



Global Healthcare and Nutrition

February 10-11, 2022 GMT+1

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International Webinar on

Global Healthcare and Nutrition

February 10-11, 2022

SCIENTIFIC PROGRAM



International Webinar on Global Healthcare and Nutrition February 10-11, 2022 | Time Zone (GMT+1) in Paris - France

	Day 01 (February 10, 2022)		
10:00-10:20	Title: Expression profiles and coexpression network analyses of long noncoding RNAs in brown adipose tissue of obesity-prone and obesityresistant mice fed a high-fat die		
	Congcong Wang, Zhejiang University, China		
10:20-10:40	Title: Can dental caries be an independent predictor of sarcopenia and its diagnostic factors?		
	Yang Yang, Zhejiang University, China		
10:40-11:00	Title: Anthocyanin content of red rice grains and agronomic ways of increasing it		
	Wayan Wangiyana , University of Mataram, Indonesia		
11:00-11:20	Title: Vegan diet: Towards a sustainable and healthy food system		
	Towid Hasan , Noakhali Science and Technology University, Bangladesh		
11:20-11:40	Title: Effect of ketogenic diet on cancer: A systematic review and meta-analysis of randomized controlled trials		
	Adeleh Khodabakhshi, Kerman University of Medical Sciences, Iran		
11:40-12:00	Title: Genetic varability and character association for yield and yield related traits in soybean (Glycine max L.) Genotypes		
	Diriba Beyene Goonde, Wollega University, Ethiopia		
12:00-12:00	Title: Caries free society: Fighting dental caries by nutrition		
	Shereen Hafez Ibrahim, Cairo University, Egypt		
12:20-12:40	Title: Physicochemical characterization of nine cassava (Manihot esculenta crantz) cultivars from Chad		
	Nadjiam Djirabaye , Chadian Institute of Agronomic Research for Development (ITRAD), South Africa		
12:40-13:00	Title: Therapeutic investigations of beta-carotene in diabetic vascular dementia in rat		
	Arunachalam Muthuraman, Asian Institute of Medicine Science and Technology, Malaysia		
13:00-14:00	Refreshment Break		
14:00-14:20	Title: The inhibitory effect of caffeine on starch digestion		
	Irit Rutman-Halili, Hemdat Hadarom Academic College of Education, Israel		



14:20-14:40	Title: Spicy foods (chili peppers, ginger) in treatment of migraine headaches	
	Amos Gelbard, Zefat Academic College, Israel	
14:40-15:00	Title: The effect of BOPP packaging on the shelf-life of citrus sinensis cultivar belladonna	
	Monica Rosa Loizzo, University of Calabria, Italy	
15:00-15:20	Title: Extra virgin olive oils extracted from different varietiescultivated in the province of reggio calabria (Italy): Quality parameters and health properties	
	Vincenzo Sicari, Mediterranean University of Reggio Calabria, Italy	
15:20-15:40	Title: Digital health, nutrition and healthy ageing	
	David John Wortley, International Society of Digital Medicine (ISDM), United Kingdom	
15:40-16:00	Title: Some methods of quality systems for food laboratories and their current uses	
	Elisabeth Borges Gonçalves, Embrapa Food Technology, Brazil	
16:20-16:40	Title: Alzheimer's disease and diabetes mellitus type 3	
	Thaísa Lopes Rodrigues, Lieue University, Brazil	
16:40-17:00	Title: Eating disorder and anxiety during Covid-19 pandemic: The Maghrebian experience	
	Saoussen Alouani, University hospital of Monastir, Tunisia	
	E-Posters Control of the Control of	
SCNHC-EP01	Title: Consumption of dietary supplements and its association with excess weight in school children from Bucaramanga, Colombia	
	Edna M. Gamboa-Delgado, University of Santander, Colombia	
SCNHC-EP02	Title: Development of an antioxidant rich beverage using effervecent tamarillo fruit powder	
	Julie Fernanda Benavides Arévalo, University of Santander, Colombia	
SCNHC-EPO3	Title: Intermittent fasting and cancer: A brief introduction to the Warburg effect	
	Saoussen Alouani, University hospital of Monastir, Tunisia	
B2B Meetings & Panel Discussions		
Day 2 February 11, 2022 GMT+1		
09:00 - 09:20	Title: Biomedicine in 21st century by Huaier: The practical health maintenance and successful recovery from cancer	
	Manami Tanaka, Bradeion Institute of Medical Sciences, Japan	



09:20 - 09:40	Title: Culture clash of female Somali adolescents and sexual and reproductive health services in Oslo, Norway
	Tamanna Afroz, International Centre for Diarrhoeal Disease Research, Bangladesh
09:40 - 10:00	Title: The landscape and environmental planning of sustainable medical and ecological recreation and population rehabilitation
	Violetta Chernaya, RSMU of the Ministry of Health of the Russian Federation, Russia Federation
10:00 - 10:20	Title: Measuring the efficiency of public hospitals in Kuwait: A two-stage data envelopment analysis and a qualitative survey study
	Abdullah Alsabah, Medical Services Authority, Kuwait
10:20 - 10:40	Title: Relationship between maxillary occlusal plane inclination and soft tissue harmony in adults with different sagittal skeletal malocclusions
	Almustafa Alhumadi, Hilla University College, Iraq
10:40 - 11:00	Title: Bridging the gap between patient self-perception, and therapist apperception: CR conceptualization in psychotherapeutic process
	Ofer Erez, Rotem Center for practical, Israel
11:00 - 11:20	Title: Parental intelligence- Actualization within parent's decision-making process
	Anat Ben Salmon, Rotem Center for Practical Professional training, Israel
11:20 - 11:40	Title: Effect of two different materials; Microgel p(NIPAM) and sodium fluoride on the depth and degree of occlusion of the dentinal tubules at different dentin depths
	Salma Basyouni Hamada, October University for Modern Sciences and Arts, Egypt
11:40 - 12:00	Title: Entrepreneurship is the future of nursing
	Eman Salman Taie, Helwan University, Egypt
12:00 - 12:20	Title: The association between COVID-19 infection, and gastrointestinal diseases
	Noha El-Sayed Ibrahim, National Research Centre, Egypt
12:20 - 12:40	Title: Psychological risk consequences in Italian nurses directly involved in the COVID-19 outbreak
	Elsa Vitale, Local Health Company Bari, Italy
12:40 - 13:00	Title: Challenges and obstacles faced by trainee female physicians: An integrative research on gender discrimination, stress, depression and harassment
	Ahlam Alharbi Hamed, King Abdulaziz University, KSA
13:00 - 14:00	Refreshment Break
14:00 - 14:20	Title: Challenges in augmented and virtual reality
17.00 - 17.20	



14:20 - 14:40	Title: Influence of tunisian revolution on bullying at work in interns and residents
	Irtyah Merchaoui, University of Monastir, Tunisia
14:40 - 15:00	Title: Religiosity and mental suffering experiences among users of the Brazilian public mental health system: Transcendence, love and healing
	Stephan Malta Oliveira, Fluminense Federal University, Brazil
15:00 - 15:20	Title: Non pertinent demand from the mobile emergency care service in Porto Alegre, RS, Brazil: Nursing perspective
	Andréa Márian Veronese, SAMU Porto Alegre, Brazil
15:20 - 15:40	Title: Caffeine for apnea of prematurity; past, present, and future
	Prem Fort, Johns Hopkins University School of Medicine, United States of America
15:40 - 16:00	Title: Barriers to digitization of health information in Kenya and Laos
	Daniel Toshio Harrell, Austin-Dell Medical School, United States of America
16:00 - 16:20	Title: Resetting policies to end family homelessness
	Jacqueline A. Hart, Bassuk Center, United States of America
16:20 - 16:40	Title: Accelerating COVID-19 Treatment Interventions and Vaccines (ACTIV) – Agent selection and master protocols for evaluation of candidate COVID-19 therapeutics
	Stacey J. Adam, National Institutes of Health, United States of America
16:40 - 17:00	Title: Caribbean diaspora health initiatives – An intersectional, Inter-Professional approach to health equity
	Farzanna S. Haffizulla, Dr. Kiran C. Patel College of Osteopathic Medicine, United States of America (10:40/9:10 AM)
17:00 - 17:20	Title: Making decision-making visible- teaching the process of evaluating interventions
	Angela Benfield, University of Wisconsin-La Crosse, United States of America
17:20 - 17:40	Title: Evolution of a DNP program during a national crisis
	Mary Wyckoff and Rebecca Rogers, Samuel Merritt University, United States of America
17:40 - 18:00	Title: A push-to-talk application as an inter-professional communication tool in an emergency department during the COVID-19 pandemic
	Khaled Soliman, King Abdullah Bin Abdulaziz University Hospital, KSA
	VIDEO PRESENTATION
18:00 - 18:15	Title: Technology innovations in health: Using machine learning techniques to detect diseases
	Lubnnia Souza, University of Pernambuco, Brazil



	E-Posters	
SCGHN-EP01	Title: Family context, identity and internet use: A cross-sectional study in a group of Italian adolescents	
	Monica Pellerone and Stesy Giuseppa Razza, Kore University of Enna, Italy	
SCGHN-EP02	Title: As influences the type of nutrition in university performance	
	Antonio Viñuela, University Castilla-La Mancha, Spain	
SCGHN-EP03	Title: Effects of Branched hain α -keto acid dehydrogenase (Bckdh) activation on fatty acid transport and oxidation – A study on the Adipocytes differentiated from visceral Adiposederived Mesenchymal Stem Cells (AdMSCs) obtained from lean as well as morbidly obesemen with or without metabolic syndrome	
	Elżbieta Supruniuk, Medical University of Bialystok, Poland	
SCGHN-EP04	Title: Pathophysiology and clinical implications of cognitive dysfunction in fibromyalgia	
	Weaam Ibraheem, California Institute of Behavioural Neurosciences and Psychology, UAE	
SCGHN-EP05	Title: Effect of obesity on lipid profiles among premenopausal women in Jeddah, KSA	
	Mai Mohamed Tarek Albaik, Batterjee Medical College, KSA	
B2B Meetings & Panel Discussions		



International Webinar on

Global Healthcare and Nutrition

February 10, 2022

Day 1

Oral Presentations





Expression profiles and coexpression network analyses of long noncoding RNAs in brown adipose tissue of obesityprone and obesity resistant mice fed a high-fat die

Congcong Wang Zhejiang University, China

ABSTRACT

n Obesity-Prone (OP) or an Obesity-Resistant (OR) phenotype exists under the same diet type, including a High-Fat Diet (HFD). Brown Adipose Tissue (BAT) functions to dissipate energy in response to cold exposure or overfeeding. Long noncoding RNAs (LncRNAs) are an important class of pervasive genes involved in a variety of biological functions. However, the potential biological functions of lncRNAs related to OP or OR phenotype in BAT have not been fully understood. Here, we constructed a high-fat diet-induced OP and OR mouse model. Transcriptome analyses were performed to obtain the expression profiles of mRNAs and lncRNAs in the BAT of the OP and OR mice. We detected 228 differentially expressed lncRNAs and 1159 differentially expressed mRNAs between the OP and OR groups. We further analysed Differentially Expressed Genes (DEGs), using Gene set enrichment, Gene Ontology, and Kyoto Encyclopedia of Genes and Genomes pathway analysis. Co-expression analysis and target gene prediction were further performed to determine the transcriptional regulatory relationship of the differentially expressed lncRNAs and mRNAs between the OP and OR groups. The expression levels of the candidate lncRNAs and mRNAs were validated in brown adipocytes activated with norepinephrine bitartrate monohydrate (NE) and Forskolin in vitro and in the BAT from cold-induced thermogenesis mice in vivo by qPCR. Our data suggest that two candidate lncRNAs (A530050N04Rik and 4930528G23Rik) and four candidate mRNAs (Lep, Oxtr, Cars2, and Gmpr) were involved in weight and metabolism regulation by cAMP and thermogenesis pathways. Significant differences were detected between the transcriptomes of the BAT from OP and OR mice. The differentially expressed lncRNAs and mRNAs were enriched in two potential pathways involved in weight and metabolism regulation. These results provide clues to the molecular mechanisms of metabolic disorders as well as candidate biomarkers of risk for obesity.

SPEAKER PROFILE:

Congcong Wang is currently an M.S. at the department of nutrition and food hygiene, Zhejiang University School of Public Health. She receives research training under the supervision of Assoc. Prof. Fei Yang from Prof. Shankuan Zhu's team at Chronic Disease Research Institute and Zhejiang university-Stanford university Collaborative Laboratory for Health. Before joining Zhejiang University, she got her bachelor degree from the department of veterinary medicine at Nanjing Agricultural University. Her research focuses on applying the multi-omics analysis to identify the molecular links underlying the obesity and related chronic diseases.



Can dental caries be an independent predictor of sarcopenia and its diagnostic factors?

Yang Yang Zhejiang University, China

ABSTRACT

Epidemiological studies have revealed the association of oral diseases with sarcopenia or its diagnostic factors (low muscle strength, low muscle mass and reduced physical performance). However, it remains unclear whether dental caries is an independent predictor of sarcopenia or one of its diagnostic factors. Hence the aim of this study was to investigate the associations of dental caries with sarcopenia and its diagnostic factors.

Methods: This cross-sectional study included a total of 1,961 participants aged 18-80. The Decayed, Missing, and Filled Teeth (DMFT) index was used for assessing severe dental caries. The independent variables related to dental caries include DMFT index, severe dental caries and tooth loss caused by caries. Severe dental caries was defined as DMFT index over 8. Low muscle strength was assessed by hand grip force. Low muscle mass was assessed by Dual-energy X-ray Absorptiometry (DXA) scan. Sarcopenia was defined as the presence of both low muscle mass and low muscle strength. Multivariate logistic regression models were used to analyse the associations of dental caries with sarcopenia and its diagnostic factors.

Results: In the fully adjusted models, dental caries was positively associated with sarcopenia (DMFT index: P-value=0.001; severe dental caries: Odds Ratio [OR], 1.67; 95% Confidence Interval [CI], 1.13-2.46; tooth loss: P-value=0.002), low muscle strength (DMFT index: P-value).

Conclusion: Dental caries can be an independent predictor of sarcopenia and its diagnostic factors except low muscle mass. This association remained in male subgroup and partly remained in female subgroup.

SPEAKER PROFILE:

Yang Yang is currently a direct application PhD student at the department of nutrition and food hygiene, Zhejiang University school of Public Health, under the supervision of professor Shankuan Zhu. She did her undergraduate at Peking University from 2014-2018. She is also in Shankuan Zhu's team at Chronic Disease Research Institute, Obesity and Body Composition Research center at Zhejiang University School of Medicine, and Zhejiang University-Stanford University Collaborative Laboratory for Health. Her work focused specifically on obesity-related chronic diseases and body composition.



Anthocyanin content of red rice grains and agronomic ways for increasing it

Wayan Wangiyana

University of Mataram, Indonesia

ABSTRACT

ased on the color of the whole grains, there are white, golden, brown, red and purple or black rice. In Indonesia, Based on the color of the fine grant of the first state of the first state of the color of th the intensity of the red or purple color of the rice grains depends on the total phenolic and total anthocyanin contents of grains. The red rice whole grains are reported to contain higher amount of total anthocyanins compared with undetected in the common white rice. Therefore, consuming red rice is much healthier than white rice due to the high antioxidant activities of the anthocyanins. In addition, feeding mice with red rice also reported to reduce their blood sugar content compared with white rice, indicating that red rice is healthier than white rice for type-2 DM (Diabetes Mellitus) patients, due to the commonly lower glycemic index of red than white rice grains. In terms of improving health values of red rice grains, intercropping red rice with soybean in additive series under aerobic irrigation systems was reported to be able to increase anthocyanin contents of upland red rice grains. Application of mycorrhiza biofertilizer, in addition to increase anthocyanin contents of red rice grains, also increased grain yield and possibly nutrient contents of the grains such as Zinc and other nutrients, especially under intercropping with legume crops such as soybean and peanut. Shading and cultivation on location with higher altitudes also reported to increase anthocyanin contents in the grains. Therefore, there are various health improvement potentials of consuming red rice, and those potentials can be improved further by selecting better varieties and cultivation techniques. Due to its higher price in the market, production of red rice is potentially more profitable for the farmers compared with production of the common white rice, especially in intercropping with legume crops on raised-beds under aerobic irrigation systems.

SPEAKER PROFILE:

Wayan Wangiyana has done his Ph.D at the University of Mataram (Indonesia) in october 1985; and started the job as a teaching staff in agronomy department of the faculty of agriculture, University of Mataram (Unram) in march 1987. In january 1991 he undertook a postgraduate diploma in systems agriculture (at the faculty of agriculture, University of Western Sydney, Australia) leading to master's degree with MSc (Hons) in environmental science at the faculty of science and technology, University of Western Sydney, and finished in 1994. In 1999 he started a Ph.D. study in farming systems at the faculty of agriculture and environmental management, University of Western Sydney, and graduated the Ph.D. degree in 2005. He has over 100 publications that have been cited over 300 times, and his Google Scholar h-index is 10. He has been serving as an Editorial board member of several national and international journals, and is currently the Editor-in-Chief of Journal of Sustainable Dryland Agricultural Systems (JoSDAS).



Vegan diet: Towards a sustainable and healthy

Towid Hasan

Noakhali Science and Technology University, Bangladesh

ABSTRACT

The current food systems contribute significantly to poor health and environmental deterioration. Hence, global endeavors are urgently required to collectively transform to healthy diets from sustainable food systems to achieve the United Nations' Sustainable Development Goals (SDGs), particularly eradicating global hunger (SDG #2) and attaining sustainable consumption and production (SDG #12). Increasing evidence suggests that shifting towards a greater dependence on vegan or plant-based foods and a reduction in animal-based products consumption will contribute significantly to improving the sustainability of food systems. Nevertheless, shaping consumer demand towards increased consumption of plant-based diets from animal-based products would likely be a profound challenge requiring a substantial societal transition, as food consumption behavior is complicated and affected by a myriad of interconnected factors. A coordinated effort of community, health and environmental organizations, government and non-government agencies, and market stakeholders will strengthen the transition towards healthier and more sustainable food systems. Thus, the present talk will pursue an overview of the opportunities and challenges of the transition to a plant-based diet in achieving a sustainable and healthy food system.

SPEAKER PROFILE:

Towhid Hasan is serving as a lecturer in department of food technology and nutrition science, Noakhali Science and Technology University, Noakhali, Bangladesh. His research interests are varied, with focus on human nutrition as well as food science. He is involved in research on public health, nutrition and dietetics, and clinical nutrition. His focus in food science includes thermal behavior of fats, food emulsions, food product development, and waste conversion to value-added products.



Effect of ketogenic diet on cancer: A systematic review and meta-analysis of randomized controlled trials

Adeleh Khodabakhshi

Kerman University of Medical Sciences, Iran

ABSTRACT

Background: In light of the mitochondrial metabolic theory, cancer could be considered a metabolic disease. It has been suggested that cancer metabolic therapies, including Ketogenic Diets (KD) may be useful to exploit differences in metabolism from non-neoplastic cells. In this systematic review and meta-analysis of Randomized Controlled Trials (RCTs) we aimed to investigate the efficacy of KD as an adjuvant therapy in the treatment of cancer compared to a traditional non-ketogenic diet.

Methods: In this study, databases such as Medline/PubMed, web of science, Scopus, Embase, and cochrane central register of controlled trials were searched. Only RCTs that involved cancer participants that were assigned to dietary interventions including a KD group and a control group (any non-ketogenic dietary intervention) were selected. Two reviewers independently extracted the data, and the meta-analysis was performed using a fixed effects model or random effects model depending on the I2 value or p-value.

Results: This meta-analysis showed a significant reduction in weight (WMD = -3.58 kg; 95% CI: -6.24, -0.92; P = 0.008, BMI (WMD = -1.96 kg/m2; 95% CI: -2.83, -1.09; P = 0.001) and fat mass (WMD = -1.90; 95% CI: -3.57, -0.24; P = 0.025) with ketogenic diet. KD significantly decreased glucose (WMD = -9.52 mg/dl; 95% CI: -13.81, -5.23; P = 0.001) and IGF-1 (WMD = -16.27 ng/ml; 95% CI: -22.44, -10.09; P = 0.001). Furthermore, ketogenic diet induced ketosis by increasing β -hydroxybutyrate (WMD = 0.51 mmol/l; 95% CI: 0.11, 0.91; P = 0.012). There was a non-significant pooled effect of the ketogenic diet on insulin, C-Reactive Protein (CRP), lipid profile, kidney and liver function, and quality of life.

Conclusion: We found that KD might result in a greater reduction in glucose, IGF-1, ketosis, weight, BMI and fat mass in cancer patients compared to traditional non-ketogenic diets. According to our data, additional well-designed RCTs with larger sample sizes are needed to evaluate if KD can be routinely used as an adjuvant therapeutic component in cancer patients.

SPEAKER PROFILE:

Adeleh Khodabakhshi has done her PhD of clinical nutrition and faculty member of Kerman University of Medical Sciences.



Genetic varability and character association for yield and yield related traits in soybean (Glycine max L.) genotypes

Diriba Beyene Goonde Wollega University, Ethiopia

ABSTRACT

The study was carried out to evaluate genetic diversity, heritability and genetic advance of traits in soybean genotypes and to estimate the magnitudes of associations among the different traits. The experiment was carried out at Uke research site, Western Ethiopia during 2018 main cropping season. The materials consisted of 100 soybean genotypes and was laid out in10*10 simple lattice design. Agronomic traits were collected and statistical analysis was carried out using GLM (General Linear Models) procedure of SAS (SAS, 2004). The results showed that there were highly significant differences among the genotypes for all the traits except for number of primary branches per plant and number of nodules per plant. seed yield indicating the possibility of the traits controlled by additive gene types and phenotypic selection for the traits could be useful. Both at genotypic and phenotypic levels, seed yield was highly and positively correlated with days to 95% maturity, plant height, number of primary branches per plant, number of pods per plant, biological yield and harvest index. Hence, indirect selection using these traits might improve the seed yield in present soybean populations. D2 statistics showed that the genotypes were clustered in to 10 diverse groups, indicating further genetic diversity in the genotypes.

SPEAKER PROFILE:

Diriba Beyene Goonde is currently PhD fellow in plant breeding at Haramaya University, Ethiopia. He is researcher and lecturer at Wollega University from 2016 until today and has expertise in maize crossing techniques, scientific paper writing, and adaptation, characterization, screening and evaluation of legumes, pulses, cereals and horticultural crops. In addition, he serves as team coordinator of agricultural researchers at Uke research and demonstration site of Wolllega University. He received his undergraduate degree in plant science from Shambu Campus, Wollega University since 2016 and his master's degree in plant breeding was obtained from Nekemte Campus since 2019, Wollega University in Ethiopia. Diriba appointed on the agricultural research leader at research and technology park, Nekemte Campus for two years before being fellowed to his current start as PhD student in plant breeding. During this time, he served his experience sharing for agricultural experts of different Woreda East Wollega and dissemination of hybrid maize BH549 to farmers with collaboration of Bakko National Maize research center. He is a young researcher runs for agricultural transformation of sub-Saharan Africa to alleviate poverty and increment of food security by conserving plant genetic resource and utilization. He is strong commitment in research writing for community service engagement and he also received recognition certificate from Wollega University.



Caries free society: Fighting dental caries by nutrition

Shereen Hafez Ibrahim Cairo University, Egypt

ABSTRACT

Caries affecting teeth is one of the most widespread problems in public health worldwide. Being considered as the major oral problem, it affects 2.4 billion people worldwide; about 60-90% of children and may reach to 100% of adult population. It is a disease that is considered multifactorial and is affected by many variables such as the patient's general health, the oral hygiene measures, the type and amount of diet and type of flora of the oral cavity, factors present in the saliva and fluoride exposure. Caries has been combated using various products, methods and strategies. However, it is rather important to concentrate on patient comfort and make oral health care simple and effective. This can be achieved by preventing exposures to risks that cause injury or disease, and changing dangerous or unhealthy behaviors that lead to disease, and by making the resistance higher, against the disease. Amongst primary preventive level, there are health promotion aspects including diet planning, dental health education and awareness program, and diet counselling. In this lecture, several recently published articles will be discussed.

SPEAKER PROFILE:

Shereen Ibrahim is the assistant professor of conservative dentistry, faculty of dentistry Cairo University Egypt and editor of textbook entitled:" Nanotechnology in Conservative Dentistry" published by Elsevier. Editorial advisory board member for Heliyon Journal (Dentistry Section), Editorial board member at Mathews Journal of Dentistry, International member at ADA (American Dental Association) and International member at Digital Dentistry Society (DDS), PhD degree in Operative Dentistry (2010), Master degree in Dental Science (2007, Bachelor of Dental Medicine & Surgery (BDS, 2001), Supervisor for more than 75 master and PhD thesis till present at conservative dentistry Cairo University and many international publications, PhD program coordinator, PhD course coordinator of nanotechnology, program director for internship program at conservative dentistry department, peer reviewer and mentor at Publons Academy.



Physicochemical characterization of nine cassava (*Manihot esculenta* crantz) cultivars from Chad

Nadjiam Djirabaye

Chadian Institute of Agronomic Research for Development (ITRAD), South Africa

ABSTRACT

'n Chad, despite the multiple culinary uses of cassava leaves and tubers, their nutritional values are untapped. In this In Chad, despite the multiple cullilary uses of cassava leaves and cases, and by Kjeldahl's method. Total sugars were determined according to the Luff-Schoorl method. For starch content, the polarimetric method of earle and milner was used. Mineral elements were carried out using an atomic absorption spectrophotometry. The cyanide was evaluated by the method of Williams and Edwards. Significant variability has been demonstrated in the leaves and dry tubers except for water content and dry matter. Analysis of the variances of the components of the tubers reveals that the water contents of the cultivars vary from 5.01% to 5.86%. The ash contents vary from 4.23% (cultivar DVA2) to 8.32% (cultivar DVL2). For total sugars, the values are between 53.63% (cultivar DVL2) and 57.99% (cultivars DVL12 and KA0303). The fiber contents are lower and vary from 1.74% (cultivar DVL12) to 1.92% (cultivars SB1366, DVA2, TL0101 and PG1314). The starch content varies from 28.93% (cultivar DVL12) to 31.05% (cultivar SB1366). The variations in mineral constituents of the tubers in mg/100g are Ca (145.21 - 250.08), Mg (83.89 - 165.22), P (147.34 - 360.78), K (1534.50 - 3064.09), Zn (0.75 - 0.82) and Mn (0.78 - 0.89). Iron concentrations are from 7.72 mg/100g (cultivar BA0909) to 60.62 mg/100g (cultivar DVA2). Analysis of the variances of the leaf constituents reveals high contents of scalcium for SB1366 (2108.41 mg/100g), of iron (Fe 54.26 mg/100g) and potassium (K 1866.86 mg/100g) for DVL12, of phosphorus for TL0101 (471.87 mg/100g), of phosphorus (470.36 mg/100g) and protein (30.74%) for PG1314, for magnesium for DVA2 (383.41 mg/100g) and copper for KA0303 (0.0147 mg/100g). The concentrations of hydrocyanic acids are high in both leaves than fresh tubers (85 - 150 ppm). Lowest values are observed in tubers (10 - 15 ppm) for cultivar DVA2. Principal component analysis of the physicochemical characteristics of the leaves revealed four groups: the first very rich in calcium, magnesium and average potassium contents. Groups 2 and 3 are poor in calcium and magnesium but group 2 has the highest potassium content while group 3 has an intermediate content. Group 4 is very rich in calcium but low in magnesium and potassium. According to tubers, three groups have been identified which are characterized by low, intermediate and high contents in phosphorus. Cultivars SB1366, DVA2, DVL2, TL0101 and PG1314 show promising nutritional values and chemical constituents even if some have high levels of hydrocyanic acids.

Conclusion: In conclusion, a significant variability of the physicochemical constituents was demonstrated at the level of the leaves and tubers. The concentrations of different minerals vary depending on the cultivar. The significant differences observed between cultivars testify to their richness in nutrients. The determination of the potential hydrogen cyanide identified cultivars that need to be detoxified before human consumption.

SPEAKER PROFILE:

Nadjiam Djirabaye has done his Diploma of Advanced Studies (DEA) in plant biology. Cheik Anta Diop University, Dakar-Senegal. He has received his graduate certificate in genetics and organic chemistry. He has done his Bachelor's and Master's degree in Biochemistry-University of Abidjan-Côte d'Ivoire Baccalaureate D. N'Djamena-Chad. He was the head of the intensification, diversification and valorization of plant production program (ITRAD). Member of the technical support team at the Scientific Department of ITRAD. Head of the Soil-Water-Plants and Foodstuffs Analysis Laboratory (ITRAD). He is currently the Scientific Director of ITRAD. He has several publications of scientific articles, technical sheets and posters.



Therapeutic investigations of beta-carotene in diabetic vascular dementia in rat

Arunachalam Muthuraman

Asian Institute of Medicine, Science and Technology, Malaysia

ABSTRACT

Vascular Dementia (VaD) is a major factor for the progress of stroke and other memory disorders. It is the second leading cause of death. The burden of VaD is higher in the aged population (>65 years). The progression of VaD occurs with lifestyle modifications i.e., fast food, smoking, and alcohol. The medicines for the treatment of VaD are limited. The present research designed to investigate the potential role of palm oil mill effluent derived Beta-Carotene (BC) in experimental model of diabetic VaD. The diabetic VaD was induced by administration of Nicotinamide (NA, 50 mg/kg; i.p.) followed by Streptozotocin (STZ, 50 mg/kg; i.p.). The test compound i.e., BC (50 and 100 mg/kg) and reference compound donepezil (1 mg/kg) were administered orally for 15 consecutive days. The changes of cognitive patterns i.e., Escape Latency Time (ELT) and Times Spent in Target Quadrant (TSTQ) were assessed by Morris Water Maze (MWM) test. Besides the changes of neurotransmitter i.e., Aacetyl Cholinesterase (AChE) were estimated in brain (hippocampus, cerebellum, entorhinal cortex, amygdala and septum) samples. The administration of STZ caused the significant changes of cognitive functions (increased ELT and decreased TSTQ) as indicated in the development of VaD when compared to normal group. The treatment of BC was ameliorated the cognitive dysfunctions against the STZ associated endocrine and neurotransmitter (elevated AChE) changes. The effects were similar to donepezil treatment group. Hence, it proved that, the administration of BC possesses the potential therapeutic effects in the management of diabetic VaD due to its potential anti-cholinergic effects.

SPEAKER PROFILE:

Arunachalam Muthuraman has completed his PhD at the age of 29 years from Punjabi University, India. He is the associate professor, department of pharmacology, AIMST University, Malaysia. He has over 70 publications that have been cited over 1853 times, and his publication h-index is 24. He has been serving as a reviewer and editorial board member of several reputed journals. This research work is supported by the Ministry of Education (MOE) through FRGS Research Grant (FRGS/1/2020/STG01/AIMST/01/1).



The inhibitory effect of caffeine on starch digestion

Irit Rutman-Halili

Hemdat Hadarom Academic College of Education, Israel

ABSTRACT

Introduction: Caffeine is a natural compound found in a number of plant species including coffee, tea and cocoa. It is a central nervous system stimulant of the methylxanthine class, and is probably the world's most widely consumed psychoactive drug. However, unlike many other psychoactive substances, it is legal and unregulated in nearly all parts of the world. While the ingestion of caffeine in the form of common beverages such as coffee and tea were previously considered to have the potential for causing harmful effects (particularly at higher doses), recent studies have provided evidence of several health benefits

Alpha-amylase is the major form of amylase in humans. It hydrolyses alpha bonds of large, alpha-linked polysaccharides such as starch and glycogen, and plays an important role in the digestion and metabolism of dietary carbohydrates. Recent studies have reported that caffeine alters saliva alpha amylase activity. However, the nature of this alteration is still not clear. Some studies reported that caffeine increased saliva alpha amylase activity, while, in contrast, others have shown it to inhibit the enzyme.

Aim: The aim of this study was to further investigate the effects of caffeine on the activity of isolated alpha amylase activity, using a spectrophotometric method. It was found that caffeine significantly reduced alpha amylase activity in a dose-dependent manner.

Conclusion: We postulate that the inhibition of alpha amylase caused by caffeine may reduce the amount of various sugars absorbed into the circulation from the digestive system. We suggest that these results may indicate a possible anti-obesity activity of caffeine.

SPEAKER PROFILE:

Irit Rutman Halili completed her PHD at the age of 36 years at Bar-llan University, Israel. She is a senior lecturer at the department of science education of the Hemdat Hadarom Academic College of Education, Israel, and also a director of research cooperation between the Katif Research Centre and the college. She has published her research findings in publications in a variety of research disciplines.



Spicy foods (chili peppers, ginger) in treatment of migraine headaches

Amos Gelbard

Zefat academic college, Israel

ABSTRACT

Migraine is a primary headache disorder characterized by recurrent headaches that are moderate to severe. Typically, the headaches affect one half of the head, are pulsating in nature, and last from two to 72 h. Associated symptoms may include nausea, vomiting, and sensitivity to light, sound or smell. Migraines are believed to be a neurovascular disorder with evidence supporting its mechanisms starting within the brain and then spreading to the blood vessels.

Hot spicy food is known to have a therapeutic effect in opening bodily pathways: in blood vessels (also known as a blood thinner) and in the respiratory system, and is known as an enhancer of tear shedding. Several studies have shown Capsaicin, the active component in Chili peppers and Ginger (*Zingiber officinale*) to have a very positive effect in treatment of migraine headaches, both as a routine therapy and in treatment of ongoing headaches.

Its effect, as reported by patients, was decisively effective in comparison to those getting placebo treatments, in all of the referenced studies.

In compliance with the above-mentioned knowledge on 'hot' spicy foods and the pathology of migraine headaches, it's safe to assume that such treatment, even just a dietary alteration towards eating spicier foods, could be decisively effective as a preventive against migraine headaches, in those suffering from it, and in treatment of such headaches.

SPEAKER PROFILE:

Amos Gelbard is a theology student at Zefat Academic College and wrote several essays, among them "Zinc in cancer therapy" and "Zinc in Cancer therapy revisited".



The Effect of BOPP packaging on the shelf-life of *citrus* sinensis cultivar Biondo di Caulonia

Monica rosa loizzo

University of calabria, Italy

ABSTRACT

Citrus fruits are an important source of bioactive compounds such as ascorbic acid, carotenoids, flavanonids, flavanone glycosides, and phenolic compounds. The effects of packaging on the maintenance of the quality of Citrus sinensis cultivar Biondo di Caulonia were investigated. For this purpose, fruits were stored at 5°C and 80% relative humidity for 45 days, wrapped in Biaxially Oriented PolyPropylene (BOPP) and compared with nonwrapped fruits. Physico-chemical fruit characteristics (headspace gas composition, pH, °Brixand CieLab parameters) were monitored every 15 days during storage. Bioactive compounds (Total phenol content, total flavonoid content, total carotenoid content and ascorbic acid) were also monitored as well as the radical scavenging potential by using 2,2 -azinobis-(3-ethylbenzothiazoline-6-sulfonic acid) (ABTS) and 2,2-Diphenyl-1-Picrylhydrazyl (DPPH) and Ferric Reducing Ability Assay (FRAP). No significant differences were recorded in samples packaged in BOPP film regarding color parameter. Both TPC (5213.20 mg gallic acid equivalent /L in BOPP packaged sample after 45 days storage) and TCC (5496.12 mg β -carotene/L at 0 day become 4228.96 mg mg β -carotene/L in control and 4982.03 mg mg β -carotene/L in BOPP packaged sample after 45 days storage) are preserved by the BOPP packaging as well as ascorbic acid and consequently the juice deriving from the samples packaged with BOPP has a greater antioxidant power than the unpackaged control (62.27 vs 72.41% inhibition of DPPH radical at 45 days storage, respectively).

SPEAKER PROFILE:

Monica Rosa Loizzo graduated cum laude in pharmacy at University of Calabria (Italy) in 1999. PhD in "Methodology for the development of new molecules of pharmacological interest" 2005, at University of Calabria; Master on clinical pathology at University of Calabria. From 2002 to 2004 she spent a period of stage at "centre for bioactivity screening of natural products" at King's College London (UK). In 2008 she spent a period of stage in the laboratory of "Area of Food Industries and technologies" of Politecnica delle Marche University (Ancona, Italy). From 18.12.2008 to 29.12.2017 she is researcher in Food science technology at department of pharmacy, health science and nutrition of University of Calabria. From 30.12.2017 she become Associate Professor. Loizzo author of 204 research paper, 17 book chapter and 10 Editorial. Her h index is 45 and 7229 citations. She is referee of several national and international Institutions and member of the Management Committee of COST Action "Eurocaroten" until 2020. She is associate editor for antioxidants (2019-today); FOODS (2019-today) and Italian Journal Food Science (2019-today).



Extra virgin olive oils extracted from different varieties cultivated in the province of Reggio Calabria (Italy): Quality parameters and health properties

Vincenzo Sicari

Mediterranean University of Reggio Calabria, Italy

ABSTRACT

The olive tree (*Olea europaea* L.) is one of the most important crops in Mediterranean countries, especially Italy, Spain and Greece. Extra virgin olive oil shows very interesting nutritional and sensorial pro-perties.

In this study, the physicochemical properties and bioactive compounds of olive oils from cultivars "Tondina", "Seminara" and "Mirtoleo", grown in the province of Reggio Calabria (Italy) have been evaluated. Polyphenols are a large family of compounds found in fruits and vegetables, which exhibit strong antioxidant activity by scavenging different families of Reactive Oxygen Species (ROS).

Dialdehydic form decarboxymethyl oleuropein aglycon, hydroxytyrosol acetate, dialdehydic form oleuropein aglycon, Pinoresinol, 1-acetoxypinoresinol, tyrosol and vanillic acid were the main phenolic compounds in all samples analyzed. Pinoresinol was the most abundant compound in the lignin fraction. In all oil samples analyzed the highest antioxidant capacity was attributed to Tondina oil (37.03 % of DPPH radical inhibition and 4.10 % of ABTS radical inhibition) compared to Mirtoleo (28.45 % of DPPH radical inhibition and 2.64 % of ABTS radical inhibition) and Seminara (17.96 % of DPPH radical inhibition and 1.78 % of ABTS radical inhibition). The main characteristics of the Tondina cultivar were a very high total phenols content (550 mg/kg of gallic acid) and α -tocopherol (225 mg/kg).

SPEAKER PROFILE:

Vincenzo Sicari is researcher at the department of AGRARIA of the Mediterranean University of Reggio Calabria. His research activity concerns in particular the characterization of antioxidant biomolecules and the preservation of foods with the use of plastic films with different permeability characteristics. Furthermore, it deals with the enhancement of agricultural products and by-products (medicinal plants, processing waste from the citrus industry processing waste from the tomato industry and the olive oil industry), through the use of traditional and innovative processes such as, the application of techniques with supercritical fluids, for the extraction of new products (functional molecules) with high added value. Innovative processes for the production of novel food ingredients and nutraceuticals. Referee for international and Italian journals in the field of Food science and technology. He has over 65 publications that have been cited over 800 times, and his h-index is 18. He is an editorial board member as Associate Editor of the Journal of Food Measurement and Characterization (Springer), IF 2.43.



Digital health, nutrition and healthy ageing

David John Wortley International Society of Digital Medicine (ISDM), United Kingdom

ABSTRACT

One of the greatest global health challenges is the ageing Society phenomenon which threatens the sustainability of public health services across the world. A combination of greater longevity, lifestyle related chronic health conditions such as obesity and a proportionately declining workforce means greater health costs for the elderly borne by a shrinking workforce. Healthy Active Ageing based around exercise, diet, hydration, sleep and mindfulness is key to future sustainability. This presentation shares some practical experiences of the growing number technologies designed to tackle this challenge including mobile health applications, the emerging science of epigenomics and gamification to encourage engagement and compliance.

SPEAKER PROFILE:

David John Wortley is a Vice President of the International Society of Digital Medicine (ISDM) and specialises in digital health and digital therapeutics for personal health management. He is a keynote speaker at international conferences on digital medicine.



Some methods of quality systems for food laboratories and their current uses

Elisabeth Borges Gonçalves

Embrapa Food Technology, Brazil

ABSTRACT

Embrapa Food Technology has been validating analytical and bioanalytical methods and using parameters from published international interlaboratory experiments and in-house validation tests to verify validation parameters. However, behavior of some quality parameters for laboratories has shown inconsistencies. Therefore, exploratory plots, such as stem-and-leaf, have shown good results when searching for outliers more suitable than those commonly used statistical tests. Moreover, uncertainty over the working range of some methods indicated changes, which mainly depend on the method and matrix. The literature has been changed and updated, and some publications have recognized that much research has to be developed in many cases. However, further attention has to be paid to validation parameters, especially regarding data characteristics, statistical methods, and matrices.

SPEAKER PROFILE:

Elisabeth Borges Gonçalves has completed her PhD at the age of 35 years from the University of Campinas (UNICAMP), Brazil. She worked in some universities as a professor and, after this, she has been working at Embrapa Food Technology on several projects from diverse mixed domains, such as sensory evaluation of foods; environmental, social, and economic impacts of food technologies; statistics, metrology and quality for food laboratory testing for many years. She has published about 100 articles and has served as an editorial board member at multiple scientific journals, besides being a member at regulated profession councils in Rio de Janeiro State, Brazil.



Alzheimer's disease and diabetes mellitus type 3

Thaísa Lopes Rodrigues Lieue University, Brazil

ABSTRACT

iabetes Mellitus (DM) is a disease with a high and growing prevalence in most countries. Recently, literature found a link between DM and the risk of developing Alzheimer's Disease (AD), one of the main mental disorders. Objective: Verify the prevalence of DM among individuals with AD. A descriptive, observational, cross-sectional study was carried out, in which 100 elderly people aged 60 years or over, of both genders and diagnosed with AD were studied. The participants, aged 18 years old or over, were the direct family members or those responsible for the care of those elderly people. Sociodemographic and clinical information was collected through an online questionnaire on the Google Forms platform and tabulated in the microsoft office excel program. Assessment scales of BADLs (Basic Activities of Daily Living) and IADLs (Assessment of Instrumental Activities of Daily Living) as well as the adapted QDRS (Quick Dementia Rating System) were applied and then correlated with the duration of DM using the Pearson's Correlation Test. Most of the AD patients were female (65.7%), with a low level of education (43%), overweight or obese (48%) and had as main comorbidities DM (51.5%) and Arterial Hypertension (57.5%). Significant differences were found in the degree of dependency scores according to the BADL (p=0,034) and IADL (p=0,028) assessment scales, and in the QDRS as well (p=0.036). According to Pearson's Linear Correlation Coefficient, duration of diabetes had very low intensity correlations with duration of Alzheimer's (r=-0.1), with the degree of dependency according to BADL assessment scale (r=-0,16), and according to IADL assessment scale (r=-0.14), and the degree of dementia according to QDRS (r=-0.15). The study apparently found a correlation between DM and a worsening of DA's symptoms, but further studies on the subject are suggested, since the sample size does not allow extrapolating the results to the population.

SPEAKER PROFILE:

Thaísa Lopes Rodrigues has completed her graduation at the age of 21 years from Presbyterian Mackenzie University, Brazil. She is still working on her studies, investing in courses and postgraduate studies. She has already 2 publications that were presented in SBAN congress in São Paulo, 2019.



Eating disorder and anxiety during Covid-19 pandemic: The Maghrebian experience

Saoussen Alouani

University hospital of Monastir, Tunisia

ABSTRACT

The Coronavirus pandemic is considered the worst hit that the world had witnessed in centuries. The impact of the pandemic, especially during the lockdown, was not only diverse but also worldwide. The African continent, including the Maghreb, was no exception. The aim of this study was to assess levels of anxiety and eating behaviors and their correlations in Maghrebian countries following the official outbreak of the COVID-19 pandemic. It is a cross-sectional study of 754 participants from Tunisia, Algeria and Morocco. it took place between April the 30th and July the 2sd 2020. The survey showed that eating disorder represented 45.9% of the sample while 26.8% (202 participants) matched the anxiety criteria. Statistical significant factors for eating disorder were male gender (p=0.002; OR= 1.760), underweight (p=0.021; OR= 0.306), anxiety (p=0.001; OR= 0.470), bulimia (p=0.000; OR= 0.794) and body dissatisfaction (p=0.000; OR= 0.920).

This rise goes along with other surveys in different parts of the world. These results can be explained by multiple reasons such as the "food insecurity" mechanism, the excessive feeling of boredom and loneliness resulting from social distancing and the overwhelming overthinking about the onset of a serious economic crisis. As this pandemic doesn't seem to have any end any sooner, larger studies are required to explain this international issue in order to come up with efficient solutions.

SPEAKER PROFILE:

Saoussen Alouani had her medical doctor degree at the age of 25. Then she had completed her master degree in nutrition and cancer therapy from Rennes University, France. She has worked long in Oncology department and her three scientific works are still under review.



International Webinar on

Global Healthcare and Nutrition

February 10, 2022

E-Poster





Consumption of dietary supplements and its association with excess weight in school children from Bucaramanga, Colombia

Edna M. Gamboa-Delgado

University of Santander, Colombia

ABSTRACT

Introduction: Childhood obesity is a global public health problem. One of the underlying causes of this complex and multi-causal event is related to high energy intake. The use of dietary supplements is considered necessary and effective in cases of demonstrated nutritional deficiencies, while improper use could exceed energy and nutrient requirements, leading to excessive body weight gain in children.

Objective: To determine the prevalence of consumption of dietary supplements and its association with excess weight in school children from Bucaramanga, Colombia.

Results: This study included children, between 6 and 12 years of age. 89% of the children had been breastfed and 74% had started complementary feeding at 6 months. The prevalence of the consumption of dietary supplements was observed in 49% of the children, of which 52% received more than one of these. The most frequently used dietary supplements corresponded to polymeric formulas, cod liver oil, zinc supplement with vitamins and minerals and multivitamin with iron, calcium and phosphorus.

Excess weight evaluated by BMI was presented in 44% of the children, with a prevalence of obesity of 22%, while 11% had a risk of thinness and 45% had an appropriate BMI for age. It was evidenced, by impedance, that 69% of the participants had a high percentage of body fat of the children who were overweight, 45% received dietary supplements in early childhood; however, no positive association was demonstrated between the consumption of these supplements and the nutritional condition presented.

Conclusion: Finally, it is necessary to continue developing similar projects that can evaluate the impact of dietary supplements at an early age on the increase in weight and body fat as another relevant factor in the increase in the prevalence of overweight and obesity in pediatric age.

SPEAKER PROFILE:

Edna M. Gamboa-Delgado has completed his PHD at the age of 36 years from National Public Health Institute, Mexico. She is professor in Nutrition department of Universidad Industrial de Santander, Colombia. She has over 50 publications that have been cited many times. She has developed several nutrition research projects related with chronic diseases and nutrition, nutritional epidemiology and evaluation of nutrition education programs.



Development of an antioxidant rich beverage using effervecent tamarillo fruit powder

Julie Fernanda Benavides Arévalo University of Santander, Colombia

ABSTRACT

Currently, people have an increasing trend towards the consumption of healthy foods having a large content of antioxidants. These substances prevent the oxidative stress caused by several pathologic conditions. Particularly, studies have found a significant number of phenolic compounds in the fruits of Solanum betaceum besides its nutritional properties. This study was focused on the production of an effervescent powder from the Solanum betaceum fruit, employing a mixture design in order to get an optimized product with a rapid solubilization time, and good sensory and microbial properties. The phenolic content and antioxidant activity of the optimized effervescent powder were also evaluated. Results showed the product containing lyophilized Solanum betaceum, maltodextrin, citric acid, saccharose, sodium carbonate and tricalcium phosphate at 30%, 22.8%, 20.0%, 15.0%, 12.0% and 0.2%, respectively, as optimal. The antioxidant activity of the effervescent powder was higher than that of the lyophilized powder. This was explained by the synergistic effect of the antioxidant power of the fruit and the excipients. The total phenolic content of the effervescent powder and lyophilized product were also measured and was the main responsible for the antioxidant power. On the other hand, the titratable acidity, pH, and total suspended solids of the final drink were 0.20 CAE /100mL, 4.06 and 0.9°, respectively. This product also showed no viable aerobic bacteria, molds or yeasts. This study proved that the Solanum betaceum fruit could be processed into an ideal effervescent antioxidant rich powder.

SPEAKER PROFILE:

Julie Fernanda Benavides Arévalo is a pharmaceutical chemist and Ph.D. pharmaceutical and food Sciences. Professional with 14 years of industrial, research and teaching experience in product design and formulation. Julie has developed products for commercial exploitation purposes, has led research and innovation projects. It has academic publications and papers. Among the lines of research that Julie investigates are pharmaceutical technology and bio pharmacy, colloids, organic chemistry of natural products, a physicochemical study of materials used in pharmacy, synthesis of organometallic complexes and oleo chemistry.



Intermittent fasting and cancer: A brief introduction to the Warburg effect

Saoussen Alouani

University hospital of Monastir, Tunisia

ABSTRACT

Pasting in cancer is an area of increasing researchers' interest, due to the results of clinical and preclinical research in animals, cell lines and yeast models investigating the Warburg effect reverse. The aim of the present study is to perform a systematic review of current studies analyzing the potential beneficial effects of intermittent fasting on cancers patients.

The literature search in our study has covered an interval of 20 years (from January 2000 until September 2021) and has managed to collect 23 relevant articles among 51,106 articles. Five studies have tested intermittent fasting as a preventive component against cancer, three of which are carried out in mouse models and two in humans predisposed to cancer. While, eighteen articles have documented the therapeutic effect of intermittent fasting during chemotherapy, including 7 studies in mouse models and 11 studies in cancer patients. Among the 11 clinical studies, only 7 studies were randomized and 6 were comparative. One clinical study investigated a short-term fasting of 7 hours, two studies on a 3-hour-short-term fasting, and two documenting the 24-hour-56-hour-72 hour fast distributed before and after chemotherapy, while 6 clinical studies chose the fasting mimicking diet as a therapeutic model in conjunction with chemotherapy. The intermittent fasting has been shown to be feasible, tolerated by patients, efficient—sometimes and sometimes neutral in reducing the side effects and toxicity of chemotherapy. It has been also evidenced that it is effective in parallel with chemotherapy to accelerate tumor regression. But these results are not conclusive.

Thus, a call for a universal unification of scientific experimental efforts is essential, in order to settle the debate and end up with a final answer.

SPEAKER PROFILE:

Saoussen Alouani completed her Medical Doctor degree at the age of 25. Then, she had completed her master degree in nutrition and cancer therapy from Rennes University, France. She has worked long in Oncology department and her three scientific works are still under review.



International Webinar on

Global Healthcare and Nutrition

February 11, 2022

Day 2

Oral Presentations





Biomedicine in 21st century by Huaier: The practical health maintenance and successful recovery from cancer

Manami Tanaka

Bradeion Institute of Medical Sciences, Japan

ABSTRACT

The time has come to reconsider the strategy of health maintenance, and compensation of genetic damage from ageing, and stresses in a course of life. Huaier therapy provides a realistic solution to the disease like cancer, which requires to overcome various problems problems during the long process toward the complete recovery. Anti-cancer effects of Huaier (Trametes robiniophila murr) are based on its clinical significance on cancer patients, and the researches were performed on the hypothesis that mono-targeting medicine such as conventional chemotherapy is not enough to cope with the disease derived from multi-dimentional factors.

Anti-cancer effects of Huaier were 1) cancer specific cell death, and elimination of resulted debris, 2) rescue of disruption in multi-functional, integrated signaling pathways, and 3) transctiption regulation of tissue regeneration by promotion of normal cell specification in induced pluripotent stem (iPS) / embryonic stem (ES) cells. For this purpose, Huaier initiates normal integration of inter/intra-cellular multi-signal trafficking, which requires striking qualitative, and quantitative genetic/genomic alterations.

Since 2017 to present, we have performed systematic MEGA-DATA (TELA-bite genetic information) transcriptome analysis by genome-scale mRNA, and small non-coding RNA sequencing using patients' specimens (clinical research), before, and after the Huaier administration. The quantitative (> 7.4 GB RNA sequencing of each sample), and qualitative (mean number=27.411 transcriptomes) analysis clearly exhibits drastic alterations amongst genome-wide expressed genes related to all the physiological systems, and pathways. In 2017, the rescue of Hippo signaling pathway, a typical model pathway integrating multiple signaling cascaes,were successfully proved as expected, the modulation of the cell fate was also observed in the immune system, i.e., in the process of hematopoietic cell lineage, reaction to virus infection, and related to many signaling pathways for cell growth, and proliferation.

In contrast, surprising enhancement, and compensation of gene function were observed almost all known transcriptional factor responsible for the correction of transcriptional misregulation. These altered transcriptional control together with the upregulation of gene function of p53, p16, Rb, PTEN, K-Ras, and c-myc, resulted in the significant changes in regulation of cell proliferation, and increased normal cell survival, and more importantly, altered cell fate shifted to embryogenesis. In order to recover from cancer, such a drastic integration of altered signaling molecules, and the control on signal trafficking is required. Surprisingly, strong embryogenesis followed by natural selection of iPS cells with stable growth was observed in one case of lung cancer (late stage 4). The patient has been long treated with conventional anticancer chemotherapy (= significant shut down of gene function).

In addition, Huaier has its potential to re-adjust the functional disruption in many kinds of signaling network, and its links to the impaired signal transfer inter/intra neurons, and in the neurodegenerative diseases such as Parkinson's disease. In total, these effects result in successful maintenance of homeostasis for a long-range of life.

SPEAKER PROFILE:

Manami Tanaka is Vice President at Bradeion Institute of Medical Sciences, Co. Ltd, Japan. She has completed her master degree in Tokyo Medical and Dental University (Medical School), Japan and She has completed her Ph.D. in Tokyo University (Pathology), Japan. She won Halasz Award at 17th International Symposium on Microscale Separations and Capillary Electrophoresis (HPCE 2004) Salzburg, Austria. February, 8-12, 2004. Her research interest is Oncology, Medical Pathology, Genetic engineering, Genome analysis (chromosomal level), Biodiversity, Microbiology and parasitology.



Culture clash of female Somali adolescents and sexual and reproductive health services in Oslo, Norway

Tamanna Afroz

International Centre for Diarrhoeal Disease Research, Bangladesh

ABSTRACT

Culture influences an individual's perception of health needs. The influence of culture also applies to Somali individuals' perception of their sexual, and reproductive health (SRH), and uptake of related services. An understanding of female Somali adolescents' SRH needs is vital to achieve inclusive health coverage. No research has, however, been conducted to explore the SRH needs of this population group in Oslo; hence, the aim of this qualitative study was to minimize the knowledge gap.

Methods: Fourteen young women aged 16–20 years were recruited using the snowball technique with purposive sampling. In-depth interviews using a semi-structured interview guide were used to collect data, and thematic analysis was applied.

Results: Participants perceived SRH as a very private matter, and open discussion of SRH was extremely limited owing to certain Somali cultural beliefs, and values. As the participants intend to practice chastity before marriage, they believed that existing SRH services were largely irrelevant, and inappropriate. Where they felt the need to access SRH services, participants wished to do so in a way they considered culturally appropriate.

Conclusion: Somali culture markedly influences individuals' perceptions of SRH services. It is recommended to modify existing SRH services by increasing confidentiality, and anonymity in order to take into account the cultural requirements of female Somali adolescents.

SPEAKER PROFILE:

Tamanna Afroz has studied medicine at the University of Rajshahi, in Bangladesh, and then worked as a physician for four years. Later, she has completed MPhil in International Community Health at the University of Oslo in Norway. Now, she is working as a researcher at International Centre for Diarrhoeal Disease Research, Bangladesh. She has both International and National publications in recent times. Her public health interests include sexual and reproductive health, global health, maternal and child health, and emerging & re-emerging diseases.



The landscape and environmental planning of sustainable medical and ecological recreation and population rehabilitation

Violetta Chernaya

RSMU of the Ministry of Health of the Russian Federation, Russian Federation

ABSTRACT

There is an objective need for plans, and models of sustainable recreational management, based on modern trends in landscape, and environmental planning, and design. The purpose of the study: scientific, and methodological substantiation of innovations in landscape, and environmental planning of the sustainable medical, and ecological recreation. Comprehensive, and synergistic approaches allowed us to develop a key diagram "Landscape, and environmental planning..." for use as a universal methodological model. The modern landscape, and environmental recreation planning in modeling natural, and natural-anthropogenic landscapes should be balanced by the tasks of sustainable nature management, and the tasks of their effective use for the needs of society. The creation of a scientifically grounded replicable model of sustainable nature planning – a territory of medical, and ecological recreation, and rehabilitation solves the problem of preserving the landscape.

SPEAKER PROFILE:

Violetta Chernaya has completed Ph.D. of Geographical Sciences and currently, she works as Associate Professor of the Chair of Disaster Medicine and Emergency Ambulance of RSMU of the Ministry of Health of the Russian Federation. Her research interests are environmental education and education for sustainable development, environmental resource studies, environmental safety, ecological tourism, medical ecology, medical recreation, and healthcare. She has over 50 publications and monographs. She worked in several project as author and co-author for "Model territory of continuous environmental education for sustainable development of the Ryazan region", "Center for ecological, medical and social-labor rehabilitation of children with disabilities and disabled people "YERLINO", "Health landscapes in the Ryazan region", Ecopark for the elderly and people with disabilities, disabled people "Healthy longevity".



Measuring the efficiency of public hospitals in Kuwait: A two-stage data envelopment analysis and a qualitative survey study

Abdullah Alsabah

Medical Services Authority, Kuwait

ABSTRACT

The recent drop in oil prices has challenged public sector financing in Kuwait. Technical, and scale efficiency scores for fifteen public hospitals in Kuwait from 2010 to 2014 were estimated using a two-stage Data Envelopment Analysis (DEA). Technical efficiency scores were regressed against institutional characteristics using Tobit regression to investigate the determinants of efficiency differences in hospitals. Semi-structured interviews were also carried out with fourteen public, and private hospital managers to qualitatively explore their perceptions, and experience about about factors affecting hospital efficiency. The mean technical efficiency score for all hospitals was 85.8%, an improvement of 2% since 2010. The mean pure technical efficiency score was 79.6%, improving from 75% in 2010 to 81.2% in 2014. The mean scale efficiency score was 91.8%, improving from 87.6% in 2010 to 94.2% in 2014. Only three hospitals were constantly technically, and scale efficient. Tobit regression showed that hospital efficiency was significantly associated with the average length of patient stay. Hospitals with more than 400 beds were potentially more technically, and scale efficient. The qualitative study revealed that external factors affecting efficiency commonly included implemention of legislative changes, and decreasing bureaucracy, while internal factors included increasing bed capacity and improving qualifications, and training of human resources. Most public hospitals in Kuwait were not technically, and scale efficient, but improvements were observed. Potential factors that affected the efficiency of hospitals in Kuwait were identified. These findings are useful to decision-makers in Kuwait for developing strategies to improve public hospital efficiency.

Keywords: Technical efficiency, Scale efficiency, Data envelopment analysis, Public hospitals, Kuwait.

SPEAKER PROFILE:

Abdullah Alsabah works at the Ministry of Defence as a Chief of Medical Services Authority, Kuwait.



Relationship between maxillary occlusal plane inclination and soft tissue harmony in adults with different sagittal skeletal malocclusions

Almustafa Alhumadi Hilla University College, Iraq

ABSTRACT

A harmonious soft tissue profile, as an important treatment goal in orthodontics, is sometimes difficult to achieve, partly because the soft tissue overlying the teeth, and bones is highly variable in its thickness.

Objective: To investigate the relationship between maxillary occlusal plane inclination, and soft tissue harmony of the face in different sagittal skeletal malocclusions.

Material and Methods: The study was a cross-sectional observational study. Lateral cephalometric x-rays of 160 individuals were collected from the Orthodontic clinic at the Faculty of Dentistry, Beirut Arab University, and divided into 4 equal groups based on ANB as a parameter of intermaxillary skeletal relationship: Class I (CI) ($0 \le ANB \le 4$), Class II division 1 (CII div 1) (ANB > 4 with normal or proclined upper incisors), Class II div 2 (CII div 2) (ANB > 4 with retroclined upper incisors), and Class III (CIII) (ANB < 0).

Hard tissue analysis included 1 angular measurement for maxillary occlusal plane (MxOP) inclination. Soft tissue analysis included 2 angular measurements for facial convexity, and 3 linear measurements for inter-jaw harmony, and 7 linear measurements for soft tissue thickness.

Results: There was significant correlation between MxOP angle, and facial contour angle, as well as Sn-Pog' for participants with CI. In CII div 1, there was a significant correlation between MxOP angle, and ULA-LLA, as well as chin thickness V. In CII div 2, there was a significant correlation between MxOP angle, and Sn-Pog', ULA-LLA, upper lip strain, chin thickness H, and chin thickness V. In class III, there was no significant correlation.

SPEAKER PROFILE:

Almustafa Alhumadi has completed his MSc at the age of 28 years from Beirut Arab University, Lebanon. He is a lecturer in the orthodontics department of Hilla University College of Dentistry, Iraq. He has over 5 publications that have been cited over 4 times, and his publication h-index is 1. He has been serving as a Member of the Iraqi orthodontic society. 2019 until now.



Bridging the gap between patient self-perception, and therapist apperception: CR conceptualization in psychotherapeutic process

Ofer Erez

Rotem Center for practical, Israel

ABSTRACT

ccording to Ciorbea, and Nedelcea, (2012) studies in psychotherapy have increasingly maintained the notion that A psychotherapy overestimates theoretical models, whilst minimising the influence of the therapist variables on the therapeutic process (Ciorbea, and Nedelcea, 2012). Moreover, meta-analytical research has illustrated no significant differences in the inefficiency of the different psychotherapy models (Wampold, 2001, Drisko 2004; Sprenkle, and Blow, 2004). Since 1960, the focus has been shifted to accurate, and controlled standards to evaluate the psychotherapeutic techniques. (Ciorbea, and Nedelcea, 2012). My basic assertion in this article is that when relating to psychotherapeutic encounters there is a distinction between the patient's content, and behavior, and the therapist's representation, and understanding of it. Regardless of the therapist's theoretical approach, he often encounters inconsistencies, in ways he perceives the patient, and/or his situation, and experience. Whenever the patient's expressions do not meet the therapist's expectations, the therapist experiences an anomaly. Taking into account that the therapist's unconscious is always present in the encounter, the fact the therapist is projecting is inevitable. However, in order to disentangle the relation between the therapist's projections, and the patient's experience, the therapist is obligated to correct, and amend his understanding. The characteristics of the transition from one therapeutic understanding to another, through detection of the appearance of anomalies is mediated by the cycle. This cycle which involves internal processes in the therapist's mind, and external activity in the actual dimension bares theoretical resemblance to the cycles of predictive processing described by Clark (2016) which involves "core perception - attention - action", in which internal models of the world, and their associated predictions play key roles in directing actions" (Clark, 2016). My practical experience supports the application of the suggested technique, in psychotherapeutic processes. By applying this cyclic technique, we can bridge the gap between the patient's experience, and the therapist's understanding of it.

SPEAKER PROFILE:

Ofer Erez is a senior lecturer and program leader in Rotem centre for practical, professional training. He acquired his B. A in psychology at Bar Ilan University, Israel, and his M.Sc in cognitive behavioral psychology at Derby University, UK. He conducted a doctoral research of professional practice process at Derby University, UK, investigating his joint practice with his professional practice partner Anat Ben Salmon, M.Sc. For the last 15 years, he has involved himself extensively in research in the field of practical psychotherapy knowledge development in psychotherapy, its communication to a trainee. He has investigated and produced developments in the fields of epistemology and research methodology and has conducted interdisciplinary research with a medical physician, Dr Anna Cristal-Lilov.



Parental intelligence- Actualization within parent's decision-making process

Anat Ben Salmon

Rotem Center for Practical Professional training, Israel

ABSTRACT

ccording to Hollman, (2015) parental intelligence is what parents use in their attempt to comprehend their child's Amind. Moreover, it is characterized by discovering meaning in the child's behavior, the attempt to understand the underlying features of the behavior, and how to clarify that behavior (Hollman, 2015). In contrast to this definition, we suggest that parental intelligence emerges with a parent's awareness to his own self, his history, background, experience, and aspiration which underlie his decision-making process in his behavior with, and in relation to his children (Ben Salmon, and Erez, 2021). According to our previous publication, parental intelligence is a conceptual abstract entity which has structure, and mechanism. It is therefore directs the parent's daily behavior as well as his decision making process while facing challenges in his parenthood. As with any conceptual entity we can only observe its concrete attributes which are evident in the behavior of the parent in relation to his children as well as with his parents (Ben Salmon, and Erez, 2021). In addition, we can observe the impact of parental intelligence implications in a child's reactions towards the parent's practices. Based on our practical experience as parental therapists, we conclude that parents usually perceive themselves as reactive in nature. Nevertheless, parents must acknowledge their primal position as mature adults, who are responsible for the setting in which the child is fostered. Therefore, we suggest an alternative perspective, which relates to children as reactive to their parents. Thus, adjusting the order of cause, and effect in relation to parent-child relationships. In this article, we suggest elaboration upon the different characteristics of parental intelligence, and their reflections in parent's practices. In addition, this review will suggest how parental intelligence can be extended.

SPEAKER PROFILE:

Anat Ben Salmon serves as the chairman of the Israeli Parental Counselling and Family Counselling Association. Over the past three years, together with Ofer Erez, she has broadcast a weekly radio show and has daily live broadcasts on social media networks, discussing mental health topics. she has published several academic publications in the last year and is involved in ongoing research of her practice, she serves on the editorial board of "Clinical images and case reports journal", she has more than 16 years of practical experience working with children, adolescents and parents. During her undergraduate studies, she worked as a therapist in the Welfare Ministry and served as a group therapist in a Mental health hospital in Ottawa, Canada, she is the comanager of Kelim Shiluvim L.T.D (established in 2006) that specialises in diagnosis and therapy and for individuals and families in both clinical and home settings and has treated hundreds of couples and families.



Effect of two different materials; Microgel p(NIPAM) and sodium fluoride on the depth and degree of occlusion of the dentinal tubules at different dentin depths

Salma Basyouni Hamada

October University for Modern Sciences and Arts, Egypt

ABSTRACT

Objectives: To evaluate the effect of two different desensitizing materials microgel p(NIPAM), and 5% sodium fluoride (NaF) on the degree of occlusion, and depth of penetration of the dentinal tubules on superficial, and deep dentin after immediate application, and thermocycling using environmental scanning electron microscope.

Materials and Methods: 20 non- carious, non-restored molars were included. Each tooth was cut in order to obtain four quadrants with total of 80 specimens. Specimens were divided into two groups according to aging. Then they were further sub-divided into two subgroups according to dentin depths. Specimens were further subdivided into four divisions according to the desensitizing material. After application of materials were completed according to each manufacturer's instructions, the specimens were evaluated for the depth of penetration, and degree of occlusion of each material using environmental scanning electron microscope. One-Way ANOVA followed by Tukey post hoc test was used to compare between more than two groups in non-related samples. Independent sample t-test was used to compare between two groups in non-related samples.

Results: p(NIPAM) showed the highest mean value without statistically significant difference with the varnish group regarding the degree of occlusion, either on immediate evaluation or after thermocycling.

Conclusion: Better occlusion of dentinal tubules was shown on immediate testing rather than after thermocycling regardless the dentin type, however, the three desensitizing materials showed more depth of penetration after thermocycling regardless the dentin type. All the desensitizing materials showed better occlusion, and depth of penetration in superficial dentin than in deep dentin.

Clinical relevance: p(NIPAM) microgel is a promising material in the treatment of dentin hypersensitivity, however further in-vivo studies are needed.

Keywords: Dentin hypersensitivity, Varnish, Thermocycling, Degree of occlusion, p(NIPAM), Depth of penetration.

SPEAKER PROFILE:

Salma Basyouni Hamada acquired her primary dental qualification the year 2012 from Modern Sciences and Arts University (MSA), Egypt, with high honors, and started the journey working as an intern in Egyptian Ministry of Health hospitals. She worked as a dental assistant in many clinics then as an operator. During this her passion for teaching, and helping undergraduates became bigger. In 2013, she was hired in MSA University as a teaching assistant and that was a dream came true. In April 2019, she became a member in the Royal College of Surgeons of Edinburgh (RCSEd) after passing the MFDS exam. She finished her master's degree in Conservative and Esthetic Dentistry (Operative Department) in March 2020, MSA University.



Entrepreneurship is the future of nursing

Eman Salman Taie Helwan University, Egypt

ABSTRACT

These advances are primarily related to improved diagnosis, and treatment, system cost-efficiency, and information technology integration. These advances have increased the need for competent professionals. Healthcare facilities across the world are inclined towards handing over unique roles to entrepreneurs. Nurse entrepreneurs use their professional nursing experience, and education to start their own business in the healthcare industry. Nurse Entrepreneurs combine healthcare knowledge with business sensibility to create successful business ventures focused on optimal healthcare delivery. Entrepreneurial nurses are changing the field of healthcare; nursing entrepreneurship provides nurses with self-employment opportunities which allow them to pursue their personal vision, and passion to improve health outcomes using innovative approaches. Becoming a nurse entrepreneur can give a nursing professional a significant measure of freedom to build their healthcare career on their own terms. However, this freedom is carefully shaped, and earned by a specific step-by-step process.

Key words: Nurse entrepreneurs, Entrepreneurship, Nursing profession.

SPEAKER PROFILE:

Eman Salman Taie is a professor of nursing administration, faculty of nursing, Helwan University, Cairo, Egypt. She was Ex. Head of Nursing Administration Department in Faculty of Nursing, Helwan University. She is International Certified Trainer & Human Resource Development Consultant in International Board for Certified Trainer (IBCT). She has more than 20 international published researches & four international published books. She is reviewer & member in the editorial board in many of the international journals.



The association between COVID-19 infection, and gastrointestinal diseases

Noha El-Sayed Ibrahim National Research Centre, Egypt

ABSTRACT

The pandemic of SARS-CoV-2 has proven to be a significant challenge. The virus's effect on the liver is unknown, but in patients with chronic liver disease, especially those in advanced stages, it can jeopardize survival, and cause decompensation, Due to the possible hepatotoxicity of several of the pharmaceutical drugs employed, treatment in this subgroup is complicated. Furthermore, patients with liver disease who have not contracted COVID-19 have been negatively impacted by the pandemic, as the reallocation of human, and material resources to the care of COVID-19 patients has resulted in a decrease in the treatment, diagnosis, and follow-up of patients with liver disease, which will undoubtedly have negative consequences in the near future. To reduce the pandemic' s impact on a group as vulnerable as liver disease patients, efficient reorganisation of hepatology units is a top concern. Patients with diabetes mellitus have a higher risk of developing coronavirus disease 2019 (COVID-19), which is caused by infection with the Renin-Angiotensin- Adosterone System 2 (SARS-CoV-2). COVID-19 may potentially increase the risk of hyperglycemia in infected people. Hyperglycemia, in combination with other risk factors, may modify immunological, and inflammatory responses, predisposing individuals to severe COVID-19, and potentially fatal results. The main entrance receptor for SARS-CoV-2 is Angiotensin- Converting Enzyme 2 (ACE2), which is part of the renin-angiotensin-aldosterone system (RAAS), Dipeptidyl Peptidase 4 (DPP4) may also operate as a binding target.

SPEAKER PROFILE:

Noha El-Sayed Ibrahim has completed her PHD at the age of 29 years. She is associate professor of medical biochemistry. She is working at National Research Center, Egypt. She has active participation in several national projects. She had published several articles in peer-reviewed good impacted international journals.



Psychological risk consequences in Italian nurses directly involved in the COVID-19 outbreak

Elsa Vitale

Local Health Company Bari, Italy

ABSTRACT

Background and Aim: Starting from November 2019, the SARS-CoV-2 infection had radically changed the experience of all of us. Since then, literature had greatly increased its number of scientific publications on this topic, particularly on the psychological conditions of healthcare workers directly involved in the care of Covid-19 patients, as anxiety, and depression conditions, and furthermore the fear due to recorded high numbers of cases all over the world, too. In this scenario, the present study aimed to identify the potential psychological malaise factors affecting the Italian nurses on the front lines of Covid-19 patient care since evidence suggested that they are at high risk of developing psychological disorders.

Methods: An online questionnaire was administered to 291 Italian nurses, containing information on: sex, years of work experience, region of Italy where nurses worked, and the intensive care unit assignment. Then, the anxiety disorders, the impact of the event, the depression, and the insomnia conditions, and their principal psychological factors influencing nurses during the health emergency were evaluated.

Results: Nurses worked in Northern Italy registered higher anxiety scores than others (p=0.023); the assignment to the intensive care unit (p=0.042) not influenced these scores. The total impact of event (IES-R) values evidenced that women recorded higher "Avoidance" (p=0.032), and "Hyperarousal" (p=0.003) values than men. The nurses who worked in Northern Italy recorded higher scores of "Hyperarousal" (p=0.010), and IES-R total (p=0.044). More women than men showed insomnia conditions (p=0.038), and nurses with a number of years of work experience not exceeding 10 years recorded greater levels of depression than the others (p=0.031). The psychological factors affected nurses included: the "Pleasure/Interest" dimension which correlated with the "Uncontrollable Thinking" (p=0.007), the "Unsatisfactory sleep/wake rhythm" (p=0.004), and the "Unmanageable pain, and weakness" (p=0.001).

Conclusions: Urgent need to implement psychological support programs for nurses who are facing the health emergency from Covid-19 on the front line.

SPEAKER PROFILE:

Elsa Vitale completed her doctorate at the University of Bari, Italy. Currently, she is a contract professor at the University of Bari, Italy for Nursing Degree. She is a member of the editorial board of international journals.



Challenges and obstacles faced by trainee female physicians: A integrative research on gender discrimination, stress, depression and harassment

Ahlam Alharbi Hamed King Abdulaziz University, KSA

ABSTRACT

This study's purpose is to assess the challenges and obstacles faced by female trainee physicians and suggest solutions that could resolve these issues and improve their performance. The study utilized an observational, analytical, cross-sectional design based on a self-administered open-ended and validated questionnaire which was distributed to 133 recruited female resident trainees of medical units in Jeddah, Saudi Arabia. The findings of the study revealed that 52% female trainees experienced gender discrimination, mostly (65%) by their superiors, while 40% were regularly harassed. About half (53%) of the interviewees were severely depressed, resulting in their reconsidering their career in medicine. A total of 14% thought of suicide, while four planned to end and five had attempted to end their life. However, only eight (6%) participants officially reported the cases of harassment to the accountable superiors. Half of them felt neglected by the healthcare administration, and one-fourth (24%) were underachieving in their studies and work. The study concluded that work dissatisfaction, limited clinical correspondence, high depression, burnout, stress and dropout rates-all deriving from common gender discrimination-compose the alarming and complex challenges that female trainee residents in Jeddah of various levels and specialties have to face.

Keywords: Jeddah; Challenges; Female physicians; Gender discrimination; Trainee.

SPEAKER PROFILE:

Ahlam Alharbi Hamed works as a faculty member at King Abdulaziz University, Saudi Arabia and as a teaching assistant at Rabigh College of Medicine Saudi Arabia. She completed her Residency training in General Surgery at National Guard Hospital, Jeddah, Saudi Arabia. Colorectal Surgery Fellow at St Mark's Hospital, United Kingdom.



Challenges in augmented and virtual reality

Hoshang Kolivand

Liverpool John Moores University, United Kingdom

ABSTRACT

There is no doubt that Augmented, and Virtual Reality (AR/VR) has changed the world recently, and has the potential to become a fascinating widespread requirement in daily life. In about two decades, AR/VR has turned into one of the most attractive topics involved in a variety of topics attempting to obtain satisfactory results. In this speech, I am going to present what I have done so far with AR, and VR, and new technologies. Current advances, and future directions of AR/VR, and wearable devices will be discussed with an eye on revenue of this technology. How to engage our current research with new technology to enhance our current research will be the next part of my speech.

SPEAKER PROFILE:

Hoshang Kolivand received his MS degree in applied mathematics and computer from Amir- kabir University, Iran, in 1999, and his PhD from Media and Games Innovation Centre of Excellence (MaGIC-X) in Universiti Teknologi Malaysia. Previously, he worked as a lecturer in Shahid Beheshti University, Iran. He has published numerous articles in international journals, conference proceedings and technical papers, including chapters in books. He is an active reviewer of many conference and international journals. He has also published many books in object-oriented programming and mathematics. His research interests include computer graphics and augmented reality.



Influence of Tunisian revolution on bullying at work in interns and residents

Irtyah Merchaoui University of Monastir, Tunisia

ABSTRACT

This study aims to compare prevalence and determinants of workplace bullying, in interns and residents before and after Tunisian revolution and to assess its influence on their quality of life. It was a two-step-cross-sectional study, carried out in 2009 and in 2016, in547 interns and residents in 2009 and 667 in 2016. The prevalence of workplace bullying decreased significantly (p <10-3) between 2009 (74%) and 2016 (43.6%). It was related to the professional status, gender, seniority, deliberate choice of medicine, satisfaction, serious family problems and hobbies in 2009 while it was related to professional status, nature of specialty, deliberate choice of medical studies and the satisfaction of the practice of Medicine in 2016. Most common acts were similar between both cohorts. Median mental and physical quality of life scores were below the mean baseline scores in both cohorts with no significant difference. Despite decrease in workplace bullying rate between both cohorts, its perception has not changed. Lawful criminalization, raising public awareness to reduce this phenomenon and prevent its negative effects are preventive measures to apply.

SPEAKER PROFILE:

Irtyah Merchaoui works at the University of Monastir, Tunisia.



Religiosity and mental suffering experiences among users of the Brazilian public mental health system: Transcendence, love and healing

Stephan Malta Oliveira

Fluminense Federal University, Brazil

ABSTRACT

The general objective of this research was to investigate the relationship between religiosity, and mental suffering 上 experiences in users of the public mental health system in a city in southeastern Brazil, with the specific objective of extracting philosophical, and existential implications from the study. The framework used consists of the existentialphenomenological approach, delimited in Marion's phenomenology, and in the existentialism of thinkers who focus on the notions of transcendence, and love, such as Kierkegaard, Jaspers, Lévinas, and Buber. In the methodology, semistructured interviews were carried out, applying the MINI - McGill University Illness Narratives Interview. The results led to the construction of the following categories of analysis: causal factors, suffering experiences, healing practices, social support, and positive transformation of the experience. The negative effects of religiosity were mainly due to the strict rules of the church, and the positive effects appeared in protection against suicide, social support, and religious rituals. The practices of helping others were infrequent, and reports related to the meaning of life appeared more like keeping oneself alive. These last two aspects are important indicators of mental health. Possibly, the greatest difficulty in accessing them is related to the participants' own psychopathological experience. The main factors related to the meaning of life reported were religiosity, and family relationships, which is in line with the Kierkegaardian, and Jasperian thesis that what enables reconciliation with anguish, and an authentic existence are the opening to transcendence (faith), and the love. Love as donation, and responsibility for others. In Buber, and Lévinas, transcendence takes place through genuine face-to-face encounters. Important implications for the clinic can be extracted from the research, such as the importance of attitudes towards the embracement, donation, and responsibility for the patient, which enable reconciliation with anguish, the transcendence or at least, to dealing with the suffering experiences.

SPEAKER PROFILE:

Stephan Malta Oliveira is adjunct professor of child neuropsychiatry at the Fluminense Federal University, Niterói, Brazil, He has completed postdoctoral degree in psychiatry from the Institute of Psychiatry of the Federal University of Rio de Janeiro, a doctorate in collective health from the Institute of Social Medicine of the State University of Rio de Janeiro and a master's degree in psychology from PUC-Rio.

Non pertinent demand from the Mobile Emergency Care Service in Porto Alegre, RS, Brazil: Nursing perspective

Andréa Márian Veronese SAMU Porto Alegre, Brazil

ABSTRACT

The study aimed to examine the demand to the Mobile Emergency Care Service (SAMU) considered not pertinent (DNP). This non pertinence is established when the case is not configured, by the regulator physician, as life-threatening situation, being unnecessary, therefore, sending ambulances to attend. At first, it was made an analysis of telephone calls in 2009. In second stage, 31 applicants from de DNP of that same year were interviewed. Semi-structured interviews were examined following the premises of Gronded Theory. The concepts of Anthony Giddens's Theory of Structuration contributed the analysis. Among the results, it is highlighted that, in 2009, the DNP to SAMU of Porto Alegre represented 33,2% das calls directed to 192. In qualitative analyses, there are described elements of DNP related to the agency of applicants of DNP, and the structure chosen by them to treat a health injury. These are elements of biological, economic, social, and cultural nature, and are products, and produces of DNP. The characterization, and analysis of DNP subsidize the proposal that nurses act in first aid workshops to discuss this issue – which is commonly discussed among health professionals – with the community. The other suggestion is to solve the problem of DNP in intersectoral scope, creating, and articulating together social networks, health services, education sector, social assistance setor, security, transport, among others. (Quantitative data has been updated for the International Conference on Global healthcare 2022 until 2020.).

SPEAKER PROFILE:

Andréa Márian Veronese completed Ph.D. in nursing at the Federal University of Rio Grande do Sul. Currently, she is a care nurse at SAMU Porto Alegre, Rio Grande do Sul, Brazil.



Caffeine for apnea of prematurity; past, present and future

Prem Fort

Johns Hopkins University School of Medicine, United States of America

ABSTRACT

Annually, 15 million babies are born premature worldwide. In the United States alone, 1 out of 10 babies are born premature every year. This leads to a healthcare cost of approximately \$26 billion per year in the US. Apnea of prematurity is one of the most common diagnoses in preterm infants, affecting up to 50% of infants born less than 32 weeks, and practically all premature infants of gestational ages below 28 weeks at birth. Caffeine has been the standard of care for the management of apnea in preterm infants for decades, with the largest trial published in 2006. Caffeine works by blocking adenosine receptors in the brain, which ultimately lead to improved signaling, and other of the respiratory center, and other respiratory mechanisms in preterm infants. Caffeine doses have increased nearly every decade, and the way caffeine has been given has also varied in clinical practice. Many years after it was first used, we are still unsure of the optimal dose or timing of caffeine. Although the safety profile of caffeine is wide, and generally considered safe, even in the smallest of infants, as doses have increased, there is caution from the pediatric, and neonatal community as to possible deleterious effects of high doses of caffeine, affecting cerebral perfusion, and ultimately long-term neurodevelopment. However, higher doses have been linked to improved respiratory outcomes in the same population. We review the studies historical use of caffeine to treat AoP as well as recent studies evaluating current, and higher doses; Caffeine, its past, present, and future.

SPEAKER PROFILE:

Prem Fort is the chair for the research council at the maternal, fetal, and Neonatal institute at Johns Hopkins All Children's Hospital. He is a board-certified pediatrician and neonatologist with a research focus in respiratory medicine in preterm infants. He attended completed his pediatrics training at Duke University Medical Center, and Neonatal-Perinatal fellowship at the University of Alabama in Birmingham. He has successfully presented research studies at the National Child Health, and Human Development (NICHD), and he is currently involved in a multitude of multicenter, regional, and national clinical trials. He is recognized nationally, and internationally as an expert in respiratory care with minimally invasive methods of surfactant administration, a drug that is needed for preterm infants to breath. He serves on international committees, and is a member of editorial board, and expert reviewer of reputed journals.



Barriers to digitization of health information in Kenya and Laos

Daniel Toshio Harrell

Austin-Dell Medical School, United States of America

ABSTRACT

Introduction: Throughout the COVID-19 global pandemic, the need for improved coordination between patients, clinics, and healthcare authorities has become apparent toward up-to-date evidence- based public health decisions. The digitization of medical records has been transformative to clinical workflows, and medical data management enabling seamless exchange of health information. Although Low-to Middle-Income Countries (LMIC)' health systems would benefit from higher adoption of Electronic Medical Records (EMRs), they have experienced low adoption in many communities. Thus, we sought to identify these barriers to digitization of medical records in Sub-Saharan African, and Southeast Asian clinical settings.

Method: We designed a custom cloud-based EMR system based on local patient-held mother, and child booklets. Our Women, and Infant Registration System (WIRE) was used in rural public-sector clinics in Kenya, and Laos by healthcare workers during routine visits. Presenter Name: Daniel Toshio Harrell, PhD Mode of Presentation: Oral Contact number: +1 (512) 426 -1338 After 31 months, we conducted in-depth interviews with the healthcare workers, and analyzed quantitative measures to elucidate WIRE's impact to clinical workflows, and identify barriers to digitization of health information.

Results: The 20 healthcare workers reported positive impressions of WIRE's features, and usability. Furthermore, they highlighted five barriers: 1) mother's resistance, 2) need for training of staff, 3) double work between paper, and digital records, 4) need for improvements of working environment, and technical infrastructure such as power, and internet in clinics, and 5) need for resources. These reported barriers were reflected in the logistic regression model for performance, and motivation.

Conclusions: The digitization of medical records around the globe will improve medical record management for healthcare workers, and officials, and enable better coordination between healthcare systems, and their patients. Proper implementation of digital health systems influences healthcare workers' satisfaction, and patients' empowerment. In order to further digitize health information toward an inclusive global healthcare eco-system, EMR system design, and implementation must also focus on improving patient, and community engagement, and clinical infrastructure.

SPEAKER PROFILE:

Daniel Toshio Harrell is a medical researcher, and IT project coordinator at the University of Texas at Austin – Dell Medical School (USA). His research focus, as a ripple fellow, is exploring uses of blockchain technology, and health information exchanges toward creating a more patient-centric healthcare record, and improving interoperability in a fragmented healthcare environment. He aims to design, and manage healthcare and data-acquisition solutions to help patients better interact with their healthcare providers, and systemsnursing at the Federal University of Rio Grande do Sul. Currently, he is care nurse at SAMU Porto Alegre, Rio Grande do Sul, Brazil.



Resetting policies to end family homelessness

Jacqueline A Hart Bassuk Center, United States of America

ABSTRACT

Housing is health. Experiencing housing instability, with homelessness on the farthest end of the spectrum, is associated with measurably negative outcomes. This devastating experience confers multigenerational consequences, particularly for families since children are disproportionately represented. Despite methods of calculation that underestimate the total, families currently comprise more than one-third of the overall homeless population in the United States, with numbers on the rise due to the COVID-19 pandemic. Complicating that further, most children in such family units are younger than six years old, a vulnerable time for brain and other development. Assumptions regarding the makeup and causes of homelessness drive policy and, in turn, the allocation of resources for programs and services. Solutions should focus on the scope and outcomes of all people experiencing housing instability, including children and families who are often hiding in plain sight. During this session, we will challenge suppositions that contribute to overlooking families and children experiencing housing instability, starting with terms and definitions for this demographic, like "doubling up" and "residential mobility." We will also explore the risks and needs of children experiencing housing instability in the context of Adverse Childhood Experiences (ACEs); discuss why services matter and how to integrate with affordable housing; and contrast the magnitude of the problem in the U.S. compared with other countries grappling with homelessness. We'll conclude with examples of evidence-based solutions to help break the cycle of housing instability for families and to support opportunities for impacted children to grow and thrive.

SPEAKER PROFILE:

Jacqueline A. Hart works at the Bassuk Center, United States of America. She has Published 100s of columns and Q&As on integrative medicine for magazines and Webzines and serving as Medical Director and Medical Editor for an integrative medicine journal watch.



Accelerating COVID-19 Treatment Interventions and Vaccines (ACTIV) – Agent selection and master protocols for evaluation of candidate COVID-19 therapeutics

Stacey J Adam

National Institutes of Health, United States of America

ABSTRACT

Working in an unprecedented timeframe, the Accelerating COVID-19 Therapeutic Interventions, and Vaccines (ACTIV) public-private partnership rapidly designed a unique therapeutic agent intake, and assessment process for multiple types of candidate treatments (preclinical, and clinical antivirals, immune modulators, SARS-CoV-2 neutralizing antibodies, and organ supportive) for COVID-19, reviewing over 800, and advancing over 30 agents to trials for testing. ACTIV also developed, and launched ten master protocols between April 2020, and August 2021 to allow for the coordinated, and efficient evaluation of these over 30 investigational therapeutic agents. The ACTIV master protocols were designed with a portfolio approach to serve multiple patient populations with COVID-19: outpatient mild to moderately ill, inpatient moderately ill, and inpatient critically ill, and designed to test the spectrum of the disease pathophysiology. Each protocol, either adaptive or pragmatic, was designed to efficiently select those treatments that provide benefit to patients while rapidly eliminating those that were either not effective or safe. For both the agent prioritization, and master protocol development ACTIV has captured lessons learned that may be useful in meeting the challenges of a future pandemic.

SPEAKER PROFILE:

Stacey J. Adam plays a leadership role at the FNIH, helping to lead many public-private partnerships, such as Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV) the PPP that evaluated hundreds of available therapeutic agents with potential application for COVID-19, prioritized them, and designed and launched multiple master protocols to test them. Stacey oversees the Cancer, Metabolic Diseases and Clinical COVID Research portfolios at the Foundation for the National Institute of Health (FNIH). Beyond ACTIV other major partnerships under her guidance include the two steering committees of the Biomarkers Consortium and their projects, Partnership for Accelerating Cancer Therapies (PACT), and the Lung Master protocol (Lung-MAP) clinical trial. Prior to FNIH, she was a Manager at Deloitte Consulting within the Federal Life Sciences and Healthcare Strategy. She received her PhD at Duke and postdoctoral training at Stanford.



Caribbean diaspora health initiatives – An intersectional, Inter-Professional approach to health equity

Farzanna S Haffizulla

Dr. Kiran C. Patel College of Osteopathic Medicine, United States of America

ABSTRACT

Background: Obesity prevention, and associated co-morbidities require a multi-tiered, culturally sensitive, population-based approach. South Florida is home to approximately 75% of Florida's total Caribbean immigrant population. This project is the first Caribbean-focused intervention using the Go-Slow-Whoa which designates whether a food or beverage should be chosen frequently (Go – green), less often (Slow – yellow), or rarely (Whoa – red) based on nutritional content.

Specific Aims: 1. To create, and evaluate culturally appropriate nutrition materials for the Caribbean diaspora population in Broward County (i.e., tailor existing GSW evidence-based materials for this population). 2. To quantify which social determinants of health are most relevant to this population.

Methods: The qualitative arm consisted of focus groups with from five Caribbean countries most represented in South Florida. The quantitative arm employed descriptive, and inferential statistics to analyze social determinants of health obtained from a modified National Association of Community Health Centers' PRAPARE survey. Intercept survey data was also collected.

Results: We found that 92% possessed housing, and 92% do not have trouble paying for housing or electrical/heating bills. Most participants (65.8%) report that they primarily access health information at a clinic or doctor's office. While 50% face no barriers accessing healthcare, 50% participants faced at least one barrier. Most commonly, cost (34.2%). Our intercept surveys indicated that our revised, culturally appropriate materials were helpful in making positive food, and beverage choices. Further study is required to determine which SDOH variables are relevant to this population

SPEAKER PROFILE:

Farzanna S. Haffizulla is chair of the department of internal medicine at Nova Southeastern University's (NSU) Dr. Kiran C. Patel College of Osteopathic Medicine (KPCOM) and former assistant dean for community and global health and founding team member at NSU's College of Allopathic Medicine (NSU MD). She is a past president of the American Medical Women's Association, founder of their Fellowship Program and Preventive Medicine Task Force and is currently leading efforts to promote health equity and eliminate health disparities in the burgeoning, underserved Caribbean Diaspora community through her work as NSU's Principal Investigator and Founder of the Caribbean Diaspora Healthy Nutrition Outreach Project. Research from this continuously funded project was published in the Annals of Global Health and received the faculty-led award at Baylor College of Medicine Health Equity Showcase. In line with health disparities highlighted by the COVID-19 pandemic, she served as Principal Investigator and senior author of Racial and Ethnic Disparities in COVID-19 Outcomes: Social Determination of Health, published in the International Journal of Environmental and Public Health. She is a sought-after speaker and authored numerous publications and 2 books, Harmony of the Spheres: Career, Family and Community and, Lead with your Heart: A Doctor's Rx for Personal and Professional Success.

International Webinar on Global Healthcare and Nutrition



Making decision-making visible- teaching the process of evaluating interventions

Angela Benfield

University of Wisconsin-La Crosse, United States of America

ABSTRACT

Dignificant efforts in the past decades to teach Evidence-Based Practice (EBP) implementation has emphasized Dincreasing knowledge of EBP, and developing interventions to support adoption to practice. These efforts have resulted in only limited sustained improvements in the daily use of evidence-based interventions in clinical practice in most health professions. Many new interventions with limited evidence of effectiveness are readily adopted each year—indicating openness to change is not the problem. The decision-making (assessment, and intervention selection) process in the clinical setting is highly reliant on heuristic reasoning due to the speed of real-time interactions. The selection of a specific intervention is the outcome of an elaborate, and complex cognitive process, which is shaped by how they represent the client's problem in their mind, and is mostly invisible processes to others. Importantly, the cognitive representation can be "fuzzy" or incomplete even to the thinker. Therefore, the complex thinking process that support appropriate adoption of interventions should be taught more explicitly. Making the process visible to healthcare providers increases the acquisition of the skills required to judiciously select one intervention over others. Specifically, using strategies which make thinking visible supports the healthcare provider in developing a rich, evidence-informed cognitive representation of client problems, and the possible interventions which should be considered. One's cognitive framing of the problems underly the heuristic reasoning, and richer, evidence-informed models are more likely to support the selection of appropriate actions. The purpose of this presentation is to provide a review of the selection process, and the critical analysis that is required to appropriately decide to trial or not trial new intervention strategies with patients.

SPEAKER PROFILE:

Angela Benfield is an occupational therapist with over 22 years of clinical experience, mostly in pediatrics, and an assistant professor of occupational therapy. Her research explores the skills, knowledge, and habits of mind, and practice which support establishing competency, and the development of expertise. She also examines the properties of educational activities which support these habits, and the development of critical thinking in students. She developed the measure of evidence-informed professional thinking using rasch analysis which allows for the identification of healthcare professionals whose habits of practice may limit their ability to maintain competent practice or develop expertise.



Evolution of a DNP program during a national crisis

Mary Wyckoff and Rebecca Rogers Samuel Merritt University, United States of America

ABSTRACT

The purpose of the project is to evaluate:

The implementation of the Diffusion of Innovation (DOI), facilitate the development of practice and projects in the Doctor of Nursing Practice (DNP) to enhance practice change through online and individual interactions, which reduces uncertainty and improves self- efficacy in the DNP program?

The goals are the graduation of leaders, with Higher Order of Thinking (HOT) ready to practice as DNP Leaders and DNP/FNP with completed projects effecting practice change. These goals incorporate change through practice and the dissemination of outcomes and through poster presentation and publication. This will continue to be demonstrated through presentation, national, local and through publication.

The DNP program previously had few graduates with classes frequently less than 10. Now through implementing DOI, innovation and development of the program has enrolled over 150 students with graduations increasing yearly, with outcomes changing practice daily. Based on the success and evolution of the program with the implementation of the philosophy of education for the Doctor of Nursing Practice is focused on innovation, diversity and the living environment, which encompasses each student to experience a quality education.

The evolution to DOI was through a diverse experience and evaluation of the needs of the student to assure the students were individually precepted, chairs / faculty were supported and learning was a 360-degree adventure.

In our current situation of healthcare, the experience of the student should prepare the individual to manage patients in difficult, existing environments, including in the midst of the pandemic, bringing care to the population and prepare the individual to be innovative in managing the healthcare needs across the continuum from newborn to the chronicity of geriatric population.

SPEAKER PROFILE:

Mary Wyckoff is the Director of Special Projects for the DNP program at Samuel Merritt University. She has presented Nationally and Internationally over 100 presentations and has 23 peer reviewed publications. She has worked in conjunction with Dr. Rogers to develop and evolve the DNP program at Samuel Merritt University.

Rebecca Rogers is the Director of the Doctor of Nursing Practice (DNP) Program at Samuel Merritt University. She has presented at several conferences and has multiple peer reviewed presentations. She is a fellow in Nursing Leadership from Duke University, Raleigh-Durham NC, USA and is highly experienced in leadership within the nursing community. She works closely in conjunction with Dr. Wyckoff, and together they have developed and grown the DNP program during a national pandemic through grit and the use of DOI.

A push-to-talk application as an Inter-professional communication tool in an emergency department during the COVID-19 pandemic

Khaled Soliman

King Abdullah Bin Abdulaziz University Hospital, KSA

ABSTRACT

Objective: To assess the effects of using a smartphone-based push-to-talk (PTT) application on communication, safety, and clinical performance of emergency department (ED) workers during the COVID-19 outbreak.

Design: An observational, cross-sectional study.

Setting: ED in an academic medical center.

Participants: All ED staff members, including physicians (consultants, specialists, residents, and interns), nurses, emergency medical services staff, technicians (X-ray), and administration employees.

Interventions: Eligible participants (n=128) were invited to fill out an online questionnaire 30 days after using a PTT application for sharing instant voice messages during the COVID- 19 outbreak.

Main Outcome Measures: Self-reported data related to communication, implementation of personal protective measures, and clinical performance at the ED were collected and analyzed on a 5-item Likert scale (from 5 [strongly agree] to 1 [strongly disagree]). Also, the proportions of favorable responses (agree or strongly agree) were calculated.

Results: Responses of 119 participants (51.3% females, 58.8% nurses, and 34.5% physicians; 90.4% received at least one notification per day) were analyzed. The participants had favorable responses regarding all domains of communication (between 63.0% and 81.5%), taking precautionary infection control measures (between 49.6% and 79.0%), and performance (between 55.5% and 72.3%). Receiving fake and annoying alerts and application breakdowns were the lowest perceived limitations (between 12.5% and 21.0%).

Conclusion: The assessed PTT application can be generalized to other departments and hospitals dealing with patients with COVID-19 to optimize staff safety and institutional preparedness.

Keywords: Communication; Emergency department; Pandemic; COVID-19.

SPEAKER PROFILE:

Khaled Soliman works at the King Abdullah Bin Abdulaziz University Hospital, KSA.





International Webinar on

Global Healthcare and Nutrition

February 11, 2022

Video Presentation





Technology innovations in health: Using machine learning techniques to detect diseases

Lubnnia Souza

University of Pernambuco, Brazil

ABSTRACT

Healthcare is one of the fastest-growing sectors today, and is at the center of complete global reform, and transformation. In the past, a large fraction of clinical data was ignored (or not even collected). This limitation was due to the size, and complexity of the data, and the lack of techniques for collecting, and storing this data. These data were often underutilized, and devalued; however, new, and improved methods of data collection, and storage (e.g., electronic health records) offer opportunities to address the issue of analytics. With the advent of medical devices, and electronic medical records, the amount of available medical data has grown exponentially, and this has also increased the potential for specific techniques such as machine learning (ML), and artificial neural networks (ANN) to learn medical tasks. Machine learning solutions are used for a myriad of health-related uses; including helping doctors determine personalized prescriptions, and treatments for patients, choosing the best medications, determining patients at high risk for poor drug outcomes, improving patients' overall health, and helping patients determine when, and whether to schedule follow-up appointments, all at a reduced cost because, such techniques, and methods help identify patterns in data, thus keeping patients out of expensive, and time-consuming emergency care centres. This lecture aims to describe how technology is intrinsically related to the health area, i.e., it will address such evolution, as well as, it will describe some machine learning techniques that have been used for the prognosis of disease.

SPEAKER PROFILE:

Lubnnia Souza is a PhD student in computer science at the University of Pernambuco (UPE). Master in Computer Science from the Federal University of Pernambuco (2015). Graduated in Analysis, and Systems Development at the Faculty of Philosophy Sciences, and Letters of Caruaru (2010). She has experience in the field of computer science, with an emphasis on computer systems, acting mainly on the respective themes: information system, and software development. Works with research related to: modelling, and performance evaluation of manufacturing processes, modelling, and performance evaluation of business processes, using reliability block diagrams (RBD), stochastic Petri nets (SPN), Markov chains, and neural networks. She has publications in national, and international journals, books chapter, and magazine. She presented papers, and participated in several national conferences.



International Webinar on

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E-Poster





Family context, identity and Internet use: A cross-sectional study in a group of Italian adolescents

Monica Pellerone and Stesy Giuseppa Razza Kore University of Enna, Italy

ABSTRACT

iterature has demonstrated the adaptive function of identity, and family dynamics toward prevention of behavior Liproblems in adolescence. In this phase, the Internet use becomes a tool necessary for the realization, and selfexpression, which could become a refuge in which to regulate their own emotional states, eliciting a fragmentation of identity personal. The objective was to investigate influence of dysfunctional family dynamics on the Internet use, and school performance. The research involved 100 Italian students (40 males, and 60 females) aged between 14, and 20 years (mean =15.99, standard deviation = 1.94). The research lasted for 1 school year. Participants completed an anamnestic questionnaire to measure: age, gender, school performance, and educational level of participants, and their parents; the family assessment device; and an ad hoc self-report questionnaire, named "Adolescents, and Digital Technologies" to measure: frequency of use of social networks, and Internet, type, and motivation for the use of social networks, number of people known virtually, mood perceived following their use. Data preliminary show that only the age seems to influence the Internet use; furthermore data show a correlation between social networks, and Internet use with a low school performance. Results underlines the presence of a negative correlation between problem solving skills - within family context - and the use of social networks. The regression analysis shows the predictive role of the intra-family communication on Internet use, and low level of school performance; these variables are predicted by family emotional involvement too. Family is considered the privileged context on which to intervene to reduce the adolescents' behavior problems, and, above all, to prevent the possible presence of difficulty in management of internalizing symptoms in adolescence.

SPEAKER PROFILE:

Monica Pellerone is psychologist and psychotherapist. She has received the title of P.h.d in "Psychology of guidance and psychology of the learning processes". She is associate professor at the "Kore" University of Enna. She is serving as an editorial board member and associate editor of several reputed journals. Prof. Monica Pellerone has carried out research in the field of developmental psychology and education investigating the following research topics: risk and protective factors in pre-adolescence and adolescence; analysis of the cognitive factors, motivational and personality in predicting school and academic success of pre-adolescents and adolescents.



As influences the type of nutrition in university performance

Antonio Viñuela University Castilla-La Mancha, Spain

ABSTRACT

Healthy lifestyles are crucial on intellectual development of university students, but this topic has been hardly analyzed.

For this reason, the objective of this research is to determine whether there is a relationship between the eating habits of the first-year nursing students, and their grades.

University task requires high energy investment. Recommendations for a healthy lifestyle to obtain good nutritional parameters require feed planification with four or five meals a day in a regular manner, and with sufficient quality to obtain the necessary nutrients. Scarce or low-quality food not only have serious health consequences, but reduce levels of memory performance. Inadequate feeding lead to poor nutrients that will impact in our quality of live including cognitive functions. In this study, we have analyzed the influence on nutritional habits on first-year nursing students, and their academic performance. If eating habits influence your school performance in some way. To do so, three experimental groups:

- 1) Students living with their parents.
- 2)Students living in university residences.
- 3) Students living alone or sharing a flat.

Students are requested to fill a survey (1 to 5) depending on their satisfaction degree. The questionnaire includes items about five daily meals, methods of preparation, food consumed, time that is dedicated to each meal. Expected results are differences among the three different groups on their academic results, and nutritional advise to improve their health, and performance.

SPEAKER PROFILE:

Antonio Viñuela completed his doctorate at the University of Salamanca. He did his postdoc at the Ramón y Cajal Hospital. Later, he was head of a Molecular Genetics laboratory. Currently, he is a professor at the University of Castilla-La Mancha. He have 30 papers. He is a member of the editorial board of international journals.



Effects of Branched chain α-keto acid dehydrogenase (Bckdh) activation on fatty acid transport and oxidation – A study on the adipocytes differentiated from visceral Adipose-derived Mesenchymal Stem Cells (AdMSCs) obtained from lean as well as morbidly obese men with or without metabolic syndrome

Elżbieta Supruniuk Medical University of Bialystok, Poland

ABSTRACT

In past few decades, a strong association of obesity, and insulin resistance was demonstrated with increased circulating levels of branched chain amino acids. The study aimed to assess the effect of BCAA catabolism activation on the processes of fatty acid transport, and oxidation in Adipose-derived Mesenchymal Stem Cells (AdMSC) isolated from visceral adipose tissue. Visceral adipose tissue was obtained from four lean males, three morbidly obese males without the metabolic syndrome,e and three obese men with metabolic syndrome. Immunophenotypic characterization of AdMSC was performed using flow cytometry. In order to induce BCAA catabolism, differentiated AdMSC were incubated for 72 hours with 40 µM, and 160 µM of BT2, i.e., the selective inhibitor of Bckdh kinase. The impact of BT2 on fatty acid uptake was examined based on the expression level of transporting proteins (i.e., CD36/SR-B2, and FATP4), and by means of liquid scintillation. The degree of fatty acid oxidation was determined based on the release of CO2, and acid soluble metabolites content in cells incubated with 14C-palmitate for 16 h. Additionally, the level of PGC- 1α , and β -HAD were evaluated using real-time PCR, and Western Blot techniques. We showed that cells retrieved from obese men had lower total expression of fatty acid transporting proteins, although these differences were less profound when considering only plasmalemmal content of transporters. BT2 reduced the CD36 transcript content in visceral adipocytes. Moreover, the release of acid soluble metabolites was enhanced in adipocytes from morbidly obese patients. ASM content substantially increased in cells treated with 160 µM of BT2 derived from morbidly obese men. In conclusion, BCAA metabolism activation coincides with reduced import of fatty acids to adipocytes, and, in cells obtained from obese individuals, with enhanced level of noncomplete fatty acid oxidation.

This work was supported by the National Science Center (Poland) under grant 2020/04/X/NZ3/00406.

SPEAKER PROFILE:

Elżbieta Supruniuk is a research and teaching assistant in the Department of Physiology at Medical University of Bialystok in Poland. She received her PhD degree with a dissertation entitled 'Effects of the pharmacological stimulation of PGC-1α co-activator on lipid metabolism in skeletal muscle cells'. Her scientific interests concern the relationship between the most important energy substrates (i.e., glucose, fatty acids and amino acids) and their contribution to metabolic disorders. Main techniques applied in the realization of her scientific research involve gas liquid chromatography, high-performance liquid chromatography, liquid scintillation, flow cytometry, immunofluorescence, real-time PCR and Western Blot. Currently, she is the co-author of several original and review articles with a total Impact Factor of 41.106.



Pathophysiology and clinical implications of cognitive dysfunction in fibromyalgia

Weaam Ibraheem

California Institute of Behavioural Neurosciences and Psychology, UAE

ABSTRACT

Cognitive dysfunction is a complaint of many patients diagnosed with fibromyalgia. Although the main symptoms of the disease are fatigue, widespread musculoskeletal pain, poor sleep quality, and tenderness points, the cognitive symptoms can be more distressing than the pain itself, and negatively affect their lives; however, many healthcare professionals underestimate these cognitive complaints, and it is still one of the least researched topics. Proper management of these symptoms at an early stage may have a great impact to improve the mental health, physical function, and overall health of these patients. Hence, this traditional review aimed to look at the previous body of literature in PubMed in the past five years to address the pathophysiology of the cognitive dysfunction in fibromyalgia patients, to find the risk factors of cognitive dysfunction in these patients, to discover the recent modalities for treatment, and to figure out the clinical implications, and recent recommendations by researchers on screening, diagnosis, and management of fibromyalgia, and its cognitive dysfunction symptoms. This review has shown the various mechanisms of cognitive dysfunction. Some mechanisms are related to disease symptomologies, such as excessive pain perception, and others are related to hormonal, and metabolite changes in the brain. Tobacco smoking, and high body mass index showed an inverse impact on cognitive dysfunction, and quality of life in fibromyalgia. Other risk factors, and clinical implications were discussed in detail.

SPEAKER PROFILE:

Weaam Ibraheem, is an emergency doctor at Phoenix Hospital -Abu Dhabi UAE and Member of California Institute of Behavioural Neuroscience and Psychology and Medical Research's Department Member of General Medical Council and London United Kingdom hold MRCP UK part 1 and 2.



Effect of obesity on lipid profiles among premenopausal women in Jeddah, Saudi Arabia

Mai Mohamed Tarek Albaik Batterjee Medical College, KSA

ABSTRACT

Obesity is a chronic multifactorial disorder characterized by the accumulation of excess body fat. Obesity has become a growing health problem all over the world. The aims of the study were to investigate the prevalence of obesity in Saudi women living in Jeddah, as well as the correlations of obesity with fasting glucose, and lipid profile in premenopausal Saudi women. In addition to predicting significant factors that contribute to serum glucose level. The study included 183 Saudi women, aged between 20- 43 years, stratified according to their Body Mass Index (BMI) into normal weight (<25 kg/m 2), overweight (25-<30 kg/m 2), and obese (≥30 kg/m 2). The study was carried in Center of Excellence for Osteoporosis Research (CEOR), Jeddah, Saudi Arabia, during January to September 2015. The fat distribution, and body composition were measured by Dual energy X-ray Absorptiometry (DXA). Serum blood was collected in the morning after fasting for 12h to examine fasting serum glucose, and lipid profile. The prevalence of obesity was estimated to 30.9% as overweight women, and 24.3% as obese, giving the overall obesity rate equal to 55.2%.

The correlation between obesity, and glucose (R 2 = 0.20), and triglycerides (R 2 = 0.31) were positive, and highly significant at P&It; 0.001 as well as cholesterol (R 2 = 0.16), and LDL-C (R 2 = 0.16) were positively significant at P&It; 0.05. Predictive model of glucose was built by using Automatic Linear Regression. By using this model, we can predict the significant variables that effect on glucose level. The significant variables were triglycerides (46.8%), LDL-C (30.1%), and BMC (23.1%). The gaining weight contributes to increasing the fast glucose and dyslipidemia especially triglycerides, and LDL-C which confirming incidence of metabolic abnormalities in women even if they are young. Further studies are required to address the pathogenesis, and prevention of obesity in Saudi women.

SPEAKER PROFILE:

Mai Mohamed Tarek Albaik is an assistant professor of Biochemistry at Batterjee Medical College, Saudi Arabia. She is also a collaborated researcher with Clinical and Molecular Osteoporosis Center, Lund University, Sweden. She holds a PhD in Biochemistry from King Abdulaziz University, Saudi Arabia (2015). She has many publications in ISI journals and won two scientific awards during her scientific career.



