



**26-28**  
MARCH, 2026  
SINGAPORE

INTERNATIONAL CONFERENCE ON

# Pediatrics, Neonatology and Child Health



Village Hotel Changi  
1 Netheravon Rd, Singapore 508502



# Book of Abstracts



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# Welcome Message

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## Gamal Mohamed Hasan Ahmed

*Sheikh Shakhbout Medical City, Abu  
Dhabi, United Arab Emirates*

*Dear Esteemed Colleagues, Guests, and Friends,*

*On behalf of the organizing committee, It is with great pleasure and heartfelt enthusiasm that I welcome you to the The international Conference on Pediatrics, Neonatology and Child Health, a gathering dedicated to advancing the health, well-being, and future of children around the world. This conference brings together brilliant minds—clinicians, researchers, educators, and advocates—who share a common passion for pediatric care and innovation.*

*Over the coming days, we will explore groundbreaking research, share best practices, and engage in meaningful discussions that will shape the future of child health. Beyond the scientific sessions, this is also a time to connect, collaborate, and inspire one another in our shared mission.*

*Your presence here reflects a commitment not only to professional excellence but also to the lives of countless children and families who depend on our collective knowledge and compassion.*

*On behalf of the organizing committee, I wish you an enriching, inspiring, and memorable conference experience. Let us learn, share, and work together to create a healthier tomorrow for every children.*

# Welcome Message

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## Dr Sergey Suchkov, MD, PhD

*Professor in Medicine & Immunology,  
Director for Center for Biodesign of N.D.  
Zelinskii Institute for Organic Chemistry  
of the Russian Academy of Sciences,  
Moscow, Russia*

*Dear Colleagues, Scientists and Friends,*

*On behalf of the Organizing committee, it is both a pleasure and an honor and to welcome you to this prestigious Conference with many esteemed and notable speakers International Conference on Pediatrics, Neonatology and Child Health, which is to be held during March 26-28, 2026 in Singapore.*

*This prestigious Global Event will bring together leading pediatricians and neonatologists, famous experts and esteemed researchers, biodesigners and bioengineers, clinical innovators and healthcare professionals to share cutting-edge advancements in in Personalized and Precision Medicine (PPM), biodesign-driven unique diagnostic tools and innovative treatments in pediatrics practice, and the latest advancements in PPM-guided neonatal services.*

*The theme for the Grand Event encapsulates our global vision of the upgraded trans-disciplinary approach to pediatric and neonatal care. From neonatologists and general pediatricians to sub-specialists and allied health professionals, partnered with biodesigners and bioengineers, and healthcare administrators and entrepreneurs, every delegate will find inspiration, fresh insights, and practical tools to enhance their individualized practice and improve outcomes for children everywhere.*

*A wide-ranging but highly focused Program, covering the latest breakthroughs, evidence-based practices, and transformative approaches in pediatric and neonatal care, will span the entire spectrum of biodesign-inspired sub-specialties, ensuring that each participant gains valuable, applicable knowledge. Expect interactive discussions, hands-on workshops, and a vibrant exchange of ideas that will empower you long after the meeting concludes.*

*This Event illustrating gathering of the next-generation pediatricians and neonatologists, which are planning to play*

*a unique role in implementing OMICS-profiling tests in PPM-guided pediatric practice, supported by IT algorithms and bioanalytical platforms. And discuss their relevance with clinicians, enabling personalized care from preconception through the postnatal period and enriching knowledge concerning the applicability of PPM in different pediatrics fields.*

*The Conference will explore a wide range of topics critical to the health and development of young babies and newborns, including neonatal intensive care, chronic disorders, neonatal personalized nutrition and precision foodomics, infectious diseases, healthy childhood and ethical considerations in pediatrics practice. Along with canonical academical and clinical approach, the Program is enriched with a meaningful educational experience for all attendees, and offers prominent pediatricians from around the globe the opportunity to review and assess the latest global advances in child health, for the benefit of our patients.*

*Building on the success of preceding meetings, the Conference will feature a highly interactive, stimulating and multidisciplinary Program including high-impact keynote lectures and speeches, workshops, interactive plenary sessions and panel discussions, and providing an ideal Forum to stimulate ideas and establish collaborations. Extended networking opportunities will foster communications between delegates. We do hope that your interaction with your colleagues from many different countries will stimulate a creative exchange of ideas and will be personally rewarding.*

*Warmest and productive wishes and hope to meet and to see you soon in Singapore! We look forward to welcoming you to the Event to taste a smell of the deeply rooted pediatrics and neonatology, practice and culture, and to enjoy the interaction with your colleagues from different countries whilst stimulating a creative exchange of ideas!*

# Welcome Message

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**Shifu Wang**

*Children's Hospital affiliated to  
Shandong University, China*

*Dear participants,*

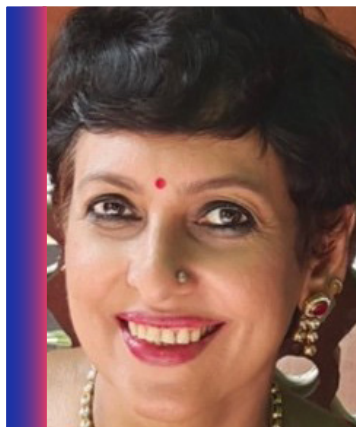
*At present, in the international expert consensus on mNGS, there are numerous expert consensus from China in this field. How to correctly interpret these expert consensus, especially in the clinical application of precise diagnosis and treatment of infectious diseases in children and newborns, is currently a difficult and hot topic for research. Since 2020, we have established the first mNGS testing platform in Shandong Province, China, and have accumulated certain experience. We look forward to sharing, discussing and exchanging ideas with you at the conference.*

# Our Keynote Team



**Gamal Mohamed  
Hasan Ahmed**

Sheikh Shakhbout Medical  
City, Assiut University  
Children Hospital, United  
Arab Emirates



**Indira Jayakumar**

Apollo Speciality  
Hospitals, India



**Kimberly Moody**

Wichita State University,  
United States



**Richard Fry**

Dr Fry & Associates,  
United Kingdom



**Robin Lynn Treptow**

Divine Mercy University,  
United States



**Sergey Suchkov**

N.D. Zelinskii Institute  
for Organic Chemistry of  
the Russian Academy of  
Sciences, Russian Federation

# Our Keynote Team



**Sheikh Arif  
Maqbool Kozgar**

Latrobe Regional Health  
& Monash University,  
Australia



**Shifu Wang**

Children's Hospital  
affiliated to Shandong  
University, China



**Zhenhuan LIU**

Guangzhou University of  
Chinese Medicine, China

## **ABOUT** *Mathews International LLC*

Founded in 2015, Mathews International LLC has rapidly established itself as a prominent publisher in the scientific community. With a strong focus on open access, Mathews International provides a platform for disseminating cutting-edge research across various scientific disciplines. The company has published numerous high-quality journals, fostering advancements in science and ensuring that knowledge is freely accessible to researchers, professionals, and the public alike.

Driven by a commitment to excellence, Mathews International prides itself on maintaining rigorous peer-review standards and collaborating with a diverse network of authors, reviewers, and editors from across the globe. Its open-access model not only promotes transparency and inclusivity but also accelerates the dissemination of vital scientific information. This approach has earned the company a reputation for publishing trustworthy, high-impact research that contributes to solving global challenges in fields such as medicine, environmental science, and technology.

As part of its ongoing commitment to advancing science and fostering collaboration, Mathews International LLC is now expanding into organizing conferences. These events aim to bring together experts, innovators, and thought leaders from around the world to share insights, exchange ideas, and explore the latest developments in their respective fields. The conferences will feature a diverse range of topics, from emerging technologies to groundbreaking healthcare innovations, fostering interdisciplinary dialogues that inspire new perspectives and solutions.

With years of experience in publishing, Mathews International's foray into conferences promises to deliver high-quality, impactful events that align with its mission of advancing scientific discovery and promoting global collaboration.

## **ABOUT** *IPN-2026*

The **International Conference on Pediatrics, Neonatology and Child Health 2026** is a distinguished hybrid scientific forum scheduled to be held from **March 26–28, 2026**, in **Singapore** and **virtually**, offering a dynamic platform for global engagement and knowledge exchange. This international gathering is dedicated to advancing excellence in pediatric and neonatal healthcare by fostering interdisciplinary collaboration among pediatricians, neonatologists, clinical researchers, academic scholars, healthcare practitioners, policymakers, and industry innovators. The conference aims to address contemporary challenges and emerging trends in child health through a comprehensive scientific agenda that integrates evidence-based research, clinical best practices, technological advancements, and policy perspectives.

In addition to its academic rigor, the conference provides participants with the opportunity to earn more than 15 Continuing Professional Development (CPD) credits, supporting ongoing professional competency and licensure requirements. The hybrid format ensures inclusive global participation, enabling attendees to engage in real-time discussions, virtual networking sessions, and collaborative research dialogues regardless of geographic location. By creating an environment that encourages innovation, partnership building, and scholarly exchange, the conference aspires to contribute meaningfully to improving neonatal survival, strengthening pediatric healthcare systems, and promoting equitable child health outcomes worldwide.

# ABOUT CPD Accreditation

## Overview

Continuing Professional Development (CPD) represents a commitment to lifelong learning and the ongoing enhancement of professional knowledge and skills.

This program provides participants with an opportunity to gain formal recognition for their dedication to professional growth through the award of CPD credits. These credits acknowledge active participation in educational sessions, workshops, and interactive discussions that contribute to advancing expertise and practical competence.



## CPD Credit Allocation

Participants are eligible to earn 1 CPD credit for each hour of active attendance, with the opportunity to accumulate up to 22 CPD credits throughout the duration of the program. Attendance is tracked to ensure accurate credit allocation, and participants who complete the required hours will receive an official certificate verifying their earned CPD credits.

## Purpose and Recognition

The CPD accreditation underscores the educational merit and professional relevance of the program. It enables participants to:

- Maintain and expand their professional knowledge base
- Strengthen practical competencies and decision-making abilities
- Demonstrate commitment to ethical and evidence-based practice
- Align with institutional, organizational, or regulatory standards for ongoing professional development

Many professional bodies and licensing authorities recognize CPD credits as part of their certification or renewal requirements. Participants are encouraged to confirm the applicability of these credits with their respective institutions or governing organizations.

## Value of CPD Credits:

- Encourages continuous learning and skill enhancement
- Contributes to career advancement and professional recognition
- Promotes knowledge sharing and collaboration in oncology research
- Supports compliance with professional development requirements

## Commitment to Professional Growth

By engaging in accredited educational activities, participants demonstrate a proactive approach to career advancement and contribute to the broader goal of maintaining high standards of practice across disciplines. The CPD framework ensures that professionals remain informed, adaptable, and capable of meeting emerging challenges in their respective fields.

# Journal Collaboration

## IPN-2026 and Mathews Journal of Pediatrics: A Strategic Partnership

IPN-2026 is honored to partner with Mathews Journal of Pediatrics (MJP; ISSN 2572-6560) is an international scholarly journal that publishes original research and reports on various pediatrics-related topics, such as neonatal medicine, child care, pediatric surgery, pediatric cancer, pediatric neurology, pediatric nephrology, pediatric cardiology, pediatric orthopaedics, pediatric radiology, pediatric urology and pediatric rheumatology. This peer-reviewed journal targets a wider audience, involving medical professionals, researchers, and child care groups. This collaboration ensures that the research shared at the conference reaches a global audience, providing participants with opportunities to showcase their work on a respected international platform.



### Conference Proceedings with DOI:

- The IPN-2026 proceedings book will be assigned a DOI, making all presented abstracts and findings globally accessible and citable.
- This guarantees that your research is recognized and easily referenced by the scientific community.

### Opportunity for Full-Length Publications:

- Participants can submit full-length manuscripts to MJP for peer-reviewed publication.
- Article processing charges are fully waived, ensuring a seamless path to publication.
- Manuscripts undergo rigorous review by the journal's editorial team, ensuring high-quality scientific standards.

### Journal Visibility & Indexing:

Indexed in CrossRef, Google Scholar, WorldCat, J-Gate, DRJI, ISI, Genamics JournalSeek, Scilit, and CiteFactor, ensuring global visibility, discoverability, and credibility of published research.

### Participant Benefits

- Global visibility for your research
- Peer-reviewed recognition in a high-profile journal
- No publication fees
- Contribution to advancing Pediatrics, Child health & Neonatology research and patient care worldwide

This collaboration reflects IPN-2026's commitment to fostering scientific excellence, promoting knowledge exchange, and providing researchers with a credible platform to disseminate their work to the global Pediatrics, Child Health, and Neonatology community.

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# BOOK OF ABSTRACTS

## Keynote Sessions

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**MAR 26-28**

INTERNATIONAL CONFERENCE ON

**PEDIATRICS,  
NEONATOLOGY AND  
CHILD HEALTH**



## Professor Gamal Ahmed

Sheikh Shakhbout Medical City, Abu Dhabi, United Arab Emirates

# Viral infections in the pediatric ICU: Endemic vs pandemic corona virus impact: A tertiary care center experience

**Objectives:** To measure the prevalence of viral infections, Length Of Stay (LOS), and outcome in children admitted to the Pediatric Intensive Care Unit (PICU) during the period preceding the COVID-19 pandemic in a MERS-CoV endemic country.

**Methods:** A retrospective chart review of children 0–14 years old admitted to PICU with a viral infection.

**Results:** Of 1736 patients, 164 patients (9.45%) had a positive viral infection. The annual prevalence trended downward over a three-year period, from 11.7% to 7.3%. The median PICU LOS was 11.6 days. Viral infections were responsible for 1904.4 (21.94%) PICU patient-days. Mechanical ventilation was used in 91.5% of patients, including noninvasive and invasive modes. Comorbidities were significantly associated with intubation ( $P$ -value = 0.025). Patients infected with multiple viruses had median pediatric index of mortality 2 (PIM 2) scores of 4, as compared to 1 for patients with single virus infections virus infections ( $p < 0.001$ ), and a median PICU LOS of 12 days, compared to 4 in the single-virus group ( $p < 0.001$ ). Overall, mortality associated with viral infections in PICU was 7 (4.3%). Patients with viral infections having multiple organ failure were significantly more likely to die in the PICU ( $p = 0.001$ ).

**Conclusion:** Viral infections are responsible for one-fifth of PICU patient-days, with a high demand for mechanical ventilation. Patients with multiple viral infections had longer LOS, and higher PIM 2 scores. The downward trend in the yearly rate of PICU admissions for viral infections between the end of the MERS-CoV outbreak and the start of the COVID-19 pandemic may suggest viral interference that warrants further investigations.

### Biography

Prof Gamal Ahmed is a professor of Pediatrics and consultant pediatric critical care. Gamal Ahmed has an extensive experience in the field of pediatric critical care with special interest in the area of critical infections and sepsis. Gamal Ahmed has an extensive academic as well as clinical practice experience in Egypt, Saudi Arabia, and United Arab Emirates. Gamal Ahmed has multiple numerous publications at international peer reviewed journals. Gamal Ahmed is reviewer at many international pediatric journals. Gamal Ahmed has special interest in the field of medical education and currently, pediatric residency program director at Sheikh Shakhbout Medical City, Abu Dhabi, UAE.



### Dr Indira Jayakumar

Lead Paediatric Intensivist, Apollo Speciality Hospitals, Chennai

## Pandora's box opened early: Non-communicable disease risk among college youth

**Background:** Non-Communicable Diseases (NCDs) are increasingly being identified in adolescents and young adults globally, driven by lifestyle transitions, unhealthy dietary patterns, physical inactivity, psychosocial stress, and sleep disruption. Early adulthood represents a critical window for the identification of cardio metabolic risk factors, allowing for timely preventive interventions before progression to established disease.

**Methods:** A large, multi-year cross-sectional screening program was conducted among college students, with complete data available for 101,087 of 178,834 students screened (55.7%). Assessments included anthropometric measurements, blood pressure, random blood sugar, waist circumference, haemoglobin levels, and HbA1c estimation. A focused analysis was conducted in a subgroup of more than 10,000 high-risk students. Non-fasting lipid profiles were obtained in a subset of participants. Lifestyle behaviours, dietary patterns, physical activity, and mental health indicators were assessed using structured questionnaires.

**Results:** Overall, only 38.6% of students had a normal body mass index, while 43% were overweight or obese, including 19.7% with class I obesity, 9.6% with class II obesity, and 0.6% with morbid obesity. An additional 18.4% were underweight, reflecting a dual burden of malnutrition.

In the high-risk subgroup ( $n \approx 10,000$ ), the prevalence of cardio metabolic abnormalities was substantial: 40% were overweight or obese; 30% had increased waist circumference; and 30% had low haemoglobin levels consistent with anaemia. One in eight students was diabetic or at high risk for diabetes, one in six had abnormal lipid profiles, and one in fifty met criteria for stage II hypertension ( $> 130/85$  mmHg). Elevated triglycerides were common and were frequently associated with high LDL, low HDL, elevated VLDL, and abnormal cholesterol-to-HDL ratios.

Sex-specific differences were observed: females had a higher prevalence of central obesity, anaemia, and elevated HbA1c, whereas males had higher rates of elevated blood pressure; both sexes showed similarly high risks of obesity and dyslipidaemia.

Mental health concerns were frequently reported, with 40.8% experiencing anxiety or nervousness, 35.8% reporting sleep disturbances, and 25.2% considering professional mental health support. Only 16.3% of students met recommended physical activity levels.

**Conclusions:** This large-scale study provides compelling evidence that the foundations of NCDs are being laid alarmingly early in life. The coexistence of obesity, dysglycemia, dyslipidaemia, metabolic dysfunction, anaemia, hypertension, and mental health concerns at such an early age, in asymptomatic youth, represents a global public health warning. Without early detection, today's young adults risk progressing to premature cardiovascular disease, diabetes, and chronic disability. Public awareness, systematic screening and early preventive interventions embedded within educational institutions offer a scalable, cost-effective strategy to identify risk early and decisively nip NCDs in the bud, protecting the health of future generations.

### **Biography**

Dr (Professor) Indira Jayakumar is Senior consultant and Lead Paediatric Intensivist at Apollo Speciality Hospital, Chennai with 35 years, experience in paediatrics. Indira is also the Medical Director of Apollo SHINE Foundation, a not for profit organisation, focussing on campus student health at schools and colleges across India. The large scale screening for the study was conducted through the Apollo SHINE organisation.



## Kimberly Moody, PhD, CCC-SLP

Wichita State University Wichita, Kansas, United States

# Reframing child health through social pediatrics: A community-centered prevention and early intervention model

**Background:** Child health outcomes are shaped not only by biological and medical factors, but also by social, emotional, educational, and environmental conditions. Children experiencing psychosocial stressors often encounter fragmented systems of care that delay prevention and early intervention. Social pediatrics provides a framework for addressing these gaps by integrating child health supports across families, schools, and communities.

**Objective:** This presentation describes a community-centered prevention and early intervention model grounded in social pediatrics, designed to strengthen psychosocial well-being, resilience, and protective factors among children and adolescents through coordinated, relationship-based supports.

**Methods:** The model was implemented in school and community settings serving elementary and middle- grade youth. A mixed-methods evaluation approach was utilized. Quantitative data included pre- and post-measures of social-emotional functioning, behavioral risk indicators, and academic performance. Qualitative data were collected through focus groups and structured feedback from caregivers, educators, and youth to examine feasibility, acceptability, and perceived impact.

**Results:** Findings demonstrate improvements in prosocial behavior, emotional regulation, and student engagement, alongside reductions in behavioral risk indicators. Qualitative analyses highlighted the importance of consistent relational support, family engagement, and cross-sector collaboration in promoting child well-being. Stakeholders emphasized the value of embedding prevention services within everyday child contexts rather than relying solely on clinic-based models.

**Conclusion:** A social pediatrics approach that integrates prevention and early intervention across schools, families, and community organizations offers a scalable pathway for improving child health outcomes. This model illustrates how interdisciplinary, community-embedded systems can address psychosocial determinants of health, strengthen protective factors, and promote holistic child development. Implications for pediatric practice, community partnerships, and public health strategies are discussed.

**Biography**

Dr. Kimberly Moody is a professor of literacy and the Director of the Collaborative Literacy Education, Advancement, and Research (CLEAR) initiative at Wichita State University. She is also the co-founder of Prime Fit Youth Foundation. Her work focuses on social pediatrics, prevention science, and community-centered systems that support child mental health, resilience, and family engagement. Dr. Moody's research and applied initiatives integrate education, mental health, and public health approaches to address psychosocial determinants of child well-being. She has led multiple school- and community-based prevention initiatives and has published and presented nationally and internationally on child development, social-emotional learning, and systems-level intervention.



## **Dr Richard Fry, MD MRCPsych MSc**

Dr Fry & Associates, United Kingdom

### **ADHD, ASD, and neurodiversity – Is it time to move on?**

In this address Dr Fry, Consultant Integrative Child Psychiatrist and ex-GP will discuss his journey to questioning the continued utility of the diagnoses “ADHD, ASD and Neurodiversity” and look at other ways of thinking about those presentations, which appear to be mushrooming to an almost endemic level.

We will look at the drivers, use and meaning of these diagnoses. We will also consider the inter-relationship between Paediatrics and Psychiatry in these conditions.

Dr Fry will explain how he now considers these syndromic categories to be unhelpful, preferring an individualised approach to the reasons why some cannot concentrate, are subject to overwhelm or other symptoms. Genetic testing and vulnerabilities form an important part of his investigation of aetiologies, along with consideration of toxic loads, metabolic variability, diet and lifestyle considerations.

In the final section we will consider new ways of thinking about the problems these children have and how to address them.

Dr Fry has been in practice for nearly forty years and seen many changes in the recognition, presentation, diagnostic and treatment trends in these diagnoses. His personal and professional journey from pure mainstream approaches to a more inclusive and holistic one is the story of this lecture.

#### **Biography**

Dr Richard Fry is a Consultant Integrative Child Psychiatrist practicing in the private sector in the UK after many years leading services in the NHS. He also spent some years in General Practice. In the last fifteen years he has moved from purely mainstream and conventional approaches to a more holistic view of brain and emotional health. He now practices in an Integrative fashion trying to consider the drivers of these presentations and address them. The aim is to minimise the exclusive use of medications and to optimise their effects where they are used. Metabolic and genetic health and constitution are key to his thinking. He places great emphasis on working in collaboration with colleagues skilled in Physical Medicine as well as those with Psychological expertise.



## **Robin Lynn Treptow**

Fielding Graduate University, Harvard Extension School, Divine Mercy University, United States

# **Who says at-risk infants and children can't do it? Raise potential and grow grit by offering challenge amid rich milieus**

Ideas drive social innovation, but unjust mind-sets hurt babies; social and physical pain fire along the same neural circuits. Bias facing young babies born with congenital or other early medical conditions puts them at risk of less optimal cognitive functioning. Early vulnerabilities such as neurologically rooted quests for safety make stopping bias against infants with early cognitive risk uniquely compelling. I highlight a novel theory that others' expectations of these babies is a game-changing factor in how they eventually think and function. I illustrate using anecdotal data from my now adult son with Trisomy 21. I draw from my published and unpublished data on bias by paediatricians and early intervention workers, and my model for re-writing medical narratives, I point to the Rosenthal effect where bias plays out to cause what an observing group expects—learned helplessness and giving up on trying to think well. I build a case that all brains are neuro plastic—that it is milieu enrichment which matters in whether at risk children thrive despite lower anticipated outcomes. A growth mindset aids young brains to optimally function amidst social threats of judged incompetence and stigma. Ample Romanian orphanage data show disrupted brain structure and function after growing up with chronic social threat in less enriched milieus, but animal models demonstrate repair and prevention of neurocognitive decline. I close with the idea that we must leverage a paradigm shift. Diagnoses that signal lower abilities do not match families' impressions or accumulating scientific data which speak to the brain's amazing ability to recover after insult.

### **Biography**

Dr. Robin Lynn Treptow is a clinical psychologist (PhD, 1999, University of Nebraska-Lincoln) and doctoral level infant mental health specialist (PhD, 2019, Fielding Graduate University). As Assistant Professor of Psychology Dr. Treptow teaches positive psychology | human flourishing (Divine Mercy University). Dr. Treptow studies bias against infants, especially those at risk for intellectual disability. Robin has presented regionally, nationally, and internationally on topics relevant to healthcare provider wellbeing, implicit bias and the welfare of infants who endure bias. See <https://tinyurl.com/kxkkva8s> for a lay-friendly research snapshot. Dr. Treptow has lived experience with bias as mother of a son with Trisomy 21.



## **Dr S. A. M. Kozgar**

Latrobe Regional Health & Faculty of Medicine, Nursing and Health Sciences, Monash School of Rural Health, Monash University, Traralgon, VIC, Australia

# **High-risk is routine: SGA, prematurity, and disadvantage in regional newborn care**

Regional neonatal care units are increasingly assuming responsibility for managing complex neonatal risks that extend beyond simple measures such as gestational age and birth weight. Drawing on data from a high-risk infant study conducted in regional Australia, along with an analysis of small-for-gestational-age (SGA) subgroups, this keynote contends that encountering “high-risk” cases is not a rare anomaly but constitutes a predictable and routine aspect of regional neonatal service demand. Data from the high-risk cohort reveal that a substantial proportion of Special Care Nursery (SCN) admissions meet high-risk criteria, with recurrent factors including prematurity, SGA status, and adverse sociodemographic conditions. The detailed analysis of the SGA subgroup demonstrates that SGA seldom occurs in isolation; rather, it is often associated with clustered maternal and contextual risk factors, with many infants exposed to multiple concurrent vulnerabilities. Collectively, these findings position SGA as a “signal condition”—an indicator of compounded neonatal and socio-environmental vulnerabilities—highlighting the intersection between biological risks and systemic barriers to post-discharge care.

This presentation translates these empirical insights into a practical, evidence-based service recommendation: neonatal follow-up in regional contexts should be an integral component of service delivery, rather than an optional adjunct. A risk-stratified, equity-oriented follow-up pathway—preferably co-located within multidisciplinary teams where feasible, or alternatively operationalised through shared care plans and warm handovers—may more effectively align resource allocation with individual patient needs, thereby enhancing access to growth monitoring, feeding support, and neurodevelopmental surveillance. The keynote concludes with pragmatic metrics for assessing regional follow-up performance, including attendance equity, time-to-intervention benchmarks, and completion rates of developmental screenings, to underpin scalable, accountable models of neonatal care tailored for high-risk infants.

## **Biography**

Dr Arif Kozgar is a clinician-academic paediatrician and researcher located in Victoria, Australia, with more than 20 years of experience in clinical practice, academia, and medical education. Dr Arif is Director of Clinical Training at Latrobe Regional Health and an Adjunct Senior Lecturer at Monash School of Rural Health, Monash University, where he teaches and assesses medical students and supervises scholarly projects. His research focuses on translational research on neonatal outcomes, regional perinatal epidemiology, and paediatric allergy and diabetes. Dr Arif has published in peer-reviewed journals and leads workforce and education reform initiatives supporting junior doctor training and patient safety.



## Sergey Suchkov

Professor in Medicine & Immunology and Director for Center for Biodesign, N.D. Zelinskii Institute for Organic Chemistry of the Russian Academy of Sciences, Moscow, Russia

R&D Director, InMedStar, Russia-UAE

Senior Scientific Advisor of China Hong Kong Innovation International Business Association, Hong Kong

Member, New York Academy of Sciences, USA

Member: EPMA (European Association for Predictive, Preventive and Personalized Medicine), Brussels, EU

Member, ISPM (International Society for Personalized Medicine), Japan

Member, PMC (Personalized Medicine Coalition), Washington, USA

Member, AMEE (Association for Medical Education in Europe), Centre for Medical Education, Dundee, Scotland

Member, ACS (American Chemical Society), Washington, DC, USA

Member, AHA (American Heart Association), Dallas, TX, USA

Member, ARVO (The Association in Research in Vision & Ophthalmology), Rockville, MD, USA

ISER (International Society for Eye Research), Anchorage, AK USA

Secretary General, United Cultural Convention (UCC), Cambridge, UK

The Russian Academy of Natural Sciences, Moscow, Russia

## **Personalized and Precision Medicine (PPM) as the unique healthcare model to secure the national health and wellness: From family planning and gestation period through human biosafety**

A new systems approach to diseased states and wellness result in a new branch in the healthcare services, namely, Personalized & Precision Medicine (PPM). PPM as being the Grand Challenge to forecast, to predict and to prevent is rooted in a big and a new science generated by the achievements of systems biology and translational medicine, whilst integrating platforms of OMICS- and IT-technologies.

NIH (Bethesda, MD, USA) have The Unique Decision had on setting up in USA a Clinical Research Network including Centers of PPM, Centers for Personalized & Precision Pediatrics (CPPP) and Reproductive Precision Medicine Centers (RPMC, e.g., at Columbia University).

The concept of PPM and RPMC has been applied in reproductive medicine long before its popularization. Due to the multifactorial etiology of the fertility problems and complications, with genetic-, environment-, and lifestyle-associated factors being involved, developing precise methods able to overcome them during gestation is a high priority. The causes of infertility are various, and factors influencing the success rates of ART are complicated; hence, every step of reproductive medicine, such as the diagnosis of infertility causes and transfer of healthy embryos, needs to be precise.

In the obstetric field, several opportunities exist to leverage PPM-guided diagnostic and treatment tool,

as well as for the development of innovative strategies with the potential to overcome the challenges associated with fetal growth restriction, preterm birth, and fetal abnormalities, to state a few.

One of the well-known uses of PPM-related resources in reproductive medicine and family planning and female infertility is the genetic test that most accurately determines how receptive a woman's endometrium (inner uterine lining) is for implanting an embryo. Genomics and proteomics tests represent examples of methods to investigate the molecular level of male infertility as well. Perhaps what is currently being offered as personalized treatment of infertile patient is more based on "the best expert opinion of the attending clinician" than "the best evidence-based data available". In this sense, The Columbia University Reproductive Precision Medicine Center is perfectly positioned to be a global leader in the development and implementation of these approaches. And PPM and personalized and precision genomics as the major part of the Reproductive medicine & Family planning are a new and exciting field with the potential to significantly improve medical care for pregnant women and newborns.

In general, four major types of genomic biomarkers are crucially important and valuable for PPM-related services: Diagnostic, Predictive, Monitoring and Prognostic ones, to be used in most of genomic testing platforms. Among the testing panels are: Carrier testing, Pre-symptomatic & Predictive Testing, Pre-conception Testing, Newborn Testing, Prenatal Testing (NIPT), Nutriogenomic and Pharmacogenomic Testing.

The use of genomic profiling for pregnant women and prenatal diagnosis of fetuses with sonographic abnormalities has grown tremendously over the past decade. Fetal genomic screening also offers an opportunity to identify incidental genomic variants that are unrelated to the fetal phenotype but may be relevant to fetal and newborn health. In this context, Fertility Awareness-based Methods (FAMs) represent the harmony of science and self-awareness. By tuning into your body's natural rhythms, these precision methods empower you to make informed decisions regarding conception - or its prevention, often in consultation with your obstetrician.

Improved patient (or persons-at-risk) outcomes must consider not only increased survival, or quality of life, but also improved Clinical Decision Support (CDS) & making! Each decision-maker values the impact of their decision to use PPM on their own budget and well-being, which may not necessarily be optimal for society as a whole. It would be extremely useful to integrate data harvesting from different databanks for applications such as prediction and personalization of further treatment to thus provide more tailored measures for the patients resulting in improved patient outcomes, reduced adverse events, and more cost effective use of health care resources. A lack of medical guidelines has been identified by the majority of responders as the predominant barrier for adoption, indicating a need for the development of best practices and guidelines to support the implementation of PPM!

Meanwhile, family planning specialists have the unique and exhilarating responsibility to help ensure that young patients derive maximal benefit from genomics which, in turn, will provide the family planning specialists new and often unexpected insights into the biological basis of health and disease and will afford new health care options requiring informed and sometimes challenging choices of physicians and patients. So, developing reproductology-related expert-driven competency in genomics

is a daunting task, but one that the specialty can and must accomplish in the near future. Achieving such competency will provide effectively integrating genomics into practice, will improve reproductology-related experts' effectiveness in caring for patient's current health concerns and will make experts the guides to lifelong health. For reproductive medicine, precision has always been a criterion in every procedure, including etiology-oriented examination, specific diagnosis, identifying healthy embryos, WOI, and accurate implantation. Combined with genetic information and a large volume of biomedical data, an unknown territory of reproductive medicine will be explored, and the mechanisms underlying the causes of infertility that we do not yet know will be elucidated. The application of PPM has become a guideline for the development of medicine, especially for reproductive medicine.

PPM in reproductive health involves using an individual's genetic and biological information to design customized treatment plans for fertility and related conditions. From identifying genetic mutations that impact fertility to tailoring hormonal therapies, PPM allows fertility specialists to develop interventions that maximize success while minimizing risks. PPM offers numerous applications in reproductive health, addressing a wide range of challenges:

(i) genetic testing and screening, (ii) preimplantation genetic testing, (iii) tailored fertility treatments, (iv) predicting treatment success, (v) optimizing embryo selection, (vi) understanding immune factors in fertility, (vii) precision prenatal care, (viii) informed decision-making, (ix) pre-early diagnosis of underlying conditions.

In this sense, PPM is gaining momentum in the family planning and obstetrics field for its potential to revolutionize the standard of care and lead to better outcomes for both mothers and babies. The possibility of improving prevention and containing side effects will contribute to controlling overall healthcare costs through the treatment of potentially critical conditions for pregnant women and their offspring.

PPM is transforming the landscape of Obstetrics, Family Planning and Reproductive Medicine as a whole, offering tailored approaches to care that enhance patient outcomes. From genetic screening and counseling to PPM-guided oncology and hormonal therapies, PPM has the potential to revolutionize women's and offspring healthcare. However, successful implementation requires collaboration among healthcare providers, geneticists, bio designers and researchers, alongside continued advancements in technology and ethical frameworks. By embracing PPM, reproductive medicine and family planning can pave the way for a future where women receive individualized, evidence-based care, leading to improved health and well-being.

### **Biography**

Sergey Suchkov was born in the City of Astrakhan, Russia, in a family of dynasty medical doctors. In 1980, graduated from Astrakhan State Med University and was awarded with MD. In 1985, maintained his PhD as a PhD student of the I.M. Sechenov Moscow Medical Academy and Inst of Med Enzymology. In 2001, maintained his Doctor Degree at the Nat Inst of Immunology, Russia. From 1989 through 1995, was being a Head of the Lab of Clin Immunology, Helmholtz Eye Research Inst in Moscow. From 1995 through 2004 - a Chair of the Dept for Clin Immunology, Moscow Clinical Research Institute (MONIKI). In 1993-1996, was a Secretary-in-Chief of the Edit Board, Biomedical Science, an int journal published jointly by the USSR Academy of Sciences and the Royal Society of Chemistry, UK.

At present, Dr Sergey Suchkov, MD, PhD, is: Professor in Medicine & Immunology and Director for Center for Biodesign, N.D. Zelinskii Institute for Organic Chemistry of the Russian Academy of Sciences, Moscow, Russia; R&D Director, InMedStar, Russia-UAE; Senior Scientific Advisor of China Hong Kong Innovation International Business Association, Hong Kong; The Russian Academy of Natural Sciences, Moscow, Russia. Dr Suchkov is a member of the: The Russian Academy of Natural Sciences, Moscow, Russia; New York Academy of Sciences, USA; American Chemical Society (ACS), USA; American Heart Association (AHA), USA; European Association for Medical Education (AMEE), Dundee, UK; EPMA (European Association for Predictive, Preventive and Personalized Medicine), Brussels, EU; ARVO (American Association for Research in Vision and Ophthalmology); ISER (International Society for Eye Research); Personalized Medicine Coalition (PMC), Washington, DC, USA.



## **Shifu Wang**

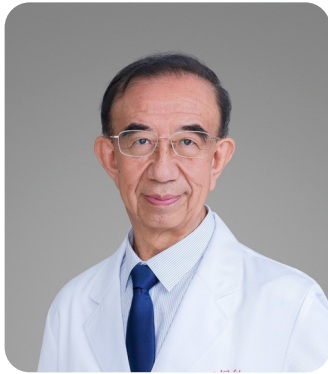
Dean of Department of Clinical Microbiology, Children's Hospital Affiliated to Shandong University, Jinan, China

# **From expert consensus to clinical practice of mNGS in severe pediatric infections**

1. The background of the formation of the Chinese expert consensus on the application of metagenomics high-throughput sequencing technology in pathogen detection of infectious diseases
2. Interpretation of the content of expert consensus
3. Experience Sharing on the interpretation of mNGS test Reports for Severe Infections in Children

### **Biography**

Professor Wang Shifu is an expert in the field of pediatric microbiology and infection. Wang Shifu was a visiting scholar at Southern California University in the United States, sent by the China Scholarship Council. Wang Shifu participated in 8 major national projects such as "Research on the Pathogen Spectrum, Epidemic Patterns and Variations of Respiratory Viral Infectious Diseases", and published 34 SCI papers. Wang Shifu is an expert of the International Cooperation and Exchange Working Group on Clinical Application and Resistance Evaluation of Antibacterial Drugs of the National Health Commission, and currently serves as the director of the Clinical Microbiology Department of the Children's Hospital Affiliated to Shandong University.



## Zhenhuan Liu

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

# Neuromodulation of scalp electroacupuncture in the treatment of autism spectrum disorder

**Background:** Autism Spectrum Disorders (ASD) are a series of neurodevelopmental disorders characterized by social disorders, rigid behaviors and narrow interests. The World Health Organization (WHO) estimates that the prevalence of ASD has been increasing over the past 50 years. With one in 48 children, ASD has become a global public health problem. Currently, there is no effective drug treatment for children with ASD, and there is no effective medical treatment. Education of these ASD children by special education methods alone has a poor outcome, with 75% of ASD children failing to achieve normal or cure. And 80% of ASD children suffer from mental retardation, ADHD, epilepsy, emotional sleep disorders and so on. It can cause pain and suffering for ASD children and their parents. The effects may persist into adulthood.

**Objective:** The purpose of this study was to investigate the effect of scalp acupuncture of painless therapy on core symptoms, quality of life and communication ability of children with ASD. Our team conducted a controlled study of scalp acupuncture therapy in 198 children diagnosed with ASD. The clinical diagnostic criteria of children with ASD who were selected for met the DSM-5 criteria. Each child and parent signed an informed consent form.

**Methods:** 198 children with ASD were randomly divided into two groups. One group 89 cases received painless scalp electro acupuncture therapy and the other group 89 cases received Pediatrics rehabilitation care and special education for 6 months. Clinical evaluation methods were ATEC, ABC, CARS and Gesell developmental scales. Pre - and post-treatment assessments were performed. The age of the two groups was 3-7 years old, and the gender, degree of illness, comorbidities, family education and rearing methods, course of disease and other factors were statistically analyzed. There was no significant difference between the two groups, and there was a certain comparability between the two groups. Painless scalp electro acupuncture therapy method, acupuncture and precise scalp surface projection in functional language area of cerebral cortex were selected for scalp acupuncture. Broca and Wennicken area were simultaneously stimulated by acupuncture. Painless scalp acupuncture is performed every other day. After Painless scalp acupuncture, electrical acupuncture was given to stimulate the language area for 15 minutes, every 10 times of acupuncture, rest for 15 days. A second clinical evaluation was conducted 6 months after painless scalp acupuncture.

**Results:** The improvement of core symptoms in the painless scalp electro acupuncture treatment group was better than that in the control group. The initial clinical improvement was in abnormal visual communication, improvement of sleep and mood, and the following clinical effects were alleviation of rigid behavior, improvement of attention, and improvement of verbal and social communication ability. Assessment of these scales reflects a gradual improvement in these core symptoms. But these changes were not significant in the control group.

**Conclusion:** The research results showed that painless scalp acupuncture therapy could significantly improve the core symptoms of ASD children, such as extreme loneliness, eye contact disorder, language repetition, compulsive agreement, and indifference, significantly regulate the abnormal EEG of ASD children, and positively promote the cognitive level of low-functioning ASD children. The clinical efficacy of the treatment of ASD was not closely related to age. Painless scalp electro acupuncture can be used as an effective supplement and alternative medicine therapy in the clinical treatment of ASD. The popularization and application of painless scalp acupuncture therapy can improve the quality of life of ASD children and reduce the economic burden of society and family.

Since 2004, Nanhai Women's and Children's Hospital Affiliated to Guangzhou University of Chinese Medicine has applied our original pediatric neuro rehabilitation scalp acupuncture therapy to treat ASD and achieved good clinical efficacy. In order to further promote the application, our research group obtained the exact clinical effect confirmed by scientific evaluation through the clinical validation study and clinical follow-up of 1000 cases of ASD. We also receive pediatricians from all over the world who come to our hospital in China to study head acupuncture therapy for ASD. Doctors and rehabilitation therapists from Switzerland, Australia, the United States, Germany, Egypt, Russia, Kazakhstan and other countries have come to our hospital to study the clinical application of head acupuncture therapy in ASD.

**Keywords:** Autism spectrum disorder, Electro acupuncture, Scalp, Painless.

### **Biography**

Zhenhuan LIU professor of pediatrics, Pediatric acupuncturist Ph.D. Tutor. Zhenhuan LIU has been engaged in pediatric clinical and child rehabilitation for 40 years. Led the rehabilitation team to treat more than 40,000 cases of children with intellectual disability, cerebral palsy and autism from China and more than 20 countries, more than 26800 children's deformity returned to school and society and became self-sufficient. The rehabilitation effect ranks the international advanced level. Vice-chairman of Rehabilitation professional committee children with cerebral palsy, World Federation of Chinese Medicine Societies. Visiting Professor of Chinese University of Hong Kong in recent 10 years. Zhenhuan LIU is most famous pediatric neurological and rehabilitation specialists in integrated traditional Chinese and Western medicine in China. Zhenhuan LIU edited 20 books. Zhenhuan LIU published 300 papers in international and Chinese medical journals.



# BOOK OF ABSTRACTS

**Special Talk**

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**MAR 26-28**

INTERNATIONAL CONFERENCE ON

**PEDIATRICS,  
NEONATOLOGY AND  
CHILD HEALTH**



## Allison Missler

Founder SG Advocacy, Carmel, Indiana, USA

# Nurturing resilience — A foster parent and doula's perspective on social pediatrics and holistic child health

As a foster parent to 98 children, over two decades as a pharmaceutical executive and a certified doula, my lived experience has offered a front-line perspective on the critical intersection of social pediatrics and child health. This presentation will explore how integrative, community-based care — rooted in compassion, advocacy, and trauma-informed practices — is essential for promoting resilience and long-term well-being in vulnerable children.

Drawing from real-world cases, I will highlight how social determinants such as poverty, family instability, abuse, and lack of access to healthcare shape a child's physical and emotional development. I will also discuss the transformative impact of consistent caregiving, early intervention, and family-centered support systems in mitigating these challenges. My dual role as a doula and foster caregiver has allowed me to support children from birth through adolescence, emphasizing breastfeeding, proper hygiene, nutritional support, and trauma-informed parenting as foundational pillars of care.

The presentation will examine how collaboration between healthcare providers, educators, and caregivers can create a safety net for at-risk children — especially those navigating the foster care system. I will share evidence-based practices and personal insights on managing mental health crises, supporting developmental delays, and creating emotionally safe environments that encourage healing and growth.

By centering children's voices and honoring their lived experiences, social pediatrics can shift from reactive treatment to proactive empowerment. My goal is to illustrate how non-clinical caregivers, like foster parents and doulas, can play a critical role in holistic pediatric care models. Together, through advocacy, policy, and practice, we can build a system where every child — regardless of their background — has the opportunity to thrive.

This session will offer conference attendees a unique perspective grounded in both hands-on caregiving and child health advocacy, contributing to a broader dialogue on equity, resilience, and the future of social pediatrics.

**Biography**

Allison Missler is a foster parent to 98 children, a certified doula serving underserved pregnant people, and a former pharmaceutical executive with over 20 years of industry experience. Her unique background blends clinical insight with compassionate, hands-on care. Allison advocates for trauma-informed approaches that prioritize healing and resilience, asking “what happened to this child?” rather than “what’s wrong with this child?” Allison works closely with Indiana’s Department of Child Services and serves on multiple child welfare committees. Through foster care, doula work, and public service, Allison is committed to creating safe, equitable environments where children and families can thrive.



# BOOK OF ABSTRACTS

## Oral Sessions

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**MAR 26-28**

INTERNATIONAL CONFERENCE ON

**PEDIATRICS,  
NEONATOLOGY AND  
CHILD HEALTH**

**Professor A R Gatrads<sup>1\*</sup>, Eshal Shaukat<sup>2</sup>**

<sup>1</sup>Manor Hospital Walsall, West Midlands (UK)

<sup>2</sup>Student at Beacon House Girls Campus, Canal Faisalabad, Pakistan

## **Integrating education, health and climate resilience to combat poverty: A community-Based UN SDG case study in Faisalabad, Pakistan**

**Background:** Women face violence, exploitation, unequal pay, and discrimination. Gender equality is a basic human right and key to a peaceful, prosperous, and a sustainable world. Persistent inequality deepens women's poverty, hindering social progress." It is education that lifts people out of poverty.

**Aim:** To demonstrate how addressing Sustainable Development Goals (SDGs) beyond education in girls can, within one year, significantly improve school attendance as well as both physical and mental health outcomes in a low-resource setting.

**Method:** In 2024, a UK-based NGO launched a solar-powered healthcare and outreach centre in Faisalabad, Pakistan. It targeted orphaned girls under 15 years of age, providing free education alongside maternal and child health advice for women, including immunisations, nutrition support, and basic health guidance. The project integrated a wide range of SDG-aligned initiatives to address barriers to wellbeing.

A stitching centre was established to teach sewing skills to 50 girls, including those unable to access formal schooling. Under the guidance of a trained instructor, girls produced reusable sanitary pads.

To improve school attendance, toilets were constructed on-site and in nearby schools. The charity also installed 67 hand pumps across surrounding villages to ensure clean water access, eliminating the need for girls to travel long distances to fetch water. (SDGs 4).

Regular educational sessions were held on hygiene, water safety, breast health, fistula awareness, and vocational training, particularly for women and youth (SDGs 1, 3, 4, 13). Sustainability workshops addressed the impact of climate-related stressors—such as heat and air pollution—on vulnerable populations such as pregnant women.

A playground and swimming pool were built exclusively for girls, giving them space for recreation, and teaching essential swimming skills that could prove life-saving during floods. A non-fossil fuel bicycle ambulance was introduced to transport the sick and pregnant women to hospitals safely.

All enrolled girls were treated for scalp infestations and trained in personal hygiene, including hair grooming and dental care. Those too old for schooling received vocational training only.

A cost-recovery system was piloted, where wealthier community members paid for services to ensure financial sustainability and ongoing maintenance.

**Results:** This initiative enhanced menstrual hygiene and school attendance, supporting SDGs 5 and 12. Over 1,000 reusable pads were distributed, and more than 100 girls commenced school—27 after needing birth certificates for school entry. Community sessions raised awareness on health and sustainability. Fifty girls received polio vaccines, 10 women gained factory employment, and 358 pregnant women received folic acid, promoting maternal health, gender equality, and economic empowerment across the community.

**Conclusion:** Initially focused on education, this project quickly evolved into a multi-SDG intervention, demonstrating the power of integrated community-led development. By addressing education as part of a wider ecosystem—including health, gender rights, water, and climate adaptation—the project achieved far-reaching and sustainable outcomes. It is hoped that in due course more monies will be raised through renting out the facilities to help upkeep.

A growing waiting list reflects its success, and it is hoped these healthier, more empowered girls will become future role models, championing social mobility and equity.

### **Biography**

Dr Gatrad OBE is a professor of paediatrics and child health at the universities of Birmingham and Wolverhampton. Gatrad was honoured by the Queen for halving the death rate of new born babies. His special interests are transcultural paediatrics and sustainability. Gatrad holds a PhD in 'differential growth' in children from different ethnic backgrounds. Gatrad is a Senior Fellow of the Royal College of Paediatrics (UK) and has published over 80 papers in peer reviewed journal. The organisation he founded, WASUP – World Against Single Use Plastic is now global. Gatrad is member of the Planetary Health Alliance.

**Dr. Abdul Sattar Anjum**

Nishtar Medical University, Multan, Pakistan

## **Clinical applications of MDCT, 3-D and virtual bronchoscopy in tracheobronchial pathologies in pediatric patients. Our experience at Children Hospital & Institute of Child Multan & Nishtar Medical University, Multan-Pakistan**

**Objective:** To investigate the value of Multi-detector CT scan, 3-D and virtual bronchoscopy in tracheobronchial pathologies in pediatric patients.

**Study design:** Descriptive Prospective study.

**Place and duration of the study:** Department of Radiology Nishtar Medical College and Children Hospital complex, Multan. From January, 2009 to January, 2014

**Patients and methods:** Low dose CT neck and chest with pediatric protocol was performed in 50 consecutive children with clinically suspected foreign body aspiration and tracheobronchial pathologies. Plain chest X-ray of each patient was evaluated at the same time. Multi-planar reformatted imaging with 3-D and virtual bronchoscopy was carried out on workstation after Multi-detector CT examination.

**Results:** Out of 50 patients 42 patients were positive for tracheobronchial foreign bodies were identified by chest CT. Three patients were normal with no tracheobronchial pathology.

Two patients having findings of pulmonary agenesis. Two patient having cystic brochiectatic changes and one patient having diagnosis of tracheal bronchus.

Right main stem bronchus was the most common location of foreign body (47.6%) and air trapping was the most common associated finding (28.5%). Sixteen of the 45(35.5%) patients had no abnormalities on plain X-Ray. The difference between Multi-detector CT and plain X-Ray results was statistically significant ( $P < 0.001$ ). Foreign bodies were removed successfully on the basis of CT findings

**Conclusion:** Evaluation of foreign body aspiration of the airway in children and clinically suspected tracheobronchial pathologies must be accomplished by Multi-detector CT chest. It will be useful both in showing the exact location of a foreign body before bronchoscopy and in ruling out a foreign body in patients with a low level suspicion and normal or nonspecific findings on chest radiography.

**Biography**

Dr. Abdul Sattar Anjum has completed his medical education with multiple national and international qualifications including BSc, MBBS, DCPS, MCPS, FCPS, EDIR, MPH, CHPE, and the European Board in Radiology. Dr. Abdul is currently serving as Professor and Chair of Radiology at Nishtar Medical University, Multan, Pakistan. Dr. Abdul is also the Training Program Director of Radiology at Nishtar Hospital and University, Multan, Pakistan. Dr. Abdul is an experienced radiologist with strong academic and clinical expertise, actively involved in postgraduate training, medical education, and advanced diagnostic imaging.



**AL-Sufayan, Fahad .MD\*, Al-Adil, Mahmoud.MD, Lutfi Islam. MD**

Dr. Sulaiman AL-Habib Hospital, Al-Khobar, Eastren Province, Kingdom of Saudi Arabia

## **Congenital chylothorax. Lessons from reported cases**

Chylothorax is the accumulation of chyle—lymphatic fluid rich in triglycerides—in the pleural cavity. This results in pleural effusion. Congenital Chylothorax (CC) is the most common cause of neonatal pleural effusions. It occurs in approximately 1 in 25,000 live births and affects female infants more often. CC is often idiopathic but can also be part of genetic syndromes such as Noonan, Turner, Down, Ehlers-Danlos, and Costello syndromes. More commonly, it arises in non-syndromic cases. These are due to congenital malformation or injury of the thoracic lymphatic duct. The duct may be occluded, underdeveloped, or traumatically disrupted during delivery.

Diagnosis is typically confirmed by analysis of pleural fluid, which reveals a high concentration of lymphocytes, proteins (e.g., albumin, antibodies, coagulation factors), lipids, and other biologically active components. Given the potential loss of essential immune and nutritional elements, close monitoring and replacement are critical. Management remains challenging, and although surgical options exist, a conservative, stepwise therapeutic approach is widely recommended as the initial strategy.

### **Biography**

Dr. Al-Sufayan, is a senior physician specialized in neonatal-perinatal medicine. Currently working at Dr. Sulaiman Alhabib Hospital in Al-Khobar city, Saudi Arabia, one of the largest healthcare private corporate. Dr. Al-Sufayan completed fellowship training in neonatal-perinatal medicine at university. of Manitoba, Canada. He obtained research methodology diploma from American university of Beirut in 2012. In 2016, Dr. Al-Sufayan successfully completed Executive Master of Business Administration. His passion for quality of care and patient safety thrives over two decades of clinical practice to be one of the national solo medical surveyors in the Saudi central board for accreditation of healthcare institutions. Dr. Al-Sufayan is a guest speaker in national and international conference. Dr. Al-Sufayan published articles medical journals as an author or coauthor.



**Dr. Varsha More, Dr. Amol Joshi\*, Dr. Atul Londhe, Dr. L. S. Deshmukh, Dr. Jyoti Bajaj**

Government Medical College, Chhatrapati Sambhajnagar (Formerly Aurangabad),  
Maharashtra State, India

## **Containing a multidrug-resistant klebsiella pneumoniae outbreak in a level III NICU: A retrospective cohort study**

**Background:** *Klebsiella pneumoniae* is a leading cause of neonatal sepsis, particularly in preterm infants. The emergence of multidrug-resistant (MDR) strains poses significant challenges for NICU infection control and clinical management. In December 2024–January 2025, our Level III NICU encountered a sudden cluster of *K. pneumoniae* cases requiring structured outbreak containment.

**Methods:** A retrospective cohort study was conducted including all neonates with culture-confirmed *K. pneumoniae* sepsis during the outbreak period. Maternal, intrapartum, and postnatal risk factors were extracted from clinical records. Univariate regression was performed to explore associations with mortality. Antibiotic susceptibility patterns were analysed. Infection-control interventions implemented during the outbreak were recorded and monitored.

**Results:** Twenty-five neonates developed *K. pneumoniae* sepsis over the two-month period. Most affected infants were preterm and low birth weight. Common clinical features included respiratory distress, feeding intolerance, lethargy, and temperature instability. Significant associations with mortality were identified for multiple maternal and postnatal risk factors. Isolates exhibited multidrug resistance with carbapenem sensitivity preserved. Following reinforcement of infection-control practices—including hand hygiene compliance, equipment sterilisation, cohort nursing, and antimicrobial stewardship—the number of new cases declined sharply.

**Conclusion:** This outbreak underscores the high mortality risk posed by MDR *K. pneumoniae* in preterm neonates. Early detection and rapid implementation of robust infection-control strategies effectively curtailed transmission. Strengthening routine surveillance and NICU hygiene practices is critical for preventing similar outbreaks in resource-limited settings.

### **Biography**

Dr Amol Joshi MD, is Consultant Neonatologist, Quality Improvement Advisor. He holds fellowship in Neonatology (MUHS, Nashik University), Fellowship IsQua (2022), has published many articles. Mentored many Newborn Care Units in secondary health facility, currently holding additional responsibility as Associate Editor (BMJ Open Quality).



**Najood Alenezi<sup>1</sup> MD, Ibrahim Almogarri<sup>2</sup> MD, Banjar Hanaa<sup>2\*</sup> MD, Shamayel Mohammed. Russol Almubark, Abeer Alharbi, Essa Alrashedi**

<sup>1</sup>Maternity and Children Hospital, Arar, Saudi Arabia

<sup>2</sup>Department of Pediatrics, King Faisal Specialist Hospital and Research Centre (KFSHRC), Riyadh, Saudi Arabia

## **Case series of hybrid lung lesion combining Congenital Pulmonary Airway Malformation (CPAM) and Pulmonary Sequestration (PS), with bilateral pulmonary sequestration and literature review**

**Introduction:** Bilateral Pulmonary Sequestration (PS) is an exceptionally uncommon variant, characterized by non-functioning lung tissue supplied by systemic arteries on both sides, Hybrid lesions combining PS and Congenital Pulmonary Airway Malformation (CPAM) represent a complex subset of these anomalies.

**Objective:** A case report of CPAM, with bilateral PS and a literature review of hybrid lung lesion, bilateral PS.

**Method:** The first case report in the Middle East of CPAM and Bilateral PS.

**Case Report:** A 3-year-old boy medically free, presented with persistent fever despite received antibiotics and unremarkable physical examination, a chest x-ray showed a picture of necrotizing pneumonia treated with dual antimicrobials, with persistent radiological abnormalities, extensive workup was done with a contrast CT chest showed multiple cystic lesions with variable densities on the left side with blood supply coming from the lower descending aorta, represent a hybrid condition as CPAM and extra lobar PS, there was another blood supply going from the descending thoracic to the right side, which represents an intrathoracic PS or arteriovenous malformation type. He underwent surgical resection of the left lower lobe lobectomy. There is only one published case report of a similar presentation of a 2-year-old case of bilateral pulmonary varices associated with hybrid lung lesion PS and CPAM, while bilateral PS was reported in 36 cases.

**Conclusion:** Understanding these complex congenital anomalies is crucial for appropriate patient care and surgical planning. Management approach ranges from conservative to surgical intervention, emphasizing the need for a multidisciplinary approach in diagnosis and treatment. Recognizing these unusual presentations is crucial for appropriate patient care and surgical planning in both pediatric and adult populations.

**Biography**

Dr. Hanaa Banjar, is a Professor of Pediatrics at Alfaisal University since 2013, Riyadh. Dr. Banjar is also A consultant pediatric Pulmonology and the Director of Pediatric Pulmonary fellowship program at King Faisal Specialist Hospital and research Center, Riyadh< Saudi Arabia. Dr. Banjar received her Residency in Pediatrics from The University of Ottawa, Ontario, Canada and her Pulmonary Fellowship from McGill University, Montreal, Quebec, Canada. As an expert in pediatric pulmonary medicine, especially in cystic fibrosis, Pulmonary Hypertension, and Non-CF Bronchiectasis, Dr. Banjar serves as the principle investigator of the cystic Fibrosis registry of up to 400 patients and the principle author of 90 articles.



## **Kukuza Anna<sup>1\*</sup>, Bloemkolk Eric<sup>2\*</sup>**

<sup>1</sup>Institute of Children and Juvenile Health Protection of National Academy of Medical Science of Ukraine, Kharkiv, Ukraine

<sup>2</sup>SOFT Tulip Foundation, The Hague, The Netherlands



# **Experience of early childhood intervention in Ukraine: Possibilities of intersectoral cooperation and internationally recognized practices during the war**

The development of Early Childhood Intervention (ECI) for families with young children with developmental delays, disabilities and at risk in Ukraine has a long history. This story began in the early 2000s, but gained special dynamics from 2008-2009, thanks to partnerships with international experts, starting with those from Dutch organization SOFT tulip. ECI in Ukraine developed into a routinely oriented service, which is based on a transdisciplinary model of the work of a team of specialists in various fields, in partnership with parents. Modern ECI has a focus on the comprehensive well-being of children by integrating medical, social, and environmental factors that influence their development and strengthening parents in their ability to raise a child. Crucial in the successful development of the child in its family is the intersect-oral cooperation and referral between the ECI-service and the early detection and treatment from the medical and rehabilitation services. In Ukraine this intersect oral cooperation is still challenging. After the start of Russia's large-scale aggression in February 2022, new challenges arose for families with children and ECI specialists: traumatic experiences over a long period of time, exhaustion, losses, frequent forced changes of circumstances, lack of stability, security, predictability, regression in children's development, mental health problems. The results of the study "Lace of Life. The functioning of the ECI network in Ukraine during the war", which was conducted in 2022-2024, showed the effectiveness of ECI during the war based on such basic things as partnership and mutual support with parents, building long-term relationships, the strength of the daily routine, and developing the ability to control one's life.

### **Biographies**

1. Dr. Anna Kukuza is medical psychologist, chair of the Department of Developmental Psychology of the Institute of Children and Juvenile Health Protection of National Academy of Medical Science of Ukraine. Dr. Anna Kukuza is one of the leaders of the development the ECI system in Ukraine for families with early age children with developmental delays, disabilities and at risk.
2. MSc. Eric Bloemkolk is social scientist and international ECI development specialist, who was director of the SOFT tulip foundation for 17 years. Eric developed a deinstitutionalisation strategy in which the nationwide development of ECI in Ukraine has become the core activity. Currently he is project leader at Healthcare4Ukraine and ECI-project leader at SOFT tulip.

**Dr. Carol Zuniga Garcia**

Hospital Mario Catarino Rivas, San Pedro Sula, Honduras

## Neurodevelopmental milestones in neuromuscular diseases

Neuromuscular diseases are part of a complex group of diseases that can have one of four locations: The motor neuron, muscle, neuromuscular junction, and peripheral nerve. They can have a hereditary etiology or be acquired. Among the most important neuromuscular diseases to be aware of are those that have disease-modifying therapy, such as spinal muscular atrophy and Duchene/Becker muscular dystrophy. Early diagnosis makes a difference in the quality of life and prognosis of these patients.

Neuromuscular diseases have a wide clinical variability, varying patterns of muscle weakness, and involvement of different organs, so clinical suspicion is important.

Among the clinical manifestations, patients may present with hypertonia, neurodevelopmental delay, gait disturbance, frequent falls, orthopedic disorders, swallowing disorders, among others.

It is important to know the milestones of normal neurodevelopment. To identify abnormalities, a child should achieve head support between 2-4 months, sitting between 6-8 months, and walking at 18 months, according to the World Health Organization. If the patient was premature, a corrected age should be determined and neurodevelopment assessed accordingly.

Anything that does not match the patient's neurodevelopmental charts is not normal and should be investigated. Comments should be avoided, as each child develops at their own pace; some boys take longer than girls.

There are scales that can be quickly performed in the office that can help us adequately monitor neurodevelopment, especially in the motor area, and identify patients at risk.

### Biography

Dr. Carol Zuniga studied medicine and general surgery at the National Autonomous University of Honduras. She later specialized in pediatrics, then a subspecialty in pediatric neurology at the Centro Medico Nacional 20 de November in Mexico City, and a high specialty in neuro-genetics at the Manuel Velasco Suarez Institute of Neurology and Neurosurgery in the same city.



## **Cher McGillivray**

PhD, Clinical Psychologist, MPsych(ClinPsych), GDipPsySc, MAPS, Bond University, Australia

# **Trauma informed care for childhood maltreatment and child abuse**

Child sexual abuse (CSA) is a widespread and intolerable issue with far-reaching consequences. The impact of CSA often extends beyond the child, significantly affecting non-offending parents (NOPs), who may experience vicarious trauma following their child's disclosure. Despite this, there remains a lack of empirically supported interventions tailored to the specific needs of NOPs.

To address this gap, the Parenting Beyond Trauma (PBT) program was developed using a compassion-focused approach to support NOPs in the aftermath of CSA. This quasi-experimental study, conducted between July 2024 and May 2025, employed a pretest-posttest design to evaluate the effectiveness of the PBT program as a parent-centred intervention combined with trauma-informed training.

Twenty-five NOPs participated in the six-week online program. Measures were collected pre- and post-intervention to assess changes in post-traumatic stress disorder (PTSD) symptomatology, complex PTSD (CPTSD) symptomatology, post-traumatic cognitions (PTCs), resilience, and cognitive emotion regulation (CER). Data were analysed using two separate one-way multivariate analyses of variance (MANOVAs) and a reliable change index (RCI) analysis.

Results indicated significant reductions in PTSD, CPTSD, and PTCs, alongside significant increases in resilience. These findings offer preliminary support for the replication and further validation of the PBT program, highlighting its potential to assist NOPs in their recovery journey. Importantly, parents play a key role in a child's recovery as do ensuring that physicians, clinicians, child protection, legal services, and parents are trauma-informed. Their active involvement is essential in fostering a holistic, family-centred approach to care and intervention.

**Keywords:** Child sexual abuse, Non-offending parents, Post-traumatic stress disorder, Complex PTSD, Post-traumatic cognitions, Resilience, Cognitive emotion regulation, Trauma-informed care, Parent-centred intervention

## **Biography**

Dr Cher McGillivray is an Assistant Professor of Psychology at Bond University, within the Faculty of Society & Design. Cher is also registered Clinical Psychologist, Coordinator of Masters of Psychology Programs (Clinical & Professional), researcher, speaker, writer and media commentator on children, families and community wellbeing. Cher focuses on positive social change and advocates for the rights and wellbeing of children and restoring familial foundations for families and communities that care for them. Her research endeavours on childhood maltreatment, complex trauma and posttraumatic growth aim to foster a deeper understanding of these critical issues, facilitating more effective responses within the realms of policy, public health, and the legal system to better respond and ultimately prevent of childhood maltreatment. She has developed the Parenting Beyond Trauma Intervention, Moral Injury and Childhood Maltreatment Assessment Measures, and continues to research in the areas of moral injury, self-compassion, mindfulness, and posttraumatic growth. Her research also involves bridging the gap between victim and victim offenders to ultimately empower victims and reduce gendered based violence.

**Dabare H. P. M**

Department of Physiotherapy, Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

## **Advancing the use of energy expenditure assessment through doubly-labelled water: Global insights and applications in physical activity research in children and adolescents**

The accurate quantification of Total Energy Expenditure (TEE) under free-living conditions remains central to understanding human metabolism, physical activity, and energy balance. The Doubly-Labelled Water (DLW) technique, recognized as the global criterion for measuring free-living TEE, has transformed our capacity to examine metabolic variability across different populations including children. DLW applications further used in validating and recalibrating self-reported energy intake and activity data on a global scale.

Recent studies have extended their scope in establishing a universal predictive equation capable of identifying the errors in self-reported energy intakes, redefining the reference standards for dietary surveillance. Global investigations have also revealed developmental and sex-specific variability in TEE during puberty, underscoring the importance of age- and sex-sensitive calibration when interpreting energy expenditure in children and adolescents. Together, these efforts demonstrate that DLW not only benchmarks energy metabolism but also exposes the biases and limitations inherent in questionnaire- and device-based energy assessment.

Within this global framework, methodological advances have extended to the validation of field tools and the development of population-specific prediction equations in children. Our research in Sri Lanka applied DLW to 11–13-year-old Sri Lankan children to validate subjective (recall questionnaires, activity logs) and objective accelerometers) physical-activity measures. The studies demonstrated that commonly used accelerometer equations derived from Western cohorts systematically misestimated activity energy expenditure, leading to the derivation of a new culturally relevant predictive model that explained over 70% of variance compared to DLW. These further shows that calibration to local body composition and movement patterns significantly improves validity of accelerometer-based PAEE prediction.

These studies highlight how DLW—when integrated with accelerometry, behavioral metrics, and fitness outcomes—enables a multidimensional understanding of physical activity and metabolism across developmental stages and geographical settings. The emerging evidence underscores that precision

in measurement is not merely methodological but foundational to shaping global recommendations on physical activity, nutrition, and chronic-disease prevention from the childhood.

As the network of DLW-validated datasets expands, spanning more than 30 countries, the approach continues to refine human energy models and expose cross-cultural heterogeneity in energy balance. The integration of such high-fidelity metabolic data with public-health and behavioral research may lead a step toward evidence-based, global physical-activity and nutrition policies.

### **Biography**

Dr. Prasangi Dabare is an academic and senior lecturer in physiotherapy, currently serving as the Head of the Department of Physiotherapy at the Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Sri Lanka. With a profound background in both clinical practice and academic research, Dr. Dabare has made significant contributions to the field of physiotherapy, particularly in pediatric and geriatric care, physical activity among children and adolescents, and body composition analysis methods.



**Abhishek L.H.G, Fernando R.T.M.N, Hewagamage D.S,  
Dabare H. P. M\***

Department of Physiotherapy, Faculty of Allied Health Sciences, General Sir John Kotelawala  
Defence University, Ratmalana, Sri Lanka

## **Facilitating factors and barriers affecting exercise adherence among children diagnosed with Duchenne Muscular Dystrophy (DMD) in a pediatric hospital, Sri Lanka**

**Introduction:** DMD (Duchenne Muscular Dystrophy) is a moderately uncommon disease among children, which affects the activities of daily living. It is a genetic disorder characterized by progressive muscle degeneration and weakness which typically diagnosed in early childhood. There is no exact cure for DMD, but exercise has significant benefits on children with DMD in improving their independency and quality of life. However, adherence to exercise programs can be challenging, and identifying these barriers can be beneficial as the healthcare workers and the parents can take measures to overcome those.

**Objective:** To describe the factors and barriers for the exercise adherence of children with DMD in Lady Ridgeway Hospital (LRH), Sri Lanka.

**Methods:** A qualitative cross-sectional study was carried out among children (N=30) diagnosed with DMD in LRH, Borella. Convenient sampling method was used as the sampling method. Ethical clearance was obtained from the Faculty of Medicine, General Sir John Kotelawala Defence University as well as LRH. A prior informed written consent was taken from the participants. A pre-tested interviewer-administrated questionnaire was used to collect subjective data from the parents/guardians of the individuals as well as their condition, treatments and exercise program. Height and weight were measured using the standard criteria and Body Mass Index (BMI) was calculated. Focus Group Discussions (FGD) were carried among children as well as their parents/guardians until the saturation point was reached. In depth interviews were done with the pediatric physiotherapists at the Lady Ridgeway Hospital. Inductive thematic approach was used to analyze the data from the focus group discussions and in-depth interviews. Subjective data were analyzed using Statistical Package for Social Sciences (SPSS) version 25.

**Results:** The mean age of the children diagnosed with DMD was  $9.9 \pm 3.0$  years. The mean age of the mothers and fathers of the affected are  $38.9 \pm 5.9$  years and  $43.7 \pm 7.6$  years respectively. A mean BMI was  $17.6 \pm 5.3$  kg/m<sup>2</sup>. The mean percentage of clinic visit completion ratio was  $89.2 \pm 13.4$  %. Three focus group discussions were carried out with the parents/guardians of the children diagnosed with

DMD and the identified themes of the discussion are as follows.

1. Parents'/guardians' perception in benefits and issues occurring while following the exercise program
2. Parents'/guardians' reasoning about the less child supportive behavior towards the exercise program
3. Parents'/guardians' perception about the child's support towards the exercise program
4. Parents'/guardians' suggestions and methods used in order to make the individual's exercise program more effective

Five focus group discussions were carried out with the parents/guardians of the children diagnosed with DMD and the identified themes of the discussion are as follows.

1. Positive connections towards exercise adherence
2. Negative connections towards exercise adherence

10 in-depth interviews have been carried out with the physiotherapists who are working at the LRH and the identified themes of the in-depth interviews are as follows.

1. Difficulties faced during the course of treatments
2. Parent and patient reactions and attitudes towards exercises
3. Physiotherapist's perception on condition and treatments

**Conclusion:** Our study investigated factors affecting exercise adherence in children with DMD, including socioeconomic, environmental, and anthropometric aspects. Focus group discussions and in-depth interviews revealed factors such as family support, parents' education, household income as well as barriers including transportation, economic barriers, physical barriers effect the exercise adherence of children diagnosed with DMD in Sri Lanka.

**Keywords:** Muscular dystrophy, Duchene muscular dystrophy, Children, Exercise adherence, Exercises

### **Biography**

Dr. Prasangi Dabare is an academic and senior lecturer in physiotherapy, currently serving as the Head of the Department of Physiotherapy at the Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Sri Lanka. With a profound background in both clinical practice and academic research, Dr. Dabare has made significant contributions to the field of physiotherapy, particularly in pediatric and geriatric care, physical activity among children and adolescents, and body composition analysis methods.



## G. Manisha Varma

Assistant professor, Pediatrics, AIIMS Bibinagar, Hyderabad, Telangana, India

### Kawasaki disease masquerading as suppurative BCG lymphadenitis

**Background:** Kawasaki disease (KD) is an acute medium-vessel vasculitis of childhood that frequently mimics infectious illnesses. Reactivation of the Bacillus Calmette–Guérin (BCG) vaccination site is a recognized complication of Kawasaki disease. We present a case of Kawasaki disease which presented with flared suppurative BCG lymphadenitis along with flare up of BCG vaccination site consistent with BCG reactivation.

**Clinical description:** An 8-month-old male infant presented with prolonged fever, unilateral cervical lymphadenopathy, and a suppurative right axillary lymph node adjacent to the BCG vaccination site. He was initially managed as bacterial lymphadenitis. Microbiological evaluation of aspirated pus revealed Mycobacterium tuberculosis complex, later confirmed as Mycobacterium bovis. Despite appropriate antimicrobial therapy, fever persisted, and the child subsequently developed mucocutaneous features suggestive of Kawasaki disease.

**Management and outcome:** A diagnosis of Kawasaki disease with suppurative BCG lymphadenitis was made. The child was treated with intravenous immunoglobulin, aspirin, and adjunctive corticosteroids owing to high-risk features. Fever subsided promptly following therapy. Serial echocardiography showed coronary artery dimensions at the upper limits of normal initially, with subsequent normalization. The child recovered without coronary sequelae.

**Conclusion:** This case highlights suppurative BCG lymphadenitis as a diagnostic pitfall in Kawasaki disease and emphasizes the need to consider KD in infants with persistent fever and lymphadenitis unresponsive to antibiotics in BCG-vaccinated populations.

**Keywords:** Kawasaki disease, BCG reactivation, Lymphadenitis, Mycobacterium bovis, Infant

#### Biography

Dr. G. Manisha Varma presently working as Assistant professor in the department of Paediatrics, All india institute of medical sciences, Bibinagar, Telangana has graduated in the year 2014 and has persuaded her Diploma at national board at Rainbow childrens hospital, Hyderabad, Telangana in the year 2019. With over 6 years of experience in Paediatrics, she has several national and international publications. She has won several awards in the quiz and poster/paper presentations in various conferences. She is an instructor for Basic NRP, Advanced NRP, BLS and PALS programs. Her special interests are pediatric hemato oncology and pediatric endocrinology.



## **Gerald H Katzman, MD, FAAP, CPE**

Clinical Associate Professor, Department of Pediatrics Wayne State University School of Medicine, USA

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

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.

### **Biography**

Dr. 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.

**Gita Bahari\*, Mochamad Robby Fajar Cahya**

Nursing Study Program, Binawan University, Indonesia

## **Application of modern wound treatment for newborn babies with epidermolysis bullosa acquisita in the NICU of Budi Kemuliaan Hospital, Jakarta: Case report**

Epidermolysis Bullosa Acquisita (EBA) is considered one of the rarest subepidermal bullous diseases in Western Europe, with an estimated annual incidence ranging from 0.2 to 0.5 cases per million people. The condition arises due to autoantibodies targeting collagen type VII, an important component of the anchoring fibrils within the dermal-epidermal junction. Modern wound care today is also called moist wound healing. Moist Wound Healing is a method of wound healing by maintaining isolation of the wound environment by remaining moist, using dressings that can maintain wound moisture. The purpose of applying wound care to newborns with Epidermolysis Bullosa Acquisita is to accelerate the wound healing process and increase comfort in infants. The method used by applying modern wound care with data collection techniques using nursing methodology and the subject in this case report is a newborn baby. One of the nursing problems that arise in clients with Epidermolysis Bullosa Acquisita in the NICU of Budi Kemuliaan Hospital is impaired skin integrity. The results obtained in the application of interventions after 3 days the wound became moist, the color of the wound was red, the size of the wound did not increase, the exudate decreased, around the wound there was no edema and no redness, the baby's C-Reactive Protein laboratory results decreased, the baby's body temperature ranged from 36.5°C - 37°C and most importantly the baby looked comfortable and not restless. Thus, it can be concluded that the importance of nursing care for newborns with EBA is carried out with modern wound care which is proven to be effective in accelerating wound healing and preventing infection. In addition, it is important to involve parents in this modern wound care, so that when the baby goes home, the parents are able to carry out wound care independently. Lastly let's make neonates comfort.

### **Biography**

I am Ns. Gita Bahari, S. Kep. I am an Indonesian nurse and graduate of the Profesi Ners program at Universitas Binawan, Jakarta. At 46 years old, I currently serves as the Head of the Infant and Pediatric Intensive Care Unit at RS Budi Kemuliaanmu in Jakarta, where I leads a team dedicated to providing specialized critical care for children.



## Ibironke Samson Ishola

Department of Food Science and Technology, Obafemi Awolowo University, Ile-Ife, Nigeria

# Nutritional status and cognitive value of egg white, egg yolk whole egg based complementary food and infectious disease

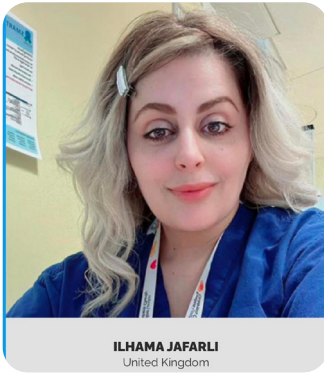
Eggs are functional foods that containing nutritional additives that is promoted as being beneficial to health and able to prevent or reduce infectious diseases that result in mortality and morbidity of mother and children during pre- and post-natal. Prominent among animal proteins, Eggs are one of the only foods that naturally contain vitamin D and Choline, that are essential for normal physiological growth, psychological reasoning and functioning of all children cells, but particularly important during pregnancy to support healthy brain development of the foetus and it is liking to a mother 'breast milk. The purpose of the study was to investigate the Nutraceutical action and Cognitive Value of Egg White, Egg Yolk and the Whole Egg based complementary Foods. The Composition of the weaning foods are as follow: Egg White 10% basal 90 %, Egg Yolk 10 % Basal 90 %, Whole Egg 10 % Basal 90 %, Control 100% Milk- based commercial diet, Basal 100%. The parameter examined were Growth response, Weight of Internal Organs (Endocrine), Nitrogen Retention and Biological Value of the experimental animals the results revealed that. Weight of Internal Organs (Endocrine), group of animal fed on diets 1-4 grew and increase in size expect for basal diet which could not could not promote increase in sizes of the organs. The highest retention of nitrogen was found in animal fed with Egg White 10% basal 90 %, Egg Yolk 10 % Basal 90 %, and the Whole Egg 10 % Basal 90 %, and compared favourably with Control Diet Milk- based commercial diet, basal diet could not support growth because it is limiting in essential amino acid, Basal 100%.

In Conclusion experimental animals fed on Egg based complementary food 1-4, increased in growth with 53.11g, 63.31g, 46.26g, 40.92g, and 5 retards the Control growth by -4.05 for 28 days. The biological value (BV) of diets 1-3 was compared favourably with Control Milk- based commercial diet. Egg White, Egg Yolk and the Whole Eggs based complementary food has nutraceutical action promote physiological growth and could give cognitive reasoning and to remove infectious disease of an Infant and children.

**Keywords:** Cognitive value, Egg white, Egg yolk and the Whole egg

**Biography**

Samson Ishola Ibironke is a seasoned and distinguished Nutritionist; at Department of Food Science and Technology, Obafemi Awolowo University, Ile-Ife, Nigeria. He attended Technologist Training School, Obafemi Awolowo University, Ile-Ife, Nigeria and Proceeded to University of Sheffield, United Kingdom, England and Joseph Ayo Babalola University, Nigeria for both undergraduate and postgraduate studies respectively. He has contributed to the training of many graduates and undergraduates in the area of Public Health, Food Science, Nutritional Health and Technology, Obafemi Awolowo University Ile-Ife. He is currently a Chief Technologist at Department of Food Science and Technology, Obafemi Awolowo University, Ile-Ife. He delivered lecture on bomb calorimeter to the university on 8-5- 2024.



## Dr Ilhama Jafarli MD MRCS FACS FEBPS PhDc CAA

Chelsea and Westminster Hospital, UK

# Androgen insensitivity syndrome and climate change: Exploring environmental interactions in disorders of sex development

Androgen Insensitivity Syndrome (AIS) is a rare X-linked disorder of sex development caused by variants in the androgen receptor (AR) gene, resulting in partial or complete resistance to androgens in individuals with a 46, XY karyotype. Clinically, AIS presents along a spectrum ranging from complete feminization (Complete AIS) to varying degrees of undervirilization (Partial AIS and Mild AIS), with diagnosis typically based on phenotypic presentation, hormonal profiling, and molecular genetic testing. While AIS is fundamentally a genetic condition, growing evidence suggests that environmental factors—including endocrine-disrupting chemicals (EDCs)—may influence androgen signalling pathways.

Climate change is altering global environmental dynamics, including temperature patterns, pollutant distribution, and the environmental persistence of EDCs such as phthalates, bisphenols, and persistent organic pollutants. Rising temperatures and extreme weather events may increase human exposure to these compounds through air, water, and food systems. Experimental and epidemiological studies indicate that certain EDCs can interfere with androgen receptor signaling, potentially exacerbating phenotypic variability in individuals with partial androgen insensitivity or affecting broader patterns of male reproductive development.

This abstract explores the intersection between AIS and climate-related environmental change, emphasizing the need to consider how shifting ecological conditions may modulate endocrine health. Although climate change does not cause AIS, it may influence androgen signalling environments and reproductive health outcomes more broadly. Future interdisciplinary research integrating genetics, endocrinology, environmental science, and climate modeling is essential to understand the potential modifying effects of environmental stressors on androgen receptor function and disorders of sex development.

### Biography

Graduated with distinction from Azerbaijan State Medical University, Dr. Jafarli has since earned several prestigious qualifications, including membership in the Royal College of Surgeons (MRCS) and fellowships such as Fellow of the European Board of Paediatric Surgeons (FEBPS) and Fellow of the American College of Surgeons (FACS). Currently, she serves on the editorial boards of five medical journals and is actively involved in education in the UK. She is an Education Committee member of the American College of Surgeons. Alongside her academic accomplishments, Dr. Jafarli has played a significant mentorship role in the Cardiff University Women in Surgery Mentorship Program, where she inspired and guided

aspiring surgical professionals. She is also engaged in research at the Institute of Molecular Biology and Biotechnology, focusing her PhD on Androgen Insensitivity Syndrome in children, in collaboration with the Azerbaijan National Academy of Sciences, the DSD Committee, and institutions in Germany. Dr. Jafarli brings hands-on experience from institutions like Guy's and St Thomas' Hospital and Chelsea and Westminster Hospital in London, in the fields of general paediatric surgery, paediatric urology, paediatric plastic surgery and general surgery. As a committed leader, she established the Association of Azerbaijani British Professionals and is an active member of various surgical and medical organizations. Additionally, she holds a degree in Leadership and Management. Dr. Jafarli has written over 25 articles in peer-reviewed journals and authored six books.

## Jenny Gray\*, Stephen Pizzey\*, Dr Samaa El Abd\*

Child and Family Training, York, North Yorkshire, UK

### Promoting positive parenting

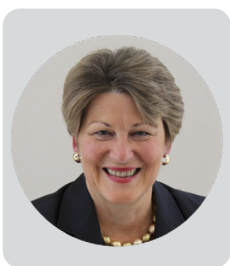
This presentation is intended for those professionals who help parents develop their positive parenting skills.

There is strong evidence that improvement in positive parenting, rather than reductions in harsh or negative parenting, is the key factor mediating change in child problem behaviour. Reduction in punishment is a necessary but not sufficient condition for improvement, whereas positive parenting is a necessary change (Fonagy et al. (2015). Drawing on the Promoting Positive Parenting intervention guide (Roberts 2016; <https://www.childandfamilytraining.org.uk/118/Promoting-Positive-Parenting>), the presentation will suggest ways in which participants can help parents/caregivers:

- Understand children's difficult behaviour
- Give praise and positive attention
- Use attention and ignoring appropriately
- Give effective instructions
- Use rewards effectively; and
- Shape challenging behaviour.

It will include the use of video material, case vignettes and examples of practical exercises that participants can use when responding within their own organisational setting.

#### Biographies



Jenny Gray OBE is a Social Work Consultant and Expert Witness in Child Welfare litigation specialising in child protection. Jenny Gray holds a BSc from Otago University, and Post-Graduate Diplomas in Social Work (Canterbury University), Family Therapy (IFT, London) and Teaching and Curriculum Design (IOE, London). Jenny Gray was the child protection policy adviser for the British Government for over 20 years, has worked with the governments internationally, WHO, EU and Council of Europe primarily on child protection initiatives and published on child welfare. Jenny Gray is a member of the Board of Directors of Child and Family Training.



Stephen Pizzey is a Social Work Consultant and Expert Witness in Child Welfare litigation specialising in child protection, and developing and delivering training programmes in child and family services in the UK and internationally. Stephen Pizzey holds a BA (Hons) (York University), Post Graduate Diploma in Soc. Admin (Bristol University), MA in Social Work and CQSW (Nottingham University). Stephen Pizzey was the Head of the Social Work Department at Great Ormond Street Hospital for Children and now undertakes a range of independent social work assessments. Stephen Pizzey is Chair of the Board of Directors of Child and Family Training.



Dr Samaa El Abd is a Consultant Child and Adolescent Neuropsychiatrist at the Cromwell Hospital in London. Dr Samaa El Abd has a special interest and expertise in the management of developmental neuropsychiatric disorders through behaviour intervention and psychopharmacology. Dr El Abd has worked at the University of Cairo, the University of Zurich and the University of London (St. George's Hospital Medical School and King's College, London). Dr Samaa El Abd obtained the degrees of MSc (ped) and FRCPsych (UK) and has completed her CCST (certificate of Completion of Specialist Training) (UK). Alongside her clinical career, Dr Samaa El Abd is a researcher and combines her academic skills with day-to-day clinical work. Dr Samaa El Abd lectures at both national and international conferences and has published widely. Dr Samaa El Abd is a member of the Board of Directors of Child and Family Training.



## Kai-Sheng Hsieh<sup>1\*</sup>, Bing-Syun Lin<sup>2</sup>, Yen-Hsi Kuo<sup>3</sup>, Yunghuan Lee<sup>4</sup>, Tsung-Ter Kuo<sup>2</sup>

<sup>1</sup>Ultrasound and Heart Diseases Center, China Medical University Children's Hospital, Taichung City, Taiwan

<sup>2</sup>Department of Medical Imaging and Radiological Technology, Yuanpei University of Medical Technology, Hsinchu City, Taiwan

<sup>3</sup>Department of Surveying Engineering, National Cheng Kung University, Hsinchu City, Taiwan

<sup>4</sup>Saloya Co., Ltd., New Taipei City, Taiwan

# A respiratory servo-control system for chest radiography

**Background:** In the field of diagnostic radiology, the gold standard for chest imaging requires the patient to perform a controlled deep inspiration followed by a momentary breath-hold. This manoeuvre ensures maximum lung expansion and minimizes motion blur. However, this routine practice is notoriously difficult to apply in clinical settings involving uncooperative patients, such as infants, toddlers, or patients with cognitive impairments. When patients cannot follow verbal commands, radiographic technicians often struggle to time the exposure, leading to repeated radiation doses or poor-quality diagnostic films. To address this gap, our cross-disciplinary team developed a novel respiratory gated mechanism designed to achieve high-precision chest radiography specifically for non-cooperative populations.

**Methods:** A specialized multi-disciplinary team was assembled, including senior pediatrician with expertise in medical imaging in a tertiary medical center and bioengineers in radio-technology institute in university. This diverse expertise allowed for the development of a sophisticated electric circuit module that operates as a parallel circuit connectable to standard X-ray equipment. This diverse expertise allowed for the development of a sophisticated electric circuit module that operates as a parallel circuit connectable to standard X-ray equipment. The system utilizes an adjustable elastic belt placed at the lower chest-upper abdomen junction to monitor physical displacement. This belt captures respiratory motion, which is processed and displayed as real-time phasic waves, allowing for the precise identification of the peak inspiratory phase. Validation was conducted through rigorous testing using a phantom infant model attached to artificial ventilation. To ensure measurement accuracy, calibrated markers were assigned to the phantom's chest wall, and their displacement was monitored to verify the correlation between the physical breath and the electronic signal. Animal experiments were subsequently conducted to confirm the module's performance in a biological environment.

**Results:** The designed electric circuit module demonstrated seamless integration with existing X-ray hardware. The correlation analysis revealed an excellent linear correlation, expressed by the regression equation  $Y = 0.5304X - 55.989$ , where X represented respiratory phasic change readings and Y the respiratory spatial displacement. Data from the phantom infant testing showed a high degree of correlation between the mechanical movement of the chest wall and the electronic trigger. By monitoring the phasic waves, the algorithm successfully identified the optimal time point for radiation

exposure during the respiratory cycle. These results were consistent across various ventilation speeds, suggesting the device is robust enough for diverse clinical scenarios.

**Conclusion:** Our study confirms that this custom-engineered system fulfills the critical clinical need for synchronized radiation exposure in uncooperative patients. By automating the timing of the X-ray exposure to match the peak of natural respiration, we can achieve high-quality diagnostic imaging that mirrors the results seen in the cooperative adult population. We expect that the widespread application of this respiratory detection technology will significantly reduce the need for repeat exposures and improve the diagnostic accuracy of chest X-rays in pediatric and adult medicine.

### **Biography**

Dr. Kai-Sheng Hsieh is a distinguished Professor and Vice Superintendent at the China Medical University Children's Hospital, specializing in congenital heart disease and ultrasound. Dr. Hsieh earned his M.D. from the National Defense Medical Center before completing a prestigious clinical fellowship at Harvard Medical School and Boston Children's Hospital. Throughout his career, Dr. Hsieh has held key leadership roles, including General Chairman of Pediatrics for the Chang Gung Medical System. A highly awarded researcher, he received the 2013 Distinguished Devotion Award in Pediatric Medical Care.

**Keerthi Prabhu\*, Shruthika Senthilkumar**

Element H PSS, Chennai, Tamil Nadu, India

## Prevalence of mental health issues in adolescents in South India

Mental health is a priority as much as physical health. Since the pandemic, mental health issues such as anxiety, depression, self-harm, OCD etc are being more prevalent. More awareness is needed for breaking the stigma of mental health especially in countries like India. Survey method was implemented to obtain data on the prevalence of mental health issues in adolescent population in South India. The data was obtained from both parents of adolescents and adolescents. Demographic variables such as urban-rural, education and occupation status of parents, availability of mental health support resources, etc were studied. Non parametric analysis was used to analyse the data obtained. Implications of the study is to develop more strategies to educate parents, adolescents, teachers and medical professionals so that the stigma is broken and the accessibility for mental health services is better.

### Biography

Dr Keerthi Prabhu has Masters degree in Psychology, MPhil in Clinical psychology from Kasturba Medical College Manipal and PhD from Madras University. Dr Keerthi is Consultant Clinical Psychologist in Apollo hospitals, Mental Health Advisor in Apollo Shine Foundation, Partner in Element H Psychological Support Services, Guest faculty in Institute of Mental Health Services, Vice President South Zone of Clinical Psychology Society of India; certified CBT trainer from CBT Australia and Professional Supervisor from APA Australia. Speaker in TEDx in 2025, Dr Keerthi spoke on emotion regulation in adolescents. Trained in Giftedness counseling from European Talent Search Network and Dr Keerthi works with identifying - conducting psychological evaluation for children with giftedness and providing psychological therapy for children giftedness as well as their parents.



## **Kengo Torii**

Nippon Dental University, Japan

# **Bite anomalies related to headache, vertigo, sensorineural hearing loss and orthopedic cases**

A five-year follow-up of temporomandibular joint clicking in children aged 5 to 10 years found that approximately 4% of the children had persistent clicking. It has been reported that this clicking occurs due to the occlusal discrepancy between habitual occlusal position and muscular position. This discrepancy has been reported to cause headaches, vertigo, sensorineural hearing loss, and orthopedic symptoms. The background of these reports was explained and the physiologic occlusal analysis were described.

### **Biography**

Kengo Torii Received his D.D.S. degree from Nippon Dental University, Tokyo, Japan in 1969 and his Ph.D. from the same university in 1973. Kengo Torii is a visiting professor of the same university since 2012 and is also in private practice.



## Korawit Keorochana<sup>1\*</sup>, Khemika Khamakanok<sup>2</sup> Sudwana

<sup>1</sup>Shrewsbury International School Bangkok Riverside, Bangkok, Thailand

<sup>2</sup>Division of Developmental and Behavioral Pediatrics, Department of Pediatrics, Phramongkutklao College of Medicine, Bangkok, Thailand

# The effect of arm concealment and distraction techniques on fear, anxiety and pain reduction in pediatric venipuncture: A randomized control trial

**Background:** Venepuncture frequently causes significant fear and anxiety in children. While distraction techniques are effective, the combined effect of arm concealment and distraction remains largely unexplored. This Randomized Control Trial (RCT) aims to evaluate the effectiveness of both arm concealment and distraction, delivered through our invention, the Magical Bravery Box, in reducing fear, anxiety and pain during pediatric venepuncture.

**Methods:** This RCT involved pediatric patients aged 6–12 years requiring routine venepuncture at Phramongkutklao Hospital. Participants were randomized into control and intervention groups. The Intervention group utilized the Magical Bravery Box to provide arm concealment combined with active distraction, specifically using a music box and colourful pictures. Outcomes of fear, anxiety, and pain were measured using standard assessment tools (The Children's Fear Scale, Children's Anxiety Meter, Wong-Baker Faces Scale) alongside pulse rate.

**Results:** The study included 40 patients randomized into the Intervention (n=20) and Control (n=20) groups. The mean age was  $8.4 \pm 1.7$  years for the Intervention Group and  $9.6 \pm 1.8$  years for the Control Group. Within-group analysis showed a highly significant reduction in the Intervention Group for Fear (Pre:  $4.6 \pm 3.7$  vs. Post:  $1.4 \pm 2.3$ ;  $p < 0.001$ , Cohen's  $d=1.04$ ) and Anxiety (Pre:  $3.5 \pm 2.9$  vs. Post:  $1.3 \pm 2.2$ ;  $p < 0.001$ , Cohen's  $d=0.82$ ), with the effect sizes categorized as large. The Control Group also showed significant reductions in Anxiety (Pre:  $3.5 \pm 3.5$  vs. Post:  $1.7 \pm 3.2$ ;  $p=0.012$ , Cohen's  $d=0.57$ ) and Pulse Rate (Pre:  $109.3 \pm 14.8$  vs. Post:  $102.4 \pm 17.5$ ;  $p=0.005$ , Cohen's  $d=0.43$ ), with the effect sizes categorized as medium. The reduction in Fear in the Control Group was not significant ( $p=0.309$ ). When comparing groups post-intervention, there were no statistically significant differences.

**Conclusion:** The Magical Bravery Box intervention achieved a large effect size in significantly reducing fear and anxiety within the Intervention Group. However, its efficacy was not statistically superior to standard care when comparing post-intervention scores. Given the lack of a significant difference, it is suggested that a larger sample size is necessary to detect a clinically meaningful difference that reaches statistical significance. Nevertheless, the within-group analysis clearly demonstrates the intervention's potential as an effective tool for managing pediatric distress during venepuncture.

**Biography**

Mr. Korawit Keorochana is a Year 12 student at Shrewsbury International School Bangkok Riverside. His primary research interests lie in Child Psychology and developmental wellness. Driven by this focus, he has developed an innovation aimed at preventing and mitigating the fear and anxiety experienced by children during blood collection procedures. This innovation reflects his deep commitment to applying psychological principles to create more child-friendly medical environments. His work demonstrates strong potential for practical application in pediatric healthcare settings.



**Dr Lekha Sreedharan<sup>1\*</sup>, Dr Sanjana Dinesh Kumar<sup>2</sup>, Prof. Dr Dhanasekar Kesavelu<sup>2</sup>**

<sup>1</sup>Apollo Children's Hospitals, India

<sup>2</sup>Pediatric Gastroenterology, Apollo Children's Hospital

## Exclusive enteral nutrition in pediatric Crohn's disease

Switching Off Inflammation with Diet – Outcomes of Nutritional Therapy in Paediatric Crohn's Disease

**Background:** Crohn's Disease (CD) is a chronic inflammatory bowel disorder that significantly affects growth, nutritional status, and quality of life in children. In paediatric populations, Exclusive Enteral Nutrition (EEN) is recommended as first-line therapy because of its strong remission rates and steroid-sparing benefits. Beyond inducing remission, EEN has the potential to correct malnutrition, improve inflammatory markers, and restore growth trajectories. However, while short-term efficacy of EEN is well established globally, long-term outcome data—particularly from Indian clinical settings—remain limited. This study was designed to evaluate the impact of EEN not only on clinical remission but also on dietary adequacy, nutritional recovery, and sustainability of outcomes over a 12-month period.

**Methods:** This retrospective case-based analysis included 61 children diagnosed with Crohn's Disease who completed EEN therapy between 2020 and 2025. The study was structured into three phases: Phase 1 (Pre-EEN Initiation): Baseline demographic data, anthropometric measurements, biochemical parameters, inflammatory markers, and dietary intake were recorded. Nutritional prescriptions were individualized, targeting 120% of Recommended Dietary Allowance (RDA) during active therapy to support catch-up growth. Phase 2 (Post6- 8 Weeks of EEN): Anthropometry, laboratory parameters, inflammatory markers, Pediatric Crohn's Disease Activity Index (PCDAI), and percentage of dietary requirement achieved were reassessed to evaluate remission and nutritional recovery. Phase 3 (12-Month Follow-Up): Anthropometric outcomes and dietary adequacy were re-evaluated to determine sustainability of remission and long-term nutritional improvement. Statistical analysis was conducted with significance set at  $p < 0.05$ .

**Results:** At baseline, 58% of children were undernourished, highlighting the significant nutritional burden associated with paediatric CD. Mean energy intake was markedly inadequate (42.5% of requirement) and showed strong negative correlation with disease severity scores. Following 8 weeks of EEN: All children achieved clinical remission. The proportion of undernourished children reduced from 58% to 26%. Significant improvements were observed in weight/BMI z-scores. Inflammatory markers including ESR improved markedly. Albumin and haemoglobin levels showed significant recovery. PCDAI scores decreased substantially, indicating reduced disease activity. Dietary quality, including caloric, protein, and micronutrient intake, improved significantly. At 12-month follow-up: 92% of children were

meeting at least 95% of their RDA. 91% demonstrated improved overall nutritional status. Only 9% remained undernourished. Weight/BMI gains were sustained. Height z-scores did not show significant change over 12 months. Relapse occurred in only 3.27% of patients, who responded well to a second course of EEN. The percentage of underweight children declined steadily over the one-year follow-up, demonstrating sustained nutritional recovery with structured monitoring.

**Conclusion:** This study demonstrates that EEN is not merely a remission-inducing therapy but a powerful nutritional intervention capable of reversing malnutrition, reducing systemic inflammation, and improving dietary adequacy in children with Crohn's Disease. Sustained dietetic follow-up plays a critical role in maintaining remission and preventing relapse. The findings provide valuable real-world insight into the timeline of EEN response and reinforce the importance of structured nutritional therapy as a central pillar in paediatric Crohn's Disease management. how much words

### **Biography**

Dr. Lekha Sreedharan, RD, PhD, is the Chief Dietitian and Head of the Clinical Dietetics Department at Apollo Children's & Women's Hospitals, Chennai, with over 27 years of distinguished clinical experience. A certified Pediatric Dietitian, ESPEN LLL Teacher, and National Vice President of IAPEN India, she is widely recognized for her expertise in pediatric nutrition and evidence-based clinical practice. Dr. Lekha has presented her research at leading international platforms including ESPEN, ESPGHAN, WCPGHAN, and AUSPEN, and has served as a keynote speaker in global conferences. She has authored numerous publications and co-edited and co-authored key textbooks in pediatric and clinical nutrition

**Dr Claire Stewart<sup>1</sup>, Mr Martin Dover<sup>2\*</sup>, Miss Pirithika Kohilathas<sup>3</sup>**

<sup>1</sup>Guy's and St Thomas' NHS Foundation Trust, London, England

<sup>2</sup>Manchester University, UK

<sup>3</sup>King's College London, UK

## **Beyond words: The role of alternative communication in hearing the voice of the child in paediatrics**

**Background:** The right of children to express their views in all matters affecting them is enshrined in Article 12 of the UN Convention on the Rights of the Child (1989). However, the 'voice of the child' extends beyond spoken language. Clinical discussions often rely on verbal communication, leaving pre-verbal, non-speaking, non-English-speaking, and silenced children disadvantaged. This project sought to address these inequities by exploring the practical use of alternative communication methods in pediatrics and piloting a multi-site visual communication toolkit designed specifically for child protection contexts.

**Methods:** A systematic literature review was undertaken using Ovid Medline and Embase to identify studies evaluating visual and alternative communication strategies with children. In parallel, a visual communication toolkit—My Voice Matters—was co-designed with 126 London schools and safeguarding teams from 26 NHS trusts. The toolkit drew on speech and language therapy approaches and aimed to promote accessible, child-centered participation. Toolkits were placed in all community clinic rooms and used during all child protection medical assessments in four London boroughs. Communication stations containing additional alternative communication aids tailored to clinical conversations were introduced in a central London children's hospital emergency department, a general pediatric ward, and two community child-health centers.

**Results:** Although more than 20,000 studies describe the benefits of alternative communication for children, translation into pediatric clinical practice remains limited. Only four studies were identified that evaluated its impact within clinical conversations. These studies demonstrate that communication tools empower children to share their own experiences and also enhance their understanding of clinicians' perspectives.

Adapted from established speech and language therapy principles, My Voice Matters provides a clinically relevant, child-friendly toolkit designed to support meaningful participation in safeguarding discussions. During the first three months of implementation, the toolkit enabled eight children to disclose previously unreported experiences of abuse and almost doubled the proportion of cases in which the child's voice was explicitly documented.

In the hospital setting, introducing communication stations across all clinical areas reduced the proportion of children reporting that they had not been heard from 9% to 0%. Concurrently, staff use of alternative communication methods increased from 17% to 96%, reflecting a significant shift towards more inclusive and child-centered communication practices.

**Conclusions:** Communication in pediatrics must extend beyond words. Children have both the right and the capability to participate in decisions about their care, but many lack accessible means to do so. Child-centered communication tools can make this right a practical reality—improving safety, equity, and care quality. Integrating communication toolkits such as My Voice Matters into everyday practice demonstrates how clinicians can uphold children’s rights, strengthen safeguarding and ensure that every child—regardless of language or ability—can truly be heard. Communication support should be universally available in all pediatric settings as a new standard of care.

### **Biography**

Martin Dover BSc (Hons) is a year 4 medical student from the University of Manchester, England having completed a BSc in Medical Sciences at the University of St Andrews, Scotland. Martin Dover has a keen interest in pediatrics and is part of a national research team ‘My Voice Matters’ working to improve how we hear children’s voices in healthcare, via alternative communication methods. Their research spans clinical practice in community child protection clinics and medical education across the UK.



**Dr. Mounika Bazar<sup>1\*</sup>, Dr. Srinivas Sankaranarayanan<sup>1,2</sup>, Dr. Malathi Sathiyasekaran<sup>1</sup>, Satheesh Ramamurthy<sup>2</sup>**

<sup>1</sup>Kanchi Kamakoti Child's Trust Hospital, Chennai, Tamil Nadu, India

<sup>2</sup>Apollo Hospitals, Chennai, Tamil Nadu, India

## **Budd–Chiari Syndrome as an extraintestinal manifestation of ulcerative colitis in a child**

**Background:** Ulcerative Colitis (UC) is a chronic inflammatory bowel disease with well-recognized extra intestinal manifestations. Budd–Chiari Syndrome (BCS), caused by hepatic venous outflow obstruction, is an exceptionally rare hepatic complication of pediatric UC and may remain clinically silent until advanced disease develops.

**Methods:** We report the case of a 12-year-old boy diagnosed with ulcerative colitis based on colonoscopy and histopathology. He initially presented with pan colitis and was treated with intravenous corticosteroids followed by oral steroids, melamine, and azathioprine, with good clinical response. Routine follow-up ultrasonography one year later revealed coarse hepatic echotexture and nodularity despite normal liver function tests and coagulation profile. Further evaluation included liver biopsy, contrast-enhanced CT abdomen, and Doppler studies.

**Results:** Liver biopsy demonstrated cirrhosis with lobular distortion, sinusoidal dilatation, and venous intimal fibrosis. Imaging revealed hepatomegaly, caudate lobe hypertrophy, narrowing of intrahepatic inferior vena cava and hepatic veins with collateral formation, confirming chronic Budd–Chiari Syndrome. Hypercoagulable work-up was negative except for low-titer ANA positivity. The child had compensated cirrhosis and was managed with anticoagulation. Interventional radiology-guided angioplasty was successfully performed, and the child remains under multidisciplinary follow-up.

**Conclusion:** Budd–Chiari Syndrome is a rare but serious extra intestinal manifestation of pediatric ulcerative colitis. Subtle hepatic imaging abnormalities, even in the presence of normal liver biochemistry, should prompt early Doppler evaluation. Early recognition and multidisciplinary management are crucial to prevent progression to hepatic decompensation.

### **Biography**

Dr. Mounika Bazar is a pediatrician from Hyderabad, India, who has completed advanced training in Pediatric Gastroenterology, Hepatology, and Nutrition. Mounika is actively involved in clinical practice and academic work, with experience in managing complex pediatric gastrointestinal and liver disorders. Mounika presented her research at national and international conferences and continues to engage in academic writing and clinical research, with a growing interest in healthcare systems, quality improvement, and medical education.



**Dr. Mounika Bazar<sup>1\*</sup>, Dr. Srinivas Sankaranarayanan<sup>1</sup>, Dr. Meena S. Sivasankaran<sup>2</sup>**

<sup>1</sup>Department of Pediatric Gastroenterology, Hepatology & Nutrition, Kanchi Kamakoti Child's Trust Hospital, Chennai, Tamil Nadu, India

<sup>2</sup>Department of Hemato-Oncology & Bone Marrow Transplantation, Kanchi Kamakoti Child's Trust Hospital, Chennai, Tamil Nadu, India

## **Very early-onset gastrointestinal and immune dysregulation due to TPP2 deficiency: A case report from South India**

**Background:** Tri-Peptidyl Peptidase II (TPPII) deficiency is a rare autosomal recessive primary immunodeficiency caused by mutations in the TPP2 gene. It is characterized by immune dysregulation, recurrent infections, autoimmunity, developmental delay, and very early-onset gastrointestinal manifestations that may mimic Inflammatory Bowel Disease (IBD). Early diagnosis is essential to guide management and consider curative treatment options such as Hematopoietic Stem Cell Transplantation (HSCT).

**Methods:** We describe a single case from a tertiary pediatric center in South India. Clinical evaluation, endoscopic assessment, immune phenotyping, and Whole Exome Sequencing (WES) were performed to investigate severe neonatal-onset gastrointestinal disease with systemic immune involvement.

**Results:** A female neonate born to third-degree consanguineous parents presented in the neonatal period with profuse diarrhea, progressing to intestinal perforation, recurrent sepsis, failure to thrive, and developmental delay. Endoscopic evaluation revealed colitis with ulceration and chronic inflammation. Immunologic assessment showed reduced naïve CD4<sup>+</sup> and CD8<sup>+</sup> T cells and decreased memory B cells. Whole exome sequencing identified a homozygous TPP2 variant (c.3392C>T; p. Ser1131Phe), with both parents confirmed as heterozygous carriers. The patient was managed with nutritional rehabilitation, corticosteroids, sirolimus, and prophylactic antimicrobials. HSCT was discussed as a definitive therapeutic option.

**Conclusion:** TPPII deficiency is a rare but important cause of very early-onset gastrointestinal disease with systemic immune dysregulation. This case highlights the need to suspect monogenic immune disorders in neonates presenting with severe, atypical enteropathy and multisystem involvement. Early immunologic evaluation and genetic confirmation are critical to guide targeted therapy and timely consideration of HSCT for improved outcomes.

### **Biography**

Dr. Mounika Bazar is a pediatrician from Hyderabad, India, with advanced training in Pediatric Gastroenterology, Hepatology, and Nutrition. Mounika is actively involved in clinical care and academic work, with experience in managing complex pediatric gastrointestinal, immunologic, and genetic disorders. Mounika presented her work at national and international conferences and continues to engage in academic writing and clinical research, with interests in immune-mediated gastrointestinal diseases and healthcare quality improvement.



## Osayuwamen Egharevba\*, Aishwarya Chellamani, Gitika Joshi

Royal Derby Hospital NHS Foundation Trust, Derby, United Kingdom

# Rising prevalence of Congenital Hyperinsulinism (CHI) in a neonatal unit: Concern or coincidence?

**Background:** Hyperinsulinemia Hypoglycaemia (HH), the hallmark of Congenital Hyperinsulinism (CHI), is the most common cause of persistent hypoketotic hypoglycaemia in neonates and infants and carries a high risk of permanent brain injury if not promptly treated. Early diagnosis and management are essential to prevent features of irreversible brain damage viz epilepsy, cerebral palsy, and neurodevelopmental impairment. Following birth, healthy neonates experience a transient fall in plasma glucose, which normally stabilises by 48 hours through adequate substrate availability and intact endocrine regulation of glucose homeostasis.

In neonates with recurrent or persistent hypoglycaemia, CHI should be suspected. A plasma glucose  $<3$  MMOL/L, requiring a glucose infusion rate  $>8$  mg/kg/min to maintain glycaemia is highly suggestive. Biochemically, CHI is characterised by inappropriate insulin and C-peptide secretion during hypoglycaemia, with suppressed ketone bodies and Free Fatty Acids (FFA).

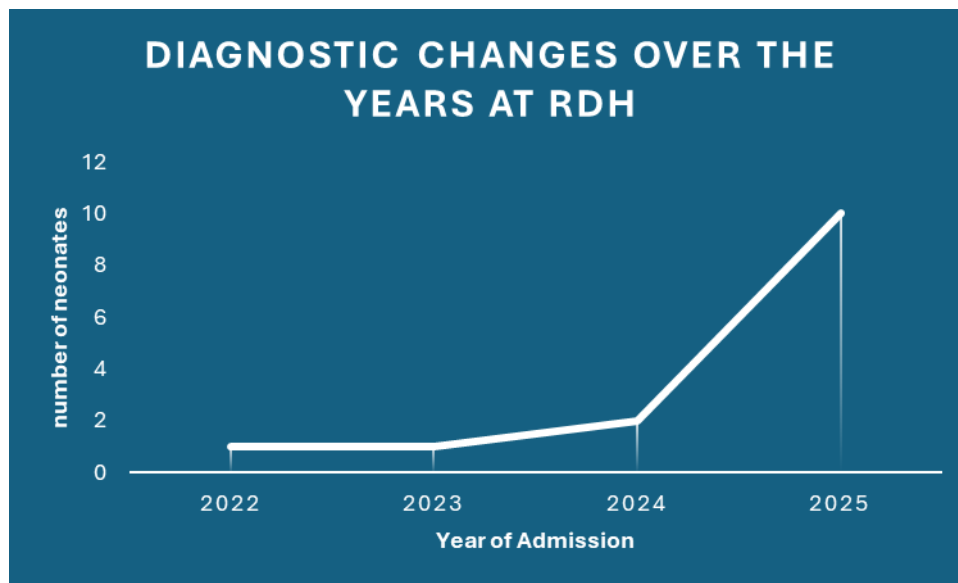
Early diagnosis and standardised management are critical to prevent long-term morbidity. A recent increase in CHI cases was observed in our neonatal unit.

**Aim:** To determine the causes of CHI in our centre and identify factors contributing to observed rise in prevalence.

**Methods:** This combined retrospective and prospective study evaluated neonates with hypoglycaemia and biochemical evidence of hyperinsulinism admitted to our unit. Management was benchmarked against national quaternary CHI centres. The study was prompted by a marked increase in CHI cases over a 12-month period (October 2024 – September 2025).

**Results:** A marked increase in CHI cases was observed over a 12-month period compared with the preceding two years. A term-to-preterm ratio of 1:4 was observed, with no sex or racial predilection. Antenatal risk factors for hyperinsulinaemic hypoglycaemia were identified in 30% of cases, including intrauterine growth restriction, maternal pregnancy-induced or chronic hypertension (notably beta-blocker use), and gestational diabetes. All infants demonstrated elevated serum insulin levels ( $>2$

MU/L), ranging from 54.2 to 5802 MU/L (mean  $916.1 \pm 814.4$ ), and raised C-peptide levels (541–2989; mean  $1346.4 \pm 367.3$ ). The mean glucose infusion rate required to maintain glycaemia was  $13.49 \pm 0.9$  mg/kg/min, with all infants recording plasma glucose  $<3$  MMOL/L. Free fatty acid levels were available in six infants, and  $\beta$ -hydroxybutyrate levels were  $\leq 0.1$  mmol/L in all, indicating suppressed ketogenesis. All infants required increased glucose concentration delivery and high-calorie feeds/volumes to maintain euglycemia. Diaz-oxide therapy was required in 50% at discharge, with two infants failing glucagon trials prior. Of the 50% dioxido responsive, the genetic subtype of CHI remains unknown. All infants successfully completed a six-hour fast before discharge.



**Conclusion:** A significant increase in CHI cases was observed, predominantly among term infants. Early recognition, prompt biochemical evaluation, and standardised management pathways are essential to minimise neurological morbidity. Further work is needed to explore underlying genetic and population-level contributors to this rising prevalence.

### Biography

Dr. Osayuwamen (Yuwa) Egharevba is a Paediatric ST8 trainee undertaking Specialist Interest (SPIN) training in Neonatology in the East Midlands, England. Dr. Osayuwamen holds an MBBS from the University of Benin, Nigeria, is a Fellow of the West African College of Physicians (FWACP, Paediatrics), and a Member of the Royal College of Paediatrics and Child Health (MRCPCH). Dr. Osayuwamen holds a Postgraduate Certificate in Medical Education and has several academic publications to her name. Dr. Osayuwamen worked as a paediatrician in a Nigerian teaching hospital and currently practises in the UK, with interests in neonatology, medical education, and global child health.

**Perla Karina García-May<sup>1\*</sup>, Alberto Enrique Alvarado Zuñiga<sup>2</sup>**

<sup>1</sup>Adolfo Lopez Mateos Hospital, ISSSTE, Mexico City, Mexico

<sup>2</sup>José María Rodríguez General Hospital, Mexico State, Mexico

## Calorie content of breast milk: Response to a weekly nutritional strategy for breastfeeding mothers

**Introduction:** The nutrition of lactating women is crucial for the health of both mother and infant. Lactating women should meet increased nutritional requirements, since during lactation, the needs for almost all nutrients increase due to breast milk production.

Regarding caloric intake, an excess of 500 calories per day is recommended to meet the demands of milk production. However, many women do not achieve this level of energy intake. The most common deficiencies among lactating women are deficiencies of vitamin A, folate, vitamin D, selenium, and iodine through diet alone. Adherence to a healthy diet such as the Food Pyramid is considered a recommendation during breastfeeding.

**Materials and methods:** A prospective, observational, analytical, longitudinal study was conducted at the Milk Bank of the José María Rodríguez General Hospital in the State of Mexico.

The creatinine was determined in 20 samples from donor mothers, who were offered nutritional counseling every week for 3 consecutive weeks and then one month after the last consultation. A total of 7 weeks. Creatinine was measured weekly. Nutritional counseling was individualized by the Milk Bank's own nutrition staff; only these cases were documented. Nutritional counseling was based on a 2,500 kcal/day diet in accordance with international recommendations for the nutrition of lactating women, providing 50% carbohydrates, 26%-27% protein, and 23%- 24% fat.

**Results:** A statistical analysis was performed, including minimum, maximum, mean, and standard deviation.

Twenty patients were selected. They ranged in age from 27.2 years, with a standard deviation of 24.377 to 30.023, minimum age 18 years, and maximum age 44 years.

The gestation period was 34.7 + 1.816 weeks, with a minimum of 32.884 weeks and a maximum of 36.516 weeks.

The initial creatinine (day 14 of lactation) was 576.5 weeks.

The second creatinine, 7 days after the first nutritional counseling session, was 663.6 weeks (day 21 of lactation).

The third creatinine was 744.35 weeks after 28 days of lactation.

The fourth creatinine was 827.35 weeks after 56 days of lactation, with three nutritional counseling sessions.

**Conclusion:** It is crucial to provide nutritional education to breastfeeding mothers. It is important that breastfeeding women receive appropriate nutritional counseling to ensure a varied and balanced diet and to meet their increased nutritional needs during the lactation period. The creatinine value is independent of the donor mother's gestational age, as mothers of premature babies had a low creatinine (400 kilocalories), and mothers of full-term babies had a high creatinine (700 kilocalories) at 14 days of breastfeeding. After nutritional counseling, the creatinine increased by an average of 43.5%, demonstrating that the creatinine of a lactating woman is influenced by her nutrition, regardless of whether she is breastfeeding mature milk.

### **Biography**

Dra. Perla Karina García-May is a Pediatrician and Neonatologist specialized in preterm nutrition and human milk research. She holds a PhD in Innovation in global institutions and a Master's degree in health sciences and Master's degree in administration, as well as a Master's degree in premature infant nutrition. Dra. Perla May has worked in the public sector as a doctor the last 16 years, she was a Head of a Human Milk Bank and professor of the speciality of neonatology for ten years. She is currently Neonatologist in ISSSTE and Medical Affairs Manager in Mead Johnson Mexico.



**Dr. Rajai Al-Bedaywi**

Hamad Medical Corporation, Qatar

## **Glucose-6-phosphate dehydrogenase deficiency and neonatal indirect hyperbilirubinemia: A retrospective cohort study among 40,305 consecutively born babies**

Glucose-6-Phosphate Dehydrogenase Deficiency (G6PDD) being highly prevalent in the Middle East, the primary objective was to estimate the incidence of neonatal jaundice among G6PD-deficient neonates and to explore its association with various risk factors.

This retrospective cohort study includes 7 years' data of neonates diagnosed with G6PDD between 1st January 2015, and 30 September 2022, from Al Wakra Hospital, HMC Qatar.

Among the 40,305 total births, 1013 had G6PDD with an incidence of 2.51%. Of all the G6PDD babies, 24.6% (249/1013) received phototherapy and three babies required exchange transfusion. Statistically significant associations were noted between the need for phototherapy and gestational age, gestational age groups, birth weight, and birth weight groups, but logistic regression analysis showed significant association for phototherapy only with the gestational age group.

**Conclusion:** Universal screening and proper follow-up is essential for G6PDD as it plays crucial role in neonatal jaundice.

### **Biography**

Dr Rajai Al-Bedaywi (Jordanian nationality) join Hamad medical corporation, Qatar since 2013 and work at neonatal intensive unit as consultant since 2019 and have great research interest. Currently, Al-Bedaywi is co-investigator for many research projects. Al-Bedaywi had seven publications during the last 6 years. Dr Rajai is Instructor of Clinical Pediatrics at Weill Cornell Medicine-Qatar and involved in teaching of students and resident at HMC.



## **Dr Ramya Ramasamy Sanjeevi, MPT (Pediatric Neurology), ACSM-EP**

<sup>1</sup>Department of Physical Therapy, College of Nursing and Health Sciences, Jazan University, Saudi Arabia

<sup>2</sup>PhD Student, Saveetha College of Physiotherapy, Saveetha Institute of Medical and Technical Sciences (SIMATS), Chennai, Tamil Nadu, India

# **Physiotherapy in early detection and intervention of rare pediatric diseases - Case series from Saudi Arabia**

**Background:** Rare pediatric neurological disorders often manifest with subtle motor and developmental signs that may be overlooked in early stages. The prevalence of Rare Diseases (RDs) in Saudi Arabia is considered high compared to other parts of the world due to the high frequency of pathogenic alleles in the population (Eiss et al., 2021; Aleissa et al., 2022). Despite efforts by the Saudi government to reduce the burden of specific diseases (Saudi Ministry of Health, 2020), the prevalence of RDs remains elevated, largely attributed to the high rate of Consanguineous Marriages (CM) in the region (Bittles and Black, 2010). The rate of positive consanguinity has been reported at 56%, with autosomal recessive inheritance accounting for 54%. Within this context, physiotherapists, through developmental screening and functional assessments, are uniquely positioned to contribute to both early identification and early intervention, thereby improving outcomes and guiding timely referral.

**Methods:** We present two pediatric cases from the Department of Physical Therapy at Jazan University Hospital, Saudi Arabia, in which physiotherapy assessments led to early recognition of rare diseases. Detailed physiotherapy evaluations focused on motor milestones, gait, balance, and neuro motor patterns. Interventions were individualized, family-centered, and integrated into multidisciplinary care.

### **Results:**

- **Case 1:** A 2-year and 6-month-old child with recurrent seizures and delayed motor milestones was referred for physiotherapy. Observation of atypical neuro motor patterns prompted neurological referral, leading to the diagnosis of a neuro-metabolic disorder - pyridoxine-dependent epilepsy. Early physiotherapy interventions emphasized motor facilitation, caregiver education, and play-based functional training, complementing medical management.
- **Case 2:** A 3-year and 2-month-old child presented with progressive gait instability and frequent falls. Physiotherapy assessment revealed features of ataxia, oculomotor difficulties, and telangiectasia, guiding genetic testing that confirmed Leukodystrophic disorder with X-linked pyruvate dehydrogenase E1-alpha deficiency. Early physiotherapy interventions focused on balance training, adaptive strategies, and family-centered support to enhance safety and participation.

**Conclusion:** Physiotherapy plays a critical role in both early identification and intervention for rare pediatric diseases. These cases demonstrate how physiotherapists can act as frontline professionals in recognizing atypical developmental trajectories and initiating timely referrals. Integrating physiotherapy into routine pediatric screening programs in Saudi Arabia may facilitate earlier diagnosis, improve functional outcomes, and strengthen multidisciplinary, family-centered care.

**Keywords:** Early intervention, Rare diseases, Pediatric neurology, Neuro-metabolic disorder, Developmental delay, Pediatric physiotherapy.

### **Biography**

Ramya Ramasamy Sanjeevi is a Lecturer in the Department of Physical Therapy, College of Nursing and Health Sciences, Jazan University, Saudi Arabia. Ramya previously served as a Physiotherapy Specialist at the Ministry of Health, Saudi Arabia. Ramya holds a Master's degree in Pediatric Neuro Physical Therapy with a gold medal and is a certified Exercise Physiologist through the American College of Sports Medicine. With over 14 years of clinical and academic experience, Ramya published in Web of Science and Scopus journals, presented at international conferences, supervised student research, and is currently pursuing her PhD in Pediatric Physical Therapy.



## Dr. Rashmi. N<sup>1\*</sup>, Dr. M.D. Ravi<sup>2</sup>, Dr. Maria Lewin<sup>3</sup>

<sup>1</sup>Associate Professor in Pediatrics, JSS Medical College, JSSAHER Mysore, Karnataka, India

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# Association of play duration and cognitive development in preschoolers (3-6 years) and school children

**Background:** The value of play is increasingly recognized, by researchers, for adults as well as children, as the evidence of its relationship with intellectual achievement and emotional well-being keeps increasing. Even-though a lot of studies have found the positive effects of play on all domains of development in children, not many have focused on the relation between the duration of play and specifically, cognitive development. The objectives of this study were: to determine the association between play duration and cognitive development of pre-school and school children, to find out the optimum play duration in these children for their maximal cognitive development and to assess the relation of play type with different cognitive skills in children aged 3–12 years.

**Methods:** The parents of the 565 (175 preschoolers and 390 school aged) eligible children were interviewed using a internally validated structured proforma to obtain information regarding play duration and other relevant details, followed by cognitive assessment of children using Gessel's Graving Test (GDT) in pre-school children and Raven's Coloured Progressive Matrices (RCPM) for school children to Assess Developmental/Intelligent Quotient (IQ), Vineland Social Maturity Scale (VSMS) for Social Quotient (SQ) and Strengths and Difficulties Questionnaire (SDQ) for behavioral (social and emotional) problems. The obtained scores were statistically analyzed.

## Results:

- **Pre-school children (3-6 years):** Largest proportion of intellectually superior children playing for average 2-3 hours per day. ( $\chi^2=42.124$ ,  $p<0.001$ ) with the largest proportion of intellectually superior children had an average daily play duration of 1-2 hrs. in school ( $\chi^2=34.599$ ,  $p<0.001$ ), the strength of association being moderate. The median Social Quotient (SQ) was found to be highest in the intellectually superior group.
- **School children (6-12 years):** Larger number of urban school children were involved in structured indoor and structured outdoor play as well as all varieties of play, while their rural counterparts were more involved in free/unstructured play ( $\chi^2 = 30.923$ ,  $p = <0.001$ ). Children who had an average duration of play at home during school days: 2-3 Hours had the largest proportion of IQ Score:  $\geq 95$ Th Percentile- Intellectually Superior. As the active screen time duration increased, there was a significant increase in difficulties score (SDQ) (emotional,

conduct, attention and peer problems) ( $\chi^2=39.268$ ,  $p=0.029$ ). Also, lesser the active screen time, higher the social quotient (VSMS). ( $\chi^2 = 6.882$ ,  $p = 0.032$ ).

### **Conclusion:**

- **Pre-school children:** Children who played for 1-3 hours per day at home during school days and 3–5 hours during vacation holidays had a higher cognitive score in terms of IQ, SQ and Pro social behavior and lesser emotional problems. The median IQ Score was highest in the group of children engaged in structured outdoor play for longer durations (1-3 hours), mean social age was highest in children engaged in structured indoor play of 2–3 hours' duration. Positive correlation between IQ and SQ and also between SQ and Prosocial score of SDQ and a moderate negative correlation between SDQ: Pro-Social and SDQ: Difficulties Score and between SQ (VSMS) and SDQ: Difficulties score was noted.
- **School children:** A significant proportion of children who played for 2-5 hours at home during school days were found to be intellectually superior and above average and those who played for 0.5–1 hour on an average daily during school recess had higher cognitive scores in terms of IQ (intellectually superior).

**Keywords:** Cognitive development, Difficulties score, Gessel drawing test, Intelligence quotient, Play duration, Pro-social score, Social quotient, Strengths and difficulties questionnaire, Vineland social maturity scale.

### **Biography**

Dr. Rashmi. N is a Pediatrician with an MBBS and DNB Pediatrics degree, specializing in developmental Pediatrics research. She holds a PhD in Developmental Pediatrics from JSSAHER, Mysore, India. Dr. Rashmi is working in JSS Medical College, JSSAHER as Associate Professor in Pediatrics and has about 22 years of experience as a Pediatrician. Dr. Rashmi has 40 publications to her credit and has authored 5 book chapters.



**Rudy J Kink, MD**

Department of Pediatrics, Memphis, TN, USA

## **Pediatric emergency airways: Crib to college**

Pediatric airway emergencies remain among the most anxiety-provoking and technically challenging scenarios encountered by prehospital providers. While infrequent, these high stakes situations demand a deep understanding of both anatomical and physiological considerations unique to children. This session will explore predictors of a difficult airway, review EMS performance data, and walk through evidence-based techniques and tools to optimize airway management across the age spectrum—from neonates to adolescents.

Through analysis of malpractice claims, national EMS datasets, and recent clinical studies, we will highlight critical lessons and common pitfalls in pediatric airway management. Attendees will gain practical strategies for pre-oxygenation, equipment selection, and the management of both anatomically and physiologically difficult airways. Emphasis will be placed on supraglottic devices, video laryngoscopy, bougie use, and appropriate pharmacologic induction—especially in the hemodynamically fragile child.

Whether in simulation or real-time crisis, preparation and practice are the key to success.

### **Biography**

Dr. Rudy Kink is a Professor of Pediatrics at the University of Tennessee Health Science Center and serves as the Medical Director of Pediatric and Neonatal Transport at Le Bonheur Children's Hospital. Dr. Rudy is the EMS Medical Director for Fayette County, TN, and Chair of the AAP PEPP Steering Committee. Board-certified in Pediatric Emergency Medicine, Dr. Kink published extensively and mentored dozens of fellows and residents. A nationally recognized speaker and educator, Dr. Rudy is passionate about improving pediatric resuscitation, airway management, and transport care across rural and urban systems.



## **Dr Samaa EL Abd MBBCh, MSc, FRCPsych**

Cromwell Hospital, London, United Kingdom

# **Resilience in the journey of a clinician with patients diagnosed with attention deficit hyperactivity disorder**

Attention Deficit Hyperactivity Disorder (ADHD) is a condition that affects children from an early age.

ADHD is a journey that is experienced for the young person as well as for the clinician treating the condition. Treatment of ADHD is one of the most evidenced based conditions to be treated. If successfully treated, the outcome for the individual and their family is most beneficial.

Young people learn to live with the chronic signs and symptoms. The objectives of this talk are threefold:

- 1) To learn of the patient's personal experiences of living with ADHD on a day to day basis.
- 2) To acquire knowledge of the experience of the clinician along the journey of their patients and their families.
- 3) To learn more about factors affecting the success of t intervention processes, medication and non-medication based.

### **Biography**

Dr. EL ABD is an Egyptian British Child and Adolescent Consultant Psychiatrist. She has been practicing medicine in the UK since 1985 and in Dubai since 2015. Dr El Abd practices at the Happiness Clinic in Dubai and at the Cromwell Hospital in London. Dr El Abd had the position of a Consultant Child and Adolescent Psychiatrist since 1998 in the UK, where she worked at St George's Hospital Medical School in London and at the Maudsley Hospital (South London and Maudsley NHS Foundation Trust). Dr El Abd's main emphasis is in maximizing the potential of children, adolescents and their parents - in particular those with special needs. She obtained the degrees of MSc (ped) and FRCPsych (London) and has completed her CCST (Certificate of Completion of Specialist Training) in London. Dr El Abd has been invited by Dubai Health Authority in the UAE as a Visiting Consultant from the UK from the period of 2004 till 2014 to help set up a service and run clinics and workshops for parents and teachers at Al Wasl Hospital in Dubai (Current Latifa Hospital) and helped set up a neuropsychiatric clinic at the hospital with the practicing neurology colleagues.

Dr El Abd is a Director in Child and Family Training (C&FT) which is a not-for-profit organization in the UK that aims to guide professionals help children and families by: promoting children's and young people's health and development. Training guides were developed by C&FT to help practitioners who work with children and families. The guides have now been translated into many languages including the Arabic language. Training courses are provided across the UK and

abroad for professionals in health, children's social care, child and adolescent mental health, education and independent organization's in different languages including Arabic. Training has been recently undertaken in Oman, Egypt and UAE. Dr El Abd is a Fellow of the Royal College of Psychiatrists in the UK. Fellowship is awarded by the Royal College of Psychiatrists in the UK as a mark of distinction and recognition of contributions to Psychiatry.



**Dr. Sandhya Khadse**

MGM Medical College, Nerul, Navi Mumbai, Maharashtra, India

## Impact of involvement of NGO in strengthening breast feeding practices and milk donation in a resource limited health care facility

**Background:** Early initiation of breastfeeding and exclusive breastfeeding for the first six months of life are crucial for the growth, development, and survival of new-borns. Early breastfeeding significantly reduces infection-related infant morbidity and mortality and is one of the most cost-effective interventions for lowering Neonatal Mortality Rate (NMR) and Infant Mortality Rate (IMR). However, in many healthcare settings, particularly resource-limited centers, establishing successful lactation remains a challenge due to short hospital stays and limited staff availability.

**Methods:** This study was conducted at Chhatrapati Shivaji Maharaj Hospital (CSMH), a 500-bedded tertiary care hospital in Kalwa, Thane, attached to the Thane Municipal Corporation. CSMH has established its own human milk bank, which collects milk from lactating mothers and distributes it to neonates in need. As per hospital protocol, women who deliver vaginally are discharged within 48 hours, and those undergoing caesarean section are discharged on the 5th day. This short duration often does not allow adequate time for lactation establishment or confidence building in mothers. To address this gap, a mother-support group was initiated to promote and counsel mothers on the importance of breastfeeding and milk donation. Given the high workload of hospital staff and time constraints, and taking into consideration the comfort level of mother in communicating with elderly women who are non-medicos and themselves being mother have a very good potential in supporting lactating mothers which can definitely avoid unnecessary use of formula feeds because of various misconceptions.

**Results:** Over a period of 299 days, counselling sessions were conducted by trained counsellors, motivating lactating mothers to donate excess breast milk. A total of 1,389 human milk donors were registered, and 3,490 mothers were counselled. As a result, 265 new-borns received donor human milk, and 123.54 liters of breast milk were collected.

Significant improvements were observed between 2016 and 2018:

- Human milk collection increased from 31.06 liters annually to 83.25 liters.
- Donor registrations rose from 472 in 2016 to 1,128 in 2018.

- Newborn recipients increased from 52 in 2016 to 179 in 2018.
- A statistically significant reduction in hospital visits for illnesses among children during the first six months of life was noted.

**Conclusions:** In resource-limited centers with overburdened hospital staff, community-based self-help groups trained in lactation management can play a vital role in supporting breastfeeding practices and human milk donation. This model not only improves donor participation and milk availability but also enhances neonatal health outcomes by reducing dependence on formula feeds and decreasing infection-related morbidity. The CSMH experience highlights that empowering mothers through peer support and structured counselling is a sustainable strategy to strengthen breastfeeding practices and reduce infant mortality.

### **Biography**

Dr. Sandhya Khadse is a Pediatrician specializing in Neonatal Nutrition and Human Milk Banking, she holds a MD degree and she is fellow of Indian academy of Pediatrics. Sandhya has worked with UNICEF and WHO and is National expert for human milk banking in India and technical expert group committee member for global guidelines, Sandhya published 176 papers, she currently the Dean at MGM Medical College, Nerul Navi Mumbai.

**Dr Sanjana Dinesh Kumar\*, Dr Lekha Sreedharan**

Apollo Children's Hospitals, Chennai, Tamil Nadu, India

## Childhood obesity and its association with dietary patterns and food behaviour: A study from a tertiary care center in Chennai

**Background:** Childhood obesity has emerged as a global public health issue of great importance. It impacts people of all socioeconomic backgrounds, regardless of their age, gender, or race. For prevention and management methods to be effective, it is crucial to comprehend the food behavior and dietary patterns of obese children.

**Objective:** To analyze the dietary patterns and food behavior of children with obesity attending a tertiary care center in Chennai.

**Methods:** Children with a Body Mass Index (BMI) above the 95th percentile attending the outpatient department between 1st July 2025 and 30th September 2025 were enrolled in the study. Baseline characteristics, including anthropometric measurements, 24-hour dietary recall, and food frequency data, were collected using an interview schedule administered by a dietitian. Statistical analysis was performed using SPSS version 25 to assess the association between eating patterns and obesity.

**Results:** A total of 72 children aged 6–17 years were included in the study. Among them, 41.6% were between 6–10 years and 58.3% were between 10–17 years of age. In the 10–12-year age group, 62.5% of children consumed calories above the recommended dietary intake, 20.8% met the recommended intake, and 16.7% consumed below the recommended level. Regarding fat intake, 57% consumed excess fat, 19.4% met their requirements, and 1.4% consumed less than the recommended amount. Obesity prevalence was significantly higher among children aged 10–15 years. Female participants were found to consume more calories than males, and this sex difference in dietary behavior was statistically significant ( $P < 0.05$ ).

**Conclusion:** The study demonstrates that not all obese children consume excess calories; some meet or even fall below their dietary requirements. These results suggest that the emergence of obesity cannot be entirely explained by food trends alone. Childhood obesity has a complex etiology that includes genetic predisposition, bad lifestyle choices, psychological effects, and physical inactivity.

**Biography**

Dr. Sanjana is a graduate of Davao Medical School Foundation, Philippines, where she ranked among the top students in her college. With a strong interest in pediatrics and clinical nutrition research, she has contributed to scientific publications in the field of Pediatric nutrition and is committed to advancing evidence-based medical practice.



## Santosh Dharel<sup>1\*</sup>, Parbati Gautam<sup>2</sup>, Sarita Yogi<sup>2</sup>

<sup>1</sup>Department of Dentistry, Trishuli Hospital, Nuwakot, Nepal

<sup>2</sup>Department of Anesthesiology, Trishuli Hospital, Nuwakot, Nepal

# Buccal space implantation of a toothbrush following traumatic fall: A case report

Impalement injuries to the oral cavity are common in preschool-aged children due to their tendency to fall while holding objects in their mouths. A variety of items, including pencils, straws, cylindrical toys, chopsticks, spoons, forks, and toothbrushes, can lead to such injuries. This case report discusses the management of a four-year-old girl who sustained an accidental toothbrush impalement into the left buccal mucosa, demonstrating satisfactory healing during follow-up visits. Timely management of impalement injuries is essential to avoid severe complications.

**Keywords:** Buccal space, Impalement, Trauma, Tooth brush

### Biography

Dr. Santosh Dharel is a dedicated dental professional from Nepal. Dr. Santosh obtained his Bachelor of Dental Surgery (BDS) from Tribhuvan University, Kathmandu, and his Master of Dental Surgery (MDS) in Pedodontics and Preventive Dentistry from B. P. Koirala Institute of Health Sciences, Dharan, Nepal. Dr. Santosh currently serves as a Consultant Pedodontist at Kanti Children's Hospital. Dr. Dharel is committed to the comprehensive management of oral and maxillofacial diseases in children and adolescents, including those with special health care needs. Beyond clinical practice, Dr. Santosh has a strong passion for advancing dental research and exploring emerging frontiers in pediatric dentistry.



### **Dr. Santosh Kumar Mishra (Ph. D.)**

Independent Researcher (Scholar): Retired from Population Education Resource Centre, Department of Life Long Learning and Extension, S. N. D. T. Women's University, Mumbai, Maharashtra, India: Retired

## **Management of pediatric primary care: Case study of Switzerland**

Need-based quality health care is right of every new born. It is imperative to ensure that babies, during the first days after birth, are protected from injury and infection. They should (a) breathe normally, (b) be warm, and (c) be fed properly. It is in view of these considerations that the conceptual framework of "pediatric primary care" gains increased significance in overall health management in all parts of the globe. Health care providers look at pediatric primary care as an intervention that has potential to ensure comprehensive and need-based health care for infants. In a more broad term, it also envisages coverage of (a) children, (b) adolescents, and (c) young adults (up to age 18-21). Pediatric primary care is provided by pediatricians and/or pediatric nurse practitioners; they act as the first point of contact for offering required health care: both in hospitals and home. It is in view of these considerations that the Switzerland's Government has devised strategies for more effective pediatric primary care.

Primary objective of this abstract is to investigate into relevant aspects of management of pediatric primary care in Switzerland (a central European country). In terms of research methodology, this work is case study in nature. Secondary data have been used in this work that were collected from various publications. Type of data used are largely 'qualitative' in nature, and method of data analysis is 'descriptive'.

Analysis of data in this work indicates that pediatric primary care in Switzerland places special emphasis focuses on preventive care. The institutional mechanism aims at providing high-quality and accessible services. Such services are offered mainly by private paediatricians. Key components of management of pediatric primary care in Switzerland include the followings:

- **Structure:** In terms of structure, required care is largely delivered by private and office-based pediatricians. It is pertinent to note that as children age, general practitioners (GPs) often take over from pediatricians.
- **Preventive Care:** Increased emphasis is placed on regular check-ups and early intervention. There are dedicated pediatric primary care providers.
- **Accessibility and Insurance:** As per regulations of the Switzerland Government, all residents are mandated to have basic health insurance. The insurance policy covers primary care visits.

Further, pediatric primary care in Switzerland is considered as a cornerstone in health initiatives that are

aimed at ensuring that infants are provided with comprehensive and continuous healthcare services (from birth till adolescence years). Twin objectives are: preventive care, and early intervention. Pediatric primary care strives to foster a healthy population (both in terms of physical and mental health). Furthermore, the author of this work makes a point that the key to pediatric primary care in Switzerland lies in a network of pediatricians in private practice; they are entrusted with the responsibility of regular check-ups, health screenings, nutrition counselling, parental education, etc.

This abstract briefly concludes that pediatric primary care model in Switzerland is rooted in the principle that access to health care is a fundamental right of infants. Government institutions play only a minor role, resulting in several challenges.

**Keywords:** Pediatric Primary Care, Management, Switzerland, Components, Accessibility, Injury, Infection, Insurance, and General Practitioners (GPs)

### **Biography**

Dr. Santosh Kumar Mishra is Independent Researcher (Scholar), having retired from Population Education Resource Centre, Department of Lifelong Learning & Extension, S.N.D.T. Women's University, Mumbai, India. He underwent training in demography & acquired Ph. D. He has authored 6 booklets, 4 books, 31 book chapters, 109 journal articles, 2 monographs, 7 research studies, & 119 papers for national & international conferences (some with bursary). He has been awarded with Certificate of Excellence in Reviewing in 2017, 2018, 2021, 2022, & 2024; and conferred with Excellence of Research Award for outstanding contribution & recognition in the field of agriculture in 2021.

**Dr. Santosh Kumar Mishra (Ph. D.)**

Independent Researcher (Scholar): Retired from Population Education Resource Centre, Department of Life Long Learning and Extension, S. N. D. T. Women's University, Mumbai, Maharashtra, India: Retired

## Significance of social pediatrics in health care system

The term "social paediatrics" is a comprehensive and holistic approach that is connected with child health. This conceptual framework places increased emphasis upon that focuses on the physical and mental health of infants and children within the context of their family, environment and surroundings around, school, and society. It is important to note that social paediatrics integrates preventive, curative, and community-based care. From this perspective, it addresses the social determinants of health (SDH). Notably, SDH envisages poverty, housing stability, and education, and other allied considerations. Social paediatrics, thus, is not limited to just treating illness.

Prime objective of this research is to present description on significance of social pediatrics in the broader context of health care system. Also, it outlines the conceptual framework of social paediatrics. With respect to research methodology, secondary data have been used in this work that were collected from secondary sources. Type of data used are largely 'qualitative' in nature, and method of data analysis is 'descriptive'.

Analysis of data in this work indicates that social pediatrics aims to promote (a) early intervention programs, (b) school health services, and (c) family support initiatives. Such family and community level interventions ensure that all children (including infants and adolescents), regardless of their socio-economic and demographic background, have access to (a) quality health care, and (b) opportunities for healthy growth. This recognition stems from the belief that children's physical and mental health are deeply influenced by their families, schools, and communities. Pediatricians in this field, thus, go beyond traditional clinical care approach.

Further, community child health programs complements social paediatrics. This is done by mobilizing and engaging local resources, organizations, and policies with the purpose of building healthier environments for children. It is important to note that this approach envisages networking and collaboration mechanism between healthcare providers, educators, social workers, and community leaders. Purpose of this mechanism is to identify and effectively address health disparities at the population level. Furthermore, initiatives and actions aimed at promoting immunization, mental health awareness, physical activity, and child nutrition are vital components of community-based care. For instance, use of mobile clinics, telehealth, and outreach initiatives helps reach underserved populations, ensuring inclusivity in child health services. Most importantly, social pediatrics and community child

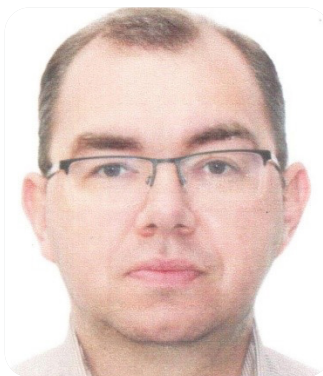
health work hand in hand with the objective of creating a supportive ecosystem wherein every child can thrive for best possible health outcomes, now and at all times. By fostering more meaningful working partnerships between families, healthcare systems, and communities, these disciplines are paving the way for a more just and health-oriented society for future generations. These programs and interventions form basic foundation of social paediatrics. However, the practice of social paediatrics is yet to be fully realised.

This abstract briefly concludes that social pediatrics is an approach that focuses on the interplay between a child's health and the social, economic, and environmental factors that shape their development and well-being during later stages of life. By integrating public healthmanagement principles with pediatric practice, social pediatrics emphasizes prevention, equity, and advocacy.

**Keywords:** Social Pediatrics, Health Care System, Social Determinants of Health (SDH), Prevention, Advocacy, Treatment, Illness, & Environmental Factors

### **Biography**

Dr. Santosh Kumar Mishra is Independent Researcher (Scholar), having retired from Population Education Resource Centre, Department of Lifelong Learning & Extension, S.N.D.T. Women's University, Mumbai, India. He underwent training in demography & acquired Ph. D. He has authored 6 booklets, 4 books, 31 book chapters, 109 journal articles, 2 monographs, 7 research studies, & 119 papers for national & international conferences (some with bursary). He has been awarded with Certificate of Excellence in Reviewing in 2017, 2018, 2021, 2022, & 2024; and conferred with Excellence of Research Award for outstanding contribution & recognition in the field of agriculture in 2021.



**Shabalov Aleksandr, MD<sup>1\*</sup>, Ivanova N.A., MD<sup>1</sup>, Ilicheva A.V.<sup>2</sup>, Kuzmina G.A.<sup>3</sup>, Nikulina P.Y.<sup>4</sup>**

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## **Features of the microbiota of the skin, small and large intestine in children with atopic dermatitis: Relationships, diagnostic, approaches to correction**

**Relevance:** Atopic Dermatitis (AD) is a widespread chronic, genetically determined, multifactorial dermatosis in children, the main factors of which are considered to be dysfunction of the skin barrier, changes in immune responses, as well as disruption of the skin microbiome and, probably, the microbiome of the small and large intestine. The mechanisms of the relationship between the microbiome of the skin and intestines in children with AD require further study. The role of Small Intestinal Bacterial Overgrowth (SIBO) in the course of atopic dermatitis in children and its effect on the effectiveness of therapy continues to be studied.

The aim of the study was to evaluate the incidence of SIBO in children with atopic dermatitis and the effectiveness of treatment of mild to moderate atopic dermatitis in children, as well as the state of the skin and intestinal microbiome, when a prebiotic and probiotic component is included in external therapy.

**Research materials and methods:** 82 children were examined, including 33 people with mild to moderate AD (main group), aged 8.0 [5.0: 15.0] years, of whom 16 (48.5%) girls and 17 (51.5%) boys, as well as 49 practically healthy children in at the age of 9.0 [5.8: 16.2] years, 27 (55.1%) girls and 22 (44.9%) boys. The determination of the hydrogen-induced (H<sub>2</sub>-SIBO) and methanogenic variants of the course (CH<sub>4</sub>-SIBO) in all patients with AD and children of the comparison group was performed using noninvasive methods: The hydrogen breathing test «Lacto fan» («AMA», Russia) and the hydrogen-methane test «GastroCheckGastrolyzer» («Bed font Scientific Ltd», Great Britain). A dynamic clinical, laboratory and functional examination of 19 children with atopic dermatitis in the subsiding stage of exacerbation, who used only a biotic complex (lactobacilli + fructooligosaccharides) as external therapy, was also conducted. The SCORAD index was evaluated, the microbiome was studied from the affected areas of the skin and in feces by PCR 16S sequencing, and the spectrum of short-chain fatty acids (acetic, propionic, butyric, and is acids) by gas-liquid chromatography in feces. The statistical analysis was performed using the Stat Tech v program. 4.1.2 («Stattech», Russia), online platforms for Omics data analysis («Met ware Cloud», China).

**Results and conclusions:** In almost all patients with AD (93.9%), SIBO was diagnosed using a hydrogen-methane breath test. In practically healthy children, SIBO of various types was detected in 28 (57.1%), the hydrogen-induced variant in 18 (36.7%) and the methanogenic variant of SIBO in 10 (20.4%) of the examined patients. In patients with AD, both the frequency of various types of SIBO and the frequency of the hydrogen-induced variant of SIBO were statistically significantly higher than in the comparison group ( $p < 0.05$ ). The methanogenic variant of SIBO was diagnosed in 21.2% of children with AD and in 20.4% of children in the comparison group, respectively ( $p > 0.05$ ).

In children with atopic dermatitis, there is a significant decrease in moisture and an increase in the pH of the skin, a deviation in the composition of the microbiome of the skin and intestines towards an increase in pathogenic and opportunistic microorganisms, and a decrease in the Shannon and Pielou biodiversity indices. AD therapy in children using external care products with a biotic complex allowed to achieve positive changes in functional parameters (humidity, pH) and the skin microbiome, and a distinctly positive clinical effect was obtained.

However, there was no significant improvement in the state of the intestinal microbiome, an increase in the Shannon and Pielou indices in the intestinal microbiota, probably due to the lack of oral probiotics.

**Keywords:** Atopic dermatitis, Small intestinal bacterial overgrowth, SIBO, Skin microbiome, Intestinal microbiome, Microbiota biodiversity, Short-chain fatty acids, Children

### **Biography**

Aleksandr M. Shabalov has completed his PhD at the age of 30 years from Saint Petersburg State Pediatric Medical University, Ministry of Health of the Russian Federation, Saint Petersburg, Russia. Aleksandr is the MD, Assistant Professor of the Department of Children's Diseases, Kirov Military Medical Academy, Saint Petersburg, Russia. Aleksandr has over 120 publications that have been cited over 420 times, and his publication h-index is 9. Aleksandr is a pediatrician and gastroenterologist interested in functional disorders of gastrointestinal tract, SIBO, GERD, pediatric allergy, obesity, MAFLD with 19 years of experience.

**Stefano Bembich<sup>1\*</sup>, Elena Castelpietra<sup>2</sup>**

<sup>1</sup>Unit of Neonatology, University Hospital of Udine (Italy)

<sup>2</sup>Department of Medicine, Surgery and Health Sciences, University of Trieste (Italy)

## Sex-related differences in the processing and experience of pain at the beginning of life

**Background:** This study explores sex differences in neonatal pain perception, an area that remains relatively understudied despite well-documented disparities in adult pain experiences. The research aims to identify sex-related patterns in neonatal pain responses using both behavioral and neurophysiological data, obtained employing the Neonatal Infant Pain Scale (NIPS) and Near-Infrared Spectroscopy (NIRS).

**Methods:** A secondary analysis was conducted on previously published data of our research group, collected from 100 healthy full-term newborns (48 males, 52 females) undergoing a routine heel-prick for metabolic screening. Participants to the original studies were randomly allocated to one of the following non-pharmacological pain relief methods: oral glucose solution, expressed breast milk, maternal holding with glucose administration, breastfeeding, or maternal holding alone.

**Results:** It was observed that female newborns exhibited a significantly more pronounced behavioral response to pain compared to their male counterparts ( $p = 0.031$ ), with this difference being particularly evident during breastfeeding as an analgesic intervention ( $p = 0.10$ ). Female newborns also showed an increased activation of the left somatosensory cortex in response to heel-prick ( $p = 0.029$ ). During breastfeeding analgesia, this difference involved the right somatosensory cortex too ( $p = 0.010$ ).

**Conclusions:** These findings underscore the importance of incorporating sex-specific considerations in neonatal pain assessment and management protocols. The study suggests that developing tailored, sex-specific approaches may be crucial for ensuring optimal pain care in newborns, potentially leading to more effective and personalized neonatal care strategies. In the end, this research contributes to the growing body of evidence supporting the need for sex-specific considerations for pain management since early-life.

### Biography

Dr. Stefano Bembich is a clinical psychologist and researcher. Currently, he works at the University Hospital of Udine (Italy), in the Mother-Child Department, as clinician. In collaboration with the Institute for Maternal and Child Health IRCCS "Burlo Garofolo" of Trieste (Italy), his research activity concerns the application of cerebral near-infrared spectroscopy, as a functional neuroimaging technique, in the field of neonatology. He published more than 20 papers on this topic.



## Tatyana Itova

<sup>1</sup>University of Ruse "Angel Kanchev", Ruse, Bulgaria

<sup>2</sup>University Hospital Medica Ruse, Neonatology Department

# Follow-up of high-risk newborn infants

High-risk newborns—such as preterm infants, those with very low birth weight, and those requiring intensive neonatal care—are at increased risk for various health complications. Advances in neonatal medicine have improved survival, but these infants remain vulnerable to conditions affecting growth, neurodevelopment, and sensory functions. Prevention, treatment, and follow-up in outpatient settings of the achieved clinical improvement of these patients are required.

Key aspects of follow-up include early detection and intervention for bronchopulmonary dysplasia, anemia, rickets, feeding and growth delays, and central nervous system injuries. Sensory impairments such as retinopathy of prematurity and hearing loss require systematic screening and specialist care.

Neurodevelopmental monitoring is essential and should be performed regularly using standardized tools such as the DDST-II, ASQ, and Bayley Scales. Cognitive, motor and behavioral development should be assessed from birth to school age at regular intervals according to the child's development, with early rehabilitation and specialized educational support provided when necessary. The main aim is to prepare the child for learning in a regular environment with their peers.

The follow-up strategy also includes individualized immunization planning, based on gestational age and clinical condition. A structured follow-up plan involving a multidisciplinary team—pediatricians, ophthalmologists, neurologists, and other specialists—is essential for optimal outcomes. Good collaboration between all these medical specialists is a prerequisite for better long-term results.

In conclusion, effective follow-up of high-risk newborns is crucial to minimize long-term morbidity and disability. It requires coordinated efforts, the establishment of clear protocols, and the active involvement of family and caregivers to support healthy development and quality of life.

### Biography

Dr. Tatyana Itova is a pediatrician and neonatologist with extensive clinical experience in the intensive care and follow-up of high-risk and premature infants. Dr. Tatyana specializes in neonatal intensive care and long-term developmental support and participates in national programs focused on early intervention and child health. Dr. Tatyana Itova is the head of the Neonatology department at the University Hospital Medica Ruse and teaches at the University of Ruse "Angel Kanchev", Bulgaria.



**Tiffany Colomé Leal\*, Jaime Miranda Junior, Maria de Lourdes de Souza**

Federal University of Santa Catarina, Florianópolis, SC, Brazil

## **AMPARO: Technology with care actions for children up to one year of age after maternal death**

The AMPARO technology was developed with the objective of systematizing and monitoring the care of children under one year of age whose mothers died during childbirth or the postpartum period. This population is in a situation of vulnerability, as maternal absence compromises access to breastfeeding, emotional bonding, and health services, increasing the risk of malnutrition, preventable diseases, and neonatal death. To address this issue, a care action matrix based on Wanda Horta's Theory of Basic Human Needs was created and validated. This theory considers care across psychobiological, psychosocial, and psycho-spiritual dimensions. AMPARO was conceived as a web-based technological solution, enabling continuous, secure, and accessible clinical and social monitoring. The technology organizes and records interventions focused on nutrition, growth, prevention of health problems, strengthening of affective bonds, and emotional and spiritual support. Centralizing this information in a digital system allows collaborative work between health professionals and family members, promoting comprehensive and longitudinal care. The prototype development followed six main stages: literature review, requirements elicitation, system architecture design, partial implementation, and planning for validation and deployment. Eight functional requirements were defined (such as child registration, monitoring based on the care matrix, and generation of individualized reports), along with five non-functional requirements focused on usability, security, performance, and compliance with Brazil's General Data Protection Law. The adopted architecture was client-server, with a user interface accessible via web browsers and a server layer responsible for data storage and access management. Interfaces were developed using HTML, CSS, and JavaScript, prioritizing simplicity and responsiveness to enhance user experience. Specific screens were created for each age group (0–12 months), integrating the care matrix and allowing personalized monitoring plans according to the child's profile. Additionally, the system includes access control via authentication, a displayed privacy policy, and report generation to support clinical decisions. The prototype will be validated by experts in women's health, child development, health technology, and design, and will be assessed in terms of appearance, usability, and functionality. AMPARO represents an innovation in maternal and child health, filling a gap in digital care for children after maternal loss. Its goal is to expand access to care, support health professionals in decision-making, and contribute to care strategies for early childhood. Future studies will evaluate its effectiveness and applicability in real healthcare settings.

**Biography**

Tiffany Colomé Leal is a nurse and PhD student in Nursing at the Federal University of Santa Catarina. She holds a Master's degree in Nursing from the Federal University of Santa Maria. Tiffany has professional experience in Neonatal ICU and has taught in the fields of child and adolescent health and critical care. Tiffany is currently a faculty member in the Nursing Program at FAEM Faculdades (Central Unit).



## Winsome Lam<sup>1\*</sup>, Cathrine Fowler<sup>2</sup>, Queenie Law<sup>3</sup>, Raymond Chung<sup>4</sup>

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<sup>2</sup>School of Nursing & Midwifery, Faculty of Health, University of Technology, Sydney, Australia

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<sup>4</sup>School of Rehabilitation Science, The Hong Kong Polytechnic University, Hong Kong, China

### **Nurse parental support using a proactive mobile app to enhance parental self-efficacy in symptom management for the children requiring mechanical ventilation**

**Background:** Children with Medical Complexity (CMC) who require mechanical ventilation often experience multiple physical and psychological symptoms that significantly impact their Quality Of Life (QOL). The literature suggests that enhancing parental self-efficacy in managing these symptoms can improve child health outcomes. In Hong Kong, home-based nursing services are available for CMC and their families, but these services face challenges due to a significant shortage in the nursing workforce. Nurse parental support using a mobile App in symptom management is another method considered more accessible and nurse-parent interactivity to continue home-based support. The aims of this study were to examine the effectiveness of a 3-month nurse parental support using a proactive mobile App in symptom management for their CMC living at home, and explore Reach, Adoption, Implementation, Maintenance of the implementation process of this intervention in real life setting.

**Methods:** Implementation science approach adopted a single group pre-post quasi-experimental design was conducted to evaluate the effects of a nurse support using a proactive mobile app to enhance parental self-efficacy in symptom management for their child requiring mechanical ventilation, and alongside identify factors facilitating or deterring the program implementation. Data collection is ongoing, with parents recruited from a non-governmental organization. The estimated sample size is 52. Data are collected via self-administered questionnaires and semi-structured interviews. Outcomes include caregiving self-efficacy, modified memorial symptom assessment scale, and child health service utilization. Assessments are conducted at four time points: 1st month (T1), and 3th month (T2) as self-controlled for comparing any differences with another two identical assessments in 6th month (T3 pre-intervention), and in 9th month (T4 post-intervention). Implementation facilitators and barriers are analysed using the RE-AIM framework. Data will be analysed using the intention-to-treat principle and generalized estimating equations.

**Results:** To date, 43 parents have been recruited, and all have completed data collection at T1 and T2.

**Conclusion:** The study is progressing as planned, with smooth recruitment and data collection. It is anticipated that the intervention will enhance parental self-efficacy, reduce symptom burden in CMC, and decrease health service utilization.

**Funding source:** Health and Medical Research Fund: Project reference number: 22231361

**Biography**

Professor Winsome LAM is a community nurse who gets experiences in taking care of paediatric patients with complex medical conditions i.e., children with cancer or life-limiting disease at home or in the community. She is the subject lead for the Community Health Nursing courses offered in both undergraduate and postgraduate programmes. Her current research studies focus on paediatric palliative service, parental support in symptom management for children with medical complexity, and health technology application. Winsome has been a PhD supervisor since 2020 and has secured several external competitive grants.



## Y. Doruk Bilgili

Bandırma Onyedli Eylül University, Balıkesir, Türkiye

# Management of ingrown toenail

Ingrown toenail is a common podiatric condition characterized by the penetration of the nail edge into the adjacent periungual soft tissue, most frequently affecting the great toe. It typically presents with pain, erythema, edema, and, in advanced cases, infection. Although it can occur at any age, it is more prevalent among young adult males. The etiopathogenesis involves improper nail trimming, the use of tight or pointed footwear, foot deformities, trauma, and excessive sweating. Additionally, hereditary factors and abnormal nail morphology may contribute to its development.

Ingrown toenails are clinically classified into three stages according to the Heifetz classification. The management approach is determined according to the clinical stage of the disease. Generally, conservative management is indicated for early-stage cases and aims to relieve symptoms and prevent progression without surgical intervention. General measures include appropriate footwear, correct nail trimming (cutting nails straight across without rounding the corners), and maintaining proper foot hygiene. Warm saline or antiseptic soaks several times daily may reduce inflammation. Placement of a small cotton wick, gauze, or plastic splint under the nail edge can help separate the nail from the soft tissue. Topical or systemic antibiotics may be required in the presence of infection. For recurrent and severe cases, treatment options include chemical matricectomy, surgery, electrocautery, cryosurgery, and CO<sub>2</sub> laser matricectomy. Chemical matricectomy involves the use of active agents such as phenol, Sodium Hydroxide (NaOH), Tri-Chloroacetic Acid (TCA), or silver nitrate. The Wino grad technique is the one of the most performed technique in surgical procedure. Total nail avulsion is rarely indicated and should be limited to cases involving extensive nail deformity or widespread infection. Postoperative care includes aseptic dressing, regular wound monitoring, and adequate pain control. Complications may include infection, bleeding, necrosis, nail deformity, and recurrence. Performing surgical interventions under sterile conditions by experienced practitioners significantly reduces these risks. Patients should be advised to elevate the affected foot, wear loose footwear, and maintain proper nail and foot hygiene during recovery.

In conclusion, the management of ingrown toenail requires a multidisciplinary approach involving accurate staging, appropriate treatment selection, and patient education. Early diagnosis and evidence-based treatment protocols play a crucial role in improving patient outcomes and quality of life.

**Biography**

I am Y. Doruk Bilgili. I completed my medical education at Demirođlu Bilim University between 2009 and 2015. I completed my residency in pediatric surgery at Zonguldak Bulent Ecevit University between 2016 and 2022. I worked at Siverek State Hospital and Bandirma Training and Research Hospital between 2022 and 2024. I have been working as Head of Pediatric Surgery Department at Bandirma Onyedi Eylul University since April 2024. I am doing research on circumcision, perioperative anxiety and appendicitis.



# BOOK OF ABSTRACTS

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## Svjetlana Mikulic

<sup>1</sup>Department of Pediatrics, University Clinical Hospital Mostar, Mostar, Bosnia and Herzegovina

<sup>2</sup>School of Medicine, University of Mostar, Mostar, Bosnia and Herzegovina

# The impact of the COVID-19 pandemic on the epidemiology of common childhood infections in the Federation of Bosnia and Herzegovina (2018–2024)

**Background:** While the global focus during the COVID-19 pandemic was directed at SARS-CoV-2 containment, collateral effects on other infectious diseases—particularly in children—have been underreported. In the pediatric population, lockdowns, school closures, and social distancing significantly altered exposure patterns to common childhood infections.

**Objective:** To analyze the epidemiological trends of selected viral infections in children (measles, influenza, varicella) before, during, and after the COVID-19 pandemic in the Federation of Bosnia and Herzegovina (FBiH) between 2018 and 2024.

**Methods:** A retrospective analysis was conducted using publicly available annual epidemiological bulletins from the Public Health Institute of the Federation of Bosnia and Herzegovina ([www.zzjzfbih.ba](http://www.zzjzfbih.ba)). Reported cases of varicella, influenza, and measles from 2018 to 2024 were extracted and analyzed through descriptive and graphical methods to illustrate incidence trends.

**Results:** All three infections demonstrated a significant decline during the peak of the COVID-19 pandemic in 2020 and 2021, a period that coincided with widespread implementation of strict public health measures. Influenza incidence, for example, fell sharply from 9,295 reported cases in 2019 to just 248 in 2020 and 601 in 2021. A substantial resurgence was observed in 2023, with 11,122 reported cases. A similar pattern was seen with varicella (chickenpox), which decreased from 6,657 cases in 2019 to 2,073 in 2020, followed by a marked increase to 11,421 in 2023. Measles showed a complete absence of reported cases between 2020 and 2022; however, this was followed by a major outbreak in 2023, during which 4,520 cases were documented. These epidemiological patterns are consistent with the consequences of reduced viral exposure due to lockdowns and a concurrent drop in routine vaccination coverage. Early data from 2024 suggest a potential stabilization, though the reported incidence remains above pre-pandemic levels for all three infections.

**Conclusion:** The pandemic significantly disrupted the epidemiology of pediatric infectious diseases in FBiH. Non-pharmaceutical interventions suppressed routine transmission but created immunity

gaps that contributed to post-pandemic surges. Targeted catch-up immunization and strengthened surveillance are critical to preventing future outbreaks in this vulnerable population.

### **Biography**

Dr. Sijetlana Mikulic is a pediatrician and PhD candidate at the University Clinical Hospital Mostar. Dr. Mikulic has significant experience in neonatal intensive care and general neonatology. Currently, Dr. Mikulic works at the Department of Pulmonology and Allergology, managing both respiratory and allergic pediatric patients. Her research focuses on neonatal endocrinology, pediatric pulmonology, perinatal outcomes, and rare congenital disorders. Dr. Mikulic is actively involved in clinical research and regularly presents at national and international pediatric conferences.



## Sijetlana Mikulic

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# Neonatal hyperinsulinemic hypoglycemia with a pathogenic KCNJ11 variant – A case report

**Introduction:** Congenital Hyperinsulinism (CHI) is the most common cause of persistent hypoglycemia in neonates. Prompt recognition and treatment are essential to prevent neurological damage. Mutations in genes regulating insulin secretion, especially KCNJ11, are frequently implicated.

**Aim:** To present the diagnostic and therapeutic approach in a neonate with persistent hypoglycemia and a confirmed pathogenic KCNJ11 variant.

**Case presentation:** A female neonate, born at 38+1 weeks via cesarean section, was admitted within hours of birth due to hypoglycemia (blood glucose 1.0 MMOL/L) and desaturation. Laboratory findings showed hyperinsulinemia (insulin 54.1  $\mu$ U/mL, C-peptide 7.41 ng/mL), metabolic acidosis, and elevated LDH. Glucose and corticosteroid therapy were insufficient, prompting initiation of diazoxide and chlorothiazide, resulting in clinical improvement. Genetic testing revealed a likely pathogenic heterozygous variant c.901C>G in the KCNJ11 gene. The infant was discharged in stable condition with endocrinology follow-up.

**Discussion:** KCNJ11 mutations may cause both autosomal dominant and recessive forms of CHI. Genetic confirmation is crucial for diagnosis and guiding therapy. Diaz oxide is the treatment of choice in responsive forms. Early diagnosis and targeted treatment can prevent severe outcomes.

**Conclusion:** In neonates with persistent hypoglycemia, early metabolic and genetic evaluation is essential. Identification of a KCNJ11 mutation enabled targeted therapy and favorable clinical outcome.

### Biography

Dr. Sijetlana Mikulic is a pediatrician and PhD candidate at the University Clinical Hospital Mostar. She has significant experience in neonatal intensive care and general neonatology. Currently, she works at the Department of Pulmonology and Allergology, managing both respiratory and allergic pediatric patients. Her research focuses on neonatal endocrinology, pediatric pulmonology, perinatal outcomes, and rare congenital disorders. Dr. Mikulic is actively involved in clinical research and regularly presents at national and international pediatric conferences.



## **T. Karthikeyan**

Associate Professor, Department of Physiotherapy, Gurugram University, Gurugram, Haryana, India

# **Physiotherapeutic rehabilitation strategies for juvenile ankylosing spondylitis with HLA-B27 association: A case report**

Ankylosing spondylitis (AS) is a chronic, progressive inflammatory arthritis primarily affecting the axial skeleton, often leading to pain, stiffness, and potential spinal fusion. Although more prevalent in young adults, juvenile onset AS is rare and presents unique challenges in diagnosis and management. This case report details the physical therapy (PT) management of a 7-year-old female diagnosed with HLA-B27–positive ankylosing spondylitis presenting with low back pain, reduced spinal mobility, and functional limitations. The comprehensive rehabilitation program was tailored to her developmental stage, focusing on pain control, posture correction, flexibility maintenance, and functional activity enhancement. Interventions included gentle spinal mobilization, core stabilization, stretching of shortened muscle groups, respiratory exercises to preserve chest expansion, and age-appropriate therapeutic play to maintain engagement. Education was provided to the family regarding activity modification, ergonomic support, and home exercise compliance. Outcomes were assessed through improvements in pain scores, range of motion, functional independence, and quality of life measures. This case emphasizes the critical role of individualized PT programs in managing juvenile AS, aiming to delay structural progression, preserve function, and promote long-term independence. The report also underscores the importance of multidisciplinary care and early intervention to address both the physical and psychosocial impact of the condition.

## **Biography**

Dr. Karthikeyan Thangavelu is a distinguished academician, researcher, and physiotherapy educator with over two decades of multifaceted experience in functional rehabilitation care, sports medicine, and clinical physiotherapy education. As a prominent figure in the field, he currently serves as an Associate Professor in the Department of Physiotherapy and holds key administrative roles as Deputy Director (Sports) and Secretary of the Sports Council at Gurugram University, Haryana. His academic and clinical interests span across neurology, post-neurosurgical rehabilitation, psychosomatic disorders, and sports injury management, with specialized expertise in fitness assessment, physical testing, and exercise prescription.



**Yanoswky Reyes Guillermo\*, Gómez Sánchez Eduardo,  
Bribiesca González, Felipe Alfonso**

Universidad de Guadalajara, Guadalajara, Jalisco, México

## **Transformative clinical simulation: History, consolidation, and impact in the first year of the CeSiCS**

**Background:** The Health Sciences Simulation Center (CeSiCS) of the University Center for Health Sciences (CUCS), University of Guadalajara, was established with the goal of enhancing experiential learning across health-related degree programs. This initiative emerged as a response to the growing demand for integrative, interdisciplinary, and safe spaces where students could develop clinical reasoning, procedural skills, and teamwork through simulation-based education. Its creation reflects a strategic institutional effort to align with global trends in medical education, emphasizing active methodologies and technological innovation.

**Methods:** The Center was developed under a multi-phase model involving curricular integration, infrastructure planning, interdepartmental collaboration, and faculty training. It was equipped with a wide array of specialized areas: one Virtual Reality Room, four outpatient clinics, two emergency bays, two operating rooms, two hospitalization wards, and ten simulation rooms. Additionally, it houses a Biomedical Engineering Unit for simulator development and maintenance, and a Digital Health Unit focused on emerging technologies. The Center provides simulation-based training to students from seven academic programs: Medicine, Nursing, Dentistry, Physical Culture and Sports, Nutrition, Forensic Sciences, and soon Psychology.

**Results:** During its first year of operation, the CeSiCS delivered 1,803 simulation sessions, spanning 73 different types of practices across 23 curricular units, serving an estimated 6,011 students. These simulations supported learning outcomes from foundational to advanced clinical skills. Furthermore, the Center became a hub for academic collaboration, hosting national and state-level simulation events and strengthening ties with professional medical education associations. Its cutting-edge facilities and multidisciplinary approach have positioned CeSiCS as a national benchmark for health simulation in Mexico.

**Conclusions:** The first year of the CeSiCS demonstrates the transformative power of simulation in health sciences education. Its integration into undergraduate curricula has enriched student learning experiences, promoted inter-professional collaboration, and set the stage for future innovation in digital health and simulation technologies. The Center not only fulfills a pedagogical need but also

acts as a strategic platform for educational advancement and institutional prestige. Continued growth and research will be key to sustaining its impact in the coming years.

### **Biography**

Dr. Guillermo Yanowsky Reyes is Chief of Pediatric Surgery at the Old Civil Hospital of Guadalajara "Fray Antonio Alcalde" and Associate Professor at the University of Guadalajara (CUCS). Dr. Guillermo holds specialties in Pediatrics, Pediatric Surgery, and Thoracoabdominal Trauma Surgery, along with two doctorates in Clinical Research and Educational Competencies. Dr. Guillermo authored 15 books and over 40 scientific articles. Dr. Yanowsky is Secretary of RENASIM and member of multiple national and international academic and medical societies. Dr. Guillermo plays a leading role in postgraduate medical education and innovation in clinical simulation in Mexico.

# Thank You for Being a Part of **IPN 2026**

We extend our sincere appreciation to all speakers, participants, and partners who contributed to making this conference a success. Your active participation and dedication to advancing research and knowledge in pediatrics, neonatology and child health are truly inspiring.

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