



Towards healthier
mothers and newborns

23rd ANNUAL SCIENTIFIC CONGRESS 2024

Perinatal Society of Sri Lanka

"Holistic intervention strategies to mitigate prematurity -
An evidence based community and clinical approach"

PROGRAMME & ABSTRACTS

18th, 19th & 20th September 2024
Hotel Galadari, Colombo, Sri Lanka.





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MESSAGE FROM THE PRESIDENT PERINATAL SOCIETY

It is with great pleasure and satisfaction I invite all of you to attend this great Annual event which will be held from 19th and 20th September 2024 at Hotel Galadari, Colombo. Very eminent speakers in the field of perinatology locally and internally will deliver their updated versions of current knowledge. Some of the foreign speakers had to join virtually because of the obstacles unforeseen.



I took the post of the president of the perinatal society of Sri Lanka 2024, and it was a huge challenge for me to organize the project calendar within the short period of time. The inauguration held on 11th February at Waters edge with the participation of Honorable minister of health Dr Ramaesh Pathirana as the chief guest and with the presence of the health secretary Dr Palitha Maheepala and the Director General of health Dr Asela Gunawardana.

The support I received from the council was enormous and we were able to conduct many capacity building workshops away from Colombo and they were a great success.

To organize a session of this caliber is need lot of planning and dedication. Unfortunately, the presidential election was called on the scheduled day and we were forced to make last moment adjustments. In spite of all these obstacles, we, the council and specially the academic chair, Dr Surantha Perera was able to make esteemed academic program consisting contemporary topics as well as areas which were not widely explored though they are imperative issues in current clinical practice.

We created a country-specific “Premi Care Bundle for Sri Lanka” to embed our targeted objectives, and this advocacy strategy will be launched at the Inauguration. We developed a narrative, “Help to Breath – Help to Grow -Help to Develop,” to promote our advocacy role.

It will be launch during the course of the congress. There was a pre congress workshops for midwives and nurses which was efficaciously concluded yesterday.

I would like to thank specially Dr. Surantha Perera Congress chair, Energetic Secretary Dr. Indunil Piyadigama, Prof Sanath Lanarolle, immediate past president Dr. Susie Perera, Dr. Ruwan Silva Dr Dilusha and all the members of the council for their invaluable services to make this event a success. At last, but not least, I would like to thank all the sponsors for their untiring support without that this event may not be a reality.

I wish for a successful annual congress this year which meets the demands of the participants.

Dr. Sudath Senaratne

President - PSSSL

Consultant Obstetrician and Gynaecologist

MESSAGE FROM THE SECRETARY PERINATAL SOCIETY



It is with immense pride and honor that I welcome you to the 23rd Annual Scientific Congress of the Perinatal Society of Sri Lanka (PSSL). As we gather here on the 19th and 20th of September 2024, at the Grand Ballroom of the Hotel Galadari, Colombo, we continue our mission of advancing perinatal care and addressing the critical health needs of mothers and newborns in Sri Lanka.

This year's congress, under the theme "Holistic Intervention Strategies to Mitigate Prematurity: An Evidence-Based Community and Clinical Approach", highlights the pressing challenge of prematurity and seeks to offer solutions through evidence-based practices. It is a unique opportunity for healthcare professionals, researchers, and policymakers to come together to share knowledge, explore innovative strategies, and ultimately enhance the quality of care provided to mothers and newborns.

Our program this year is rich with distinguished speakers, panels, and discussions, featuring international and local experts who are renowned in their respective fields. I am confident that the sessions will spark meaningful dialogue, inspire new ideas, and foster collaborations that will have a lasting impact on perinatal healthcare in Sri Lanka.

I would like to take this opportunity to express my gratitude to all who have worked tirelessly to make this event a success. My sincere thanks go out to the organizing committee, our esteemed speakers, sponsors, and participants. A special word of appreciation goes to our event organizer, Iroshini, and our office secretary, Sandali, for their dedication and support in making this congress a reality.

I look forward to welcoming each of you to what promises to be an insightful and engaging two days of learning and networking. May this congress serve as a platform for growth, collaboration, and innovation in perinatal care, as we strive towards healthier mothers and newborns in Sri Lanka and beyond.

Warm regards,

Dr. Indunil Piyadigama

Secretary - PSSSL

Consultant Obstetrician & Gynaecologist, De Soysa Hospital for Women

Senior lecturer, Faculty of Medicine, University of Colombo

MESSAGE FROM THE CONGRESS CHAIR

This year's Annual Scientific Congress and Pre-Congress of the Perinatal Society of Sri Lanka, a platform for discussing global themes and the best practices of perinatal care, will be held over three days from September 18th to 20th at Galadari Hotel Colombo.

The theme for the year, "Holistic Intervention Strategies to Mitigate Prematurity: An Evidence-based Community and Clinical Approach", is timely considering the economic burden of prematurity on the government and society. Mitigating prematurity requires a multifaceted approach that combines community awareness and support with clinical expertise and evidence-based practices.



We created a country-specific "Premi Care Bundle for Sri Lanka" to embed our targeted objectives, and this advocacy strategy will be launched at the Inauguration. We developed a narrative, "Help to Breath – Help to Grow -Help to Develop," to promote our advocacy role. Under Help to Breath, we mentioned securing the continuity of supplying surfactants and registering and procuring Caffeine. In Help to Grow, we included the spectrum of nutritional interventions, i.e., breastfeeding, kangaroo mother care, and parental nutrition for those who cannot tolerate enteral feeds. In Help to Develop, we mentioned the importance of correcting congenital disabilities and early developmental interventions. We intend to address this double jeopardy, extreme preterm and neurodevelopment disability in a meaningful and timely manner. These two ends, birth to survival, preterm infants die and prevail with disability and contribute to the increased neonatal and infant mortality.

We have planned very interesting discussions on several topics to raise awareness among the participants and, later, initiate steps to address them meaningfully at the national level. Laws, ethics, and obstetric practice: Concerns and conundrums are ignored topics in society, but they shed light on challenges faced by the law-enforcing authority in handling a pregnant mother and the unborn baby. Climate effects – Impact on perinatal outcomes and termination of pregnancy for lethal anomalies are two other topics discussed in the Scientific Sessions. These topics dominate global headlines and are vital for us in the current context. Over two decades, we have struggled to bring legislation to the termination of pregnancy because of its sensitive nature, culturally and religiously. Climate changes cause devastating effects on pregnancy, threatening the lives of the mother and the foetus. Increased heat and air pollution increase health risks, and floods, landslides, and cyclones cause displacement and destroy crops, creating food scarcity.

Our oration is on pre- and perinatal predictors of childhood obesity in a tertiary care setting in Sri Lanka, which is part of the double burden of malnutrition and obesity. It will motivate policymakers to think differently. With our country's economic turndown and political instability, we do our best to hold onto what we have gained; securing low neonatal and infant mortality and maternal mortality are a few of them. We also do our best to promote breastfeeding and Kangaroo mother care, which will help to keep the above indices at least at the current numbers.

I thank all the foreign and local speakers for their worthy contributions. I sincerely hope the new knowledge we infuse about the latest advances will help us further improve perinatal care in our country. As healthcare professionals, researchers, and policymakers, your role is crucial in addressing these significant challenges from the country's perspective. We expect you to think and act differently for a just society and rise to the occasion in a country with a failed economy and a highly polarized society.

Dr Surantha Perera

Chair of the Scientific Committee - PSSSL

Consultant Paediatrician

Perinatal Society of Sri Lanka

Council Members - 2024



Standing from Left to Right - Dr Himali Herath, Dr Nimesha Gamhewage, Dr Dilani Dehigama (Assistant Treasurer), Dr Dilusha Atukorale, Dr Diluk Senadeera, Professor Sachith Mettananda, Dr Asiri Hewamalage (Immediate Past Secretary), Dr Nimali Wijegoonewardene (Assistant Secretary) , Dr Sandya Doluweera , Dr Jithma Ruwini Fonseka, Dr Nalin Gamaathige

Seated from Left to Right - Dr Ruwan Silva (Treasurer), Dr Kapilani Withanarachchi , Dr Kaushalya Kasturiarachchi, Dr Surantha Perera (SLJPM Managing Editor), Dr Sudath Senaratne (President), Professor Indrajee Amarasinghe (Founder President), Dr Susie Perera (Immediate Past President), Dr U.D.P Ratnasiri, Dr Harendra Dassanayake (President elect), Dr Indunil Piyadigama (Secretary), Professor Dulani Gunasekera (SLJPM Editor in Chief)

Absent - Dr Amila Chandrasiri, Dr Prabath Randombage, Dr Chandima Sirithunga, Dr Sumal Nandasena

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Consultant Obstetrician and Gynaecologist

President elect

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Consultant Neonatologist

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Consultant Paediatrician

Dr Sandya Doluweera

Consultant Paediatrician

Dr Dilusha Atukorale

Consultant Paediatrician

Dr Kaushalya Kasturiarachchi

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Dr.Diluk Senadeera

Consultant Obstetrician and Gynecologist

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Provincial Director Health Services Southern Province

Dr Sumal Nandasena

Deputy Regional Director of Health Services - Kalutara



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23rd ANNUAL SCIENTIFIC CONGRESS 2024

18th to 20th September 2024 - Program Layout

Help Preterm: To breath, grow and develop

18th September 2024

- **Pre congress Scientific Session for Nurses and Midwives**
Galadari Hotel, Colombo.

19th September 2024

- **Inauguration of the Perinatal Society of Sri Lanka**
Galadari Hotel, Colombo.

19th September 2024

- **Annual Scientific Congress Day 1**
Galadari Hotel, Colombo.

20th September 2024

- **Annual Scientific Congress Day 2
& Prof. Indraje Amarasinghe Oration**
Galadari Hotel, Colombo.



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**PRE-CONGRESS SCIENTIFIC SESSIONS
OF THE
PERINATAL SOCIETY OF SRI LANKA (PSSL)
FOR NURSES AND MIDWIVES**

18th September 2024, at Galadari Hotel, Colombo



PROGRAMME OF PRE-CONGRESS SCIENTIFIC SESSION

Hall A

Hall B

7.00 - 8.00 am	Registration	
7.30 - 8.30 am	Oral presentations	
8.30- 9.00 am	Keynote speech Continuous professional development (CPD) Prof. Madhawa Chandrathilake, Professor of Medical Education, Faculty of Medicine, Ragama	
9.00-9.30 am	Tea	
9.30-11.00 am	Family Integrated care (FICare) in NICU <ul style="list-style-type: none"> • Addressing negative impact of NICU environment Dr Kapilani Withanaarachchi, Consultant Paediatrician • Zero separation & parents as equal partners Dr Nalin Gamaathige, Consultant Neonatologist • Psychosocial support Prof. Miyuru Chandradasa, Professor in Psychiatry • Communication strategies Prof Sachith Mettananda, Professor of Paediatrics 	Minimizing perinatal infection risk <ul style="list-style-type: none"> • Reducing risk of the mother Dr Sudath Senaratne, Consultant Obstetrician & Gynaecologist • Reducing risk of the newborns Dr M H S M Hassan, Consultant Neonatologist • Preventing antimicrobial resistance Dr Dammika Vidanagama, Consultant Microbiologist
11.00 - 12.30pm	Low-cost big impact interventions for enhancing neonatal care <ul style="list-style-type: none"> • Baby friendly hospital initiative Dr Himali Herath, Consultant Community Physician • Mother friendly practices Dr Indunil Piyadigama, Consultant Obstetrician & Gynaecologist • Kangaroo mother care Dr Surantha Perera, Consultant Paediatrician • Sharing experience- a video explanation Dr Sandya Doluweera, Consultant Paediatrician and the neonatal team, CSHW 	Identifying the high-risk mother and the newborn in the community <ul style="list-style-type: none"> • Identifying newborn at risk Dr Nimesha Gamhewage, Consultant Neonatologist • Identifying mother at risk Dr Achintha Dissanayake, Consultant Obstetrician & Gynaecologist • Role of the public health worker Dr Amila Chandrasiri, Consultant Community Physician
12.30 -1.30 pm	Lunch	
1.30 - 3.00 pm	Still births and newborn deaths and care of bereavement <ul style="list-style-type: none"> • Counting the deaths Dr Kapila Jayaratne, Consultant Community Physician • Impact on the family Dr Chathuri Suraweera, Consultant Psychiatrist • Care after death Dr Prabodana Ranaweera, Consultant Obstetrician & Gynaecologist 	Respectful maternity care for a positive intrapartum experience <ul style="list-style-type: none"> • Positive intrapartum experience Dr Mohamed Rishard, Consultant Obstetrician & Gynaecologist Mrs. H M P Herath, Nursing Sister, CSHW • Non-pharmacological pain management Dr Ruwan Silva, Consultant Obstetrician & Gynaecologist Mrs. M C P Mudunkotuwa, Nursing officer, TH Kurunegala

		<ul style="list-style-type: none"> • Educating parents in the field setting Dr Harendra Dassanayake, Consultant Community Physician
3.00 - 4.30 pm	<p>Interpregnancy care</p> <ul style="list-style-type: none"> • Managing non-communicable diseases Dr Manilka Sumanathilake, Consultant Endocrinologist • Weight reduction and improving nutrition Prof Shyamali Samaranayake • Postpartum Psychosis Dr. Amila Isuru, Consultant Psychiatrist 	<p>Development stimulation in early childhood</p> <ul style="list-style-type: none"> • Team approach for early development stimulation Ms Thilini Vithanage, Occupational therapist, BH Panadura Ms Navindra Rajapaksha-Speech and Language therapist, TH LRH Ms Thilini Madushika, Physiotherapist, Ayathi • Identifying development delays Dr Prathiba Arshakularatne, Consultant Community Paediatrician • Caring for the caregiver Dr Asiri Hewamalage Consultant Community Physician
4.30 - 5.00 pm	Tea	

FACULTY - ANNUAL PRE-CONGRESS SCIENTIFIC SESSION



**Prof. Madhawa
Chandrathilake**



**Dr. Kapilani
Withanaarachchi**



Dr. Nalin Gamaathige



**Prof. Miyuru
Chandradasa**



**Prof. Sachith
Mettananda**



Dr. Sudath Senaratne



Dr. M H S M Hassan



**Dr. Dammika
Vidanagama**



Dr. Himali Herath



**Dr. Indunil
Piyadigama**



Dr. Surantha Perera



**Dr. Sandya
Doluweera**



**Dr. Nimesha
Gamhewage**



**Dr. Achintha
Dissanayake**



Dr. Amila Chandrasiri



Dr. Kapila Jayaratne



**Dr. Chathuri
Suraweera**



**Dr. Prabodana
Ranaweera**



Dr. Mohamed Rishard



Dr. Ruwan Silva



**Dr. Harendra
Dassanayake**



**Dr. Manilka
Sumanathilake**



**Prof. Shyamali
Samaranayake**



Dr. Amila Isuru



Dr. Asiri Hewamalage



**Dr. Prathiba
Arshakularatne**



Ms. Thilini Vithanage



**Ms. Navindra
Rajapaksha**



Ms. Thilini Madushika

ABSTRACTS - PRE-CONGRESS SCIENTIFIC SESSION

Symposium

Family Integrated care (FICare) in NICU

Addressing negative impact of NICU environment

Dr Kapilani Withanaarachchi

Consultant Paediatrician

The NICU environment exposes the neonates, especially the preterm infants, to intense neurosensory stimulation, including chaotic light, noise, and stress. Scientific evidence supports the negative impact of pain, stress, sleep disturbances, and prolonged exposure to light and noise. These stressors can lead to poorer clinical outcomes in cognitive, psychomotor, emotional, and behavioral development. Preterm children are at a higher risk of impairment in these domains. Increased energy expenditure during routine nursery care negatively affects infant growth.

It's not only the neonates in NICU but their parents too find it a stressful environment. Having an infant in the NICU, surrounded by medical equipment, wires, and monitors, was an overwhelming experience associated with negative feelings.

Studies show that when the mothers were in NICU, they felt like an outsider, alienated with a sense of unreality regarding being a parent, despairing, powerless, homeless, lonely, depressed, guilty, anxious, insecure and with sense of alienation. Fathers find it even more difficult, as they are left outside most of the time, excluded from taking care of the infant and excluded from parental-infant proximity or closeness. They express the deep need to be at the bedside to follow what happened to their sick infant. Mothers also feel insecure and experience a loss of trust in their health-care provider.

They also face challenges including access to information, disclosure about the diagnosis, and treatment and prognosis of their newborn, as well as a lack of control over the care of their newborn.

Zero separation & parents as equal partners

Dr Nalin Gamaathige

Consultant Neonatologist

Zero separation is defined as a family-centered approach to newborn care where the newborns should be accompanied by their mothers/parents maintain skin to skin contact, regardless of whether or not they have health problems. When the newborn is placed skin to skin with the mother, there is a significant increase in oxytocin, which will reduce maternal and newborn stress and help the newborn transition to postnatal life. Furthermore, it will help to meet the newborn's basic biological needs, to activate neuroprotective mechanisms, and to enable early neuro behavioural self-regulation that gives the newborn a more stable heart rate, blood pressure, breathing and higher blood glucose levels.

Parental involvement in providing neonatal care which is based on partnership between the family and the health care team in delivering care to a sick neonate. This is based on dignity and respect, information sharing and the family's participation through their acquired competencies in providing essential newborn care.

However, as a result of hospital policies, accommodations and attitudes of health staff, parents often cannot be with their infant continuously, leading to parent-infant separation during maternal and neonatal care.

Changing hospital care culture to enable parents to actively participate in care, be present continuously, and achieve closeness with their newborns is important in modern day perinatal care.

Communication strategies

Prof Sachith Mettananda

Professor of Paediatrics

MBBS(Col), DCH(Col), MD-Paediatrics(Col), DPhil(Oxford), FRCPCH(UK), FRCP(Edin), FRCP(Lond), FNASSL

Chair Professor of Paediatrics at University of Kelaniya

Consultant Paediatrician at Colombo North Teaching Hospital, Ragama, Sri Lanka.

Communication is an integral part of patient care in any healthcare setting. It is particularly important in the neonatal Intensive Care Units (NICU), where the newborns are separated from their mothers. The important points and aspects of communicating with parents in the NICU setting will be discussed in this talk.

Symposium

Minimizing Perinatal infection risk

Reducing risk of the newborns

Dr M H Sharmy M Hassan

Consultant Neonatologist

Senior Lecturer In Paediatrics

Faculty Of Medicine

University Of Moratuwa

The prevention of neonatal sepsis in the NICU primarily hinges on stringent infection control measures. Hand hygiene stands as one of the most crucial methods, supplemented by careful catheter care, which involves adhering to guidelines for insertion, maintenance, and timely removal of indwelling lines.

The use of closed drug delivery systems and the promotion of early enteral feeding with breast milk also play pivotal roles in reducing infection risks. Additionally, strategies like avoiding overcrowding, employing contact precautions, and cohorting during outbreaks are essential.

Antibiotic stewardship is emphasized to prevent resistance, with surveillance of multidrug-resistant bacteria aiding in early detection of potential outbreaks. Implementing protocols, along with continuous staff education and monitoring, ensures compliance with these preventive measures.

Prophylactic therapies like lactoferrin and probiotics have been studied but are not routinely recommended due to uncertain benefits and concerns about safety and efficacy. Lactoferrin, although showing a potential to reduce late-onset sepsis (LOS) in some studies, has not demonstrated significant enough results to warrant routine use. Similarly, probiotics have shown some promise in reducing LOS and mortality, particularly in breastfed neonates, but uncertainties regarding strains, doses, and safety, including rare cases of probiotic-associated sepsis, limit their recommendation.

Neonatal sepsis remains a significant cause of mortality, particularly among very low birth weight and extremely preterm infants. Mortality is higher in cases of gram-negative infections and is associated with

factors like intubation, vasopressor therapy, and necrotizing enterocolitis. Survivors of neonatal sepsis are at increased risk for both short-term complications, such as prolonged hospital stays, and long-term neuro-developmental impairments, including cognitive delays and sensory impairments.

Preventing antimicrobial resistance

Dr. Dhammika Vidanagama

MBBS (Colombo), PGDip. Med.Micro, MD Med. Micro (Colombo), DipRCPath (UK)

Consultant Microbiologist, Lady Ridgeway Hospital for Children. Colombo 8

Infections are major causes of morbidity and mortality in neonatal care units. Effective antimicrobial therapy is essential for the successful management of infections. Microorganisms can use various mechanisms to resist the activity of antimicrobials. Antimicrobial resistance (AMR) is a natural phenomenon exaggerated by the excessive use of antimicrobials. It is a global public health threat which makes infections difficult to treat, resulting in greater suffering, poor treatment outcomes and increased healthcare costs. Since resistant microorganisms can spread across geographical boundaries and propagate in generations, AMR has predictable adverse impacts on the developmental efforts of the global community in future.

Since the use of antimicrobials cannot be avoided in perinatal care, the emergence of AMR becomes a challenge which must be met with due attention in order to ensure patient safety. A multidisciplinary approach is required to improve the diagnosis, management and prevention of infections. Globally accepted strategies for prevention and control of AMR should be adopted in these special care areas.

The World Health Organization recommends five key areas to consider when planning activities to combat AMR. Sri Lanka has developed a National Strategic Plan for prevention and control of AMR based on the same objectives. Preventive strategies should focus on improving knowledge and understanding of AMR; surveillance of AMR and antimicrobial consumption; infection prevention and control; optimizing antimicrobial use and preparation of the economic case for sustainable investment on new interventions.

Strategies listed above have been incorporated to develop a national action plan for combatting AMR. It includes multiple activities at different levels in human health as well as in animal production and health, agriculture and environment sectors. As the main user of antimicrobials, the human health sector is the most significant stakeholder responsible for slowing the evolution of AMR. While striving to deliver the best possible care for patients, all healthcare workers have a crucial role to play in saving effective antimicrobials for future generations.

Symposium

Low-cost big impact interventions for enhancing neonatal care

Baby friendly hospital initiative

Dr Himali Herath

Consultant Community Physician

The Baby-Friendly Hospital Initiative (BFHI), launched by UNICEF and WHO, is a global effort aimed at improving infant and maternal health through the promotion of breastfeeding. This focus on the critical role that health facilities play in supporting mothers during the crucial early days of a newborn's life. Ten Steps to Successful Breastfeeding, a set of evidence-based practices, significantly increase breastfeeding rates, duration and exclusivity.

By implementing these steps, hospitals can create an environment where breastfeeding is protected, promoted, and supported, ultimately improving health outcomes for both mothers and infants. The speech will

also emphasize the importance of educating healthcare professionals and empowering mothers, fostering a culture that prioritizes breastfeeding as a vital public health intervention. Additionally, it will address the positive long-term impacts of breastfeeding on maternal and child well-being and the critical need for continuous advocacy to ensure wider adoption of the BFHI.

Symposium

Still births and newborn deaths and care of bereavement

Impact on the family

Dr Chathuri Suraweera

Consultant Psychiatrist

Stillbirths and newborn deaths represent profound losses that profoundly affect women and their families. These events bring psychological, emotional, social, and economic consequences that can persist long after the immediate tragedy. For women, the experience of stillbirth or the death of a newborn often triggers intense grief characterised by deep sadness, emptiness, and yearning. This profound emotional pain is frequently accompanied by feelings of guilt, self-blame, and a questioning of self-worth, particularly around their identity as a mother. Women who experience such losses are at an increased risk of developing mental health disorders, including depression, anxiety, and post-traumatic stress disorder (PTSD). The fear of future loss can also lead to heightened anxiety in subsequent pregnancies, often resulting in emotional detachment or hypervigilance.

The psychological impact extends beyond the individual woman to the entire family unit. Partners may experience grief, which can manifest differently, leading to misunderstandings, emotional disconnect, or conflict within the relationship. Differing coping mechanisms and grieving styles can strain communication and diminish mutual support between partners. Children in the family, including surviving siblings, may face confusion, fear, and anxiety, especially if they do not fully understand the loss. This can result in behavioural changes or emotional withdrawal. The extended family may also be affected, often feeling helpless or uncertain about how to offer support, which can create additional stress and tension.

Social isolation is another significant consequence for both women and their families. Stigma or discomfort surrounding the topic of stillbirths and newborn deaths can lead to a lack of understanding or empathy from the community. Economically, the family may face unexpected costs associated with medical care, funerals, and loss of income, adding financial stress to the emotional burden.

Addressing the complex impact of stillbirths and newborn deaths requires comprehensive psychological support, communication, and the fostering of empathetic community networks to help women and families navigate their grief and rebuild their lives. Understanding the multifaceted effects of such losses is crucial for providing the appropriate care and support necessary for healing.

Care after death

Dr. A. K. Probhodana Ranaweera

Consultant Obstetrician & Gynaecologist

Stillbirth is a devastating experience for both the parents and the caregivers. Management of patients experiencing still birth remains a challenge especially in the initial period. Offering satisfactory bereavement services, counselling, dignified labour management and investigation of the cause remain of still birth is essential part of the care plan and should be offered as bundle.

Evaluating the incident in view of finding the cause, honest disclosure of information to parents regarding the cause of death and plan management of future pregnancies are key concepts needed to be addressed.

Symposium

Respectful maternity care for a positive intrapartum experience

Positive intrapartum experience

Mrs. H M P Herath

Bsc (Nsg) (Hon)

Nursing Sister, CSHW

Diploma in ward management & supervision Diploma in productivity

Castle Street Hospital for Women, Colombo 08

Abstract of the speech

- Concepts follow at ward to enhance comfortability and quality of care.
- Internal and external ward set-up changes made at the ward.
- Maintain learning culture to support the new adaptations of patient environment.
- Evidences of results obtained after successful attempt at labour room.
- Preparation of labour companion with informed consent at the admission and support them with information where necessary.
- Comments and suggestions of patients and their family members about labour companion ship.

Educating parents in the field setting

Dr Harendra Dassanayake

Consultant Community Physician

Non-medical factors which influence the health outcome of a person is considered as Social determinants of health. SHD can have positive as well as negative influence on the health equity. When the health of a women in the reproductive age is considered these factors have a wide influence on the pregnancy outcome. Environmental social and structural factors can impact the pregnancy outcome in a considerable manner. Women in particular are more vulnerable to negative effects of SDH. It is observed that negative effects of SHD has contributed significantly on the maternal mortality ratio in many countries.

Factors like safe food, safe environment, proper housing, access to education, poverty unemployment, social norms, gender discrimination and domestic violence makes women more vulnerable. Inter pregnancy period which is the interval between two pregnancies is a critical period where women need to recover from the effects of one pregnancy and prepare herself for the next pregnancy. Being the most stress full period in a women's life, effects of SDH play a major role to make a difference. Evidence suggests that the effects of SDH play an equal or more role in the health outcomes in a person in comparison to the health care services received. Access to health care services understanding the importance of healthy living maintaining optimum physical and psychological health is of utmost importance during the interpregnancy period. This is an area understudied and need to be focused more.

Key words : Social Determinants of Health, Inter pregnancy period

Symposium

Development stimulation in early childhood

Team approach for early development stimulation

Ms. Thilini Vithanage

Occupational therapist, BH Panadura

In early childhood development, an Occupational Therapist plays a vital role within the multidisciplinary team, particularly in stimulating and developmental milestones. Occupational Therapy aims to provide support to the unique needs of each child; specially for the children with ASD (Autism Spectrum Disorder), ADHD (Attention Deficit Disorder) Developmental delay, Trisomy 21(Downs syndrome), Cerebral Palsy (CP).Occupational therapists are specialized in assessing ,evaluating ,intervention planning and addressing the challenges related to the fine and gross motor skills, sensory processing and daily living activities.

Through a detailed assessment we identify the areas where a child may be struggling. Based on the assessment we create individual intervention plans aimed at improving skills necessary for better functioning. These skills may include ADL (Activities of Daily Living); (Such as feeding, toileting, self-care, dressing),fine motor skills (such as holding a pencil or working with a scissor),gross motor skills(like walking, running ,jumping and playing),sensory skills(such as tip toe walking in ASD),social skills (including following instructions and interacting with peers),cognitive skills(such as attention, concentration and activity planning).To achieve these skills we come up with goal directed therapeutic activities.

Occupational therapist collaborates closely with other health professionals, mainly physiotherapist, speech and language therapist and medical staff. This multidisciplinary work ensures that therapeutic interventions are well coordinated and provide a cohesive approach to child development. We provide valuable insights into how sensory, motor, emotional and cognitive skills impact the child. It may be in their ADL, play and leisure. This kind of teamwork provides a more holistic approach to the treatment plan.

As occupational therapist we provide guidance and training to family members on how to support their child's development at home. We come up with strategies for improving their skills through therapeutic activities.

Occupational therapists recommend environmental and instrumental adaptations to the child's lifestyle for better support. These devices and architectural designs ensure their developmental needs and participation in daily routines.

By focusing on the specific needs of each child, occupational therapist carries out therapeutic interventions to reduce the risk of long-term developmental issues and improving the child's ability to participate fully in daily activities and social interactions.

Ms. Navindra Rajapaksha

Speech and Language therapist, TH LRH

Early childhood is a critical period for development, and speech and language therapy plays a vital role in promoting healthy development. Speech and language development begins in infancy and progresses through various stages, with communication skills being essential for academic, social, and emotional development. Speech and language therapy aims to improve communication skills, enhance self-esteem, foster social interaction and improve quality of life.

Early intervention is the crucial to achieve those aims. It can drastically improve child's skills to communicate, gain knowledge and mix with their peers. Speech and language therapists make their involvement in very early stages of life and understands delays and disorders the child faces in each milestones and start the therapeutic activities including articulation therapy, verbal and non verbal communication therapy, swallowing therapy and also the parent training. Children who underwent early speech and language therapy exhibit noticeable improvement in their linguistic skills relative to those without such intervention. It mirrors the process of acquiring any skill – the earlier we intervene and the more we reinforce, the more proficient the child becomes. The gains made through therapy can contribute to better academic outcomes and social interactions, thereby elevating your child's self-confidence and living standards

A multidisciplinary team approach ensures that children receive comprehensive support from various professionals, including doctors, speech and language therapists, occupational therapists, physiotherapists, psychologists, teachers, and parents. Collaboration and communication among team members are crucial for effective intervention and support. By working together, these professionals can ensure that children with speech and language disorders receive the necessary interventions and support to reach their full potential.

FREE PAPERS - PRE-CONGRESS SCIENTIFIC SESSION ORAL PRESENTATIONS

OP 1 : SYSTEMATIC REVIEW: EFFECTIVENESS OF EVIDENCE BASED NON-PHARMACOLOGICAL PAIN MANAGEMENT PRACTICES BY NURSES IN NEONATAL INTENSIVE CARE UNIT. (NICU)

Nayanakanthi S.A.H

Introduction

Infants treated in a neonatal Intensive care units (NICU) are exposed to a variety of painful procedures. Non-pharmacological pain Management techniques are used by the NICU nurses to manage mild to moderate level of pain of the patient. However, the best evidence for the non-pharmacological pain management techniques has not been published.

Objective

The purpose of this study was to review the literature examining the effectiveness of evidence based non-pharmacological pain management techniques for manage mild to moderate pain management at NICU.

Methods

A systematic review was conducted following PRISMA guidelines searching PubMed, google scholars, Research Gate databases. Peer review articles was selected based on pre-determined inclusion criteria. Review articles published last 5 years in English language containing the key words included for synthesis.

Result

Most literature findings shows the best effective methods are breastfeeding followed by non-nutritive sucking coupled with sucrose sucking, facilitated tucking, positioning reduces the expression of pain in premature infants. Music therapy combined with Kangaroo mother care decreased the pulse, slowed down the respiration, increase the oxygen saturation, weight gain in premature infants, improve neurodevelopmental outcome, and reduce oxygen dependency, apnea and hospital stay. Multisensorial stimulation, human touch, swaddling, collaborative parental approach also recommended in some literature

Conclusion And Recommendation

This review concluded that nurses need to empower with non-pharmacological pain management practices. Lack of knowledge, shortage of nurses and time, resistance to change, heavy work load, awareness of pain complication, fatigue are emerged as barriers. However around the clock analgesia administration did not guarantee for neonates. Further studies are required to develop an evidence based non-pharmacological pain management guideline for NICU.

Key Words

Non pharmacological, pain management, evidence base, neonatal intensive care unit.

OP 2 : EFFECTIVENESS OF EVIDENCE BASED NON-PHARMACOLOGICAL PAIN MANAGEMENT PRACTICES IN NICU

S.A. Harshi Nayanakanthi (RN, RM, BScN, MSc FN reading),
Teaching Hospital Karapitiya, Sri Lanka.

Research Question

What are the effective methods of practices for evidence base non- pharmacological pain management in NICU?

Planning The Systematic Review

1. Defining the inclusion criteria

Preterm or term neonates who underwent one or more painful procedures during their hospital stay in the NICU were included.

Pain relief interventions should be non- pharmacological methods of pain management. Whether sucrose and glucose are non-pharmacological or pharmacological analgesic is still controversial but I include sucrose or glucose as non-pharmacological pain management method according to the recommendation of the guidelines.

Exclusion criteria

Studies on neonates not admitted to the NICU are excluded.

Duplicated publications, protocols review comments and studies published in conferences are excluded.

2. Shortlisting digital databases

- ResearchGate
- Pubmed
- Google Scholars
- Medline

Performing the review

1. Identifying the search syntax

“Evidence base” OR “Non-pharmacological” AND “pain management” AND “NICU”

2. Inclusion of studies

Studies published any time after 2018 March 31.

Original full text of studies available in English language

Article types: Clinical trial, Review articles and systematic review articles. Included.

17921 relevant studies identified from three major databases.

3. Exclusion of studies

Exclusion criteria

- Eliminate duplicate studies from different searches (15813 studies eliminated)
- Exclude studies that do not offer models or frameworks (875 studies excluded)
- Studies published in conferences and review comments. (121 are excluded)
- Eliminate studies based on quality evaluation (924 studies failed to quality)
- Non English studies (168 studies eliminated)
- 20 studies remained

Presenting the review (sample = 20 studies)

1. Importance and prevalence of the research topic

Neonates under treatment of neonatal ICU are exposed to repeated painful procedures during their hospitalized period under routine medical care. Around the clock analgesic medication administration has several side effects and alteration of neurodevelopmental outcomes. The application of non-pharmacological pain management techniques is a cost-effective method in the health sector as well as to improve the quality of life.

Therefore, it is important to empower nurses in NICU to practice evidence-based non-pharmacological pain management methods.

Prevalence:

A total of 20 full-text original articles about evidence-based non-pharmacological pain management in NICU were analyzed. The median number of authors was 8 (interquartile range 7-10), the median of databases searched was 3 (3-4), and the median number of studies included in each review was 8 (6-10). 20% of included reviews had published or registered the systematic review protocols. Reporting guidelines were used in 70% of reviews. The quality of included studies was assessed in 85% of reviews. 15% did not report how data was transformed.

Acknowledgement of key contributors

I would like to acknowledge for the guideline of Consultant Paediatrician Dr. Kapilani Withanarachchi (NICU, TH Karapitiya), Dr. B.I Wickramaarachchi (Senior Lecturer grade II, Allied Health Sciences Department, University of Ruhuna) and the supervision of Ms. Eranthi Weerathunga (Senior Lecturer, Allied Health Science Department) and my parents and friends who encourage me to complete this research article.

Reporting findings of reviewed studies

Non-pharmacological pain management is the management of pain without medications. This can improve quality of life by using noninvasive non-pharmacological methods to manage the pain. Neonatal period is the first 4 weeks of a child's life. Pain is defined as an unpleasant sensory and emotional experience associated with actual and potential tissue damage (ASP, 2003). Neonates are frequently subjected to procedures and diseases. Painful experience in neonatal period has been a result of poor quality motor and cognitive developmental outcomes.

According to this systematic review study findings, the best effective method of non-pharmacological pain management for neonates in NICU are breast feeding followed by non-nutritive sucking coupled with sucrose sucking facilitated tucking, positioning. As well as music therapy combined with kangaroo mother care decreases the pulse, slows down respiration, increases the oxygen saturation, weight gain in premature infants, improves neurodevelopmental outcome and reduces oxygen saturation, weight gain in premature infants, improves neurodevelopmental outcome and reduces oxygen dependency, apnea and hospital stay. Multisensory stimulation, human touch, swaddling, collaborative parental approach also recommended in some literature. Therefore, nurses in NICU need to be empowered with non-pharmacological pain management practices in problem solving and decision making approach that involves the conscientious use of current best evidence, clinical expertise and patient preferences (Evidence-based practice).

Comprehensive understanding and future research agendas

Neonates cannot express their pain verbally. There is a need to detect neonatal pain and the knowledge and practices of non-pharmacological pain management techniques of nurses who give care in NICU as well as it could be managed. Other barriers of applying non-pharmacological pain management techniques

such as shortage of nurses, shortage of time, resistance to change, heavy work load, awareness of pain complication, fatigue. Further research studies also need to develop new effective method of non-pharmacological pain management techniques followed by pain assessment scales and manipulate upload guideline for NICU nurses.

References

1. *Borges Migliavaca, C., Stein, C., Colpani, V. et al. How are systematic reviews of prevalence conducted? A methodological study. BMC Med Res Methodol 20, 96 (2020). <https://doi.org/10.1186/s12874-020-00975-3>*
2. *Y Zahedpasha, A Arzani, Z Akbarian, M Hajiahmadi, M Ahmadi, Journal of Babol University of Medical Sciences 19 (9), 20-25, 2017*
3. *Kathleen A Sluka, PT, PhD, FAPTA, Steven Z George, PT, PhD, FAPTA, A New Definition of Pain: Update and Implications for Physical Therapist Practice and Rehabilitation Science, Physical Therapy, Volume 101, Issue 4, April 2021, pzab019, <https://doi.org/10.1093/ptj/pzab019>*
4. *Waite R., Killian P. 2010. Evidence-Based Practice – Nurses need to apply all sources of evidence relate to their practice area to develop effective nursing practice strategies. Retrieved from: <http://nursing.advanceweb.com/Article/Evidence-Based-Practice-6.aspx>*
5. *Pussegoda K, Turner L, Garritty C, et al. Systematic review adherence to methodological or reporting quality. Syst Rev 2017;6:131. [PMC free article] [PubMed] [Google Scholar]*
6. *Page MJ, Moher D. Evaluations of the uptake and impact of the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) Statement and extensions: a scoping review. Syst Rev 2017;6:263. [PMC free article] [PubMed] [Google Scholar]*

OP 3 : ASSESSMENT OF LEVEL OF ANXIETY AND DEPRESSION AMONG POSTNATAL MOTHERS IN A SELECTED HOSPITAL IN KEGALLE DISTRICT, SRI LANKA

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Background

The postnatal period is a critical phase marked by significant emotional and psychological changes, with anxiety and depression being common issues that can negatively impact both mother and child. Understanding the mental health status of postnatal mothers is essential for developing effective interventions and support systems to promote maternal and child well-being.

Objective/s

This study aims to assess the level of anxiety and depression among postnatal mothers in a selected hospital in Kegalle District, Sri Lanka.

Methods

A descriptive cross-sectional study was conducted among the total of 384 postnatal mothers at Base Hospital, Warakapola using convenience sampling technique. Data were collected using the Edinburgh Postnatal Depression Scale (EPDS) and the Beck Anxiety Inventory Scale (BAI). Statistical analysis was performed using SPSS version 25, incorporating descriptive and inferential techniques.

Results

The study involved a sample with a mean age of 29 years (SD = 6.24), with 58.9% having completed their first week post-delivery. The mean EPDS score was 14.25 with a standard deviation of 3.109, and the mean BAI score was 27.92 with a standard deviation of 9.347. EPDS scores revealed that 4.4% of mothers had minimal distress, 25.8% had moderate distress, and 69.8% had high likelihood of depression. BAI scores indicated that 20.3% had low anxiety, 59.1% had moderate anxiety, and 20.6% had high anxiety. No significant association was found between anxiety and depression levels ($p = 0.797$). A slight negative correlation was observed between depression levels and weeks since birth (Pearson's $R = -0.128$, $p = 0.012$), while anxiety levels showed a weak positive correlation with weeks since birth (Pearson's $R = 0.111$, $p = 0.03$).

Conclusion/s

These findings underscore the importance of targeted support and interventions to address postnatal mental health issues, emphasizing the need for comprehensive strategies for prevention, early detection, and management to support the well-being of mothers and their families.

Keywords

anxiety, depression, postnatal, mothers

OP 4: MATERNAL AWARENESS AND PRACTICES TOWARDS EPISIOTOMY CARE: A CROSS-SECTIONAL SURVEY AMONG MOTHERS WHO UNDERWENT NORMAL VAGINAL DELIVERY AT DISTRICT GENERAL HOSPITAL NAWALAPITIYA.

Zoysa, HSM¹, Jayasinghe, RWMRSK¹, Ranathunga, PDR¹, Kodikara KGNP¹, Nilakshi, MUGS¹, Thilakarathna, HMCRK¹, Senarath, NSASN¹

¹Faculty of Nursing, KIU

Introduction

Episiotomy, a common obstetric procedure involving a surgical incision to enlarge the vaginal opening during childbirth, is often performed to facilitate delivery and prevent severe perineal tears. Proper post-natal care of episiotomies is crucial for preventing infections and ensuring optimal healing, yet maternal awareness and adherence to recommended care practices can vary significantly.

Objectives

To assess the level of awareness and the practices related to episiotomy care among mothers who have undergone normal vaginal delivery at the District General Hospital Nawalapitiya.

Method

A cross-sectional survey was conducted among 381 mothers who delivered vaginally and received an episiotomy at District General Hospital Nawalapitiya between February and June 2024. Data were collected using a structured questionnaire, which included sections on demographic information, knowledge about episiotomy care, and self-reported practices. Frequencies percentages and Descriptive statistics were used to summarize the data.

Results

The results revealed that the mean age was 26.29 (in years) (SD4.79; range 17-45). Highest education level of the majority (n=180, 47.3%) was A/Ls. For 40.2% (n=153) mothers this was their second pregnancy. 184 mothers (48.3%) have had previous NVD. More than half of the mothers (n=194, 50.9%) were living in Sub-urban areas and 144 (37.8%) were Buddhist. The majority of the participants had good Knowledge level (mean 62.06 ;SD 8.54; range20-75) and practice level (mean 10.34 ;SD 1.27; range 7-14). It was respectively 375 (94.4%) and 376 (98.7%).

Conclusion

While a majority of mothers at District General Hospital Nawalapitiya there existed a reduced awareness of episiotomy care among some resulting, to a lack of adherence to proper care practices. Targeted educational interventions and improved postnatal support are essential to enhance maternal knowledge and practices, thereby promoting better health outcomes for mothers.



Perinatal Society of Sri Lanka

23rd ANNUAL SCIENTIFIC CONGRESS 2024

19th September 2024

INAUGURATION

8.45 am	Guests take their seats
9.00 am	Ceremonial Procession
9.10 am	National Anthem
9.20 am	Lighting of the Oil lamp
9.30 am	Welcome Address Dr Sudath Senaratne, President, Perinatal Society of Sri Lanka
9.45 am	Speech by the Special Guest Mr Christian Skoog, Country Representative, UNICEF
10.00 am	Speech by the Special Guest Dr Alaka Singh, Country Representative, WHO
10.15 am	Premi Care Bundle for Sri Lanka Dr Surantha Perera, Past President, Perinatal Society of Sri Lanka Deputy Secretary General, FAOPS
10.30 am	Speech by the Chief Guest Dr Palitha Mahipala, Secretary of Health, Sri Lanka
10.45 am	Book Launch Dr Upali Marasinghe, Consultant Obstetrician and Gynaecologist
10.50 am	Awarding of Fellowships
11.00 am	Keynote Address by The Guest of Honor Mr Parinda Ranasinghe, President's Counsel, Hon. Attorney General
11.30 am	Vote of Thanks Dr Indunil Piyadigama, Honorary Secretary, Perinatal Society of Sri Lanka
11.45 am	Procession leaves the hall
12.00 pm	Reception

Special Guest



Mr Christian Skoog
Country Representative,
UNICEF



Dr Alaka Singh -
Country Representative,
WHO

Chief Guest



Dr Palitha Mahipala
Secretary of Health, Sri Lanka

Guest of Honor



Mr Parinda Ranasinghe
President's Counsel, Hon. Attorney
General

Book Launch Perinatal Society of Sri Lanka



Dr Upali Marasinghe
Consultant Obstetrician and Gynecologist

Premi Care Bundle for Sri Lanka: Hope for Tomorrow -Nurturing Beginnings

Our society's theme this year is "Holistic Intervention Strategies to Mitigate Prematurity: An Evidence-Based Community and Clinical Approach," which culminates our efforts to incorporate global and regional interests and best practices into our discussions in the scientific sessions to ensure meaningful outcomes.

Prematurity remains a significant challenge globally, affecting neonatal health and long-term outcomes. Mitigating prematurity requires a multifaceted approach that combines community awareness and support with clinical expertise and evidence-based practices. By empowering communities and healthcare providers with the necessary tools and knowledge, we can significantly reduce the rates of preterm births and enhance the health and well-being of families. It's important to remember that our collaborative efforts are beneficial and essential to drive meaningful change and improve outcomes for mothers and infants alike. Together, we are part of a more significant cause.

At the same time, we must understand that what matters to families is the care of their preterm baby, expecting a positive outcome for them, being involved in delivering care and taking an active role in deciding the best interventions.

When we study the key elements that the WHO, UNICEF, and other agencies have advocated for our country, we see that they must be addressed at the national or local levels. Our approach is to highlight this difference and to align our strategy to achieve targeted objectives in an integrated manner while adhering to universally prescribed policies and guidelines.

We created a country-specific "Premi Care Bundle for Sri Lanka" to embed our targeted objectives. We developed a narrative, "Help to Breath – Help to Grow -Help to Develop," to promote our advocacy role. Under Help to Breath, we mentioned securing the continuity of supplying surfactants and registering and procuring Caffeine. In Help to Grow, we included the spectrum of nutritional interventions, i.e., breastfeeding, kangaroo mother care, and parental nutrition for those who cannot tolerate enteral feeds. In Help to Develop, we mentioned the importance of correcting congenital disabilities and early developmental interventions.

We intend to address this double jeopardy, extreme preterm and neurodevelopment disability in a meaningful and timely manner. These two ends, birth to survival, preterm infants die and prevail with disability and contribute to the increased neonatal and infant mortality. Prematurity, in this sense, is an economic burden that demands swift action from the decision-makers in the government hierarchy.

As an advocacy group, we intend to win this time but not succumb to the circumstances and give voice to the most vulnerable babies born too soon.

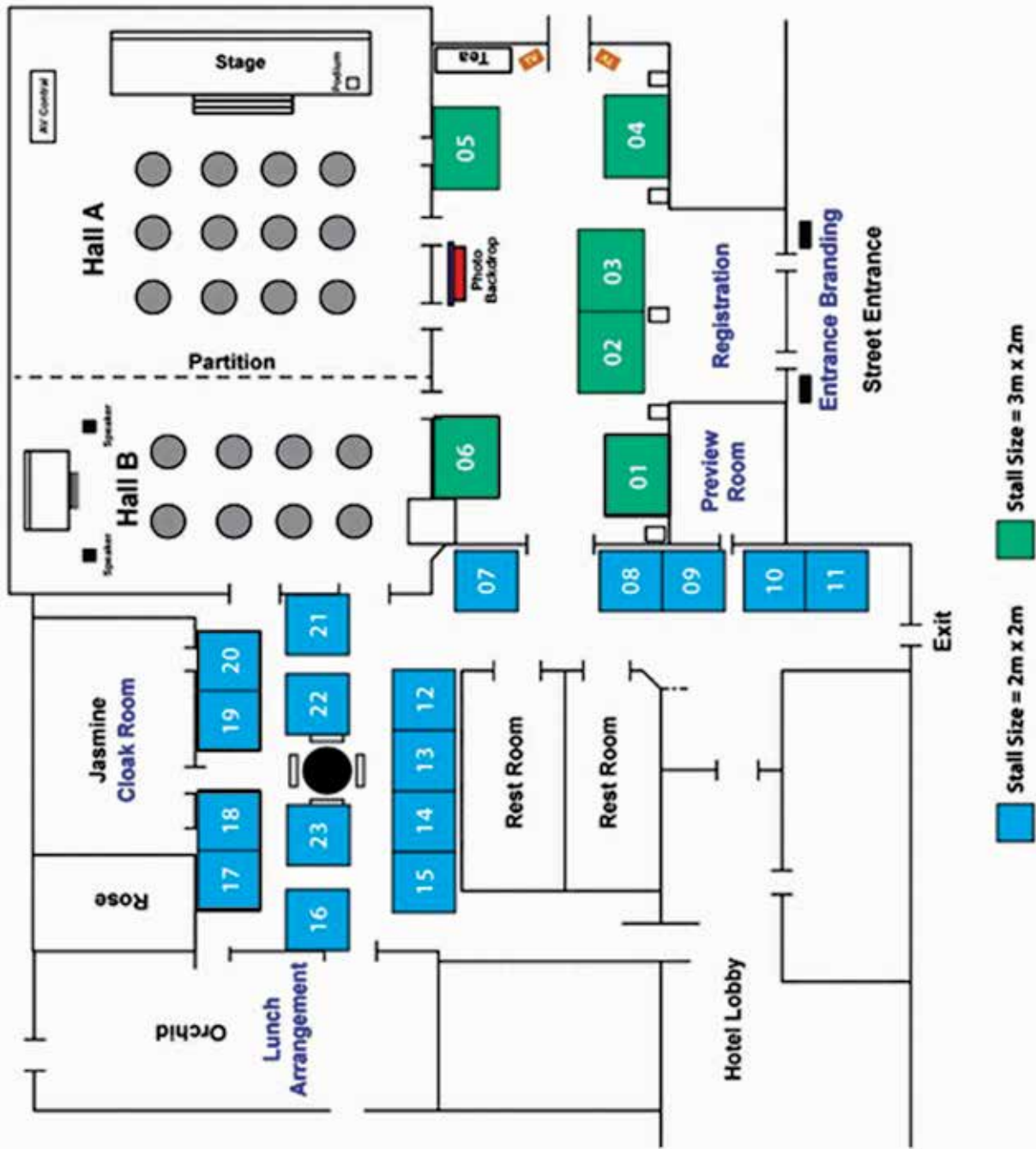
Dr Surantha Perera

Past President, Perinatal Society of Sri Lanka (PSSL)

President-Elect, Sri Lanka Medical Association (SLMA)

Deputy Secretary General, Federation of Oceania and Asia Perinatal Societies (FAOPS)

FLOOR PLAN





Towards healthier
mothers and newborns

23RD ANNUAL SCIENTIFIC CONGRESS Perinatal Society of Sri Lanka - 2024

19th & 20th September at Galadari Hotel, Colombo



PROGRAMME OF ANNUAL SCIENTIFIC CONGRESS

19th September 2024 at Hotel Galadari, Colombo

Day 01

7.00 – 8.00 am	Registration	
8.30 am – 9.00 am	Tea	
9.00 am – 12.00 pm	Inauguration	
12.00 pm- 1.00 pm	Lunch	
ANNUAL SCIENTIFIC CONGRESS OF PSSSL		
	Hall A	Hall B
1.00 pm - 2.30 pm	<p>Panel Discussion In collaboration with UNICEF</p> <p>M-NICU and iKMC</p> <ul style="list-style-type: none"> o Dr Harish Chellani, WHO consultant implementation of research, India <p>Panellist</p> <ul style="list-style-type: none"> o Prof. Sanath Lanerolle Consultant Obstetrician and Gynaecologist o Dr Kapilani Withanarachchi, Consultant Paediatrician o Dr Himali Herath Consultant Community Physician <p>Moderator Dr Chithramali de Silva, Director, FHB</p>	<p>Panel Discussion</p> <p>Laws and Ethics and Obstetric Practice: Concerns and conundrums</p> <p>Panellist</p> <ul style="list-style-type: none"> o Ms. Ayesha Jinasena, Solicitor General, Sri Lanka o Dr Alan Ludowyke, Chairman, NATA o Mr. Shakya Nanayakkara, Chairman, Dangerous Drug Control Board, NDDCB o Mr. Nihal Thalduwa, DIG, Sri Lanka Police o Dr Lakshman Senanayake, Consultant Obstetrician & Gynaecologist o Dr Sudath Senaratne, Consultant Obstetrician & Gynaecologist <p>Moderator Dr Surantha Perera, Consultant Paediatrician</p>
2.30 pm - 3.00 pm	<p>Plenary</p> <p>Transcatheter interventions for neonate with congenital heart disease</p> <p>Dr Duminda Smarasinghe, Consultant Paediatric Cardiologist</p>	<p>Plenary</p> <p>Medicines in Pregnancy: An Overview</p> <p>Professor Priyadarshani Galappatthy, Professor of Pharmacology</p>
3.00 pm -3.30pm	Tea	
3.30 pm- 5.00 pm	<p>Panel discussion In collaboration with UNFPA</p> <p>Termination of Pregnancy in lethal anomalies</p> <ul style="list-style-type: none"> o Birth defects and lethal congenital anomalies o Sri Lankan situation; A statistical analysis o Interpretation of law and suggested law reforms o Social, cultural & political dimensions <ul style="list-style-type: none"> o Dr Ruwan Silva, Consultant Obstetrician & Gynaecologist o Dr Nimesha Gamhewage, Consultant Neonatologist o UNFPA Representative <p>Moderator</p> <ul style="list-style-type: none"> o Dr Susie Perera, Consultant Community Physician, WHO 	<p>Symposium Inter pregnancy care within the continuum of care</p> <ul style="list-style-type: none"> o Reducing weight and quality nutrition Prof. Ranil Jayawardana, Professor in Nutrition o Managing medical conditions Dr Shamitha Dassanayake, Consultant Physician o Sexually Transmitted Infections Dr. Vino Dharmakulasinghe, Consultant Venereologist o Social determinants of health Dr Harendra Dassanayake, Consultant Community Physician
	End	

Day 02

7.00 am - 8.00 am	Registration	
	Hall A	Hall B
7.30 am - 8.30 am	Oral presentations	Oral presentations
8.30 am - 9.25 am	<p>Professor Indrajee Amarasinghe Oration</p> <p>Pre and perinatal predictors of childhood obesity in a tertiary care setting in Sri Lanka Prof. Aruna de Silva, MBBS, DCH, MD(Paed) Consultant Paediatrician & Professor in Paediatrics Teaching Hospital Karapitiya & University of Ruhuna</p>	
9.25 am - 9.35 am	<p>Social Media App - Challenges in obstetrics care & information delivery How digital platforms help Dr Binu Joy, MD</p>	
9.30am - 10.00 am	Tea	
10.00 am -11.30 am	<p>Panel Discussion In collaboration with UNFPA</p> <p>Climate change and perinatal outcomes</p> <p>Climate change poses one of the greatest risks to human health as, extreme temperature rise, Increase in air pollution, natural disasters have disproportionate effect on pregnant women through influencing food and water security, civil conflicts, extreme weather events and the spread of disease</p>	<p>Symposium</p> <p>Sepsis and intrapartum management</p> <ul style="list-style-type: none"> o Pathophysiology of sepsis and application of early warning scores Dr Ramani Pallemulla, Consultant Anaesthetist o Evidence based approach to improve the outcomes of sepsis Dr Prabhodana Ranaweera, Consultant in Obstetrics & Gynaecology o Advanced management of sepsis Dr Anushka Mudalige, Consultant intensivist
11.30 am-1.00 pm	<p>Symposium</p> <p>Interventions in Newborn Physiology</p> <ul style="list-style-type: none"> o Sleep ecology Dr Surantha Perera, Consultant Paediatrician o Brain development Dr Sanjaya Fernando, Consultant Neurologist o Endocrine changes Dr Chamidri Naotunna, Consultant Paediatric Endocrinologist 	<p>Symposium</p> <p>Reducing peripartum maternal mortality in Sri Lanka: A paradigm shift through the integration of global best practices</p> <ul style="list-style-type: none"> o Gaps in maternal mortality: Innovative strategies for enhancing accountability and quality of care Prof. Rajesh Mehta, Professor, Public Health Foundation of India and former Regional advisor for newborn, child and adolescent health, WHO-SEARO o Postpartum haemorrhage: From prevention to life-saving interventions Dr U D P Ratnasiri, Consultant Obstetrician and Gynaecologist o Tackling hypertensive crises: Enhancing care through early detection and personalized care Dr Rahul Wani, Consultant Obstetrician and Gynaecologist, India o Reducing mortality from heart disease during pregnancy Dr Disna Amaratunga, Consultant Cardiologist
1.00 pm - 2.00 pm	Lunch	

	Hall A	Hall B
2.00 pm - 2.30 pm	<p>Plenary</p> <p>Challenges in neonatal neurosurgery</p> <p>Dr Nirukshan Jayaweera, Consultant Neurosurgeon</p>	<p>Plenary</p> <p>Saving babies' lives - care bundle to reduce still births</p> <p>Dr Sundarajah Rajkumar, Consultant Obstetrician & Gynaecologist, UK</p>
2.30 pm - 3.00 pm	<p>Plenary</p> <p>The role of Artificial Intelligence(AI) in Perinatology and Neonatology: Transforming maternal and newborn care</p> <p>Professor Girish Gupta, Professor in Neonatology and Perinatology, India</p>	<p>Plenary</p> <p>Patient centred labour care to improve maternal and neonatal outcomes</p> <p>Dr Chandana Jayasundara, Consultant Obstetrician & Gynaecologist</p>
3.00 pm - 4.30 pm	<p>Symposium</p> <p>Transdisciplinary approach in solving neonatal pathologies</p> <ul style="list-style-type: none"> o Imaging evaluation of prenatally diagnosed neonatal genitourinary abnormalities Dr Jerard Feranado, Consultant Radiologist o Plastic surgeries for congenital anomalies and Facial birth defects Dr Yasas Abeywickrama, Consultant Plastic Surgeon o Common ENT procedures in neonates Dr A D K S N Yasawardena, Consultant ENT Surgeon 	<p>Symposium</p> <p>Prevention of prematurity</p> <ul style="list-style-type: none"> o Ultrasound in multiple pregnancy & prematurity Dr Shemoon Marleen, Consultant Obstetrician & Gynaecologist o Cervical Cerclage in the prevention of prematurity Dr Mohamed Rishard, Consultant, Obstetrician & Gynaecologist o Progesterone therapy for preventing preterm birth <p>Professor Tiran Dias, Professor in Obstetrics & Gynaecology</p>
4.30 pm - 4.45 pm	Concluding Remark	
4.45 pm - 5.15 pm	Tea	

FACULTY - ANNUAL CONGRESS SCIENTIFIC CONGRESS



Prof. Sanath Lanerolle



**Dr. Kapilani
Withanaarachchi**



Dr. Himali Herath



**Dr. Chithramalee
de Silva**



Ms. Ayesha Jinasena



Dr. Alan Ludowyke



**Mr. Shakya
Nanayakkara**



Mr. Nihal Thaldudwa



**Dr Lakshman
Senanayake**



Dr. Sudath Senaratne



Dr. Surantha Perera



**Dr. Duminda
Smarasinghe**



Prof. Priyadarshani Galappatthy



Dr. Ruwan Silva



Dr. Nimesha Gamhewage



Dr. Susie Perera



Prof. Ranil Jayawardana



Dr. Shamitha Dassanayake



Dr. Vino Dharmakulasinghe



Dr. Harendra Dassanayake



Prof. Aruna de Silva



Dr. Ramani Pallemulla



Dr. Prabodana Ranaweera



Dr. Anushka Mudalige



Dr. Sanjaya Fernando



Dr. Chamidri Naotunna



Dr. U.D.P. Ratnasiri



Dr. Disna Amaratunga



Dr. Nirukshan Jayaweera



Dr. D.M. Chandana Jayasundara



Dr. Jerard Feranado



Dr. Yasas Abeywickrama



Dr. A. D. K. S. N. Yasawardena



Dr. Shemoon Marleen



Dr. Mohamed Rishard



Prof. Tiran Dias

Day 01

Plenary

Transcatheter interventions for neonate with congenital heart disease

Dr. Duminda Samarasinghe

Consultant Paediatric Cardiologist

MBBS, DCH, MD, FACC

According to literature, approximately 8-10 out of every 1000 newborns are born with a congenital heart disease. In keeping with these estimates, it is expected that 3000 newborns are born with a congenital heart disease in Sri Lanka every year. Some of them with critical congenital heart disease need either surgical or catheter-based intervention during the neonatal period. Transcatheter interventions provide many advantages over surgery as they are less invasive, take less time to perform and there is no need for cardiopulmonary bypass. Neonatal transcatheter interventions are mainly performed in those with obstructive lesions like pulmonary stenosis or pulmonary atresia, coarctation of aorta and aortic stenosis. Restriction in the communication in the interatrial septum also warrants intervention in specific conditions like transposition of great arteries to improve mixing and in mitral/ tricuspid valve atresia to relieve pressure buildup in the atrium. Stenting of the ductus arteriosus is done when the duct becomes restrictive in a duct-dependent pulmonary or systemic circulation. In certain centres, device closure of PDA is preferred over surgical ligation when the neonate becomes ventilator dependent. The main limitation in neonatal interventions is in obtaining arterial and venous access. For most interventions, a 4F sheath must be inserted into an artery, into a vein or both. The usual access is the femoral but for certain procedures like PDA stenting, axillary artery access is preferred depending on the orientation of the PDA. Generally, to insert a 4F sheath, 2kg of weight is preferred but now there are low-profile sheaths which can be used in even smaller neonates. Complications can be minimized with proper patient selection. Vascular complications are the commonest and arterial or venous thrombosis is the main issue during the neonatal period. This is mainly due to smaller vessel size and usually responds to intravenous heparin infusion. With advances in hardware used for neonatal interventions, more and more newborns with heart defects will go for catheter interventions in the near future.

Symposium

Inter pregnancy care within the continuum of care

Reducing weight and quality nutrition

Prof. Ranil Jayawardana

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Professor in Nutrition

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Obesity during pregnancy is a significant health concern with potential risks for both the mother and the baby. Therefore, losing weight before any pregnancy and achieving right BMI is important. Benefits of Losing Weight Before Pregnancy: Reduced Risk of Complications: Lowering weight can reduce the risk of gestational diabetes, preeclampsia, and complications during labor and delivery. Improved Fertility: Achieving a healthy weight can enhance fertility and increase the likelihood of conception. Healthier Pregnancy: A healthier weight can lead to better overall pregnancy outcomes and a lower risk of complications

for the baby. Weight gain during pregnancy is a natural and important part of a healthy pregnancy, as it supports the growth and development of the baby and prepares the mother's body for childbirth. However, the amount of weight gain can vary based on factors like pre-pregnancy weight, overall health, and whether you're carrying multiple babies. Finally, managing your weight between pregnancies not only improves your overall health but can also enhance your readiness for a future pregnancy. By focusing on a balanced diet, regular exercise, and overall well-being, you can set a positive foundation for your next pregnancy. All these life style advices should be culturally specific and practical solutions.

Managing medical conditions

Dr Shamitha Dassanayake

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Consultant Physician in Internal Medicine

Castle Street Hospital for Women

Vice President, Sri Lanka College of Internal Medicine.

Maternal Mortality rate in Sri Lanka is static. However indirect causes for maternal mortality are overriding direct causes and Heart disease complicating pregnancy are the leading causes of maternal deaths at the moment. Moreover, Medical disorders in pregnancy cause as direct impact to the new born leading to the significant impact to their later life. According to the recent evidences, malnutrition in Sri Lanka is on the rise and Medical Disorders in pregnancy is a contributing factor for this. Inter pregnancy care is an important aspect which depends on previous pregnancy outcomes (Miscarriage, Abortion, Pre- term delivery and full-term delivery). Pre pregnancy assessment is a major need and this should be assessed under three main areas – Physical, Psychological and Social. Through assessment in all three aspects is important as it directly involves with the successful outcome of the baby.

Physical assessment involves assessment for both communicable and Non communicable diseases. This needs addressing three main areas.

1. Assessment of pre-existing medical disorders
2. Screening for medical disorders
3. Prevention of Medical disorders

Prevention of medical disorders before pregnancy is the main stay of successful outcome of the off spring. Addressing issues related to Obesity, Sedentary life style, Vaccination, Nutritional deficiencies, Alcohol, smoking and drug addiction needs to priority.

Maternal Health issues among young females are rising in trend. Alcohol abuse, drug addiction, teenage pregnancies and unwanted pregnancies are significant threat to successful pregnancy out comes. Undiagnosed mental health issues have caused significant negative aspects in controlling Diabetes and Hypertension during pregnancy. Addressing social issues also makes the foundation for the successful Pregnancy out comes. Financial issues, uncertainty of future of the children, Gender based violence, Lack of paternal support, work place issues all needs to consideration.

As medical professionals its our utmost duty to deliver optimum maternal care to ensure successful out-comes of the future generation of this country,

Sexually Transmitted Infections

Dr. Vino Dharmakulasinghe

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Globally sexually transmitted infections (STIs) during pregnancy are a significant health concern, as they can impact both maternal and neonatal health and Sri Lanka is no exception. Although Sri Lanka currently has a low prevalence of STIs among women, the country experienced some changes in the epidemiology of STIs. A total of 5857 women reported STIs in Sri Lanka in the year 2023. Genital herpes and non-gonococcal infections each account for 68% of the total cases, with 1742 and 2271 reported cases respectively. Genital warts 18% of the cases with 1110 reported. Syphilis accounts for 5% of 337 cases, while gonorrhoea represents 3% with 201 cases. Trichomoniasis has the lowest incidence, with 41 cases making up less than 1% of total STI cases among females. HIV can significantly impact women's health, but with early diagnosis, effective treatment, and sustained viral suppression, HIV-positive women can live normal lives and prevent transmission of the virus to their babies. Untreated syphilis in pregnant women can lead to abortions and infant death. Preventing congenital syphilis primarily involves screening and treating pregnant women for syphilis. Sri Lanka obtained validation of elimination of mother-to-child transmission of Syphilis and HIV from the World Health Organization 2019 and achieved maintenance of validation status in 2021. Women are more likely to have asymptomatic STIs than men. Genital herpes, while not affecting fertility, poses a risk of transmission to the baby during delivery if active lesions are present. Women with genital herpes should be educated on how to prevent transmission to newborns. Human papillomavirus (HPV) usually has minimal impact on pregnancy and newborns, except in rare cases of laryngeal papillomatosis. Untreated gonorrhoea and chlamydia can cause pelvic inflammatory disease, infertility, ectopic pregnancies, and neonatal eye infections. However, timely diagnosis and treatment can prevent these complications. Identifying women at risk of STIs and arranging appropriate screening is essential. With prompt diagnosis, effective treatment, and regular follow-up, complications for women and their babies can be significantly reduced.

Day 02

Symposium

Evidence based approach to improve the outcomes of sepsis

Dr Prabhodana Ranaweera

Consultant in Obstetrics & Gynaecology

Sepsis remains a leading cause of morbidity and mortality in both mothers and neonates during the perinatal period. An evidence-based approach to improving sepsis outcomes involves timely recognition, accurate diagnosis, and prompt management, all grounded in current best practices. Early identification is critical, with screening protocols utilizing clinical signs such as fever, tachycardia, hypotension, and altered mental status in mothers, alongside lethargy, respiratory distress, and temperature instability in neonates. Rapid laboratory testing, including blood cultures, complete blood counts, and lactate levels, further aids in diagnosis. Treatment hinges on the early administration of broad-spectrum antibiotics, guided by culture results and antibiotic stewardship principles. Maternal management protocols focus on fluid resuscitation, source control, and addressing underlying obstetric causes such as chorioamnionitis or retained products of conception. Neonatal management involves antimicrobial therapy, respiratory support, and vigilant monitoring of organ function. Evidence supports the implementation of sepsis care bundles, which include the administration of antibiotics within the first hour of suspicion, fluid resuscitation, and regular lactate monitoring. Multidisciplinary team-based care, involving obstetricians, neonatologists, intensivists, and infectious disease specialists, is essential for improving outcomes. Additionally, promoting hand hygiene, appropriate use of invasive devices, and maternal vaccinations (e.g., Group B streptococcus) have proven effective in reducing the incidence of perinatal sepsis. This discussion aims to highlight the latest evidence-based practices, including sepsis bundles, rapid diagnostics, and antimicrobial stewardship, which collectively improve maternal and neonatal survival.

Advanced management of sepsis

Dr. A. D. Mudalige.

MD, FRCA, FFICM, EDIC

Consultant Intensivist, Colombo North Teaching hospital

Despite repeated definitions, updates and recommendations, the mortality of sepsis remains alarmingly high worldwide. Reevaluation of reasons behind this, points towards heterogeneity in septic patients, seriously questioning the validity of the recommendations for management of sepsis under a universal protocol. "Precision medicine" is a novel concept that evolves around individualization of treatment according to the dynamic and different requirements of the patients. Biomarkers, clinical patterns using artificial intelligence, aid in phenotyping patients at the onset of sepsis and thereby set a unique plan of management refusing the theory of "one size fits all". The hyperinflammatory state followed by immunocompromised state of sepsis as well as genomics, transcriptomics, proteomics and metabolomics involved in sepsis are currently being widely investigated thereby aiming to prognosticate and manage critically ill patients more effectively. Nano technology, immunomodulation, blood purification are some of the novel therapies that are under surveillance in the western world. Yet, prior to accepting or refusing these new theories of optimistic researchers of the western world, many investigations, evidence of safety and efficiency will be needed by our parts of the world to avoid unintended harm, cost and futility.

Symposium

Interventions in Newborn Physiology

Brain development

Dr Sanjaya Fernando

Consultant Neurologist

The brain of newborns is exceptionally responsive to environmental stimuli. Research indicates that the formative years, especially from birth to the age of five, play a vital role in brain development. During this time, every interaction, regardless of its significance, plays a role in shaping the brain and influencing future outcomes. This discussion will delve into the seven stages of brain development that are vital for early cognitive growth. The process begins with neurogenesis, which leads to the formation of new neurons. This is succeeded by cell migration, where cells move to different locations within the brain. Following this, cell differentiation occurs, transforming stem cells into specialized cell types. The maturation of these cells then lays the foundation for neural connections. Synaptogenesis, the formation of synapses, is essential for effective communication between neurons. Establishing strong neural connections in early childhood is critical for long-term success. While genetic factors provide the initial framework, the environment significantly influences development. Any disruption at any of these stages can impede optimal brain function. Furthermore, such disruptions may lead to specific neurodevelopmental syndromes, which can be anticipated based on the timing and severity of the insult. Healthy brain development is significantly affected by various elements, including relationships, positive interactions, and adverse environmental conditions. Factors such as poverty, abuse, neglect, stress, and environmental influences can negatively impact fetal brain development. Engaged parenting can reduce developmental setbacks and facilitate early identification of deficits. Timely recognition and intervention can help rewire neuronal networks, ultimately leading to the best possible neurodevelopmental outcomes for the child.

Endocrine changes

Dr Chamidri Naotunna

Consultant Paediatric Endocrinologist

To evaluate suspected endocrine disorders in newborns, it is crucial to understand the dynamic changes that define normal hormonal function during the neonatal period. Although endocrine disorders in newborns are

rare, they can be life-threatening or lead to significant long-term consequences if not promptly diagnosed and treated. However, endocrine dysfunction is relatively common, especially in sick or preterm infants. The hormonal environment is influenced by both the mother and placenta, with abrupt changes occurring at birth, which must be considered when interpreting results. The situation is even more complex in preterm infants compared to full-term babies. Soon after delivery, in response to a drop in ambient temperature, changes occur in serum levels of TRH, TSH, T4, and T3. TSH levels peak within 30 minutes and return to normal infant levels by days 3 to 5. However, in hospitalized infants, thyroid function abnormalities due to non-thyroidal illness (NTI) or prematurity are common. Marked changes in glycemia occur within the first hours after birth. At birth, a newborn's plasma glucose concentration reflects the mother's. After the umbilical cord is clamped, glucose levels drop rapidly during the first few hours postnatally, sometimes transiently decreasing to as low as 20–30 mg/dL. Subsequently, a normal counterregulatory response, including the secretion of epinephrine and cortisol, increases plasma glucose levels. The fetus is entirely dependent on the mother for calcium and phosphorus, which are required for skeletal development and tissue growth. At birth, cord blood calcium levels correlate with gestational age and are about 0.25–0.5 mmol/L higher than maternal levels. Following the clamping of the cord, calcium levels fall rapidly within the first 6 hours, with ionized calcium reaching a nadir of 1.2–1.45 mmol/L at 24 hours. Plasma cortisol levels rise sharply immediately after delivery due to stress, but by 7 days, they fall to around 100–200 nmol/L. It takes 8–12 weeks for diurnal variation in cortisol secretion to be established. Because of the hormonal changes that occur at delivery, test results must be interpreted with these fluctuations in mind.

Symposium

Reducing peripartum maternal mortality in Sri Lanka: A paradigm shift through the integration of global best practices

Postpartum haemorrhage: From prevention to life-saving interventions

Dr U D P Ratnasiri

Consultant Obstetrician and Gynaecologist

Postpartum hemorrhage (PPH) is one of the leading causes of maternal mortality worldwide, defined as blood loss of more than 500 mL after vaginal birth or more than 1000 mL after a cesarean section. It can occur immediately after childbirth or within the first 24 hours (primary PPH) or up to 6 weeks postpartum (secondary PPH). Effective management involves prevention, early recognition, and prompt intervention. Strategies in prevention mainly includes satisfactory antenatal care and risk assessment for PPH and delivering high risk women in centers with adequate facilities. Prevention, detection and correction of anaemia prior to delivery and active management of third stage of labour in all deliveries. Optimising the caesarean section rates also very important in prevention as there is association of increase in the number of placenta accreta spectrum of disorders. Preventing PPH relies heavily on the proactive management of labor, while rapid detection and treatment are critical in managing life-threatening cases. Access to skilled care, appropriate uterotonic drugs, and effective interventions like balloon tamponade, surgery, and blood products can prevent most maternal deaths from hemorrhage. Treatment strategies have failed to bring down the maternal morbidity and mortality over the years. Only a few research studies have been conducted on this subject and a Randomized Trial of Early Detection and Treatment of Postpartum Hemorrhage Emotive approach conducted in four countries have shown to a reduction of severe postpartum hemorrhage, laparotomy for bleeding, or death from bleeding, than usual care among patients having vaginal delivery. The WHO is planning to implement a road map to bring down the maternal mortality due to PPH with the introduction of E motive bundle care approach in treatment. Countries with high maternal mortality with PPH needs to initiate this approach to bring down the maternal morbidity and mortality with obstetric haemorrhage.

Plenary

Patient centred labour care to improve maternal and neonatal outcomes

Dr Chandana Jayasundara

Consultant Obstetrician & Gynaecologist

Patient-centered labour care is a comprehensive approach that places the pregnant woman's needs, preferences, and values at the forefront, thereby trying to optimizing maternal and neonatal outcomes. This paradigm shift from traditional, provider-centered methodologies ensures personalized care, which has been shown to mitigate adverse events and promote positive child birth experience and health results. Recent studies demonstrate that empowering patients through shared decision-making, continuous support during labour, and fostering a respectful and culturally sensitive environment leads to increased satisfaction and reduced stress levels. This empowerment translates into biophysical benefits, such as decreased incidences of cesarean sections, decreased utilization of analgesics, and shorter labor durations. Moreover, patient-centered care fosters enhanced neonatal outcomes, including higher Apgar scores and reduced rates of neonatal intensive care admissions. The implementation of patient-centred care involves structured communication, individualized birth plans, and the incorporation of evidence-based practices tailored to the patient's specific circumstances. Health care providers are trained to respect autonomy, demonstrate empathy, and ensure informed consent, which cultivates a trusting patient-provider relationship and enhances care efficiency. Furthermore, support systems, such as labour companionship with family members, doulas and continuous professional support from midwives or nurses, play a critical role in providing emotional and physical assistance throughout labour. This new approach has been endorsed by the WHO and released new recommendations on antenatal care for a positive pregnancy experience in 2016, here they proposes some guiding principles for intrapartum care which include:-

- ◆ Labour and childbirth should be individualized and woman centered
- ◆ No intervention should be implemented without a clear medical indication
- ◆ Only interventions that serve an immediate purpose and have been proven to be beneficial should be promoted
- ◆ A clear objective that a positive childbirth experience for the woman, the newborn, and her family should be at the forefront of labour and childbirth care at all time.

Overall, patient-centered labour care is instrumental in improving maternal and neonatal health outcomes. Establishing policies and interventions that prioritize this care model is essential for advancing public health goals. Future research should further explore the mechanisms by which patient-centered approaches can be systematically integrated into labor care practices globally.

Symposium

Transdisciplinary approach in solving neonatal pathologies

Common ENT procedures in neonates

Dr A D K S N Yasawardene

MS(ORL) FRCSEd

Consultant ENT Surgeon

Lady Ridgeway Hospital for Children, Colombo

Though there are many ENT procedures done during neonatal period, the most crucial and demanding procedures involve the paediatric upper airway. Early recognition of airway emergencies and prompt intervention not only saves lives but prevents long term disabilities. Advancements in technology can now predict possible upper airway obstruction antenatally and many relatively non invasive interventions can be performed avoiding Neuro disabilities and long term tracheotomies. However the close collaboration between the Neonatologist, paediatric ENT surgeon and paediatric Anaesthetist remains crucial to achieve optimal outcome in spite of technological advances. Consensus decision making through multi disciplinary approach with realistic explanations to parents together with their involvement is essential when complex life threatening conditions are identified. Finally though the equipment concerned are some what expensive, these expenditures can be considered as worthwhile investments to avoid long term complications and loss of lives.

Symposium

Prevention of prematurity

Cervical Cerclage in the prevention of prematurity

Dr Mohamed Rishard

Consultant, Obstetrician & Gynaecologist

Mohamed Rishard^{1,2} MBBS, MD, MRCOG (UK), Dip Gynae Endoscopy (ESGE-France), PG Cert Med. (Dundee)

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Cervical Cerclage is a critical intervention that reduces the risk of preterm birth in at-risk women and likely decreases perinatal mortality. This procedure fortifies the cervix, maintains its length, and preserves the mucus plug in the cervical canal, providing protection against ascending infections. In 1953, an Indian gynecologist presented a pioneering technique for treating cervical incompetence at an international conference. This method involved elevating the bladder and placing a stitch at the level of the internal os using harvested fascia lata. Since its introduction, the technique has seen numerous modifications. Two years later, Ian McDonald of Melbourne, Australia, introduced the McDonald cerclage, which has since become the most commonly performed technique. The McDonald cerclage involves placing a transvaginal purse-string suture at the cervicovaginal junction, thereby avoiding the need for bladder and rectum dissection. For cases requiring greater structural support, an abdominal cerclage can be performed. This method allows the suture to be placed at the internal os. The first abdominal cerclage was reported by Benson and Durfee in 1965, specifically for patients with extreme cervical shortening. The placement of a cervical cerclage is indicated in scenarios involving a strong history of preterm birth, sonographic evidence of cervical shortening, or as a rescue measure when premature cervical dilatation with exposed fetal membranes is observed. Despite its long history, there remains a lack of consensus on the optimal cerclage technique, timing of suture placement, and post-insertion care. It is crucial for obstetricians in institutional settings to be highly skilled in these procedures, while field staff should be well-informed to ensure appropriate referrals to improve outcomes.

Progesterone therapy for preventing preterm birth

Professor Tiran Dias

Professor in Obstetrics & Gynecology

Preterm birth, defined as delivery before 37 weeks of gestation, is a leading cause of neonatal morbidity and mortality worldwide. Progesterone plays a critical role in maintaining pregnancy, and its supplementation has been investigated as a strategy to prevent preterm birth in high-risk women. Progesterone can be administered via different routes, including intramuscular injections, vaginal suppositories, and oral formulations. Clinical evidence suggests that vaginal progesterone is effective in reducing the incidence of preterm birth in women with a short cervix identified by ultrasound, irrespective of obstetric history. Similarly, 17-alpha-hydroxyprogesterone caproate (17-OHPC), given as a weekly intramuscular injection, has shown benefits in preventing recurrent preterm birth in women with a history of spontaneous preterm delivery. The mechanisms by which progesterone reduces preterm birth include its anti-inflammatory effects, cervical remodeling inhibition, and maintenance of uterine quiescence. While progesterone therapy is generally well tolerated, the choice of formulation and administration route should be tailored to the patient's clinical profile and risk factors. Current guidelines support the use of progesterone in specific high-risk populations; however, further research is needed to refine indications, dosing regimens, and to explore potential benefits in broader populations at risk for preterm birth.

FREE PAPERS - ANNUAL SCIENTIFIC CONGRESS - ORAL PRESENTATIONS

OP 01 : KNOWLEDGE AND SKILLS IN NEONATAL RESUSCITATION AMONG HEALTHCARE PROFESSIONALS IN UVA PROVINCE, SRI LANKA: IMPACT OF THE NEONATAL LIFE SUPPORT PROGRAM.

Hassan MHSM¹, Guruge KGHS¹, De Silva BM¹, Senaratne R¹, Wijewardena K¹, Liyanage C¹, Kuruppu WS¹, Herath HMSY¹

¹ Teaching Hospital Badulla, Sri Lanka

Introduction

Neonatal resuscitation is an important skill for healthcare professionals in Neonatal Intensive Care Units (NICU) and delivery rooms. Ensuring proficiency and sustainability in these skills are vital for improving neonatal outcomes. This audit evaluates the initial knowledge and skills of neonatal resuscitation among doctors, nurses, and midwives in UVA Province, Sri Lanka, and assesses improvements following the Neonatal Life Support (NLS) program.

Methods

The study had 118 participants including 38 doctors, 40 nurses, 20 hospital midwives, and 20 field midwives. Baseline knowledge and skills were assessed using a standardized written test and practical skills evaluation. Following the assessment, all participants underwent the NLS program, which comprised of both theoretical and hands-on training. A post-program assessment was conducted using the same evaluation tools. Data were collected from multiple NLS programs held over a period of four months from February 2024 till May 2024.

Results

Initial assessment revealed that 18 out of 38 doctors (47.3%), 8 out of 40 nurses (20%), 8 out of 20 hospital midwives (40%), 4 out of 20 field midwives (20%) met the required standard, resulting in an overall competency of 38 out of 118 (32%).

After the NLS program, results showed that 38 out of 38 doctors (100%), 36 out of 40 nurses (90%), 18 out of 20 hospital midwives (90%) and 16 out of 20 field midwives (80%) met the standard. Overall competency increased to 94 out of 118 (91.5%).

Discussion

The initial assessment revealed significant gaps in neonatal resuscitation and skills among healthcare professionals. The NLS program resulted in substantial improvements across all groups, demonstrating the effectiveness of such structured training programs. Enhanced competencies in neonatal resuscitation are likely to improve clinical outcomes for neonates requiring resuscitation.

Conclusion

This audit underscores the importance of regular and structured training programs like the NLS in improving neonatal resuscitation skills among healthcare professionals. The significant improvements observed post-NLS program highlight the need for ongoing education and training to maintain high standards of neonatal care.

OP 02 : RE-AUDIT ON THE DURATION OF THE KANGAROO MOTHER CARE PRACTICE AT THE NEONATAL UNIT CSHW

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Introduction

Kangaroo Mother Care (KMC) is a world-recommended effective interventional practice that reduces the primary causes of preterm mortality and morbidity. This method is considered to be more effective, particularly in developing countries with limited access to resources associated with conventional neonatal care.

Objectives

To assess the sustainability of existing KMC practice for all preterm and SGA babies admitted to the Neonatal Unit, CSHW, with adherence to the “Unit Policy” for KMC introduced and implemented since June 2023.

Methods

In this study, we focused on all preterm and SGA babies admitted to the Neonatal unit, CSHW, from 01/11/2023 to 30/11/2023. The exclusion criteria of this study were mothers who were not clinically stable and babies on phototherapy. An in-depth analysis was conducted based on the data collected from the questionnaire completed by mothers and the interviewer-administered questionnaire with the health staff in the Neonatal unit. The deficiencies were addressed by implementing the following initiatives;

- Antenatal education and counselling
- Presenting KMC videos, posters and leaflets
- Providing KMC binder and jackets
- Conducting KMC workshops for healthcare staff
- Providing support during feeding

Results

The “Unit Policy” for KMC has been introduced, given the KMC duration of 3 to 8 hours. However, initial re-audit results presented that the minimum KMC duration was less than 3 hours. With the implementation of new initiatives, the minimum KMC duration has increased to 6 hours, with the KMC practice level of 60%.

Conclusions

This study was significant in identifying the deficiencies in KMC practice and addressing maternal as well as health staff-related barriers. The minimum KMC duration has increased to 6 hours with the implementation of new initiatives but is still below the WHO recommendation of 8 hours. Hence, it is apparent the significance of introducing and implementing of National Policy for KMC to ensure the sustainability of KMC practice in Sri Lanka.

OP 03 : RESPECTFUL MATERNAL CARE (RMC) TO SUPPORT BREASTFEEDING AMONG POST-NATAL MOTHERS AT COLOMBO SOUTH TEACHING HOSPITAL

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Introduction:

Respectful maternity care (RMC) is a concept defined by WHO that ensures women's dignity, privacy, and confidentiality during labour and childbirth, while also promoting informed choice and continuous support, including early breastfeeding initiation (Ansari H, Yeravdekar R, 2021). However, inadequate staff training and lack of awareness can lead to undignified and disrespectful care (Ishola F, Owolabi O, Filippi V, 2018).

Objectives:

This project aimed to assess the effectiveness of breastfeeding sessions for postnatal mothers at Colombo South Teaching Hospital, with additional objectives to:

1. Evaluate staff's provision of respectful care while supporting breastfeeding
2. Measure mothers' confidence in breastfeeding
3. Assess mothers' knowledge about breastfeeding before being discharged from the hospital.

Method:

This study used a descriptive cross-sectional design to collect data from 65 postnatal mothers at Colombo South Teaching Hospital who delivered term babies. The data was collected over a month (July 1 - August 1, 2023) using a pretested questionnaire in the mothers' preferred language, which assessed their socio-economic background, breastfeeding knowledge, and experience with Respectful Maternity Care (RMC) during their hospital stay. The data was analyzed using descriptive and analytical methods, including SPSS 21, to identify correlations and significant factors (p -value ≤ 0.05). The effectiveness of breastfeeding was evaluated by considering the mean weight loss after 24 hours, with an expected weight loss of $\leq 5\%$.

Results:

A study on breastfeeding found that most mothers were between 19-30 years old and had an average newborn weight of 3000g. Despite slightly below-average weight loss in the first 24 hours, the study revealed significant correlations. Mothers with lactation knowledge and hospital staff support were more likely to initiate breastfeeding. Family income and religious beliefs were also positively linked. Providing postnatal instructions boosted maternal confidence. However, no correlations were found between breastfeeding outcomes and mothers' experience, civil status, ethnicity, occupation, or age. The duration of lactation was crucial for optimal newborn weight establishment.

Conclusions:

The study finds that Respectful Maternity Care and hospital staff instructions positively impact postnatal mothers, boosting confidence, awareness, and successful breastfeeding practices, ultimately empowering them to nurse their babies successfully.

OP 04 : DOES PARENT WEIGHT, HEIGHT OR BMI AFFECT INFANT FAT MASS? A LONGITUDINAL BODY COMPOSITION STUDY FROM BIRTH TO 2 YEARS IN HEALTHY BABIES BORN AT TERM IN COLOMBO, SRI LANKA

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Introduction

This is the first study to describe the effect of parent anthropometry on body composition in Sri Lankan infants from birth-2 years.

Objective

To determine the effect of parent anthropometry on the body composition from birth to two years.

Methodology

Descriptive longitudinal study, 2015-2019, at Professorial Unit, De Soysa Hospital for Women. Healthy, term babies born to mothers >18 years of age, who agreed to attend monthly follow-up were enrolled (n=337). None developed any conditions affecting growth during the study. Parent anthropometry was measured by a single investigator using SECA instruments according to WHO guidelines at recruitment. Maternal weight at booking visit was obtained from the maternity records. Body composition was assessed at 3, 6, 9, 12, 18 and 24 months of age by deuterium dilution method. Saliva was sampled pre-dose, 2.5 and 3 hours post-dose (deuterium=0.15 mg/kg) and analysed using Fourier Transform Infrared Spectroscopy (Agilent 4500) DD. Simple linear regression conducted to determine the relationship between parent variables and body composition at 3, 6, 9, 12, 18 and 24 months. Ethics clearance was obtained from Faculty of Medicine, University of Colombo.

Results

A significantly positive relationship ($p < 0.05$) was seen between infant fat mass (FM) and maternal weight (MW) and BMI (MBMI) at booking visit, as well as paternal weight (PW) and BMI (PBMI). A 1 kg increase in MW and PW was associated with an increase in FM by 1 g at 3 months of age ($F=(1,117)=5.286$, $p=0.023$, $R^2=0.046$) and by 16 g at 24 months of age ($F=(1,20)=4.786$, $p=0.041$, $R^2=0.193$) respectively. A 1 kg/m² increase in MBMI and PBMI were associated with an increase in 1% of fat % at 18 months of age ($F=(1,42)=5.283$, $p=0.02$, $R^2=0.122$) and an increase of FM by 5 g at 24 months of age ($F=(1,125)=5.285$, $p=0.033$, $R^2=0.218$) respectively.

Conclusion

Increase in parent weight and BMI was associated with an increased fat mass at 3, 18 and 24 months of age.

OP 05 : GESTATION SPECIFIC NEONATAL MORTALITY FOR 2023/2024, IN A TERTIARY CARE NEONATAL UNIT, IN COLOMBO SRI LANKA.

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Introduction

Identifying the cause of death is helpful in determining preventive strategies to reduce the neonatal mortality in Sri Lanka.

Objective

To determine gestation specific neonatal mortality in a tertiary care neonatal unit in Colombo, Sri Lanka.

Method

A retrospective study was conducted at University Unit, De Soysa Hospital for Women, Colombo on the neonatal deaths that occurred from 01.01.2023 to 30.05.2024. Permission was obtained from the head of the institution. Babies who were transferred out due to bed unavailability were excluded. Data was obtained from perinatal mortality presentations, perinatal death forms and birth and death registers. Microsoft Excel for Mac 2023 v16.77.1 was used for statistical analysis.

Results

There were 4485 live births and 30 neonatal deaths resulting in a neonatal mortality rate of 6.7 per 1000 live births. Most (n=18, 60%) deaths were due to prematurity. Mortality was 100% at 22 (one birth), 23 (4 births), and 24 (2 births) weeks gestation. Mortality was 50% for 25 weeks (2 births, 1 death) and 20% for 26 weeks (5 births, 1 death) gestation. Mortality was 50% for 27 weeks (2 births, 1 death) and 28 weeks (6 births, 3 deaths), where deaths were due to intraventricular haemorrhage, pulmonary haemorrhage, placental abruption with hypoxic injury and group B streptococcus(GBS) sepsis on day one. Mortality was 6.5% at 31 weeks (15 births, 1 death due to coliform sepsis on day one), 5.6% at 32 weeks (18 births, 1 death due to non-immune hydrops), 6.3% at 33 weeks gestation (16 births, 1 death due to congenital abnormality) and 6.7% mortality at 35 weeks gestation (30 births, 2 deaths due to multiple congenital abnormalities and GBS sepsis on day one). No deaths occurred at 29,30, 34 and 36 weeks gestation. Among the 12 deaths in term babies, one was due to GBS sepsis on day one (3.3%), 2 were due to severe hypoxic ischaemic encephalopathy (6.6%), whereas all others were due to congenital anomalies (30%).

Conclusion

Prematurity was the leading cause of neonatal death with 100% mortality at 22-24 weeks, 20-50 % mortality from 25-28 weeks, with a drastic drop to 0-6% from 29-36 weeks gestation.

OP 06 : OUTCOMES OF PRETERM BABIES, BORN IN A TERTIARY CARE NEONATAL TRAINING CENTRE, IN COLOMBO SRI LANKA, AT THE TIME OF DISCHARGE FROM HOSPITAL FOR

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Introduction

Prematurity accounts for over half of neonatal deaths in Sri Lanka. However, data regarding preterm outcomes are sparse.

Objective

To determine the outcomes of preterm babies in a tertiary care neonatal center in Colombo Sri Lanka

Method

A retrospective study was conducted at University Unit, De Soysa Hospital for Women, Colombo on the outcome of preterm babies discharged from 01.01.2023 to 30.06.2024. Permission was obtained from the head of the institution. All preterm babies born before 37 weeks of gestation were included. Deaths and transfers out were excluded. Data on discharge outcomes were obtained from discharge summaries Cross checking this data with births, admissions, discharge and death registers ensured that no records were missed during data collection. Microsoft Excel for Mac v16.77.1 was used for statistical analysis.

Results

There were 4485 live births with 394 (8.8%) preterm births; 307 (76%),) were moderate-to-late(MLP) (32-37weeks), 71(18%) very-preterm(VP) (28-31weeks) and 26(6%) were extreme preterm(EP) (<28 weeks). Neonatal unit admission was seen in 39%, 82% and 100%, while mortality was 1%, 7% and 38% for MLP, VP and EP. Mean and SD for age at discharge, birth weight and discharge weight were 16 ± 22 days, 2.1 ± 0.5 kg, 2.0 ± 0.4 kg for MLP, 39 ± 24 days, 1.3 ± 0.3 kg, 1.6 ± 0.2 kg for VP and 90 ± 25 days, 0.9 ± 0.2 kg, 2 ± 0.7 kg for EP. Respiratory support was required in 54%, 31% and 100% in MLP, VP and EP. CPAP was used in 52%, 92% and 100%, whereas NIMV was used in 13%, 67% and 100% and invasive ventilation in 4.5%, 39% and 100% in MLP, VP and EP. Expressed breast milk was started on day one for 93%, 75% and 50%, on day 2 for 6%, 19%, 50% for MLP, VP and EP. Parenteral nutrition was used in 19%, 67% and 100% in MLP, VP and EP. Retinopathy(ROP) wasn't seen in MLP, but 36% and 50% in VP and EP. Biochemical osteopenia wasn't seen in MLP but, 72% and 100% in VP and EP. Blood transfusions were used in 8%, 28% and 83% in MLP, VP and EP.

Conclusion

Most preterm births were MLP with 99% survival and minimal complications. VP and EP had 93% and 62% survival, with higher rates of complications.

OP 07 : EVALUATING THE TIMELINESS AND COMPLIANCE OF THERAPEUTIC HYPOTHERMIA INITIATION AND ITS CORRELATION WITH EARLY BLOOD GAS PARAMETERS IN NEONATES WITH HYPOXIC ISCHEMIC ENCEPHALOPATHY AND THE FOLLOW-UP

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Introduction

This audit examined the effectiveness of implementing therapeutic hypothermia in neonatal care and its impact on early blood gas parameters. Conducted in the NICU at Teaching Hospital Mahamodara from January to April 2024, the study aimed to evaluate adherence to established standards for hypothermia treatment in neonates. Key areas of focus included the initiation of total body cooling, the timeliness of blood gas analysis, monitoring of cerebral function, conducting repeat ultrasound scans, arranging follow-up clinics, and performing hearing screenings before discharge.

Objectives

The primary objective was to evaluate adherence to therapeutic hypothermia protocols and early blood gas monitoring in neonates with HIE, identify compliance levels, and recommend improvements.

Method

A prospective observational study was conducted, involving structured audits during a 3-month period. Data were collected from medical records using a standardized data collection form.

Results

High compliance was observed in total body cooling initiation (100%), blood gas analysis within 1 hour (100%), repeat ultrasound scans before discharge (100%), follow-up clinic arrangements (100%), and hearing screenings (100%). However, there was a significant gap in the availability and use of cerebral function monitoring facilities (0%) and the timely conduct of cord blood gas analysis (56%).

Conclusion

The audit highlighted high compliance in key areas of HIE management, such as therapeutic cooling initiation and prompt blood gas analysis, reflecting effective adherence to these protocols. Nevertheless, there are critical deficiencies in monitoring capabilities, particularly in cerebral function monitoring and cord blood gas analysis. These gaps indicate a need for improved infrastructure, including the acquisition of necessary scalp electrodes, enhanced staff training, develop and implement a guideline for resuscitated babies to ensure correct way of cord blood gas analysis and monitor stricter adherence to protocols by doing a re-audit. Addressing these issues is essential to ensure comprehensive care and improve outcomes for neonates with HIE.

OP 08 : AN AUDIT OF NEURODEVELOPMENTAL CARE PRACTICES FOR PREMATURE AND CRITICALLY ILL NEONATES IN THE NEONATAL INTENSIVE CARE UNIT AT TEACHING HOSPITAL KARAPITIYA, GALLE

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Introduction

This audit assessed neurodevelopmental care practices in the NICU at Teaching Hospital Karapitiya over a 50-day period from May 1, 2024, to June 20, 2024. The audit aimed to evaluate compliance with established standards such as noise reduction, tactile stimulation, oral aversion minimization, protection from noxious odors, positioning, parental involvement, and light reduction. A total of 250 observations were conducted during ward rounds from 7 am to 7 pm.

Objectives

The primary objective was to qualitative assessment of neurodevelopmental care standards, statistical analysis of compliance rates and highlight areas requiring improvement.

Method

A prospective observational study was employed, involving structured audits during ward rounds. Observations were systematically recorded in a data collection sheet and analyzed to assess adherence to various care standards.

Results

High compliance was observed in gentle handling, holding baby during feeding, avoidance of noxious odours, eye covers during procedures and the use of incubator covers. However, significant gaps were identified in talking softly near warmers (50%), interventions when the baby is gently aroused , encouraging hand-to-mouth contact (60%), positioning practices: not keeping hands in 'W' position (64%), not keeping legs in 'M' position (60%), not turning head >45 degrees (66%), individual light with dimmers placed over the neonate (0%) and blind curtain to windows (0%) and paternal involvement (0%). These findings indicate a need for enhanced training, infrastructure improvements, and stringent policy implementation.

Conclusion

The audit revealed both strengths and deficiencies in the neurodevelopmental care practices within the NICU. While certain standards were met consistently, others showed significant room for improvement. By addressing identified gaps through infrastructure upgrades, staff education and training, regular monitoring with reaudits and policy enforcement, the NICU can enhance its compliance with best practices. This will contribute to better neurodevelopmental outcomes for neonates and support the continuous improvement of care standards in the NICU setting.

OP 09 : KNOWLEDGE REGARDING NEONATAL ADVANCED LIFE SUPPORT AMONG INTERN MEDICAL OFFICERS – FOLLOWING PRE-INTERN ONLINE TEACHING

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Introduction

Neonatal advanced life support (NALS) is a crucial factor in reducing the mortality and morbidity in birth asphyxia-related complications. Confidence & sound knowledge in NALS among intern medical officers are vital, as they may be the first contacts of newborn emergencies after completing the internship. All intern medical officers undergo a mandatory one-day training on NALS just prior to the beginning of the internship.

Objectives

This study is designed to assess the knowledge of NALS among intern medical officers (IMO) after six months of the one-day NALS online teaching program.

Method

This is an interviewer-administered questionnaire-based descriptive study done in IMOs after six months of the NALS online teaching program. IMOs from Sri Jayewardenepura General Hospital and Lady Ridgway Hospital for Children were included. Thirty questions assessed the participants' NALS knowledge covering 1) Preparation for resuscitation, 2) Initial assessment, intervention and reassessment, 3) Airway management, 4) Chest Compression, 5) Intravenous access and medication, and 6) Special situations. The questionnaire included 15 questions carrying 2 marks each, requiring compulsory correct responses to consider as having adequate knowledge. Balance 15 questions carried one mark each. Marks were given out of 45

A Binary Logistic Regression model was used to assess adequate knowledge versus Age, Sex, Exposure, and Attention to the program. Percentages of successful answers calculated.

Results

A total of 68 subjects were included. The majority were females, 50 (73.5%), and the mean age was 27.5 (range 26-31). Only 18 (27.27%) participants answered all mandatory questions correctly demonstrating adequate knowledge. The gender and age of the participants were not significantly associated with having satisfactory knowledge. However, exposure to real-life experience on NALS is significantly correlated ($P = 0.028$) with having adequate knowledge.

Conclusions

Most IMOs have an inadequate knowledge of NALS. Experience involving NALS is associated with good knowledge. Most participants have poorer knowledge of cardiac compression technique, medications used, and resuscitation of babies born through Meconium-stained liquor. The majority of intern medical officers like to have another NALS programme (preferably hands-on) to refresh their knowledge.

OP 10 : DOES BIRTH WEIGHT AFFECT INFANT BODY COMPOSITION? A LONGITUDINAL BODY COMPOSITION STUDY FROM BIRTH TO 2 YEARS IN HEALTHY BABIES BORN AT TERM IN COLOMBO, SRI LANKA

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Introduction

Birth weight (BW) has been found to be a risk factor for obesity. This is the first study to describe the effect of BW on body composition (BC) in Sri Lankan infants from birth-2 years.

Objective

To determine the effect of BW on the BC from birth to two years.

Methodology

Descriptive longitudinal study, 2015-2019, at Professorial Unit, De Soysa Hospital for Women. Healthy, term babies born to mothers >18 years of age, who agreed to attend monthly follow-up were enrolled (n=337). None developed any conditions affecting growth during the study. BW was measured within 12-24 hours of birth, to the nearest 5g, using 2-weekly calibrated, SECA 334 electronic weighing scale, according to WHO-MGRS protocol. BC i.e., fat-mass (FM) and fat-free-mass (FFM) was assessed at 3,6,9,12,18 and 24 months of age by deuterium dilution method. Saliva was sampled pre-dose, 2.5 and 3 hours post-dose (deuterium=0.15mg/kg) and analysed using Fourier Transform Infrared Spectroscopy (Agilent 4500). Ethics clearance was obtained from Faculty of Medicine, University of Colombo. Longitudinal BC curves were drawn for <2.5kg, 2.5-3.5kg and >3.5kg BW categories using LMS Chartmaker Pro(v2.54). Mean BC for each BW category was compared using independent sample t test. Pearson correlation was used to determine the relationship between BW and BC.

Results

There were 55, 250 and 32 babies with BW <2.5kg, 2.5-3.5kg and >3.5kg respectively. Mean FFM was significantly higher in BW >3.5kg than 2.5-3.5kg [5.2(0.5)kg vs 4.6(0.6)kg, p=0.006] and BW 2.5-3.5kg than <2.5kg [4.6(0.6)kg vs 4.2(0.5)kg, p=0.002] from 3-9 months of age. Fat % was significantly higher in BW <2.5kg than >3.5kg at 9 months [21(8)% vs 14(5)%, p=0.032] and 24 months [18(1)% vs 11(4)%, p=0.016] of age. FFM% was higher in BW >3.5kg than 2.5-3.5kg than <2.5kg respectively, from 6-24 months of age. FM% was higher in BW <2.5kg than 2.5-3.5kg than >3.5kg respectively, from 6-24 months of age. FFM showed a significant positive correlation to BW at 3,9,12,18 and 24 months [r=0.46(p<0.001), r=0.54(p<0.001), r=0.26(p=0.024), r=0.3(p=0.03), r=0.35(p=0.01)] respectively.

Conclusion

An increase in BW was associated with an increase in FFM, whereas <2.5kg BW babies had the highest FM% at 24 months of age.

OP 11: INDUCTION OF LABOUR WITH FOLEY CATHETER INSERTION- THE EFFECT OF “UNFAVORABLE CERVIX” AND ASSOCIATED FACTORS

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Introduction

When a woman doesn't start her labor as having an unfavorable cervix at accepted dates or if the delivery of the baby will bring a better outcome than extending the pregnancy at a relevant period of amenorrhea, induction of labor plays a major role in starting her labor. the unfavorable cervix is defined as a cervix less than 8 of the bishop score. The Foley catheter is a safe, effective, and feasible mechanical method of induction of labor (IOL). By Foley induction expected result was a successful vaginal delivery than directly going to elective C-section.

Objectives

Study the outcome of IOL with Foley catheter of an unfavorable cervix at past dates and the association of the factors to the outcome (Mother's BMI, Estimated weight of the baby, Parity, bishop's score at the induction)

Design

A descriptive cohort study was designed at the Professorial Unit of the De Soysa Maternity Hospital, Colombo.

Method

All the women who had induction of labor using a Foley catheter due to unfavorable cervix at 40+6 weeks were selected and all the associated factors mentioned above were noted for 6 months period.

Results

A total of 177 women had labor induction for unfavorable cervix, out of which, 55(31.04%) terminated the pregnancy with emergency cesarean sections Major indications were fetal distress and Lack of progression, 103(58.1%) and 19(10.7%) unassisted vaginal deliveries and assisted vaginal deliveries respectively. Most of the mothers (71/103; 68.9%) who delivered by unassisted vaginal delivery were mothers with a parity of 3 or more.

There were 33(42.8%) of BMI more than 30 kgm-3 postdates mothers, 31(93.9%) undergo Emergency C-section. Mothers who had baby of EFW more than 3.2kg with past dates were 48(62.3%). Out of which 33(68.75%) undergo emergency caesarian section. Mothers who had a bishop score of 6 or more at the induction (39), 92% (36/39) delivered via unassisted vaginal delivery.

Conclusions

There is no statistical significance between the outcome and parity, BMI, estimated fetal weight of the baby, and the bishop score at induction. Hence, using the bishop's score to decide the favorability of the cervix should be studied more.

OP 12 : MANAGEMENT OF PREGNANCY COMPLICATED BY RED CELL ISOIMMUNIZATION WITH KELL ANTIBODIES

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Introduction

The incidence of anti-Kell alloimmunization of pregnancy is quoted to be around 1.16 per 1000 pregnancies and may cause stillbirth or severe anaemia of neonate at birth. (1) As anti-Kell antibodies inhibit growth of Kell positive erythroid progenitor cells fetal anaemia may not correlate well with antibody titers. (2)

Objective

Describe a pregnancy complicated with red cell isoimmunization with Kell antibodies

Method and Result

A 38-year-old woman in her 6th pregnancy with no living children was referred at a period of gestation of 20 weeks with diagnosis of red cell isoimmunization with unexpected antibodies positive against Kell antigen. The patient had a first trimester miscarriage followed by two intra-uterine fetal deaths (IUD) initially. In her 4th pregnancy caesarean delivery was carried out at 32 weeks of gestation due to hydrops fetalis and neonate died postnatally due to severe anaemia. Subsequent investigations revealed positive Kell antibodies in this B positive, Kell negative woman. Her fifth pregnancy miscarried at 20th week of gestation without an evident cause.

In her 6th pregnancy she was referred for fetal medicine opinion at 20th week of gestation. Though non-invasive fetal K status testing was offered to stratify risk as her partner was having B positive blood group with heterozygous status for K antigen it was not affordable. (3) She was monitored with weekly middle cerebral artery peak systolic velocity assessment (MCA PSV) and had an intrauterine transfusion at 25 weeks of gestation. Later the baby was delivered at 28 weeks of gestation via a hysterotomy with a birth weight of 1.025 kg as MCA PSV above 1.5 times of multiples of median. Neonate had a haemoglobin level of 5.5 g/dl at birth. Subsequently baby had six blood transfusions and was treated with intravenous immunoglobulin (IVIG) which are standard management options for neonate. (4) However neonate's serum bilirubin was below the threshold for phototherapy or exchange transfusion throughout.

Conclusion

Management of pregnancies affected with red cell isoimmunization in a tertiary care center with multi-disciplinary management with involvement of fetal medicine specialist, neonatologist and transfusion physicians will improve pregnancy outcome.

References

1. MAYNE KM, BOWELL PJ, PRATT GA. The significance of anti-Kell sensitization in pregnancy. *Clin Lab Haematol.* 1990;
2. Vaughan JI, Manning M, Warwick RM, Letsky EA, Murray NA, Roberts IAG. Inhibition of Erythroid Progenitor Cells by Anti-Kell Antibodies in Fetal Alloimmune Anemia. *N Engl J Med.* 1998;
3. Rieneck K, Clausen FB, Bergholt T, Nørgaard LN, Dziegiel MH. Non-Invasive Fetal K Status Prediction: 7 Years of Experience. *Transfus Med Hemotherapy.* 2022;
4. YÜCEL H, ÇELİK İH, KAVURT AS, ÖZCAN B, SANDAL S, BAŞ AY, et al. A Neonate with Severe Hemolytic Disease Treated With Repeated Doses of Intravenous Immunoglobulin and Erythrocyte Transfusion Due to Anti-E, C and Kell Isoimmunization. *Türk Kadın Sağlığı ve Neonatoloji Derg.* 2022;

OP 13: PREVALENCE AND ASSOCIATED FACTORS OF HYPOTHERMIA AMONG NEONATES ADMITTED TO THE PREMATURE BABY UNIT (PBU) OF DISTRICT GENERAL HOSPITAL NAWALAPITIYA: A RETROSPECTIVE ANALYSIS

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Introduction and Objectives

Hypothermia is defined as core body temperature being below 36.5°C. Though hypothermia is commonly associated with neonatal morbidity and mortality, relevant literature is limited in Sri Lanka. This study aimed to identify the prevalence and associated factors of hypothermia among neonates admitted to PBU of District General Hospital Nawalapitiya.

Methods

Patient records of all neonates admitted to PBU from January 2021 to February 2022 were included by consecutive sampling. Axillary temperature on admission and clinical data were extracted. Data was analyzed using SPSS 25.0 software. Descriptive statistics were performed. The variables that were positive in bivariate analysis done using Chi square tests were included in a multivariable logistic regression analysis.

Results

Among 407 neonates, the mean admission age was 5.2 days. Majority were males (52.6%) with a corrected gestational age of 37 weeks or above on admission (64%) and a mean weight of 2.44 kg. Prevalence of hypothermia was 38.6% (95%CI:33.9–43.4). Maternal factors like teenage pregnancy, multiple pregnancy, hypertension during pregnancy, premature rupture of membranes and lower-segment caesarian sections; neonatal factors like low birth weight, prematurity, age on admission being ≤ 24 hours, weight on admission being < 2500 g, corrected gestational age on admission being < 37 weeks and having been resuscitated at birth had statistically significant associations with hypothermia on bivariate analysis. Following multivariable analysis, only teenage pregnancy (Adjusted odds ratio(AOR):7.3, 95%CI:1.6-32.9), multiple pregnancy (AOR:2.8, 95%CI:1.1-7.1), hypertension in pregnancy (AOR:2.3, 95%CI:1.1-4.6), low birth weight (AOR:3.7, 95%CI:1.1-12.6) and age on admission being ≤ 24 hours (AOR:2.5, 95%CI:1.3-4.7) remained significant. Neonates with hypothermia had 5.1 times (95%CI:1.8-14.5) increased odds of mortality and 4.3 times (95%CI:2.5-7.4) increased odds of receiving ventilatory support compared to normothermic neonates. Hypothermia also showed statistically significant associations with infant respiratory distress syndrome, metabolic acidosis and neonatal jaundice. Hypothermia showed no significant association with the month/season of admission.

Conclusions

Nearly two out of five neonates admitted to PBU were hypothermic. There were significant maternal and neonatal risk factors to be addressed. Hypothermia on admission may indicate serious neonatal morbidity and mortality.

OP 14 : NUTRITIONAL STATUS AND FEEDING PRACTICES OF NEONATES AND INFANTS WITH OROFACIAL CLEFTS WHO ARE ATTENDING TO MULTIDISCIPLINARY CLEFT CLINIC (MDCC), PLASTIC AND RECONSTRUCTIVE CLINIC AND ORTHODONTIC CLINIC AT LADY RIDGEWAY HOSPITAL COLOMBO.

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Introduction

Cleft Lip (CL) with or without Cleft Palate (CP) and CP alone are collectively known as the Oro-Facial Clefts (OFCs). OFCs are known to be associated with several negative outcomes including feeding problems which cause nutritional impairment.

Objective

To identify the feeding practices, nutritional status and its associated factors of neonates and infants with OFCs attending to tertiary care hospital in Sri Lanka

Methods

A hospital based cross sectional study was conducted among a convenient sample of 102 neonates and infants with OFCs attending to Multidisciplinary Cleft Clinic, Plastic and Reconstructive clinic and Orthodontic clinic at Lady Ridgeway Hospital Colombo, Sri Lanka. In the assessment of the nutritional status, the growth charts of the babies incorporated in the Child Health and Development Record of the child were observed. The babies with either underweight, stunting, wasting or with both wasting and stunting were classified as the babies having poor nutritional statuses. Chi square test was used to find out the associations of nutritional status of neonates and infants with OFCs.

Results

Forty-two (41.2 %) children had CL with CP followed by CP (38.2%) and CL (20.6%) alone. Growth faltering (GF) was detected in 84.3%. Majority (82.4%) had poor nutritional status while 65.7% had Severe Acute Malnutrition (SAM). Feeding problems were common with OFCs, however it has statistically significantly reduced following surgical correction (90.2% vs 5.8%, $p < 0.001$). Having feeding problems ($p = 0.002$), being on formula milk ($p = 0.002$), having CL with CP ($p = 0.048$) and presence of GF ($p < 0.001$) were associated with poor nutritional status. Surgical interventions have done for 41.2% and they were 58.0 times likely to have growth improvement following surgery.

Conclusion

Feeding problems with poor nutritional status are identified as a problem among neonates and infants with OFCs. Timely surgical correction with prompt nutritional intervention is recommended for ensure nutritional status among children with OFCs.

Key words

Oro-facial clefts, nutritional status, feeding practices, associated factors

**FREE PAPERS - ANNUAL SCIENTIFIC CONGRESS
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PP 01 : A CASE OF JUVENILE MYELOMONOCYTIC LEUKEMIA (JMML) PRESENTING WITH CONCURRENT CYTOMEGALOVIRUS INFECTION

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Introduction

Juvenile Myelomonocytic Leukemia (JMML) is a rare myeloproliferative disorder primarily affecting young children, characterized by proliferation of myelomonocytic cells. It is considered a childhood myelodysplastic/ myeloproliferative neoplasm with a poor prognosis without hematopoietic stem cell transplantation (HSCT). JMML typically presents with splenomegaly, hepatomegaly, and a leukocytosis with monocytosis.

Case Presentation

A 3-month-old boy who was admitted with bronchiolitis was incidentally found to have microcephaly, hepatomegaly (8 cm) and splenomegaly (14 cm). In due course he developed generalized petechial rash. Laboratory investigations showed an elevated white blood cell count of $154 \times 10^9/L$ with monocytosis, with dysplastic morphology and 3% blasts in the peripheral blood smear suggestive of JMML which was supported by the bone marrow biopsy. Further workup revealed an elevated erythrocyte sedimentation rate (ESR) of 65 mm/hr and increased uric acid levels ($477 \mu\text{mol/L}$), consistent with a hematologic disorder. CMV PCR from urine was positive (5×10^5 copies/mL), and serum CMV IgG and IgM were reactive, indicating an active CMV infection. This constellation of findings supported a diagnosis of juvenile myelomonocytic leukemia (JMML) with concurrent CMV infection. The patient was initiated on valganciclovir for antiviral therapy. Due to the absence of a suitable hematopoietic stem cell transplant (HSCT) donor, chemotherapy was planned as a supportive therapy. Two weeks after starting antiviral therapy while awaiting chemotherapy, he developed a bronchopneumonia following which he succumbed to death.

Conclusion

This case highlights the diagnostic challenges and clinical management of JMML in infancy, particularly when presenting with concurrent infections such as CMV. Early recognition and prompt referral to specialized centers for HSCT are critical to improve outcomes in these patients.

PP 02 : A RARE CASE OF PENILE AGENESIS (APHALLIA) WITH ASSOCIATED MULTIPLE UROGENITAL ANOMALIES, DUODENAL ATRESIA, LIMB ANOMALIES AND SPONTANEOUS PNEUMOTHORAX

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Introduction

Aphallia is a rare genitourinary anomaly with an incidence of about one in 10-30 million live births. It is an anomaly occurred during the fourth week of embryonic development which is related to the absence or a failure in the development of the genital tubercle. Aphallia can be classified into two major groups as isolated penile agenesis and the complex form which is often incompatible with life because of accompanying multiple congenital anomalies including genitourinary (54%) and gastrointestinal tract anomalies and developmental defects of the caudal axis.

Case Presentation

A baby was born at 36 weeks with a birth weight of 2kg to a 22 year old primi mother without consanguinity. The antenatal period was uneventful except for antenatally detected duodenal atresia. On neonatal examination there was aphallia; however, the scrotum was well-developed and the testes were palpable bilaterally. The anus was located normally and the urethral opening was identified on the anterior anal verge. He also had right side upper limb radial ray anomaly and developed spontaneous pneumothorax on day 1. Ultrasound scan abdomen revealed absent left kidney and Right side multicystic dysplastic kidney with gross hydronephrosis which was incompatible with life.

Discussion

Aphallia is characterized by the absence of penis in a baby with 46XY Karyotype. Aphillia should be differentiated from the concealed penis, hypospadias, epispadias, rudimentary penis and intrauterine amputated penis. Aphallia is usually associated with multiple genitourinary malformations with the perineal urethral opening. Other associated malformations include pigeon chest, hemivertebrae, clubfoot, shorten forearms and ear abnormalities.

In the past, these infants underwent gender reassignment surgery with estrogen therapy at puberty, which has resulted male typical shift in psychosexual development. Several authors have advised performing masculinizing surgeries, in order not to disturb the patient and parents psychologically. In conclusion management is very challenging and requires a multidisciplinary team approach.

PP 03 : A RARE CASE OF CONGENITAL HEPATOBLASTOMA COEXISTING WITH PERSISTENT PULMONARY HYPERTENSION OF NEWBORN

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Introduction

Hepatoblastoma is a rare primary malignant tumor commonly affecting children less than 3 years. It is very rare to get congenital hepatoblastoma during the neonatal period and minimal case reports are available on Hepatoblastomas detected antenatally or at birth. Only one reported case is available on Hepatoblastoma coexisting with Persistent Pulmonary Hypertension of Newborn (PPHN).

Case Presentation

A baby boy who had uncomplicated antenatal history was delivered at 36 weeks and four days of gestation via vaginal delivery with a birth weight of 3150 grams. He had a normal APGAR score and developed tachypnea and low saturation. Later baby was found to have PPHN by echocardiogram. The baby was noted to have marked abdominal distension with a palpable mass on the right side. An ultrasound scan of the abdomen was performed and it was suggestive of hepatoblastoma involving the right hepatic lobe. Contrast-enhanced computed tomography of the abdomen and pelvis showed a large hepatic mass lesion in the right lobe of the liver (most likely a hepatoblastoma) without distant organ metastasis and tumor staging was 3PV according to PRETEXT grouping system. The baby was immediately transferred to a tertiary care center with pediatric surgical facilities and a hepatic biopsy was done there. Immunohistochemistry report revealed Hepatoblastoma of embryonal type. Alfa fetoprotein level was above 5000IU/ml. Chemotherapy was initiated and currently, the baby is awaiting surgical resection of the tumor after the completion of chemotherapy cycles. PPHN which was gradually settled, was managed with oral Sildenafil and oxygen therapy.

Conclusion

Though hepatoblastomas can be identified antenatally by imaging, they can be missed and can present during the neonatal period. This baby had significant abdominal distension which led to the detection of the condition soon after birth. Respiratory distress was initially thought to be directly due to a markedly distended abdomen but further investigations revealed PPHN. Therefore, congenital hepatoblastoma is a rare but important cause of abdominal distension in the neonatal period. Even though the mechanism is not certain PPHN can be an important coexisting factor that can affect the prognosis in such conditions.

PP 04 : THREE SIBLINGS WITH CLEFT PALATE AND PIERRE ROBINS SEQUENCE; A CASE REPORT

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Introduction

Pierre Robin Sequence (PRS) includes micrognathia, glossoptosis and airway obstruction with or without cleft palate. Cleft palate and PRS are usually associated with syndromes or other birth defects. There are limited case histories of the siblings with those conditions. Here we present three siblings where one had isolated cleft palate and the other two had isolated PRS.

Case Presentation

A baby boy who had a normal birth weight was delivered at term via elective caesarian section. Mother had Gestational Diabetes Mellitus which was managed with medical nutrition therapy. The baby was found to have a cleft palate involving the soft palate, micrognathia and a large tongue obstructing the airway. As the baby had respiratory distress he was connected to High Flow Nasal Oxygen. He was transferred to a Tertiary Care Center for further surgical management of the airway obstruction and birth defects. The first sibling of this baby had PRS with cleft palate involving the soft palate and the surgical correction was done at the age of ten months. The second child of this family had an isolated cleft palate involving the soft palate which led to feeding difficulties. Surgical correction of that defect was done at the age of one year and eight months. Both these siblings had feeding difficulties due to the above-mentioned defects. The first two siblings had an age gap of five years and three years with the last child. There were no other family members with similar birth defects.

Conclusion

Genetics of PRS associated with other birth defects and syndromes are well-studied and many etiological factors have been understood. However, the etiology of isolated clefts palate or isolated PRS is not well-established yet. Even though the risk of having offspring with these defects in families with cleft palate and PRS is evaluated to some extent, literature of siblings with similar conditions is rare. It is extremely rare to find more than two siblings with the above-mentioned conditions without any syndromic association. This case will be a valuable entity for further evaluation of possible genetic etiology for isolated cleft palate and isolated PRS

PP 05 : THE SURVIVAL STORY OF A NEONATE WITH BRONCHOGENIC DUPLICATION CYST- A CASE REPORT

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Introduction

Congenital pulmonary malformations in children are uncommon but potentially life-threatening. They share similar embryologic and clinical characteristics which can lead to diagnostic dilemma. The bronchogenic cyst belongs to the group of congenital non-vascular lung malformations that results from abnormal budding of the ventral segment of the primitive foregut. Urgent diagnostic work up is crucial and lifesaving.

Case History

A baby boy, the second born to healthy non consanguineous parents with antenatally detected right sided cystic lung lesion at 20 weeks of gestation, was delivered by normal vaginal delivery at 36 weeks of gestation with a birth weight of 2.13kg. Although baby cried at birth, he developed severe respiratory distress within 2 hours of birth requiring ventilator support.

The chest x-ray revealed a large cystic lesion in the right lung crossing the mediastinum. CECT scan of the chest revealed features in favour of infected foregut duplication cyst in the posterior chest with mass effect on both lung field across the midline. The surgical resection of the cyst was done on D27 of life and the histopathological report of the excision biopsy further confirmed the diagnosis. Despite the challenges in mechanical ventilation pre and postoperatively, baby was successfully weaned off from the ventilator and discharged home on day 74 of life.

Discussion

Prenatal diagnosis helped to anticipate problems early in our case and with the help of a multidisciplinary team, we were able to save the baby's life. Early diagnosis and elective surgery can prevent late complications such as local compression, erosion, pneumothorax, pulmonary hypertension and recurrent infections.

The presence of mass effect is an indication for therapeutic decompression. Lobectomy, which is the procedure of choice is well tolerated and leads to excellent outcomes. Resection of these cysts can become surgically challenging due to increased risk of adhesions to surrounding structures. The long-term outcome for infants and children with bronchogenic cysts is excellent because they generally do not require sacrifice of significant normal lung parenchyma. This case highlights the importance of timely diagnosis and surgical resection of congenital lung malformations, even in asymptomatic patients which can lead to favorable outcomes.

PP 06 : EXTENSIVE AND RAPIDLY SPREADING NEONATAL TINEA CORPORIS: A CASE OF CONTACT TRANSMISSION FROM MOTHER WITH TINEA CORPORIS

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Introduction

Tinea corporis, commonly known as ringworm, is a fungal infection that typically affects the hairless areas of the body. While uncommon in newborns, a case is presented here of a neonate who developed extensive and rapidly spreading tinea corporis within 24 hours of contact. This case highlights the possibility of contact-acquired neonatal tinea corporis from a mother with a pre-existing fungal infection.

Case report

A term newborn baby who developed neonatal encephalopathy after birth was transferred to a tertiary care center for further management. Subsequently, the baby was successfully managed as hypoxic ischemic encephalopathy with therapeutic hypothermia and supportive care. Furthermore, 2 weeks of antibiotics coverage was given during NICU stay.

Mother exhibited extensive fungal skin rash spreading over breast area and started treatment with topical and oral antifungals after dermatology opinion. Expressed breast milk was started from day 2 onwards. After one week of antifungal therapy for mother, baby was given for direct breast feeding with preventive measures. However, the baby developed rapidly spreading extensive erythematous, scaly, annular lesions over the body within 24 hours of direct contact. Subsequently, ordered microscopy and culture of the tissue specimens of both mother and baby were positive for tinea corporis. Accordingly, baby was successfully treated with local antifungal (terbinafine) and oral antifungal (fluconazole) therapy.

Conclusion

The prompt diagnosis and antifungal treatment resulted in successful management of the infection. This case underscores the importance of considering maternal health history, particularly regarding fungal infections, to ensure optimal neonatal care. It also highlights the potential for rapid and severe spread of tinea in neonates, necessitating early intervention. Further research may be warranted to explore the optimal strategies for preventing and managing contact-acquired neonatal tinea infections.

PP 07 : A CASE OF UREA CYCLE DISORDER- N- ACETYL GLUTAMATE SYNTHASE DEFICIENCY IN A NEONATE FROM SRI LANKA

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Introduction

The Urea cycle is the main pathway for the removal of excess nitrogen in the human body which consists of 6 main enzymes and an essential allosteric cofactor named *N*-Acetylglutamate (NAG). Deficiency of any of these enzymes or the cofactor will result in a group of genetic disorders named urea cycle defects (UCD). The global incidence of urea cycle disorders is about 1:35000 and NAGS deficiency accounts only for 0.5-1% making it the rarest UCD

In this report we will describe a case of a neonate, who presented with hyperammonemia and encephalopathy which was later diagnosed as NAGS deficiency.

Case report

A baby girl was born at term to healthy second-degree consanguineous parents via an elective lower segment cesarean section (LSCS) due to lack of progression in labor, with a birth weight of 3.050 kg. The baby was depressed at birth with APGAR scores of 6 at 5 minutes and 7 at 10 minutes. She required resuscitation and intubation immediately after birth. Initially, the baby was placed on ventilator support, which was gradually weaned off to nasal prongs by the third day of life as her condition improved.

Enteral feeding with breast milk started on day one, reaching full feeds by day two. On day four, the baby deteriorated with progressive lethargy, worsening tachypnea, tachycardia, prolonged capillary refill time, hypotension, and convulsions, requiring reintubation. Septic screening was negative, and blood sugar was normal. High serum ammonia (1667 $\mu\text{mol/L}$) and respiratory alkalosis indicated a suspected urea cycle disorder. Breast milk was discontinued, and the baby received IV dextrose, lipids, antibiotics, inotropic support, anticonvulsants, oral sodium benzoate, and a double volume exchange transfusion due to unavailability of other hyperammonemia treatments in Sri Lanka.

Despite intensive care, the baby developed convulsions and circulatory collapse, succumbing on day eight. Whole exome sequencing confirmed *N*-acetylglutamate synthase deficiency due to a homozygous 3-base pair deletion in exon 5 of the NAGS gene.

Conclusion

In summary, this case highlights challenges in diagnosing and managing rare genetic disorders like urea cycle disorders in neonates, especially in settings with limited treatment options.

PP 08 : A CASE OF EVOLVING BRONCHIOLITIS OBLITERANS IN A NEONATE FOLLOWING RESPIRATORY TRACT INFECTION

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Introduction

Bronchiolitis obliterans is a rare form of chronic obstructive pulmonary disease that follows severe insult to the lower respiratory tract, resulting in fibrosis of the small airways. While several cases of post-infectious bronchiolitis obliterans have been reported in pediatric patients, cases in neonates are minimal. Here, we report a case of a neonate who was managed for evolving bronchiolitis obliterans following a lower respiratory tract infection.

Case Report

A term baby was born to a 33-year-old primi gravida mother via elective cesarean section following an unremarkable antenatal period with a birth weight of 2.660 kg. On the first day of life, the baby developed severe respiratory distress, necessitating admission to the Special Care Baby Unit for mechanical ventilation. The baby was initially managed for congenital pneumonia, but involvement in different lung fields was noted radiographically during the course, despite negative septic markers throughout. Baby was also negative for Covid - 19, influenza and tuberculosis. An echocardiogram revealed a small atrial septal defect. Several extubation attempts failed, leading to worsening respiratory distress. Subsequently, the baby developed a cough and audible crepitations on auscultation.

Given the clinical course, a high-resolution computed tomography (HRCT) scan of the chest was performed, revealing bilateral scarring and mosaicism. Evolving bronchiolitis obliterans was suspected, and the infant was started on oral prednisolone. The baby showed significant improvement with this treatment and was successfully extubated on day 19. Management also included inhaled beclomethasone, ipratropium, and oral azithromycin. The baby was later discharged from the neonatal unit with inhalers and oral azithromycin.

Conclusion

Bronchiolitis obliterans in neonates presents diagnostic and therapeutic challenges. Early recognition and aggressive management are crucial to prevent permanent lung damage.

PP 09 : CONGENITAL PULMONARY AIRWAY MALFORMATION PRESENTING AS RECURRENT PNEUMOTHORACES IN PRETERM NEONATE

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Introduction

Congenital Pulmonary Airway Malformation (CPAM) which was previously known as Congenital Cystic Adenomatous Malformations (CCAMs) are a heterogeneous group of cystic and non-cystic lung lesions which results from early airway maldevelopment. There are five types of congenital pulmonary airway malformation (CPAM), which are categorized based on the size and structure of the cysts or abnormal lung tissue.

Case Presentation

An extreme preterm baby girl was born at 28 weeks of gestation with an extreme low birth weight of 600 grams to a 28-year-old primi mother without any antenatal complications. She was born by an emergency caesarean section due to absent liquor and absent end diastolic flow. Baby cried at birth and required only Positive end expiratory pressure support. Her APGAR score was 7 at 1 minute, 9 at 5 minutes and 10 at 10 minutes. Baby subsequently developed respiratory distress and needed mechanical ventilation and single dose of surfactant on Day 1. On Day 10 right sided pneumothorax was detected requiring Intercostal tube drainage. Despite volume guaranteed mechanical ventilation, baby experienced recurrent bilateral pneumothoraces requiring multiple IC tube drainages. A Contrast-Enhanced Computed tomography scan on day 22 revealed type 1 CPAM of bilateral lower lobes. Baby was successfully weaned off from ventilator by day 24 and received a course of oral steroids from day 30. Non-invasive mechanical ventilation continued till 64 days followed by 2 days of CPAP support before being placed on room air. Since the baby was asymptomatic, a conservative approach was employed with continuous follow-up.

Conclusion

It is important to consider the possibility of congenital pulmonary airway malformation (CPAM) in preterm infants presenting with recurrent pneumothoraces, even when antenatal scans appear normal. Clinical suspicion in these instances is important as CPAM can be treated successfully through surgical interventions, including fetal and postnatal surgeries.

PP 10 : AUDIT ON GOLDEN HOUR BUNDLE ACTIVITIES ON NEONATES DELIVERED \geq 34 WEEKS OF GESTATIONAL AGE WITHOUT COMPLICATIONS AT CSHW

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Introduction

The "Golden hour" concept includes practicing all the evidence based intervention for term and preterm neonates, in the initial sixty minutes of postnatal life for better long-term and short-term outcomes. **The Golden Hour Bundle for a term newborn without complications** are composed of delivery room preparation, delayed cord clamping, maintaining thermoregulation, and the initiation of early breast feeding.

Objectives

To reduce number of babies sending to observation by improving practice on Golden Hour Bundle Activities on neonates delivered \geq 34 weeks of gestational age without complications.

Method

This Audit was conducted during the month of November 2023 and implementations were done at different stages. Data were collected weekly using an audit form and register maintained at the observational unit at Special Care Baby Unit. Pre audit data were collected by tracing BHTs from the record room.

The barriers to practice some of golden hour activities were identified during root cause analysis as lack of awareness of staff regarding golden hour bundle policies, lack of staff, difficulties in mothers, lack of awareness of mothers, not having strict guidelines on maintaining Golden Hour Policies.

Changes were tested as PDSA cycles.

- Awareness programs and counselling the staff and the mothers
- Introduction of a user friendly binder & distributed to labour rooms through the CSSD of the hospital as required since 2nd week of November

Results

Number of deliveries during the 1st week of November were 167 and 34 (20%) babies were sent for observation. Number of deliveries during the last week of November were 144 and 19(13%) babies were sent for observation. Total of 643 deliveries at CSHW during the month of November and from that 107 babies were sent for observation. 45% of them were sent to postnatal ward following 2 hours of observation at SCBU

Conclusion

We were able to reduce the number of babies sending to observation unit from 20% to 13%_within 4 weeks from 1st of November to 28th of November 2023

PP 11 : POLAND SYNDROME IN A NEONATE PRESENTING WITH A LUMBO-SACRAL MENINGOMYELOCELE

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Introduction

Neonatal meningomyelocele is a congenital neural tube defect characterized by the protrusion of the meninges and spinal cord through a vertebral column defect. This condition often presents with various musculoskeletal and neurological abnormalities. Additionally, Poland syndrome, a rare congenital anomaly involving the absence or underdevelopment of the Pectoralis major muscle on one side of the body and sometimes webbing of the fingers and rib abnormalities, can further complicate the clinical presentation.

Objectives

This case report aims to describe the rare occurrence of Poland syndrome together with a ruptured meningomyelocele and different aspects of interdisciplinary management.

Method

A term baby girl was born to a 28-year-old healthy primigravida who had an uncomplicated antenatal history and proper follow-up, having been on folic acid since the preconceptional period. The baby was born via an EM/LSCS due to delayed progression of labour and foetal distress, where resuscitation at birth was not required.

Results

Upon delivery, the baby was noted with a ruptured meningomyelocele in the lumbo-sacral region with hip, knee, and ankle joint contractures along with abnormally positioned B/L great toes. Further examination revealed an underdeveloped pectoralis major muscle on the right side with associated rib anomalies. NCCT & USS brain showed evidence of hydrocephalus. Meningomyelocele repair surgery was done on D3. Her OFC was rising rapidly, where a ventricular tap was done on postoperative D5, and IV antibiotics were continued for up to 21 days. Baby had developmental dysplasia of hips bilaterally, where orthopedic opinion was sought. Neurology follow-up was continued, and limb physiotherapy was arranged for lower limb contractures.

CXR revealed rib and vertebral anomalies. A cleft in the R/Axilla with underdeveloped R/Chest, was clinically suggestive of Poland syndrome. There was no respiratory distress throughout the hospital stay, and a normal echocardiogram excluded cardiac pathologies.

Conclusions

This case underscores the importance of early diagnosis, interdisciplinary care, and vigilant follow-up to address the diverse clinical needs and potential complications associated with conditions like meningomyelocele and Poland syndrome. The coordination among pediatric orthopedic, neurosurgical, and neurological teams is essential to provide holistic care and optimize long-term prognoses for affected neonates.

PP 12 : BEYOND COMFORT: ENHANCING NEONATAL CARE THROUGH COMPREHENSIVE PAIN MANAGEMENT STRATEGIES

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Introduction

Newborns in Neonatal Intensive Care Units (NICUs) often undergo painful procedures without adequate pain management, leading to both immediate and long-term consequences. Recognizing the importance of addressing neonatal pain, we conducted an audit at NICU-Teaching Hospital Mahamodara to implement the modified Pain Assessment Tool (mPAT) pain assessment tool and interventions for pain management depending on the score.

Objective

This audit aimed to emphasize pain as a vital sign and implement mPAT as a validated pain assessment tool at NICU-Teaching Hospital Mahamodara. We sought to involve NICU staff in interpreting pain scores, strengthening pain management strategies, and implementing effective pain management during care.

Methods

After introductory sessions on the mPAT score, NICU staff documented pain management strategies using the mPAT score and data sheets. Scores were given to neonates during their stay and procedures, with pain management discussed with medical officers as needed. At the end of one month, nurses' perspectives were assessed using a questionnaire to identify practical problems encountered during implementation.

Results

Pain assessment during NICU stay showed 84% of neonates having a score <5, manageable by non-pharmacological methods, while 16% needed combination management. Overall compliance with pain management strategies was 90%. Pain assessment during procedures had only 40% compliance, with severe pain most often perceived during cannulation and blood drawing. Pain monitoring was conducted once per nursing shift in only 14% of cases, with 56% carried out once daily. A survey of nursing staff revealed that 92% wished to incorporate mPAT into their routine assessments. The main concerns noted were time constraints and a lack of knowledge about non-pharmacological methods, with 78% of nurses expressing doubts about involving parents during painful procedures.

Conclusion

NICU staff must be well-trained to identify pain and interpret the mPAT scale correctly. Appropriate interventions should be taken based on the scores and identified painful procedures. Ensuring staff training and parents' involvement during care can significantly improve pain management outcomes for neonates, benefiting both short-term and long-term health outcomes.

PP 13 : CONGENITAL DERMOID CYST OF THE TONGUE IN A NEONATE

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Introduction

Congenital dermoid cysts are subcutaneous lump which arise along the embryonic fusion lines on the face, scalp and spine. It contains epidermal and dermal tissue. Dermoid cysts of the oral cavity are rare with an incidence of 1.6% of all dermoid cysts with cysts on the mouth representing 0.01%. Complications include infection, swallowing dysfunction, airway obstruction and malignant transformation. This case report describes a congenital dermoid cyst of the tongue.

Clinical Presentation

We describe a baby girl without any antenatal concerns delivered via vaginal delivery at 38 weeks with a birth weight of 2.96 kg. The most striking feature noted on examination was a large mass arising from the tongue and floor of the mouth. There was no respiratory distress but baby was admitted to the special baby care unit for further evaluation.

Ultrasound scan of the neck and floor of the mouth revealed a possible congenital dermoid cyst which was 3 x 2.6 cm in size. This unilocular thin wall cyst was filled with echogenic material. It was along the anterior and inferior aspect of the tongue extending in to the floor of the mouth. No vascularity noted. Thyroid gland appear normal in size and position.

Swallowing assessment revealed poor sucking with poor coordination in swallowing and planned for nasogastric feeding till surgical intervention was done. Baby was referred to the oro-maxillary-facial surgical team and interval surgery was planned once the baby was one month of age. Surgery was successful with a histological diagnosis of a congenital dermoid cyst.

Conclusion

Surgical excision of the dermoid cysts of the tongue does not restore the function of the tongue muscle immediately. After surgery, myofunctional therapy with specific exercise to the tongue is needed to restore the normal functioning of the tongue.

PP 14 : TWO RARE CASES OF CONGENITAL SURFACTANT DEFICIENCY IN NEONATES

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Introduction

Genetic surfactant dysfunction disorders are caused by mutations in genes encoding proteins critical for the production and function of pulmonary surfactant. These rare disorders produce variety of familial or sporadic lung diseases. Clinical presentation ranges from neonatal respiratory failure to childhood or adult-onset interstitial lung disease. Mutations in the genes encoding surfactant protein B (SP-B) and member A3 of the ATP-binding cassette (ABCA3) family of membrane transporters causes failure in surfactant metabolism. We describe two patients who had histologically confirmed congenital surfactant deficiency.

Clinical history

Case 1

A baby girl was delivered at term with a birth weight of 2600g to non-consanguineous healthy parents. There was a history of an early neonatal death in the family.

Since birth, baby had severe respiratory distress with white out lung fields on the chest x-ray and needed invasive ventilatory support. Three doses of surfactant were also given at regular intervals to improve the pulmonary function.

Transient clinical improvement was noted with each surfactant dose. However due to worsening of the clinical condition, baby was escalated to high frequency oscillatory ventilation (HFOV) by day 3 of life. Despite optimal ventilatory support, baby passed away on day 3 of life. Pathological postmortem was requested to exclude the possibility of a congenital surfactant deficiency.

Case 2

A term baby boy was delivered via a vaginal delivery to a primi mother with a birth weight of 2.73kg to third degree consanguineous healthy parents. This baby also had a similar clinical presentation as the previous case.

High-resolution computerized tomography (HRCT) of chest revealed reduced lung volume with diffuse ground glass opacities suggestive of possible surfactant deficiency. Computed tomography guided lung biopsy was done. The baby expired on day 22 of life despite optimal management.

In both babies, histopathology revealed poorly developed alveolar spaces with atelectasis and absence of type 2 pneumocytes suggestive of congenital surfactant deficiency.

Conclusion

Definitive treatment is lung transplantation. Exogenous surfactant therapy provides transient improvement in lung function. Genetic counselling plays an important role with regard to future pregnancies.

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Introduction

Refeeding Syndrome (RS) can occur when nutrition is restarted after a period of starvation or malnutrition. Although most reports of RS involve pediatric and adult populations, recent literature highlights a syndrome in neonates characterized by similar metabolic alterations. It can be challenging to distinguish from complications of preterm birth. This is characterized by low levels of phosphorus, potassium, and magnesium, as well as changes in glucose, protein, and fat metabolism. It's more common in intrauterine growth-restricted (IUGR) infants due to placental insufficiency, resulting in chronic malnourishment and reduced muscle mass, glycogen stores, and adipose tissue. Additionally, the active transfer of potassium and phosphorus across the placenta may also be limited. Premature infants with IUGR may experience similar effects due to their shortened gestation.

Case Presentation

A baby girl was admitted to the Neonatal Intensive Care Unit due to extreme prematurity (28 weeks and 5 days) and very low birth weight (960 grams). She was treated for possible necrotizing enterocolitis. With the establishment of enteral feeds following a period of fasting baby experienced low levels of potassium, phosphate, and magnesium. Clitoromegaly and elevated 17-hydroxyprogesterone also raised a concern about congenital adrenal hyperplasia but the normal serum sodium level, low potassium, absence of excessive urination, metabolic acidosis, and hypoglycaemia contradicted this. This clitoromegaly can be explained in prematurity as well. The child received treatment with potassium, phosphate, and magnesium supplementation, and the electrolyte imbalance was corrected. Despite the normalization of serum potassium and magnesium levels, persistently low phosphate levels with high alkaline phosphatase indicate the co-existence of osteopenia of prematurity.

Conclusions

The American Society for Parenteral and Enteral Nutrition has provided recommendations for preventing and managing refeeding syndrome in children and adults, but specific recommendations for newborns are not available yet. Proposed general principles in the literature are identify patients at risk, monitor electrolytes closely, be cautious with parenteral nutrition advancements, institute nutrition interventions before considering IV electrolyte repletion, initiate enteral feeds as soon as possible with consideration of early fortification and/or consider enteral repletion of phosphorous and potassium based on risk versus benefit of individual patient.

PP 16 : AUDIT ON KNOWLEDGE REGARDING BREASTFEEDING AMONG STAFF INVOLVED IN NEWBORN CARE.

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Introduction

Breast milk is the ideal food which is tailor-made to suit the requirements of the human baby. Breastfeeding promotes healthy brain development and is essential to preventing burden of malnutrition, infectious diseases, and mortality. Furthermore, it reduces the risk of obesity and chronic diseases in later life in low-income and high income countries.

Objective

To assess the knowledge of nursing and midwifery staffs involved in newborn care regarding advantages, breast feeding technique, and feeding during illnesses.

Method

A prospective audit was conducted in the neonatal unit and postnatal ward of DGH Nuwara Eliya. The study included all nursing staff and midwifery staff involved in neonatal care. An interviewer- administered questionnaire, developed based on national guidelines for breast feeding, was used to collect data. The questionnaire assessed knowledge on advantages of breast feeding to the baby and mother, initiation and timing of breast-feeding, breast-feeding technique and feeding during illnesses. Permission to conduct the audit was obtained from the head of the institution.

Results

A total of 50 Nursing officers and midwives from neonatal unit and postnatal ward participated in the study. Overall, 20% of the midwife staff and 5% of nurses scored excellent marks, 70% of midwife staff and 80% of nursing staff scored very satisfactory marks, and 10% of midwife staff and 15% of nursing staff scored satisfactory marks.

Out of the above results, 90% of midwife staff and 85% of nursing staff has a good knowledge about advantages of breast feeding to the baby as well as mother. 97% of midwife staff and 95% of nursing staff has a good knowledge about initiation /timing of breast feeding. 85% of midwife staff and 70% of nursing staff has a good knowledge about hunger cues. 95% of midwife staff and 90% of nursing staff has a good knowledge about frequency & duration of breast feeding. 85% of midwife staff and 60% of nursing staff has a good knowledge about breast feeding techniques. 80% of midwife staff and 85% of nursing staff has a good knowledge about feeding during an illness.

Conclusion

The study identified that although most of the nursing and midwife staffs has very satisfactory to satisfactory knowledge regarding different aspects of breast feeding, only minority had comprehensive knowledge.

PP 17 : BURDEN OF NEONATAL MORBIDITY AND MORTALITY IN A TERTIARY CARE CENTRE OVER A 5 YEAR PERIOD

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Introduction

Reducing neonatal mortality is an essential part of the third Sustainable Development Goal (SDG), to end preventable child deaths. Sri Lanka is an exception to the neighbors in the region, but neonatal mortality rate has declined at slower pace after achieving Millennium Developmental Goals. Therefore, analysis of neonatal deaths in remote regions of the country is essential to strengthen healthcare facilities in view of achieving SDGs.

Objective: To evaluate the trends, causes and maturity of neonatal deaths and to evaluate the causes of admissions to special care baby unit (SCBU) from 2019 to 2023 in a tertiary care center in Central Province in Sri Lanka.

Method

All neonatal deaths occurred at DGH Nuwara Eliya and all the admissions to SCBU of DGH NuwaraEliya from 2019 January to 2023 December are included in the analysis.

Results: The total number of neonatal deaths during the study period was 171. The leading causes of deaths were, extreme prematurity (30.70%), congenital malformations (25%), septicemia (20.4%), birth asphyxia (13.33%) and meconium aspiration syndrome (MAS) (3.93%). Neonatal mortality rate has increased over the past 5 years, been highest in 2023 (12.55), followed by 2022 (9.61) 2021(9.40), 2020(6.59) and lowest in 2019(6.20). The gestational age specific mortality showed, 100 % mortality among those born before 24 weeks of gestation. Furthermore, 84%, 72%, 26.2%, 25.5%, 25%, 16.3%, and 12% mortality were noted at 26 weeks, 25 weeks, 29 weeks, 28 weeks, 27 weeks, 30 and 31 weeks of POA respectively.

Total number of admissions to SCBU during these 5 years was 1851. Out of them, highest number of admissions were due to low birth weight (33%) and prematurity (28%). Sepsis (15%) was the next leading cause and congenital abnormalities (5%), birth asphyxia (4%), MAS (3%) hypoglycemia, were some other causes.

Conclusions

Neonatal deaths due to extreme prematurity and perinatal asphyxia has been increased over the past 5 years and deaths due to septicemia and MAS has been gradually declined over the past 5 years. Highest number of deaths were due to extreme prematurity and septicemia. Neonatal mortality rate on average has been increased over the past 5 years with the highest average neonatal mortality rate showing in 2023 (12.55)Low birth weight (33%) and prematurity (28%) has caused the highest burden of total admissions to SCBU while sepsis (15%) contributed as the second leading cause.

PP 18 : AUDIT ON HAND HYGEINE KNOWLEDGE OF HEATH CARE STAFF AT A TERTIARY CARE OBSTETRICS WARD

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Introduction

There was observation that the rate of neonatal infection has risen over the past few months in Professorial Obstetrics ward at Colombo North Teaching Hospital. It was well proven that good hand hygiene practices are associated with less health care associated infections.

Objective

Assessment of knowledge on hand hygiene of Obstetrics staff members

Method

Hand Hygiene Knowledge Questionnaire for Health-Care Workers published by world health organisation (WHO) was used as audit tool to assess knowledge of health care staff members who are working at Professorial Obstetrics Unit of Colombo North Teaching Hospital Ragama.

Results

There were 25 participants and 4 medical officers, 11 nursing officers, 2 midwives and 8 medical students were among them. Among them 72% of participants had a formal training on hand hygiene within past 3 years and 84% were using alcohol hand rub routinely.

Everyone agreed that main route of cross transmission of potentially harmful germs between patients is health care worker's hand and minority (16%) of them identified that the germs already present on or within patient is the most frequent source of health care associated infection.

Majority of participants identified that hand hygiene actions before touching a patient (96%) and immediately before clean/aseptic procedure (92%) will prevent transmission of germs to patient. The hand hygiene actions after touching a patient, immediately after a risk of body fluid exposure and exposure to immediate surroundings of patients were identified as preventers of transmitting germs to health care worker by 96%, 100% and 92% of the participants respectively.

Only 60% identified that hand rubbing is quicker than handwashing for hand cleansing and only 4% commented that hand rubbing is more effective against germs. Majority were in wrong impression that hand rubbing cause more skin dryness and hand washing and rubbing recommended to be done in sequence. Majority of participants (76%) knew that alcohol based handrub will minimally take 20 seconds to kill most germs on hand.

Majority were not acknowledged to choose between hand rubbing and washing depending on situation. Over 90% of participants agreed that avoiding wearing jewellery, damaged skin and artificial fingernails will minimise colonisation of hands with germs.

Conclusion

There is a gap of hand hygiene knowledge among health care staff which need to be filled.

PP 19 : UNDERSTANDING AND IMPROVING NEONATAL HYPOGLYCEMIA MANAGEMENT: INSIGHTS FROM A HOSPITAL-BASED AUDIT

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Introduction

Neonatal hypoglycemia, defined as blood glucose levels in newborns, less than 45mg/dl (2.6mmol/L) is a common metabolic condition that, if not promptly identified and managed, can result in significant morbidity. Early identification and intervention for at risk babies are crucial in preventing adverse outcomes and ensuring the well-being of the newborn. Understanding the current level of knowledge and identifying areas for improvement among medical and nursing staff is essential to enhance the quality of neonatal care.

Objective

To assess the knowledge of medical and nursing staff regarding the detection, diagnosis, and management of neonatal hypoglycemia in a hospital setting.

Method

A prospective audit was conducted in the neonatal unit and postnatal ward of DGH Nuwara Eliya. The study included all medical and nursing staff involved in neonatal care. A self-administered questionnaire, developed based on national guidelines for neonatal hypoglycemia, was used to collect data on various aspects of the condition. The questionnaire assessed knowledge in four key areas: understanding of hypoglycemia (operational threshold, infants at risk of hypoglycaemia), identification of symptoms, diagnosis, and management practices of different clinical scenarios. Permission to conduct the audit was obtained from the head of the institution and informed consent was obtained from all the participants.

Results

A total of 40 healthcare professionals participated in the study, comprising 20 doctors and 20 nursing officers. The findings revealed differences in knowledge and practices between the two groups. Regarding knowledge of hypoglycemia, 70% of doctors demonstrated good knowledge compared to 40% of nurses, with an additional 20% of nurses having satisfactory knowledge and 40% having poor knowledge. In identifying the symptoms of hypoglycemia, all doctors were proficient, while 75% of nurses could accurately identify the symptoms. When it came to diagnosing hypoglycemia, 80% of doctors were able to diagnose the condition accurately, compared to 65% of nurses. In terms of management practices, 50% of doctors had good practices and the other 50% had satisfactory practices, whereas 65% of nurses were satisfactory in managing hypoglycemia, 30% demonstrated good practice, and 5% had poor practice.

Conclusion

The study identified that although the majority of the healthcare staff demonstrated good to satisfactory knowledge regarding neonatal hypoglycemia, significant gaps exist in management practices and understanding the underlying causes.

PP 20 : STUDY OF NEONATES WITH BILIOUS VOMITING DUE TO CONGENITAL ANATOMICAL ABNORMALITIES MANAGED AT A TERTIARY CARE REFERRAL HOSPITAL: ANALYSIS OF MODE OF DIAGNOSIS, PATHOLOGY, CORRECTIVE SURGERY AND OUTCOME

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Introduction

Bilious nasogastric aspiration in neonates is a salient clinical evidence of congenital intestinal obstruction. Causative pathologies include: duodenal atresia, jejuno-ileal obstruction and malrotation of midgut. Timely diagnosis, resuscitation, surgical reconstruction and post-operative care prevent gut ischaemia, perforation and shock resulting in death. International research analysing above data of neonates with bilious vomiting is rare. None from Sri Lanka is available. This ongoing research at Colombo North Teaching Hospital Ragama commenced 2022.07.01 would be conducted over 30 months to enable comparison with other international studies. All neonates were managed at the two hospital SCBUs by one paediatric surgeon and two consultant neonatologists in-charge. Input from hospital obstetricians on positive antenatal screenings and discussions with radiologists facilitated diagnosis.

Objectives

1. Education of stakeholders (neonatal, obstetric and health-policymakers) on interpretation of clinical and radiological evidence, resuscitation, surgical reconstruction and post-operative management intending to prevent complications.
2. On publication of research, make data available to future national and international researches and study groups to enhance knowledge.

Methodology

Data was collected from first author's personnel operations log book.
Study period: 2022.07.01-2024.06.30

Results

Twelve neonates with bilious vomiting were managed over two years. Analysis: 3 malrotations of midgut, 6 duodenal atresias, 1 jejunal atresia, 1 jejunal stenosis, 1 ileal atresia. >75% were preterm LBW babies. During diagnosis all had x-ray abdomen. Jejunal stenosis and malrotation of midgut underwent standard upper GI contrast studies. Antenatal screening identified 3 with bowel dilatation. Eleven neonates underwent standard surgical reconstructions. One with duodenal atresia and severe congenital anomalies expired. Surgeries included: duodeno-duodenostomy, tapering jejuno-jejunostomy, tapering ileo-ileostomy and Ladd's procedure in malrotation of midgut. All 3 with malrotations, 2 duodenal atresias, and 1 ileal atresia went home. Three preterm LBW with reconstructed duodenal atresias (one syndromic) succumbed to sepsis after post-operative day 5. Two with jejunal pathologies expired 1 month later due to sepsis and cardiac pathologies.

Conclusion

Standard diagnostic techniques and surgical reconstructions were practised in managing 12 neonates with bilious NG aspirates during two year study period. Sepsis was the major risk factor affecting premature and LBW surgical neonates. Teamwork of permanent members of paediatric surgical, neonatal, radiological and obstetric units enhanced final outcome of surgical neonates.

PP 21 : REDUCING THE LENGTH OF HOSPITAL STAY OF BABIES DUE TO FEEDING PROBLEMS IN POSTNATAL WARDS AT CASTLE STREET HOSPITAL FOR WOMEN: A QUALITY IMPROVEMENT INITIATIVE

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Introduction

Breastfeeding is a crucial, low-cost intervention for reducing global child morbidity and mortality, endorsed by programs like the & “Baby Friendly hospitals initiative”, launched by WHO and UNICEF.

CSHW is a premier maternity hospital in Sri Lanka. We identified that 24% of newborns in the postnatal wards of this hospital, particularly Ward 2 (66%), experienced extended hospital stays due to breastfeeding difficulties. A Point of Care Quality Improvement (POCQI) project was initiated to address this issue.

Objectives

This study aimed to reduce the percentage of babies staying >3 days due to breastfeeding problems in Ward 2, CSHW from 66% to 20% over a period of four weeks, without altering the discharge criteria.

Method

A multidisciplinary team was formed. A root-cause analysis was performed using a fish bone diagram. The implementation of Plan-Do-Study-Act cycles involved daily educational sessions using visual aids, introduction of a breast-feeding assessment tool, and timely referral to the Lactation Management Center.

Results

Over the study period, 196 newborns were admitted. The percentage of neonates staying >3 days due to breastfeeding problems decreased to 16%, achieving the target.

Conclusions

Lack of timely support on correct breastfeeding was identified as a primary barrier. Simple changes in practice using QI methods could yield remarkable improvement in outcome. The success of this study prompts the extension of these interventions to other wards at CSHW, aiming to implement hospital-wide policies to reduce prolonged stays due to breastfeeding issues from 24% to 5% within another 4 weeks.

PP 22 : A SUCCESSFUL OUTCOME WITH A TRIAL OF STEROIDS IN A CASE OF SEVERE PERSISTENT PULMONARY HYPERTENSION AND REFRACTORY CHEMICAL PNEUMONITIS FOLLOWING MECONIUM ASPIRATION SYNDROME IN A NEONATE.

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Introduction

Meconium Aspiration Syndrome (MAS) is defined as respiratory distress in newborns born through Meconium-stained Amniotic Fluid (MSAF) whose symptoms cannot be explained otherwise. Severity can be of varying degrees ranging from mild respiratory distress to life threatening respiratory failure.

Case Report

We describe a term baby boy (2.6 kg) who was transferred to our unit for further management of severe MAS needing invasive ventilation from a peripheral unit.

Surfactant was administered but ventilation was escalated to High Frequency Oscillation Ventilation (HFOV) along with inhaled Nitric oxide (iNO) due to severe hypoxemia caused by severe Persistent Pulmonary Hypertension (PPHN) which was evident on echocardiography.

However, baby's condition deteriorated as a result of worsening of hypoxemia with an oxygenation index varying from 40-50 persistently with the highest value reaching 62. Additionally, severely impaired ventilation with carbon dioxide retention despite maximum HFOV settings (amplitude 70 and frequency 7) due to severe chemical pneumonitis and PPHN was present. Nevertheless, baby's preductal saturation was always maintained above 85%.

General supportive measures were adhered to. Baby needed multiple inotropic support, including inodilator (Milrinone) due to biventricular dysfunction. Baby's ventilation progressively worsened due to the ongoing severe chemical pneumonitis. Even though there is no clear evidence for steroids in this condition, decision was made for a trial of systemic and inhaled steroids. This was the turning point at which there was a gradual improvement in the ventilation.

Gradually, baby was weaned off from HFOV, iNO and ino-tropes. Sildenafil was used as bridging therapy as iNO was used for 7 days duration. Steroids were tapered off gradually.

Chronic Lung Disease (CLD) was established as baby was oxygen dependent and required CLD management strategies. Baby was weaned off from oxygen on day 60 of life. Neurodevelopment is normal with normal vision and hearing. Baby was referred for paediatric pulmonology follow up.

Discussion

The overall outcome of MAS has improved with advances in neonatal care. Even though there is not much evidence for steroids reducing mortality in MAS, this patient proved to be otherwise. Further trials are needed to establish the efficacy of steroids in severe complicated MAS.

PP 23 : ENHANCING WOMEN'S SATISFACTION: NURSING CARE DURING INTRAPARTUM AT A LEADING STATE HOSPITAL IN SRI LANKA

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Introduction

Nursing care plays a major role in shaping women's satisfaction in maternity care. The intrapartum period is a critical phase in women's lives that requires dedicated and compassionate care. Hence, evaluating the quality of nursing care and identifying key factors influencing women's satisfaction is essential for enhancing maternal health services and improving their experiences during childbirth.

Objectives

The study aimed to assess maternal satisfaction with nursing care during the intrapartum period among postnatal mothers.

Methods

A descriptive cross-sectional study was conducted among 228 postnatal mothers in Castle Street Hospital for Women in Sri Lanka. Data were collected using simple random sampling utilizing a researcher-developed self-administered questionnaire consisting of 10 items with a five-point Likert scale. The internal consistency of the questionnaire was assessed ($\alpha = 0.927$). Higher scores on the scale preferred higher satisfaction (> 70%), moderate satisfaction (40%-70%), and dissatisfaction (< 40%). Data were analyzed using SPSS version 25. The study was ethically approved by the KIU, Sri Lanka (KIU_ERC_24_090).

Results

A majority (n=119, 85%) belonged to the 26-35 years category and 90% (n=205) were married. Ninety percent (n=204) expressed higher satisfaction, 10% (n=24) expressed dissatisfaction while none reported moderate satisfaction toward nursing care during intrapartum care. Moreover, 74% (n=169) agreed that they received adequate emotional support and nurses addressed their physical discomfort and pain management effectively. Significantly, 94.4% (n=215) conveyed that nursing care impacted their self-esteem positively. However, 44.7% (n=102) of women expressed that they did not feel they were well-informed and involved in the decision-making process regarding intrapartum care.

Conclusions

The study revealed a higher level of overall maternal satisfaction with nursing care during the intrapartum period. However, the study also identified a gap in communication and involvement in the decision-making process. Enhancing communication through training nurses in effective communication skills, developing standardized protocols for information sharing and introducing regular feedback mechanisms are recommended.

Keywords

satisfaction, nursing care, intrapartum

PP 24 : SUCCESSFUL OUTCOME OF PREGNANCY COMPLICATED WITH MYELOPROLIFERATIVE NEOPLASIA (MPN)

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Introduction and Objective

Pregnancy in the background of MPN is associated with case-specific maternal and fetal consequences. Fetal losses, Pre-eclampsia, eclampsia, intrauterine growth restriction, and abnormal placental growth are some of them. Evidence of increased risk of thrombosis will persist after 1 year of post-partum. Current literature focuses on essential thrombocytosis, overlapping conditions, and myelofibrosis, which are poorly studied. Herein we share our own experience.

Case

32 years old, diagnosed patient with triple-negative biopsy-proven essential thrombocytosis and preproliferative myelofibrosis (PMF) presented with an unplanned pregnancy while on hydroxyurea and allopurinol at period of amenorrhea (POA) of seven weeks with a platelet level of 1035×10^6 . Multi-disciplinary management (MDT) by consultant obstetrician, fetal medicine specialist, cardiologist, hematologist, oncologist, anesthetist, and routine fetal evaluation was performed during the pregnancy. The first trimester was treated with aspirin while the second and third trimesters were treated with enoxaparin platelet count was around 800×10^6 . MDT decision was to induce at 38 weeks of POA with a Foley catheter and monitor the platelet count every 2 weeks. Although the MDT plan was continued she underwent a successful emergency caesarian section due to lack of progression and fetal distress. Surgery was uneventful and a baby boy of 2.560kg with an estimated blood loss was 500 ml. The postpartum period was complicated with a post-spinal puncture headache, confirmed by a neurologist following a CT, and platelet was rising from $411 - 582 \times 10^6$ within one day at post op day 2. Hence hydroxyurea was restarted and enoxaparin SC injections until 6 weeks of pregnancy. She was offered a levonorgestrel implant as a contraceptive method.

Discussion

Successful management of a pregnant patient with MPN is challenging and young women with PMF made it more complicated due to lack of literature. Aspirin plays a major role in reducing the risk of fetal loss; with rates of 27% to 60% with or without aspirin.

Conclusion

Frequent monitoring and optimum treatment can avoid most of the complications. Further studies should be carried out to decide the mode of delivery and management of PMF.

PP 25 : BINDER SYNDROME - A RARE CONDITION ASSOCIATED WITH MATERNAL MIXED CONNECTIVE TISSUE DISORDER

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Introduction

Binder type nasomaxillary dysplasia first described in 1882, is a clinical diagnosis characterized by abnormal midface development, resulting in a flattened midface, underdeveloped or absent frontal sinuses, a short nose, a flattened bridge of the nose, abnormal positioning of nasal bones and underdevelopment of the upper jaw. It is associated with spine malformations, hearing impairment, cleft palate, misaligned eyes, congenital heart defects, and mild intellectual disability. Many cases have been found to occur sporadically although multiple family members being affected has been reported rarely. It has been found to be associated with birth trauma, warfarin embryopathy, maternal phenytoin use, maternal rubella, maternal autoimmune disease and maternal anticoagulation.

Case report

A 34-year-old mother with 3 children was diagnosed with seropositive rheumatoid arthritis seven years ago. She was found to be positive for rheumatoid factor as well as U1RNP and had an ANA titer > 1:1280. This led to the diagnosis of mixed connective tissue disorder with systemic sclerosis and mild pulmonary hypertension 2 years ago. Since then, she has been on hydroxychloroquine, sildenafil, nifedipine, aspirin, vitamin D, and folic acid until now. Mycophenolate mofetil was omitted once pregnancy was confirmed. Warfarin, which was used for one year duration, was stopped 8 months prior to conception. Mother was immunized against rubella and has never been on phenytoin. She underwent elective caesarean section at 37+2 weeks of gestation, due to 3 past sections and pulmonary hypertension, after which a baby girl with a birth weight of 2545g was delivered. Baby was found to have abnormal mid-face development, with a flattened mid-face, short nose, flattened bridge of the nose, micrognathia and low-set ears. Her nostrils had a half-moon appearance. There was no cleft lip or palate, no vertebral anomalies, and no murmurs. There was no history of birth trauma. Furthermore, baby's 4-year-old brother was also noted to have similar facial features. Clinical features in the baby were suggestive of Binder syndrome secondary to maternal autoimmune disease in addition to another affected sibling. Baby was discharged after establishing breastfeeding, with a referral to the orthodontist and is planned to be followed up at the well-baby clinic.

Conclusion

Binder syndrome is a type of nasomaxillary hypoplasia that is clinically diagnosed and not associated with a specific antibody or genetic condition. It is more common in families with a history of previous binder phenotype pregnancies and is linked to maternal mixed connective tissue disorders. Corrective plastic or cosmetic surgeries are available to address mid-facial hypoplasia, and babies with this condition typically have normal IQ levels. In families with a previous child with the Binder phenotype and/or maternal mixed connective disorder, there is a risk of having a child with Binder syndrome. Therefore, it is important to provide antenatal counselling regarding the risk of having a child with Binder syndrome and the available treatment options to give parents peace of mind. Additionally, healthcare workers should be prepared to address potential breathing and feeding difficulties at the birth of a baby and ensure that the necessary equipment is available for delivery. In cases where a woman has a baby with a Binder phenotype without any known risk factors, she should be examined and investigated for the possibility of having mixed connective tissue disorders, so that early detection and intervention can lead to better outcome

PP 26 : AUDIT OF MOTHERS' PRACTICES ON ESSENTIAL NEWBORN CARE OF THERMOREGULATION OF PRETERM BABIES IN TEACHING HOSPITAL MAHAMODARA, SRI LANKA

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Introduction:

It has been identified that more than 80% of premature babies die due to a lack of simple care including warmth, breastfeeding support, and basic care for breathing difficulties and infections worldwide at between 32 and 37 weeks of gestation. Premature mortality can be reduced even without neonatal intensive care. In Sri Lanka, 10->15% of preterm deliveries are occurring, and it has been identified that the number of preterm-born children surviving beyond their infancy was increasing in Sri Lanka due to improved medical care.

Objectives

To determine self-reported practices of thermoregulation on preterm babies among postnatal mothers in Teaching Hospital, Mahamodara.

Methods

A descriptive cross-sectional study using qualitative and quantitative methods was conducted at Teaching Hospital, Mahamodara. A random sampling method was used, and 384 participants who had preterm babies (before the completion of 37 weeks of gestation) were assessed using a pretested, interviewer-based questionnaire. Ethical approval was taken from the International Institute of Health Sciences and Teaching Hospital, Mahamodara.

Results

The general practices of mothers with preterm babies are good regarding essential newborn care including thermoregulation. 94.8% of participants had not bathed their babies within the first 24 hours of birth. However, only 15.9% of mothers had practiced Kangaroo mother care at home. 98.7% of mothers had wrapped their babies with dry cloth to prevent heat loss. However, only 8 mothers readmitted their preterm babies to hospital due to hypothermia, because these mothers did not follow the correct techniques of essential newborn practices for thermoregulation for preterm babies.

Conclusions

The participants have good self-reported practices regarding the thermoregulation of their preterm babies. All mothers having preterm babies should be educated regarding essential newborn care practices.

PP 27 : DEPRESSION AND QUALITY OF LIFE AMONG FAMILY CAREGIVERS OF CHILDREN WITH CONGENITAL HEART DISEASES ATTENDING A SELECTED HOSPITAL IN COLOMBO, SRI LANKA

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Background: Congenital heart disease is the most common congenital anomaly globally. The diagnosis of a child with congenital heart disease (CHD) significantly impacts the psychological health of family caregivers. Family caregivers also experience a diminished quality of life due to the demands of caring for a child with CHD.

Objective/s: The aim of this study was to assess depression and quality of life of family caregivers of children with CHD attending a selected hospital, Sri Lanka

Methods: A descriptive cross-sectional study was conducted among the total of 422 family caregivers of children with congenital heart diseases who are undertreatment in the cardiothoracic clinic at LRH Hospital in Sri Lanka using convenience sampling technique. Data were collected using the Patient Health Questionnaire (PHQ-9) and the Beck Anxiety Inventory Scale (BAI). Statistical analysis was performed using SPSS version 25, incorporating descriptive and inferential statistics.

Results: The majority of participants were female (67.5%) with a mean age of 37.05 years, and most of the children were male (59.5%) with a mean age of 6.72 years. The mean depression level according to the PHQ-9 was 6.96+3.63 indicating moderate level of depression. Only 29.9% were not having depression and 70.1% had mild to severe depression level. WHOQOL-BREF scale, a mean score of 68.9+12.2 suggests a moderately high quality of life among family caregivers and 52.4% had poor quality of life. There was a statistically significant association between depression and quality of life ($p=0.000$) and a small but statistically significant negative correlation ($r=-0.097$, $p=0.047$) between depression and the quality of life among family caregivers. This suggests that higher levels of depression are associated with slightly lower quality of life scores and may have a measurable impact on the quality of life among these caregivers.

Conclusion/s: The study concluded that a significant proportion of family caregivers of children with CHD experience mild to severe depression, which is negatively correlated with their quality of life. The targeted mental health support and interventions be provided to these caregivers to help alleviate depression and improve their overall quality of life.

Keywords

caregivers, depression, family, quality of life

PP 28 : Title: BURNOUT SYNDROME AMONG HEALTH CARE STAFF OF THE PAEDIATRIC INTENSIVE CARE UNIT AT THE CHILDREN'S HOSPITAL AT WESTMEAD, NSW, AUSTRALIA.

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Introduction

Burnout syndrome is a state of emotional, physical, and mental exhaustion caused by excessive and prolonged stress. It is especially prevalent among healthcare professionals due to the demanding nature of their work. Burnout can lead to reduced performance, chronic fatigue, and feelings of helplessness.

Objectives

General objective

To evaluate the prevalence of Burnout Syndrome among paediatric intensive care staff members of the Children's Hospital at Westmead.

Specific objectives

1. To identify socio-demographic factors associated with Burnout Syndrome in paediatric intensive care staff members of the Children's Hospital at Westmead.
2. To identify work-related factors contributing to Burnout Syndrome in Paediatric Intensive Care Staff members at the Children's Hospital at Westmead.

Methodology

This descriptive cross-sectional study was conducted in the Paediatric Intensive Care Unit (PICU) at the Children's Hospital at Westmead recruiting 134 medical and nursing staff members working in the PICU. Data were collected through self-administered, web-based questionnaires using the Quality Audit Reporting System (QARS). Participants accessed the questionnaire via a provided link or QR code. Burnout scores were calculated for each domain of Burnout Syndrome and categorized into the burnout levels. Chi-square test used to assess associations between categorical socio-demographic variables and burnout categories.

Results

The data indicates a high prevalence of burnout syndrome among healthcare professionals, particularly in terms of emotional exhaustion and depersonalization. Emotional exhaustion is notably high (69.9%), with significant associations found with age, gender, and work-related factors such as working hours and shift length. Females and mid-career professionals are particularly affected. Depersonalization is also prevalent (69.1%) but shows no significant associations with demographic or professional factors, though insufficient sleep is a contributing factor. Despite these challenges, personal accomplishment remains high (97.8%), suggesting that healthcare workers still find substantial intrinsic satisfaction in their roles, which may help mitigate some negative impacts of burnout.

Conclusion

Overall, the findings highlight the complex nature of burnout in healthcare professionals, influenced by various demographic, professional, and work-related factors. Addressing burnout requires a multifaceted approach, considering the specific needs of different staff categories and promoting a culture that values both the well-being and professional fulfillment of healthcare workers.

PP 29 : A CASE REPORT OF PRENATALLY DIAGNOSED DUODENAL ATRESIA DUE TO ANNULAR PANCREAS.

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Introduction

Duodenal atresia is a congenital disorder where the duodenum is obstructed due to narrowing causing a blockage of liquids and food passage from stomach into the duodenum. It's a rare condition with an incidence of 1 in 5000 to 10000 live births. It is usually associated with poly-hydramnios during antenatal period due to impaired swallowing of liquor amnii. Rarely, duodenal atresia is associated with annular pancreas, where there is a problem with the duodenal development, causing pancreatic tissue surrounding the entire circumference of the duodenum obstructing the duodenum.

Case Presentation

A 38 year old woman (gravida 3, para 2) who had two previous caesarean sections, presented to the antenatal clinic with fundal height more than for her dates with an impaired glucose tolerance at 28 weeks of gestation. Blood sugar series and serial growth scans were done every two weeks. At 32 weeks of period of gestation she was found to have severe poly-hydramnios with an amniotic fluid index of more than 35cm. On further evaluation the fetus was found to have the characteristic double bubble sign, the baby was small for the gestational age with normal Doppler. The woman had a satisfactory glycemic control with Metformine. The baby was delivered late preterm at 35 weeks of gestation by elective repeat caesarean section, since the woman developed difficulty in breathing. The APGAR score at delivery was normal, with a birth weight of 1900 grams. Baby was admitted to HD incubator, oxygen given via nasal prongs, kept nil by mouth and started on IV fluid and antibiotics. Corrective surgery was done on day three with duodeno-duodenostomy. During the surgery annular pancreas was noted causing duodenal atresia with adhesions in the small bowel. Duodenum Kocherized and diamond shape duodeno-duodenostomy done using 4/0 interrupted vicryl, and patency of anastomosis obtained by passage of normal saline through anastomosis. After successful surgery, the baby was discharged, following 15 days of NICU care after establishing breast feeding.

Discussion

The demonstration of fluid filled dilated stomach and dilated proximal duodenum gives the typical double bubble sign on ultrasound. Diagnosis of duodenal atresia during antenatal period enable prenatal counselling and preparation of parents psychologically and plan the delivery in a unit where there is facility for early surgical correction. Once the baby is born, a simple antero-posterior radiograph (plain X-ray) of the abdomen shows the double bubble sign, and the definitive diagnosis can be made soon after birth. After successful surgical repair, overall survival is more than 90% and nowadays, early mortality after procedure is less than 3% in most case series, though most infants (about 50%) of them have other associated anomalies such as cardiac defects.

Conclusion

Duodenal atresia is a congenital intestinal obstruction which is associated with polyhydramnios in utero and is one of the common causes of fetal bowel obstruction. Care full assessment of ultrasonic features enables the diagnosis prenatally, and the subsequent management is with multidisciplinary approach involving the neonatologist and the paediatric surgeon. Overall success of surgical management have been excellent.

PP 30 : A RARE CASE OF A MAJOR EXAMPHALOS AND FALLOT'S TETRALOGY IN A TERM BABY WITH INTRAUTERINE GROWTH RETARDATION

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Introduction

An Examphalos is a herniation or protrusion of the abdominal viscera into the base of the umbilical cord. Most common organs herniating are intestine, stomach and liver. Males and females are equally affected with an incidence of 1 in 1,500 at birth. Examphalos has 50-70% of other associated malformations and 30% have chromosomal abnormalities. The likelihood of an abnormal karyotype goes up when liver is intracorporeal. An Examphalos is major when liver is extracorporeal and minor when intracorporeal. Tetralogy of Fallot is one of the well known conotruncal defects comprising of Pulmonary stenosis, a malalignment type of Ventricular septal defect, Overriding of aorta and Right ventricular hypertrophy. The degree of RVOT obstruction and the patency of ductus arteriosus determine the degree of cyanosis and the age at first presentation.

Objectives

This case report aims to describe the rare presentation of a neonate born with Major Examphalos and Tetralogy of Fallot and how the complexity of the condition challenges the overall management of the baby.

Method

A term (37+5d) neonate was born to non-consanguineous healthy parents via an Elective Caesarean section with a birth weight of 2270g due to diagnosed Examphalos on antenatal ultrasound scan.

Results

The baby was cyanotic with an ejection systolic murmur on auscultation with oxygen saturations around 60-70% in room air, not improving with oxygen and the echocardiogram detected a Tetralogy of Fallot with duct dependent pulmonary circulation. Baby was provided with NICU care with aseptic precautions, broad spectrum antibiotics, IV fluids and initial surgical care with 'Paint and Wait approach'. A delayed secondary closure was the definitive plan of management at a later stage. Inflammatory markers were elevated from time to time and baby was fighting sepsis with a good daily weight gain. A high TSH value was detected through out the course where Thyroxin was started but the USS Neck was normal with no clinical features of Congenital Hypothyroidism.

Conclusions

This case highlights the importance of a multidisciplinary approach in managing a newborn with major Examphalos and co-existing congenital cyanotic heart disease. Proper antenatal and postnatal care, early diagnosis, and a careful management plan are vital for improving outcomes.

PP 31 : A CASE OF SEVERE EPIDERMOLYSIS BULLOSA PRESENTING AT BIRTH

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Introduction

Epidermolysis bullosa (EB) comprises a group of rare inherited disorders characterized by mechanical fragility of epithelial tissues, leading to blistering and erosions following minimal trauma. EB is typically inherited in an autosomal dominant pattern, though autosomal recessive forms also exist. The clinical presentation varies significantly depending on the genetic mutation and its molecular consequences. The spectrum ranges from mild blistering to severe forms with extracutaneous involvement and potentially lethal outcomes.

Clinical Presentation

The infant was delivered at 33 weeks of gestation via an emergency caesarean section due to severe intrauterine growth restriction and oligohydramnios, with a birth weight of 1330 grams. The parents were second-degree relatives, but there was no known family history of similar dermatological conditions.

At birth, the infant exhibited a shiny, taut membrane covering the entire body with multiple fissures and scaling. Additional findings included bilateral ectropion and hypotrichosis. Dermatological consultation led to a clinical diagnosis of severe EB. Ophthalmological evaluation revealed a large cornea with no evidence of conjunctival glaucoma.

The baby required non-invasive ventilatory support, broad-spectrum intravenous antibiotics, and meticulous management of fluid and electrolyte balance. Skin care involved the use of emollients and strict barrier nursing techniques to minimize secondary infections. Despite these measures, the infant developed severe sepsis with disseminated intravascular coagulation by the second day of life and succumbed by the third day.

Discussion

In cases where EB is suspected, a skin biopsy from an induced blister for immunofluorescence mapping (IFM) is recommended. If IFM is normal or inconclusive, genetic mutational analysis can confirm the diagnosis. Sepsis resulting from cutaneous infections is a frequent cause of mortality in severe EB cases. Management of EB is primarily supportive, involving a multidisciplinary approach to address wound care, pain management, nutrition, hydration, infection prevention, and the management of extracutaneous manifestations such as ocular lesions, oral and dental issues, and oesophageal strictures. Genetic counselling is crucial for affected families to help minimize the burden of future disease

PP 32 : IDENTIFYING MODIFIABLE RISK FACTORS ASSOCIATED WITH EARLY ONSET NEONATAL SEPSIS FOR STRATEGIC MEDICAL INTERVENTIONS

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Objectives

To identify modifiable maternal, neonatal, and healthcare related risk factors associated with Early Onset Neonatal Sepsis (EONS).

Introduction

Sepsis is one of the leading causes of neonatal mortality and morbidity, particularly in developing countries. EONS is defined as suspected or proven sepsis within 72 hours of life and despite the available evidence, there is still uncertainty about potentially modifiable risk factors for EONS. Understanding these risk factors is essential for early diagnosis and treatment.

Method

A descriptive cross-sectional study was conducted from 1st-30th of April 2024 at Obstetrics professorial unit of Colombo South Teaching Hospital, Sri Lanka. A total of 39 antenatal mothers who were in gestational age >24 weeks, were selected using non-probability convenient sampling. Data pertaining to maternal demographic and clinical characteristics, antenatal history, birth circumstances, and incidence of EONS were collected from the medical records using a pre-tested questionnaire, prepared based on National Guidelines for Newborn Care, Sri Lanka 2020, and analyzed using chi-square and fisher's exact tests in SPSS 26th version. $P < 0.05$ was considered as statistically significant.

Results

All the participant mothers were between 18 - 45 years with a mean age of 29.9 years. 12.8% of mothers went into a preterm delivery. Mean and the minimum birth weights were 2.95 kg and 1.94kg, respectively. Mothers of neonates with EONS, who were 9 (23%), 22.2%, 44.4%, 33.3%, 44.4%, 11.1% were complaining of vaginal discharge on admission, had undergone >2 PVs, ASOM, ARM & vaginal prostaglandin insertion, respectively. Among the mothers who had undergone >1 ASOM 66.7% neonates had EONS. 22.2% and 50% of neonates with EONS were born preterm and had low birth weight, respectively. All the neonates with EONS had one minute APGAR <10, which was statistically significant ($p < 0.05$). 66.6% of mothers of septic newborns had >24 hours in antenatal ward stay. Among neonates who were delivered by LSCS, 28.6% had EONS, compared to labour room deliveries (16.7%).

Conclusions

One minute APGAR score is a predictor of EONS. Maternal, neonatal, and healthcare related risk factors had contributed to the incidence of EONS.

PP 33: 9p DELETION SYNDROME (OPTIZ TROGONOCEPHALY SYNDROME)

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Introduction

A 9p deletion is a rare genetic condition in chromosome 9 with part missing. occurs in one in 50,000 newborn babies of whom two thirds are girls. 9p deletion means that the short arm of chromosome 9s has broken, breakup point can be anywhere. with this 9p deletion showing one or more symptoms like developmental delay particularly speech and language delay unusual head shape with or large , rounded forehead or a forehead that points forward like a keel due to premature fusion of the metopic suture. low muscle tone. others are heart disease, hernias, spinal curvature. respiratory problems.

Case Report

1 year and 6 month old baby girl born to healthy non consanguineous parents past history of three miscarriage one is T1 miscarriage and other two 2nd trimester miscarriage .this baby is born at 37 week after abdominal cerclage birth weight is 2750grams has multiple dysmorphic features. And history of OS ASD and constipation, hip dysplasia, on examination shows trigonocephaly, flat nasal bridge, mild hypotelorism, epicanthal fold, high arch palate, abnormal small ears, abnormal left thumb flexure deformity, thin upper lip, micrognathia, short neck, anteriorly displaced anus. On investigation basic investigation normal, Echo small OS ASD , MRI brain shows trigonocephaly with small AP diameter of frontal lobes, likely due to early metapocic sutures fusion. rest of brain normal, Genetic testing of baby's shows 46,XX,del (9)(p15.2-pter) , Father and mother's karyotyping normal. USS KUB normal.

Discussion

As syndromic baby multi disciplinary team involving management. Neonatal team at birth as pressures baby should have big role in management, Genetist, paediatric cardiologist, paediatric neurologist and surgeon with therapist team has started early stimulation. there is no cure for this genetic pattern. Long term follow up necessary for achievement of good outcome.

PP 34: SEVERE MANIFESTATION OF BLEEDING DISORDERS AS A CASE OF NEONATAL HEMOPHILIA

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Introduction

Hemophilia A, an X-linked recessive disorder, presents with prolonged bleeding due to deficient Factor VIII. It affects 1 in 5000 males globally. Inadequate thrombin leads to impaired fibrin generation, causing bleeding. Females may be carriers, transmitting the gene to male offspring. Treatment aims to replace missing Factor VIII.

Case Report

A newborn male infant with bluish bruises on the cheeks presented on the second day of life, with a family history of an elder sibling having moderate Hemophilia A. Initial investigations revealed coagulation abnormalities (Cord blood APTT – 153 s, PT-19.1, INR 1.39), prompting the administration of FFP and 100% factor correction therapy for 10 days EOD. On the fifth day, the patient developed a fever spike, with subsequent positive blood cultures. Antibiotic therapy was initiated. The child developed paucity of limb movements, prompting USS Brain, which revealed grade 1 germinal matrix hemorrhages bilaterally. An intramuscular thigh hematoma occurred on the tenth day, necessitating careful ultrasound surveillance. Only gentle physiotherapy could be arranged due to the bleeding risk. Antibiotic therapy was tailored based on culture sensitivities, leading to negative repeat blood cultures. Hematological consultation regarding vaccination determined the necessity of admission to the ward prior to IM vaccination. A general medical assessment and factor assay were arranged post-discharge, revealing severe factor deficiency (<1%).

Discussion

This case highlights the intricate management of a newborn with Hemophilia A. The occurrence of an intramuscular thigh hematoma emphasizes the vulnerability of neonates to bleeding complications, necessitating careful management and close monitoring. Although there is a 25% probability of meningitis in culture-positive infants, we opted against a Lumbar Puncture because of the initial presentation of severe hemophilia-like picture. This case shows the challenges in managing neonates with coagulation disorders, necessitating prompt intervention, vigilant monitoring, and tailored therapy to minimize complications and optimize outcomes.

PP 35: NEWBORN ANAPHYLAXIS NOT UNCOMMON

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Introduction

Anaphylaxis is a serious allergic reaction that is rapid in onset and life threatening. After contact with an allergen, mast cells and basophiles release chemical mediators. Increased immunoglobulin E (IgE) is responsible for pathogenesis. The most common causes of anaphylaxis in children are food and medicines. Anaphylaxis caused by drugs are mostly seen in hospitals. Hypersensitivity reactions are common in childhood but they are rare in the neonatal period due to the immaturity of the immunological system.

Case Report

We present this case due to the penicillin which is a commonly used antibiotic in newborn intensive care units and because of the rare occurrence of anaphylaxis in the newborn period. A female infant was born by caesarean section at 39 weeks with birth weight 2.7Kg since birth the female infant was tachypneic and had retractions diagnosis of Left diaphragmatic hernia made, intubated. Baby was treated with penicillin and gentamycin. FBC, CRP normal. Echocardiography revealed, OS - ASD. On third dose 10 minutes after the penicillin whole body hyperemia, cyanosis of the extremities, edema of eye lid, subcostal retraction noted with tachycardia we didn't think it as anaphylaxis as uncommon in newborns but Hydrocortisone used responded within 1/2 hour. But 5th dose again recur same symptoms after penicillin. We definitely thought it is anaphylaxis to penicillin managed with IM adrenalin and responded well.

Discussion

Diagnosis is based on clinical symptoms and findings rather than laboratory findings. Mast cells and basophiles may also be activated by IgE-independent mechanisms and may cause "anaphylactoid" reactions with similar clinical features. Anaphylaxis with IgE-mediated or non immunization mechanisms less common due to the immaturity of immunological system during the neonatal period. For this reason, the diagnosis of anaphylaxis in the newborn is controversial and necessary to evaluate the differential diagnosis. We would like to emphasize the importance of monitoring patients who are followed up in NICU. Hereditary angioedema has similar clinical findings to anaphylaxis but no response to adrenaline. The number of cases of anaphylaxis during the newborn period in the literature is few.

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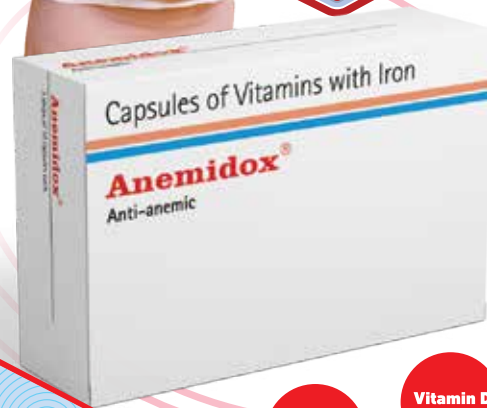
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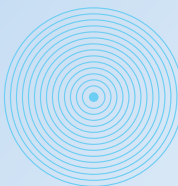
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