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# Scientific Tracks & Sessions November 15, 2022

## **Pediatrics Healthcare 2022**



16<sup>th</sup> INTERNATIONAL CONFERENCE ON **PEDIATRICS HEALTHCARE** NOVEMBER 15, 2022 | WEBINAR

November 15, 2022

Pediatrics and Neonatal Nursing | Child and Adolescent Gynecology | Pediatric healthcare | Child health

## **Session Chair**

Dai Sugimoto | Waseda University | Japan

## **Session Introduction**

- Title: Child development leading to the pursuit of virtues and the avoidance of vices **Gerald H Katzman** | Wayne State University School of Medicine | USA
- Title: Implementation of a non-randomized controlled trial of yoga-based intervention to reduce behavioral issues in early adolescent school-going children in Sri Lanka Josephine Thirumagal Sivashankar | University of Queensland | Australia
- Title: Association between the timing of antibiotics administration and neonatal sepsis outcomes **Mustafa Al Suliman** | King Fahad Medical City | Saudi Arabia
- Title: FTO and ADRB2 genetic polymorphisms are risk factors for earlier excessive gestational weight gain in pregnant women with pre-gestational diabetes mellitus: results of a randomized nutrigenetic trial

Karina dos Santos | Federal University of Rio de Janeiro – UFRJ | Brazil

Materials Science 2022



## **PEDIATRICS HEALTHCARE**

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## Child development leading to the pursuit of virtues and the avoidance of vices

## Gerald H Katzman

Wayne State University School of Medicine, USA

Optimizing the social, emotional, moral and cognitive development of children will support prosocial behavior and peaceful societies. To accomplish these goals, efforts need to start from birth with authoritative parenting to achieve secure attuned attachment between caregiver and child. Such parenting should eliminate the toxic stress associated with the authoritarian approach and the lack of direction seen with permissive or uninvolved parenting. Early literacy is the key to building character using the vehicles of modeled behaviors, reading stories with a moral and that teach a lesson and human relations programs for children. Benevolent mindfulness characterized by emotional empathy, compassion and helping behaviors will result from proper parenting and successful character education. The resultant ability to think in a complex fashion where virtues are pursued and vices avoided should facilitate resistance to false narratives and non-violent conflict resolution. Avoiding adverse child experiences has been shown to minimize depression, violence perpetration and other problem behaviors and disorders. When there are educational and professional resources in play to support the development of children in communities, a responsible, caring citizenry can be anticipated

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- Genocide: Plotting a Course to Never Again. Neuropsychiatry(London)2016;6(4):190-192

### Biography

Gerald H Katzman served his pediatric residency at the University of Chicago and Children's Hospital of Michigan. After spending two years in the navy, he entered a fellowship in neonatal-perinatal medicine at Temple University Hospital. He is board certified in pediatrics and neonatal-perinatal medicine. He is also certified by the American College of Physician Executives as a Physician Executive. Over the years, he has published a number of papers in both neonatology and pediatrics. An initial interest in human relations programs for children in the 1980s evolved into an effort to understand the ways children are taught to hate and how such indoctrinations can be prevented.

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## An implementation of a non-randomized controlled trial of yoga-based intervention to reduce behavioral issues in early adolescent school-going children in Sri Lanka

Josephine Thirumagal Sivashankar<sup>1</sup>, Rajendra Surenthirakumaran<sup>2</sup>, and Nalini Sathiakumar<sup>3</sup>

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<sup>2</sup>University of Jaffna, Sri Lanka

<sup>3</sup>University of Alabama at Birmingham, USA

**Background:** Behaviour issues of adolescence is a cross-cutting issue in all communities worldwide. In addition to the 30 years of internal conflict, and the post-conflict conditions in Jaffna Province, Sri Lanka added further issues for adolescents. Conduct problems, hyperactivity along with emotional problems are challenges faced by adolescents, particularly in fragile, post-conflict settings.

**Methods:** The aim was to evaluate. Effectiveness of implementing a yoga-based intervention package in grade 8 school children (early adolescents) to address behavioral problems. This was a quasi-experimental study carried out in 4 educational zones over 6 months. a yoga-based intervention package was implemented: two types of slow breathing for 5-6 min, Surya-namaskaram for 6-8 min, and mindfulness meditation for 5-6min. Pre/post-quantitative assessments were conducted in the intervention and control arms.

**Results:** Statistical Product and Service Solutions (SPSS21) was used to complete paired t-test and independent t-tests in both arms. Students' self-assessments in the intervention group indicate a reduction in emotional problems [t(584)=6.4, p =0.001], and reduction in problems with peers [t(584)=14.4, p =0.001]. Parents' assessments of emotional issues reduced for the intervention group (n =584) [t(584)=11.41, p =0.001] also with reduction of the total difficulty score [t(584)=28.12, p =0.001]. Teachers' assessments indicated prosocial scores improved in the intervention group [t(584)=-28.5, p =0.001]. Within the control group (n =499), teachers' assessments indicated emotional problems increased [t(499)=-9.5, p =0.001] and prosocial scores re-

duced [t(499)=13.5, p =0.001]. Students self-assessments in the control group indicated emotional problems increased [t(499)=-27.1, p =0.001]. A comparison of post-test scores revealed a statistically significant difference between groups. Focus group results indicate students felt the intervention had an overall positive effect on school achievements, family dynamics and individual health.

**Conclusions:** This yoga-based intervention package seems to be effective in reducing both externalizing and internalizing symptoms in adolescents. It is recommended this intervention be scaled up across Sri Lanka.

### References

- Josephine Thirumagal Sivashankar, Rajendra Surenthirakumaran, Shannon Doherty, Nalini Sathiakumar,Implementation of a nonrandomized controlled trial of yoga-based intervention to reduce behavioural issues in early adolescent school-going children in Sri Lanka.
- Josephine Thirumagal Sivashankar, Neil Thalagala, Effectiveness of a homemade supplementary food in the management of severe acute malnutrition in 2-5 year old children in the Kopay MOH area.

## Biography

Josephine Thirumagal Sivashankar has completed her doctor of medicine in public health at the post graduate Institute of Medicine Colombo, Sri Lanka in 2019. She is a research supervisor and a visiting lecturer at the faculty of medicine, University of Jaffna since 2008. She is a post-doctoral research fellow at the school of public health, University of Queensland, Australia.

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## **PEDIATRICS HEALTHCARE**

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## Association between the timing of antibiotics administration and neonatal sepsis outcomes

### Mostafa Ramzi Al Sulaiman

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**Background:** Sepsis is a life-threatening condition and it requires aggressive and rapid intervention. However, data on the association between antibiotic administration timing in neonatal sepsis and neonatal outcomes is scarce, particularly from the gulf area.

**Objective:** This study aims to evaluate the association between the timing of antibiotics administration and the outcomes of neonatal sepsis treatment.

**Design and Setting:** This is a retrospective comparison cohort study investigation undertaken through data collection from patient records of neonatal sepsis patients.

**Results:** In the study, 237 sepsis-proven neonates were included, 9.3% had necrotizing enterocolitis, 35% had bronchopulmonary dysplasia, and 6.3% had maternal chorioamnionitis. Also, 18.6% of mothers had been prescribed antibiotics during labor, and 5.5% had a maternal fever. Staphylococcus epidermidis was the most commonly isolated strain (24.1%). 87.3% of the neonates had their antibiotics within the first three hours of prescription. Survival was significantly higher among the non-delayed group, while the risk of complications was significantly lower as necrotizing enterocolitis, patent ductus arteriosus, and bronchopulmonary dysplasia. The length of stay was significantly shorter in the non-de-

layed antibiotic group.

**Conclusion:** Early antibiotic administration in neonatal sepsis can improve survival and reduce the incidence of complications.

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 Abdulrahman Al-Matary, Mustafa Al Sulaiman, Shahad Al-Otaiby, Mostafa Qaraqei, Maram Al-Matary, Association between the Timing of Antibiotics Administration and Neonatal Sepsis Outcomes

### Biography

Mostafa Ramzi Al Sulaiman, is a holder of subspeciality in pediatric medicine. His subspeciality in the field of neonatology. He is working currently as neonatology consultant in Eastern province, Kingdom of Saudi Arabia. He was born in 31/7/1988 in Al Hassa region, Eastern Province, KSA. He earned his Bachelor degree in general medicine and surgery from King Faisal University, KSA at 2012. Then he continued his educational journey through joining the Saudi Program in Pediatrics. In 2018, he was certified with the Saudi Pediatric Board certificate. Later, in 2022, he earned the Saudi Fellowship Certification in Perinatal-Neonatal subspeciality. He participated as Co-author in the study titled "Association between the timing of antibiotics administration and neonatal sepsis outcomes" that was published in the "Journal of infection and public health" in 2022.

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## **PEDIATRICS HEALTHCARE**

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# FTO and ADRB2 genetic polymorphisms are risk factors for earlier excessive gestational weight gain in pregnant women with pre-gestational diabetes mellitus: results of a randomized nutrigenetic trial

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Excessive Gestational Weight Gain (GWG) increases the risk of maternal and neonatal adverse outcomes and may be influenced by many factors, including diet and genetic background. We investigated polymorphisms in the FTO (rs9939609, rs17817449) and ADRB2 (rs1042713, rs1042714) genes as candidate risk factors for excessive GWG in pregnant women with diabetes testing two different dietary patterns. We conducted a nutrigenetic trial in Rio de Janeiro/Brazil, randomly assigning 70 pregnant women to one of the groups: traditional diet (n = 41) or DASH diet (n = 29), before 28 weeks of pregnancy, followed until the childbirth. Body weight measures were performed during the prenatal visits. Excessive GWG was the total weight gain above the upper limit of the Institute of Medicine recommendations. DNA samples were extracted from buccal cells and genotyped by real time PCR. We performed time-toevent analysis to investigate risk factors for progression to excessive GWG. The median of age was 32 years (IQR 25.7-36.0); 28.6% of the participants had normal pre-pregnancy BMI, 35.7% overweight, and 35.7% obesity. Excessive GWG occurred in 52.9% of the sample, with no effect of DASH diet on the risk of progression, compared to the traditional diet (aHR 1.32, CI 95% 0.62; 2.79, p = 0.46). The genotypes for the polymorphisms rs9939609 (FTO) and rs1042713 (ADRB2) had influence on the risk of progression to excessive GWG: AT vs. TT (aHR 2.44, CI 95% 1.03;5.78, p = 0.04); AT/AA vs. TT (aHR 2.55, CI 95% 1.14;5.69, p = 0.02) e AA vs. GG (aHR 3.91, CI 95% 1.12;13.70, p = 0.03); AG/AA vs. GG (aHR 2.37, CI 95% 1.01;5.52, p = 0.04), respectively, and the haplotype FTO rs9939609:rs17817449 (AG) (aHR 1.79, CI 95% 1.04;3.06, p = 0.02), regardless the type of diet. Now, we are investigating personalized nutrition that may benefit high-risk pregnant women who have genetic predisposition to excessive GWG.

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### Biography

Karina dos Santos is a Brazilian registered dietitian/nutritionist, researcher at Federal University of Rio de Janeiro (UFRJ) in the Maternal and Child Health Research Group (GPSMI/UFRJ) and professor at federal University of the State of Rio de Janeiro (UNIRIO). She received her bachelor's degree with academic distinction in 2015 from the Federal University of Rio Grande do Sul (UFRGS) and also received academic distinction for her thesis about nutrigenetics in pregnancy with diabetes from the Federal University of Rio de Janeiro, in 2022. As part of her Ph.D., she studied for a month at IMDEA Food (Madrid, Spain), in 2021. Her main research areas are women health, maternal and child nutrition, pregnancy with diabetes, and nutrigenetics.

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November 15, 2022

Pediatrics and Neonatal Nursing | Child and Adolescent Gynecology | Pediatric health

## **Session Chair**

Uday Devaskar | Mattel Childrens Hospital | USA

## **Session Introduction**

- Title: The D-dimer reference intervals in healthy term newborns
  Zamin Ibrahimhalilov | Ankara City Hospital | Turkey
- Title: Validity and reliability of the Persian version of neonatal pain, agitation, and sedation Scale
  Mehdi Heidarzadeh | Ardabil University of Medical Sciences | Iran
- Title: Quality of life and stress in mothers of preterm infant with feeding problems: a cross sectional study

Farideh Kamran | University of Medical Science | Iran

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## The D-dimer reference intervals in healthy term newborns

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<sup>1</sup>Ankara Yıldırım Beyazıt University, Turkey <sup>2</sup>Ankara Gazi University, Turkey

**Materials and methods:** The research had been carried out in the obstetrics and gynecology clinic and neonatal outpatient clinic of a third level hospital. Healthy-term newborns aged between 1 and 28 days were enrolled in the study. Venous blood samples were collected from peripheral veins in all babies and D-dimer, prothrombin time, activated partial thromboplastin time and platelet counts were measured. Reference intervals for D-dimer in the neonatal period were determined using 2.5th and 97.5th percentile values.

**Results:** A hundred and thirty-four newborns (71 boys, 63 girls) were enrolled in the study. Mean D-dimer levels of infants aged 1–28 days was  $1.74 \pm 1.88$  mg/L (reference range; 0.25–2.81 mg/L). D-dimer levels were between 2.44 and 2.45 mg/L, 1.71-1.76 mg/L, 1.26-0.89 mg/L and 0.88-0.66 mg/L in the first, second, third and fourth week of life, respectively. D-dimer values inversely correlated with postnatal age (r:-0.3, p < 0.001). However, it remained above adult levels even in the last week. There was no statistically significant difference between the D-dimer levels of girls (1.93  $\pm$  2.06 mg/L) and of boys (1.57  $\pm$  1.71 mg/L).

Discussion: In this study, D-dimer levels in the neonatal pe-

riod were found to be higher than adult levels stated in the literature. D-dimer levels gradually decreased over time in the first month. It would be appropriate to use age-specific reference values in the evaluation of D dimer levels in the neonatal period.

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## Biography

Zamin İbrahimhalilov graduated at the age of 23 years from Azerbaijan medical faculty, Azerbaijan as a general practitioner. After 4 years of residency, he graduated from Ankara Yıldırım Beyazıt University medical faculty, department of pediatrics, Turkey. He is a Pediatrician and has 3 publications. He is currently working as a pediatrician in a private hospital.

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## **PEDIATRICS HEALTHCARE**

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## Validity and reliability of the Persian version of neonatal pain, agitation, and sedation scale

### Mehdi Heidarzadeh

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**Background:** The Neonatal Pain, Agitation, and Sedation Scale (N-PASS) is a tool that, in addition to assessing pain, also considers the level of sedation in infants. This study aimed to translate and determine the psychometric properties of pain and sedation parts of the N-PASS in neonates.

**Methods:** Two evaluators observed 70 non-intubated and 30 intubated infants admitted to the neonatal ward and neonatal intensive care unit. Totally, 1000 observations were done to assess discriminant and criterion validity, internal consistency, and inter-rater reliability.

**Results:** The discriminant validity of both the sedation and pain parts of the Persian version of N-PASS (PN-PASS) was confirmed by significantly increasing the pain score during the painful procedures compared to the rest time. The criterion validity of the PN-PASS was approved by the high correlation (r = 0.85) between the Premature Infant Pain Profile and the PN-PASS. The intraclass correlation coefficient between the two evaluators was in the range of r = 0.71-0.92, and Cronbach's alpha coefficient during non-painful and painful procedures was in the range of  $\alpha = 0.57$  and  $\alpha = 0.86$ .

**Conclusion:** This study showed that the Persian version of N-PASS is valid and reliable in assessing pain and sedation in term and preterm infants. Increases in some item scores were related more to the mechanism of the procedures than to the painful nature of the stimuli.

### References

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- Fatemeh Khademi, Maryam Rassouli, Leila Khanali Mojen, Mehdi Heidarzadeh, Azam Shirinabadi Farahani, Psychometric Evaluation of the Caring Ability of Family Caregivers of Patients With Cancer Scale–Mothers' Version for the Mothers of Children With Cancer
- Azam Shirinabadi Farahani, Mehdi Heidarzadeh, Saleheh Tajalli, Hadis Ashrafizade, Marjan Akbarpour, Soore Khaki, Fatemeh Khademi, Razieh Beikmirza, Anahita Masoumpoor, and Maryam Rassouli, Developing and Evaluating the Psychometric Properties of the Persian Version of Post-traumatic Growth Inventory in Patients With Cancer

### Biography

Mehdi Heidarzadeh got bachelor of nursing from Tehran University of Medical Sciences, Tehran, Iran in 2002, master of science in nursing from Tabriz University of Medical Sciences, Tabriz, Iran in 2006, and PhD of nursing from Shahid Beheshti University of Medical Sciences, Tehran, Iran in 2014. Now he is an associates professor of the Nursing department of Ardabil University of Medical Sciences, Ardabil. He is working in Kamkar-Arabnia hospital as a nurse in 2002 and 2003. He had worked as an instructor of nursing in Azad University for 7 years as a faculty member from 2006 to 2012. My fields of study are most in heart disease and cancer.

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## Quality of life and stress in mothers of preterm infant with feeding problems: a crosssectional study

Farideh Kamran<sup>1</sup>, Saleheh Tajalli<sup>2</sup>, Abbas Ebadi<sup>2</sup>, Setareh Sagheb<sup>3</sup>, Minoo Fallahi<sup>1</sup>, Carole Kenner<sup>4</sup>

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**Background:** Oral feeding problems are common among most preterm infants. The comorbidities of preterm infants with feeding problems are not determined. This study was carried out to investigate the quality of life and stress in mothers of preterm infants with feeding problems.

**Materials and methods:** The sample of study was mothers with preterm infants. Outcome measures were the score of Infants Feeding Readiness Assessment Scale (POFRAS), Parental Stress Scale: Neonate Intensive Care Unit (PSS - NICU), quality of life questionnaire (SF-36), and a socio-demographic questionnaire.

**Results:** There was no significant association between the POFRAS and domains of SF-36 and the subscales of the PSS - NICU. There was no correlation between stress and general physical health. On the other hand, all PSS-NICU subscales were inversely correlated with overall quality of life of mothers and general mental health.

**Conclusion:** The infants' appearance and behaviors was the most stressful for mothers. The physical health dimension of quality of life was affected less than the mental health dimension. Healthcare professionals should inform mothers of

preterm infants about the parental role, NICU environment, and their infants' appearance and behaviors.

### References

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- Farideh Kamran, Setareh Sagheb Seyyed Ahmadreza Khatoonabadi, avatar Abbas Ebadi, Yaser Faryadras, Mahshid Aghajanzadeh The Validity and Reliability of Early Feeding Skills Assessment and Cue-Based Feeding Scales for Preterm Infants
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## Biography

Farideh kamran is a graduate of Speech and Language Pathology from Tehran University of Medical Science and working as a Speech Therapy for more than three years. I gained valuable experience working with adults and pediatric with swallowing disorders.

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DINT EVENT

# Video Presentation

## **Pediatrics Healthcare 2022**



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## Validation of the diet quality questionnaire in Chinese children and adolescents and relationship with pediatric overweight and obesity

### **Huan Wang**

Peking University, China

The low-burden Diet Quality Questionnaire (DQQ) has been developed to rapidly assess diet quality globally. Poor diet is often correlated with body size, and certain dietary risk factors can result in overweight and obesity. We aimed to examine the extent to which the DQQ captured food group consumption among children and adolescents in China, and to understand the association of several new indicators of diet quality scores derived from the DQQ with overweight and obesity, using the 2011 wave of China Health and Nutrition Survey. The DQQ questions are constructed using sentinel foods-that is, food items that are intended to capture a large proportion of the population consuming the food groups. The overall Global Dietary Recommendations (GDR) score, GDR-Healthy score, and GDR-Limit score are novel indicators of diet quality that reflect dietary risk factors for non-communicable diseases derived from the DQQ guestions. Multivariable logistic regression analysis was used to examine the associations of the GDR scores with overweight and obesity in the sample. The DQQ questions captured over 95% of children who consumed the food groups. Additionally, we found that the GDR-Limit score was positively associated with general obesity (odds ratio (OR) = 1.43, 95% confidence interval (CI): 1.17-1.74) and abdominal obesity (OR = 1.22, 95% CI: 1.05-1.43), whereas the overall GDR score was negatively related to general obesity (OR = 0.85, 95% CI: 0.74–0.97). The low-burden DQQ could be a valid tool to assess diet quality for the Chinese pediatric population aged 7–18 years. Poor diet quality, as determined by the GDR-Limit score, is associated with the increased risk of obesity in Chinese children and adolescents.

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#### Biography

Huan Wang has completed her master degree on the major of epidemiology in 2022 from Shandong University, China. She is a Ph.D. student of Peking University, China. Her research areas focus on malnutrition in early life and nutrition, adolescent health and cardiovascular.

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