthier atmosphere, greater commitment to the employer and the goals, and a better healthcare environment. In order to build the argument for this idea and the rationale for what can be called a healthy work- environment we need to encourage meaningful aspect of the Multiple intelligence, emphasizing constructive emotions and spirituality at work, which can emphasize norms, values and expectations associated with the benevolent and principled ethical climates of the learning organization which goes beyond merely making profits. By encouraging values, norms that support caring for each other and the organization and for the country and for the planet such higher-order goals often reflect the spiritual values of the contribution to the society and make employers feel that their work has a higher meaning.

Speaker Biography

Olessia Gorkovenko is currently a Ph.D. (Psych) student at UNISA in South Africa. She is an associate at the Well Lab and runs a center “Pilatelicious” in Johannesburg. She has wrote a book “Spiritually Evolved” and published papers in reputed journals and has been serving as an editorial board member of Journal. She has a passion for teaching and coaching and is extremely meticulous in achieving the best results. She operates on the fundamentals of positive psychology approaches that focus on performance improvements as a result of holistic development. Olessia is a firm believer of best practices. She is always willing to share knowledge and collaboration between stakeholders in order to reach a common goal.

e: olessia@pilatelicious.co.za

Alpha-lipoic acid mitigates toxic-induced demyelination in the Corpus Callosum by lessening of oxidative stress and stimulation of Polydendrocytes proliferation

Mehdi Mehdizadeh

Iran University of Medical Sciences, Iran

Multiple Sclerosis (MS), is a disease that degenerates myelin in central nervous system (CNS). Reactive oxygen species (ROSs) are toxic metabolites, and accumulating data indicate that ROSs-mediated apoptosis of oligodendrocytes (OLGs) plays a major role in the pathogenesis of MS under oxidative stress conditions. In this study, we investigated the role of endogenous antioxidant alpha-lipoic acid (ALA) as ROSs scavenger in the OLGs loss and myelin degeneration during cuprizone (cup)-induced demyelination in the experimental model of MS. Our results have shown that ALA treatment significantly increased population of mature OLGs (MOG+ cells), as well as decreased oxidative stress (ROSs, COX-2 and PGE2) and apoptosis mediators (caspase-3 and Bax/Bcl2 ratio) in corpus callosum (CC). Surprisingly, ALA significantly stimulates population of NG2

chondroitin sulfate proteoglycan positive glia (NG2+ cells or polydendrocytes), from week 4 afterward. Accordingly ALA could prevent apoptosis, delays demyelination and recruits OLGs survival and regeneration mechanisms in CC. We conclude that ALA has protective effects against toxic demyelination via reduction of redox signaling, and alleviation of polydendrocytes vulnerability to excitotoxic challenge.

Speaker Biography

Professor Mehdi Mehdizadeh has a PhD in Anatomical Sciences from Tehran University of Medical Sciences. He is a member of Cellular and Molecular Research Center, Faculty of Advanced Technologies in Medicine, Department of Anatomical Sciences, IUMS, Tehran, Iran. Professor Mehdizadeh worked as a Fellow at the German Research Center for Biotechnology on Transgenic Animals. He is author and co-author of over 100 peer-reviewed scientific articles, and has contributed numerous book chapters.

e: mehdizadeh.m@iums.ac.ir