

# 18th Asia Pacific Congress of Pediatrics

Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific

14-17 November 2024 | Cebu City, Philippines









Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific

November 14-17, 2024 | Cebu, Philippines

#### **LOGO DESCRIPTION**

The Philippine hosting of the Asia Pacific Congress of Pediatrics in 2024 with the theme, "Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific" is represented here by this Logo. Featured in the logo are iconic images that depict the Philippines and the profession of Pediatrics.

As the foremost mode of transportation in the country, the jeepney is a quintessential symbol of the Philippines being the host of the APCP. The children are the passengers in the jeepney with the pediatrician behind the wheel navigating the health journey. This imagery represents them travelling together towards the future of healthcare not only in the Philippines but in the whole Asia Pacific region.

The Philippines being known for its fiesta celebrations, the fiesta small flags or "banderitas" on the top are used to unify the logo as the stethoscope is superimposed on the image of the small flags. This symbolizes pediatric healthcare as the overarching theme of the Congress.

The use of the colors red, white, yellow and blue tie up the whole logo as these colors represent the Philippine flag, the Philippines being the host of the Congress.



Logo Description		i	
Table	Table of Contents		
About the Asia Pacific Pediatric Association			
	APPA History	3	
	APPA Country Members	4	
18th A	sia Pacific Congress of Pediatrics	5	
Welcome Messages		6	
Organizing Committee		16	
The Program		20	
	Program at a Glance	21	
	Special Pre-Congress	25	
	Regular Pre-Congress	31	
	Main Congress	37	
	Poster Presentations	44	
	Socials	56	
About	the Congress Speakers	61	
Resea	Research Abstracts		
	Paper Presentation Abstracts	98	
	Poster Presentation Abstracts	115	
Sponsors		164	
Acknowledgments		175	





# ABOUT THE ASIA PACIFIC PEDIATRIC ASSOCIATION



# ABOUT THE ASIA PACIFIC PEDIATRIC ASSOCIATION History of the Asia Pacific Pediatric Association



#### FROM APSSEAR TO APPA: 50 GOLDEN YEARS OF CARING FOR THE ASIA PACIFIC CHILDREN

You are all invited to the birthplace of the Asia Pacific Pediatric Association (APPA) to celebrate 50 golden years of caring for the Asia Pacific children! The 18th Asia Pacific Congress of Pediatrics will be held in Cebu, Philippines on November 14-17, 2024.

Our history dates back to April 30, 1974, during an organizational meeting held in Manila, Philippines attended by pediatricians representing 15 countries. This date coincided with the First Asian Congress of Pediatrics hosted by the Philippine Pediatric Society. The moving force behind the formation of the Association of Pediatric Societies of the Southeast Asian Region (APSSEAR) were Dr. Lino Edralin Lim and Prof. Perla D. Santos Ocampo of the Philippines, who served as its first President (1974-76) and Secretary-General (1974-2000), respectively. By October 25, 1977, APSSEAR became an official affiliate of the International Pediatric Association (IPA).

APSSEAR's main aim was to pursue the objectives of IPA in improving the health status of children in the region and had a four-point program of action to achieve its objectives: research in all aspects of pediatrics, dissemination of pediatric knowledge, holding of an Asian Congress of Pediatrics every three years, and promotion of national pediatric meetings. From an initial 15 member countries, it increased to 20 members.

In 2003, it was deemed that a name change was necessary to reflect more appropriately the geographical location of the countries represented in the organization; hence, the name was changed to Asia Pacific Pediatric Association.

There have been 17 congresses so far, hosted by the various member countries' pediatric societies; the latest was held in Lahore, Pakistan last March 10-13, 2022, and in keeping with the pandemic was a hybrid conference.

APSSEAR or APPA has attained regional and global recognition and through the years, its congresses continued to bring pediatricians together to work towards its goals.

Great success in the fulfillment of its objectives is the fruit of the joint efforts of the Association's pioneers, past presidents and officers, and most importantly, its members. On the occasion of APPA's 50th anniversary, it is fitting that we hearken back to the Philippines where it all began!



# ABOUT THE ASIA PACIFIC PEDIATRIC ASSOCIATION Country Members of the Asia Pacific Pediatric Association



Click on the blue texts to learn more about the APPA country member.

#### **OCEANIAN REGION**

Paediatrics and Child Health Division, The Royal Australasian College of Physicians President: Adi. Prof. Nitin Kapur

Paediatric Society of New Zealand President: Dr. Michael Shepherd

PNG Paediatric Society President: Dr. James Amini

#### **SOUTH ASIA REGION**

**Bangladesh Paediatric Association** *President: Prof. Mohd. Zahid Hussain* 

**The Indian Academy of Pediatrics** *President: Dr. Upendra S. Kinjawadekar* 

**Nepal Pediatric Society** *President: Dr. Arun Neopane* 

Pakistan Pediatric Association President: Prof. Sved Jamal Raza

**Sri Lanka College of Paediatricians** *President: Dr. Kosala Karunaratne* 

#### **SOUTHEAST ASIA REGION**

**Malaysian Paediatric Association** *President: Dr. Mohd Ikram Ilias* 

**Indonesian Pediatric Society** *President: Dr. Piprim B. Yanuarso* 

**Myanmar Pediatric Society** *President: Prof. Kyaw Linn* 

**Singapore Paediatric Society** *President: Dr. Alvin S M Chang* 

Philippine Pediatric Society Inc. President: Dr. Cesar M. Ong

Pediatric Society of Thailand President: Prof. Somsak Lolekha

**Vietnam Pediatric Association** *President: Assoc. Prof. Tran Minh Dien* 

#### **EAST ASIA REGION**

**Chinese Pediatric Society** *President: Prof. Sun Kun* 

**Japan Pediatric Society** *President: Dr. Akira Oka* 

**The Hong Kong Pediatric Society** *President: Dr. Fung Po Gee, Genevieve* 

**The Korean Pediatric Society** *President: Dr. Ji Hong Kim* 

**Taiwan Pediatric Association** *President: Prof. Yen-Hsuan Ni* 

Macau Pediatric Society President: Dr. George Choi

**Mongolia Pediatric Society** *President: Dr. Soyolgerel Gochoo* 

more details of APPA Members at https://a-p-p-a.org/member\_societies.php





# • ASIA PACIFIC CONGRESS OF PEDIATRICS

TABLE OF CONTENTS



# • WELCOME • MESSAGES



- 66

As pediatricians and allied professionals, you actively shape this new horizon as you secure healthier futures for millions of children who will inherit our world.



**77** ·

My warmest greetings to the organizers and participants of the 18th Asia Pacific Congress of Pediatrics.

This congress, proudly hosted by the Philippine Pediatric Society, is a pivotal moment for pediatric healthcare in our region as we reimagine and strengthen healthcare systems to meet the changing needs of society's younger members.

As pediatricians and allied professionals, you actively shape this new horizon as you secure healthier futures for millions of children who will inherit our world. Like you, I believe they are justly entitled to the highest level of care, as their well-being is the foundation of our collective progress. I trust that this gathering will highlight groundbreaking research and improved healthcare policies as we narrow the disparities impacting children and youth in this region.

Your work holds particular significance as the Asia Pacific region grapples with complex health challenges —from infectious diseases and nutritional deficiencies to the impact of mental health issues on our young ones. I encourage you all to explore and share best practices and transformative ideas that will deepen your resolve as we build a *Bagong Pilipinas* where every child is free and empowered to reach their full potential.

I wish you a highly successful and productive congress.

**FERDINAND R. MARCOS, JR.** President of the Philippines



"

By focusing on important issues like mental health, adolescent pregnancy, and the impact of digital technology, you are addressing pressing challenges and building a future where every child can thrive.

"

Dear esteemed delegates of the 18th Asia Pacific Congress of Pediatrics,

It is my great pleasure to welcome you all to the Philippines for this remarkable gathering of pediatric care professionals from across the Asia Pacific. I extend my heartfelt commendation to the Philippine Pediatric Society for their dedication and hard work in organizing this congress, bringing together some of the most brilliant minds in pediatric healthcare.

The theme, "Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific," reflects the changing health needs of our children. By focusing on important issues like mental health, adolescent pregnancy, and the impact of digital technology, you are addressing pressing challenges and building a future where every child can thrive.

The work you undertake, especially on immunization and nutrition, has the potential to transform not just individual lives but entire communities in our region. The Philippine Department of Health stands fully in support of your efforts, and we are committed to partnering with you to ensure that each child is afforded the highest standard of care.

Thank you for your dedication to improving pediatric health and for your commitment to the well-being of children across Asia Pacific. I hope this congress inspires a renewed sense of purpose, unity, and a clear vision for the future of our young generation.

Mabuhay and welcome!

TEODORÓ J. HERBOSA, MD

Secretary of Health



- 66

By redesigning the horizon of pediatric care, you are not only safeguarding the health of today's children but also laying the groundwork for resilient, healthier generations to come.



**77** ·

I extend my warmest greetings to all members of the Philippine Pediatric Society, distinguished pediatricians, and healthcare professionals across the Asia Pacific joining this **18th Asia Pacific Congress of Pediatrics**.

The theme, "Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific," speaks volumes about your commitment to the health, well-being, and future of our youngest generation.

In these times of rapid change, pediatric healthcare stands at a pivotal juncture. Your dedication to advancing medical knowledge, integrating cutting-edge technology, and fostering collaborative solutions is invaluable in addressing the evolving needs of children not just all throughout the Philippines but including all countries of the Asia Pacific region. By redesigning the horizon of pediatric care, you are not only safeguarding the health of today's children but also laying the groundwork for resilient, healthier generations to come.

May this Congress spark new ideas, inspire breakthroughs, and build lasting partnerships that will transform pediatric healthcare for the better. Thank you for your tireless work, compassion, and dedication. May this Congress be a resounding success!

Mabuhi ang Sugbo!

Mabuhi kitang tanan Sugbuanon!

**GWÉNDOLYN F. GARCIA** Governor

Province of Cebu



"

Pediatrics has always been about more than treating illness in children. It is also about nurturing potential and building the foundations for healthier generations. In this era of rapid medical advancements, collaboration and knowledge-sharing are more critical than ever.



"Children are the world's most valuable resource and its best hope for the future." — John F. Kennedy

As the City Mayor, it is with immense pride and joy that I welcome all distinguished delegates, experts, and participants to the **18th Asia Pacific Congress of Pediatrics**, here in Cebu City. Allow me, on behalf of the Cebuano people, to express our excitement to have you all here with us as you gather to advance the vital field of pediatric healthcare. Do know that Cebu stands ready to extend its warm hospitality and support for this significant event. After all, the people of Cebu City are honored to host such a prestigious gathering and are always ready to support future endeavors aimed at advancing pediatric care. Cebu is not only rich in culture and history but is also a city that values innovation and progress, making it an ideal partner for initiatives like this congress.

In my humble understanding, Pediatrics has always been about more than treating illness in children. It is also about nurturing potential and building the foundations for healthier generations. In this era of rapid medical advancements, collaboration and knowledge-sharing are more critical than ever. As you embark on redesigning the future of pediatric healthcare, it is my earnest hope that this congress of yours pave the way for breakthroughs that ensure every child has access to quality healthcare and a bright, healthy future. I think we can all agree that every step we take in enhancing pediatric care resonates beyond hospitals and clinics; it shapes communities and influences the very future of society. By working together, I do hope that you truly can reimagine the horizon of pediatric healthcare and ensure that every child, regardless of background or circumstance, has the opportunity to thrive.

May this convention of yours be filled with productive discussions, insightful presentations, and forging strong connections throughout this momentous event.

Lastly, for those here in Cebu for the first time, I do hope you will also find time to enjoy our wonderful city and beautiful province. Cebu is known for the best dried mangoes, the best *otap*, the best *danggit*, and of course everyone's favorite – the best lechon. But many fail to realize Cebu's most important asset – its people, and the Cebuano hospitality. In fact, we are so hospitable that you can visit our first visitor, Ferdinand Magellan. And what did we do to him? We killed him – that's how hospitable we are – and so my dear friends, welcome to Cebu and rest assured that this time we will kill you not with spears and bolos, but with love, compassion, kindness, and perhaps a little overdose of Cebu's best delicacies.

On behalf of Cebu City, I once again extend a heartfelt welcome to all participants and sincerely hope that your time here will be both fruitful and memorable. Rest assured that Cebu City will always be open to hosting the Asia Pacific Congress of Pediatrics in its future activities and endeavors.

More power to the 18th Asia Pacific Congress of Pediatrics!

**RAYMOND ALVIN N. GARCIA** 

Mayor Cebu City





#### "

By sharing your expertise through courses like this, you are enhancing the delivery of comprehensive care plan for children in the Asia Pacific Region and help ensure that the child receives the best possible care and support.



**77** -

Warmest greetings to the Philippine Pediatric Society as you host the **Asia Pacific Congress of Pediatrics** with the theme, "**Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific**". It is a testament to your commitment to stay at the forefront of advancement in the field of Pediatrics. Your continued search for innovation and updates in your filed of specialization is truly admirable as it reaffirms your dedication to continuous improvement of your skills and expertise to better serve the Filipino Child.

It is important to provide means to address the medical challenges of children in your care. It is likewise a noble act as you continue to teach your colleagues and the younger generation for them to grow in competency with you. You are not only enhancing your career but also assures improving the lives of your patients. By sharing your expertise through courses like this, you are enhancing the delivery of comprehensive care plan for children in the Asia Pacific Region and help ensure that the child receives the best possible care and support.

Rest assured the PMA is one with you in your aspirations and goals. I wish all the best in your endeavors.

Nagkakaisang PMA: Hatid ay Kalusugan para sa Lahat.

HECTOR M. SANTOS, JR., MOMMHA

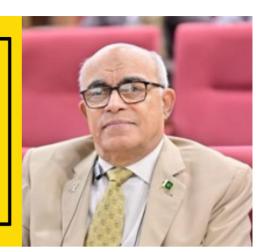
President

Philippine Medical Association



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The theme reflects the need for a change as envisaged by the post-epidemic situation as well as climate change impact.



"

Asia Pacific Pediatric Association (APPA) started its sojourn as the Association of Pediatric Societies of South-East Asian Region (APPSEAR) in 1974 from the Philippines with the objectives of providing linkages between pediatricians of the region and managing educational programs to improve services & health status of children in the region through: Research in all aspects of Pediatrics, dissemination of knowledge and holding of an Asian Congress of Pediatrics, every three years.

Our **18th congress**, **Asia Pacific Congress of Pediatrics (APCP)**, the golden Jubilee event, is being organized by National Pediatric Society of Philippines, at the birthplace of APPA on November 14-17, 2024.

The theme is very appropriate: "Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific"; and is being organized in Cebu, Philippines, a tourist destination as well. The theme reflects the need for a change as envisaged by the post-epidemic situation as well as climate change impact.

The Organizing team is led by Prof. Joselyn Eusebio, the President-Elect of APPA with a very energetic and experienced team of the national society of the Philippines thus promises to be an excellent congress with lots to learn as well as a superb forum for the exchange of experience. Our experts shall deliberate on the latest developments in their field and will not only be coming from the region but also from beyond the borders as per the required expertise.

This event is often academically rich but also promises social/cultural experience as well as tasteful delights.

At this event, we shall recognize our legends with the award of "Asian Outstanding Pediatrician Award", as per scrutiny of the nomination committee.

Overall, this congress promises to be a fully encompassing activity, that shall quench everyone's thirst.

I hope that all of you will join us at this congress to learn and exchange experiences for the betterment of our children's health.

PROF. IQBAL AHMAD MEMON

President (2022-2024)

Asia Pacific Pediatric Association



- 66

With collaboration from all the 23 member societies of APPA and inter-society networking, we can look forward to better healthcare for all of our children in the region.



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Welcome to the 18th APCP!

Dear friends and colleagues,

It is with great pleasure that I extend an invitation to you on behalf of the Asia Pacific Pediatric Association (APPA) to the **18th Asia Pacific Congress of Pediatrics (APCP)** in Cebu. This year we celebrate our 50th anniversary in a country that APPA was originally established as the Association of Pediatric Societies of the South-East Asian Region (APSSEAR) in 1974. I am sure the local organising committee will make this golden jubilee celebration an eventful and exciting one with excellent scientific content as well as remarkable social events.

The theme of "Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific" is a forward-looking and ambitious one. With collaboration from all the 23 member societies of APPA and inter-society networking, we can look forward to better healthcare for all of our children in the region.

The 18th APCP is organised in conjunction, and concurrently, with the 8th Asia Pacific Congress of Pediatric Nursing. This is in line with our commitment as paediatricians to increase the knowledge and expertise of our partners in child health, the nurses who work in the wards, clinics, NICUs, PICUs, and community. We invite paediatric and neonatal nurses to join us in the celebrations too.

Cebu and the Philippines are well known for their hospitality which I need not elaborate on. Knowing the Filipinos, the social events to celebrate APPA's golden jubilee will be memorable and surpass previous ones.

See you all in Cebu.

PROF. DATUK DR. ZULKIFLI ISMAII Secretary General Asia Pacific Pediatric Association



- 66

Our collective dedication to improving child health outcomes and ensuring the well-being of our youngest populations unites us in a common mission that transcends borders and boundaries.

**7**7 -

On behalf of the Philippine Pediatric Society, it is with great pleasure and honor that I extend a warm welcome to all distinguished guests, speakers, delegates, and participants to the **18th Asia Pacific Congress of Pediatrics (APCP)**.

As the President of the host society, I am delighted to have the opportunity to bring together experts, practitioners, and advocates in child care from across the Asia Pacific region. This congress serves as a platform for us to engage in meaningful discussions, share invaluable knowledge, and collaborate on advancing pediatric healthcare practices. Our collective dedication to improving child health outcomes and ensuring the well-being of our youngest populations unites us in a common mission that transcends borders and boundaries.

The innovative research, diverse perspectives, and best practices that will be shared during this congress are invaluable in shaping the future of pediatrics and enhancing the quality of care provided to children in our region. I am confident that our time together will foster new connections, inspire fresh ideas, and ignite a renewed passion for our profession.

Once again, welcome to the Asia Pacific Congress of Pediatrics. Together, let us make this event a resounding success that will leave a lasting impact on the health and well-being of our children.

**CESAR M. ONG, MD**President
Philippine Pediatric Society

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...the congress aims to bring together renowned experts, professional luminaries, and passionate advocates in the field of pediatrics from 22 member countries in the region and will provide a collegial forum for sharing, discussion, and collaboration.

**77** ·

Mabuhay dear colleagues and fellow child advocates!

The Philippine Pediatric Society (PPS) is proud to host the **18th Asia Pacific Congress of Pediatrics** (APCP) on November 14 to 17, 2024 in Cebu, Philippines. This is a landmark event as the Asia Pacific Pediatric Association (APPA) celebrates its Golden Jubilee in the country where the organization was formed. The first meeting that formed the APPA was held in Manila, Philippines on April 30, 1974 in conjunction with the First Asian Congress of Pediatrics. So after 50 years, it is fitting for the Philippines to host again the APCP this time in the majestic city of Cebu. With the theme, "Redesigning the Horizon of Pediatric Healthcare in Asia-Pacific," the congress aims to bring together renowned experts, professional luminaries and passionate advocates in the field of pediatrics from 22 member countries in the region and will provide a collegial forum for sharing, discussion and collaboration.

Additionally, the 18th APCP will also showcase the rich heritage, vibrant culture, breathtaking natural venues and historical landmarks of Cebu City. The city will provide a conducive learning environment for the robust and dynamic scientific program we have prepared.

We give gratitude to the Organizing Committee and the Asia Pacific Pediatric Association secretariat and executives for their hard work and commitment to making this Congress a success. We also thank all our speakers, sponsors and delegates for their participation in the Congress. Truly the commitment, cooperation and camaraderie fostered by this Congress among Pediatricians across the Asia Pacific region make this Golden Jubilee celebration a memorable one.

JOSELYN A. EUSEBIO, MD, FPPS, FPSPDB

Overall Chair

18th Asia Pacific Congress of Pediatrics



# • ORGANIZING • COMMITTEE





# • EXECUTIVE • COMMITTEE

Overall Chair Joselyn A. Eusebio, MD

Honorary Chair **Professor Iqbal Ahmad Memon** 

Secretary General **Professor Zulkifli Ismail** 

Co-Chair (Scientific Cluster)
Francis Xavier Daniel Dimalanta, MD

Co-Chair (Non-Scientific Cluster) **Bernadette Benitez, MD** 

Congress Secretary

Jacqueline Navarro, MD

Congress Treasurer **Joseph Regalado, MD** 

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# . SCIENTIFIC .

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# NON-SCIENTIFIC CLUSTER

#### **Ways and Means Committee**

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Main Co-Chair

Angeline Tinga, MD

Co-Chair - Commercial Exhibits

Claire Robles, MD

Co-Chair - Industry Sponsored Sessions

Nepthalie Ordonez, MD

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Co-Chair

**Edward Santos, MD** 

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Hannah Therese Sy, MD
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Co-Chair

Mary Joan Millonado, MD

Members

Suzette Bautista, MD Teodosio Alcantara, MD Francisco Remotigue, Jr., MD

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# • THE PROGRAM



# PROGRAM AT A GLANCE



TIME	ACTIVITY	VENUE
08:00 am - 05:00 pm	Special Pre-Congress Vaccinology Masterclass	<b>Cebu Grand Ballroom</b> <i>Marco Polo Plaza Cebu</i>
	Regular Pre-Congress Module 1 Neurology	<b>Tokyo A</b> Marco Polo Plaza Cebu
10:00 am - 12:00 pm	Regular Pre-Congress Module 2 Developmental and Behavioral Pediatrics	Manila B & C Marco Polo Plaza Cebu
10.00 am - 12.00 pm	Regular Pre-Congress Module 3 Neonatology	<b>Tokyo B</b> Marco Polo Plaza Cebu
	Regular Pre-Congress Module 4 Allergology	Manila A Marco Polo Plaza Cebu
	Regular Pre-Congress Module 5 Hematology	<b>Tokyo A</b> Marco Polo Plaza Cebu
	Regular Pre-Congress Module 6 Pulmonology	Manila B & C Marco Polo Plaza Cebu
02:00 pm - 04:00 pm	Regular Pre-Congress Module 7 Nephrology	<b>Tokyo B</b> Marco Polo Plaza Cebu
	Regular Pre-Congress Module 8 Cardiology	Manila A Marco Polo Plaza Cebu
06:00 pm - 08:00 pm	Welcome Reception	<b>Cebu Grand Ballroom</b> Marco Polo Plaza Cebu





### Friday, 15 November 2024 (Day 1)

TIME	ACTIVITY	VENUE
08:00 am - 09:00 pm	Opening Ceremony	Pacific Grand Ballroom Waterfront Cebu City Hotel
09:00 am - 12:00 pm	Plenary Lectures	Pacific Grand Ballroom Waterfront Cebu City Hotel
12:00 pm - 02:00 pm	Luncheon Symposium	Pacific Grand Ballroom Waterfront Cebu City Hotel
	43rd APPA Council Meeting	Coral Room Waterfront Cebu City Hotel
	Simultaneous Session 1 Adolescent Medicine/ Developmental and Behavioral Pediatrics	Mediterranean Room Waterfront Cebu City Hotel
	Simultaneous Session 2 Neurology/Genetics/Endocrinology/Metabolism	Aegean Room Waterfront Cebu City Hotel
02:00 pm - 05:00 pm	Simultaneous Session 3 Hematology/Oncology/Allergology/Immunology	Caspian Room Waterfront Cebu City Hotel
	Simultaneous Session 4 Gastroenterology/Hepatology/Nutrition	Arctic 2 Room Waterfront Cebu City Hotel
	Simultaneous Session 5 Pediatric Emergencies/Toxicology/Critical Care Medicine	Arctic 1 Room Waterfront Cebu City Hotel
	Simultaneous Session 6 Nephrology/Urology	Arctic 3 Room Waterfront Cebu City Hotel
06:00 pm onwards	Faculty Dinner  * by invitation only	Pacific Grand Ballroom Waterfront Cebu City Hotel
whole day	Poster Presentations (Display)	Waterfront Cebu City Hotel





### Saturday, 16 November 2024 (Day 2)

TIME	ACTIVITY	VENUE
09:00 am - 12:00 pm	Plenary Lectures	Pacific Grand Ballroom Waterfront Cebu City Hotel
12:00 pm - 02:00 pm	Luncheon Symposium	Pacific Grand Ballroom Waterfront Cebu City Hotel
	43rd APPA Council Meeting	Coral Room Waterfront Cebu City Hotel
	Simultaneous Session 7 Newborn Medicine	Caspian Room Waterfront Cebu City Hotel
	Simultaneous Session 8 Pulmonology	Arctic 2 Room Waterfront Cebu City Hotel
02:00 pm - 05:00 pm	Simultaneous Session 9 Cardiology	Arctic 3 Room Waterfront Cebu City Hotel
	Simultaneous Session 10 Rheumatology/Ethics/Professionalism	Aegean Room Waterfront Cebu City Hotel
	Simultaneous Session 11 Infectious Diseases/Tropical Medicine	Mediterranean Room Waterfront Cebu City Hotel
	Simultaneous Session 12 Infectious Diseases/Tropical Medicine	Arctic 1 Room Waterfront Cebu City Hotel
06:00 pm - 09:00 pm	Gala Dinner	Pacific Grand Ballroom Waterfront Cebu City Hotel
whole day	Poster Presentations (Display)	Waterfront Cebu City Hotel

### Sunday, 17 November 2024 (Day 3)

TIME	ACTIVITY	VENUE
09:00 am - 11:15 am	Plenary Lectures	Pacific Grand Ballroom Waterfront Cebu City Hotel
11:15 am - 11:45 am	Closing Ceremony	Pacific Grand Ballroom Waterfront Cebu City Hotel
whole morning	Poster Presentations (Display)	Waterfront Cebu City Hotel





SPECIAL PRE-CONGRESS



#### **IPAP Pre-Conference Vaccinology Masterclass**

Cebu Grand Ballroom, Marco Polo Plaza Cebu

Welcome Remarks
Objectives and Orientation

Lulu Bravo (President, IPAP, Philippines)

08:30 am - 08:40 am

Plenary

**History and Value of Vaccination** 

Jerome Kim (IVI, South Korea)

08:40 am - 09:00 am

**Dr. Jerome H. Kim** is an international expert on the development and evaluation of vaccines and the Director General of the International Vaccine Institute (IVI). IVI is a nonprofit international organization with a mission to discover, develop and deliver safe, effective, and affordable vaccines for Global Health. IVI's oral cholera vaccine is used around the world to prevent and control this deadly diarrheal disease. IVI's typhoid conjugate vaccine (TCV), tech-transferred to SK bioscience and Bio Farma, was approved by the Korean Ministry of Food and Drug Safety and Indonesian BPOM, respectively. In 2024, the TCV manufactured by SK bioscience achieved WHO prequalification.

Prior to joining IVI, Dr. Kim was the Program Manager for the US Army's Advanced Development Program for HIV vaccines and I ed the only HIV vaccine trial to show protection against infection (RV144), the identification of correlates from the trial, and analysis of viral sieve effects. He also served as the Principal Deputy of the US Military HIV Research Program doing earlier stage R&D on HIV vaccines and as the Chief, Laboratory of Molecular Virology and Pathogenesis at Walter Reed Army Institute of Research.

Dr. Kim is a Distinguished Visiting Professor, Seoul National University; an Adjunct Professor at the Uniformed Services University (USA) and the Graduate School of Public Health, Yonsei University; and an Honorary Professor, University of Rwanda and the School of Public Health of Hong Kong University. He is a graduate of the University of Hawaii with High Honors in History and Highest Honors in Biology.

Dr. Kim received his M.D. from the Yale University School of Medicine and completed Internal Medicine Residency and Infectious Diseases Fellowship at Duke University Medical Center. He has authored over 350 publications and has received numerous awards, including the Medal of Honor for Civic Merit, Republic of Korea.

#### Session 1

#### **Vaccine Development & Immunology**

Moderator: Jonathan Lim (Philippines)

- Fundamentals of Vaccine Development Safety, Efficacy and Effectiveness Deep Thacker (India)
- How Vaccines Work Mechanisms of Vaccines and the Adjuvants Jin Oh Kim (MSD, South Korea)
- Cross Protection and Herd Immunity Elizabeth Gallardo (Philippines)

09:00 am - 10:10 am

Dr. Deep Thacker leads the Routine Immunization portfolio of the Maternal, Newborn and Child Health program in the Uttar Pradesh Technical Support Unit, Lucknow, India. For the past four years, he has provided techno-strategic support to the Government of Uttar Pradesh in implementing immunization interventions. Previously, while working with JSI, he led rotavirus vaccine introduction teams in two of India's largest states. Deep is passionate about using technology to drive change in public health and has helped develop digital platforms for infectious disease surveillance for the Indian Academy of Pediatrics and, more recently, for VPD surveillance in Uttar Pradesh.

Deep has an MPH in Global Health from Harvard University and completed his Bachelor of Medicine and Bachelor of Surgery (MBBS) from Rajiv Gandhi University of Health Sciences, India.

**Dr. Jin Oh Kim** is regional director of medical affairs (RDMA) in MSD Asia-Pacific region. Since 2017, he has been responsible for diverse vaccines in AP region including pneumococcal, HPV, rotavirus, varicella, zoster, MMR, hepatitis and so on. More recently, he has primarily worked on new pneumococcal vaccines, PCV15 and V116 (PCV21). He graduated from the school of medicine in Kyungpook national university, Daegu, Korea in 1999 and got master and PhD in Immunology from the same school. He has done post-doc fellowship in the division of rheumatology, university of Washington, US between 2007 and 2010. His main research topics in post-doc fellow period were autoimmune diseases like lupus and rheumatoid arthritis. He worked in medical affairs department in UCB Korea (2010-2012) and MSD Korea (2012-2016) and moved to MSD Asia-Pacific region as RDMA of vaccines in 2017.







#### **IPAP Pre-Conference Vaccinology Masterclass**

Cebu Grand Ballroom, Marco Polo Plaza Cebu

**Prof. Dr. Elizabeth T. Escaño-Gallardo** is a Pediatric Infectious Disease Specialist, a Senior Consultant Pediatrician at the Saint Louis University-Sacred Heart Medical Center and visiting consultant in other private hospitals in Baguio City, Philippines. She is a Professor at the Department of Pediatrics and the Department of Microbiology and Parasitology of the School of Medicine at Saint Louis University where she currently serves as the Head of the Department of Pediatrics for the past three years. As a member of the pediatric residency training committee, she has mentored numerous trainees who are now successful pediatricians. She also co-chairs the Infection Prevention and Control Committee, Antimicrobial Stewardship Committee and HIV/AIDS Core Team of the same institutions.

Prof. Gallardo is a Fellow of the Philippine Pediatric Society (PPS) and the Pediatric Infectious Disease Society of the Philippines (PIDSP) where she is actively involved in the latter's Continuing Medical Education and Scientific committee, Medical practice and ethics committee, Subspecialty board committee as well as the editorial board of The PIDSP Journal. She is also a member of the Philippine Foundation for Vaccination, the Asian Society for Pediatric Infectious Diseases and the Philippine Hospital Infection Control Society, Inc.. She has contributed to publications of the Section of Infectious and Tropical Diseases of the Department of Pediatrics-College of Medicine, Philippine General Hospital, University of the Philippines, Manila on Childhood Vaccination, Rational Antibiotic Use in Pediatrics, and Handbook of Pediatric Infectious Diseases.

Prof. Gallardo has undergone intensive training workshops in vaccinology and addressing vaccine hesitancy and has served as resource speaker, moderator, organizer, or facilitator in various pediatric conferences and fora both locally and internationally. Her advocacies include childhood vaccination and antimicrobial stewardship and she often gives lectures to healthcare workers and lay people on these advocacies as well as on various topics related to infectious diseases.

Coffee Break 10:10 am - 10:30 am

Session 2

Surveillance of Vaccine Preventable Disease: Pandemic Preparedness Moderator: Igbal Memon (Pakistan)

- Control of VPD Outbreaks: Measles, Rubella, Polio, Dipththeria and more Masood Alam (Sll. India)
- Technological Aids in Surveillance: Digital and Technical Support Smriti Mathema (Nepal)

10:30 am - 11:30 am

Dr. Masood Alam is the Head Strategic Planning, Commercial Development, Emerging Markets at Serum Institute of India Pvt. Ltd.

Trusted result focused senior Pharma/Biotech business leader having 18+ years of Country C level leadership experience in country commercial management, P&L accountability, marketing / market access with commercial excellence, setting new operations (start-up/scale up / turnaround), collaborations and partnering, having delivered many high impact commercial projects of public health relevance in child immunization, targeted oncology, cardiology, Critical Care segments. Besides also credited with creation and shaping up of industry's leading brands and businesses across various therapies and categories.



Dr. Smriti Mathema is an Associate Professor of Pediatrics at Kathmandu Medical College Teaching Hospital, Nepal. She completed her undergraduate MBBS degree from Jawaharlal Nehru Medical College, India and her postgraduate MD residency training in Pediatrics from Kasturba Medical College, India to qualify as a Pediatrician in 2010. With a special interest in preventive and social pediatrics, she is a trained Vaccinologist and an ADVAC-2019 alumni, with several research and publications in her field. She was one of the coordinators of "AAP-CDC Program to Strengthen the Advocacy of Immunization Champions in Nepal" (2017-2018) and is a Master Trainer of Immunization Advocacy Champions. She also graduated from the leadership in global child health program (IPA-LEAD) from International Pediatric Association and GHLI, Yale University where she pursued a project to strengthen vaccinology expertise in Nepal. She is currently an executive member of Nepal Pediatric Society (NEPAS) and serves as the Coordinator of NEPAS Immunization Committee, along with being the Editor-in-Chief of their Immunization Guidebook and Recommendation. She also represents Nepal in the Asia Pacific Pediatric Association Immunization Technical Advisory Group (APPA-TAG). She is a Moth Storyteller for their Global Community Vaccinology Program, a TED Speaker and is grateful every single day for being a mother of two amazing children.

#### **Lunch Symposium (Takeda)**

Moderator: Maria Rosario Capeding (Philippines)

- Dr. Lakkumar Fernando (Sri Lanka)
- Dr. Lulu Bravo (Philippines)

11:30 am - 12:30 pm





#### **IPAP Pre-Conference Vaccinology Masterclass**

Cebu Grand Ballroom, Marco Polo Plaza Cebu

Session 3

#### **Communication and Advocacy**

Moderator: May Emmeline Montellano (Philippines)

- Vaccine Safety and Efficacy H.T Wickramasinghe (Sri Lanka)
- **Vaccine Confidence and Resilience** Zulkifli Ismail (Malavsia)

12:30 pm - 01:45 pm

Dr. H.T. Wickramasinghe is a distinguished Senior Consultant Pediatrician at Neville Fernando Teaching Hospital in Sri Lanka. He previously served as the Head of the Department of Pediatrics at RIPAS Hospital in Brunei Darussalam for six years. During his tenure in Brunei, he also was a lecture at Queensland University in Brisbane, Australia, where he taught undergraduate students visiting Brunei on an exchange program. During his time in Brunei, he also taught undergraduates from Queensland University in Brisbane, Australia, who were visiting as part of an exchange program.

In Sri Lanka, Dr. Wickramasinghe has held the position of Head of the Department of Pediatrics at Sri Jayawardenepura Post-Graduate Teaching Hospital, where he mentored postgraduate trainees. His primary research interests include vaccine-preventable diseases, vaccines, and issues related to vaccination, such as vaccine hesitancy and resilience. He has presented extensively at national and international conferences, including ASPID, WSPID, ASVAC, and APPA, and has published numerous articles in internationally indexed medical journals.

Dr. Wickramasinghe served as President of the Sri Lanka College of Pediatricians from 2009 to 2010. He is a founding member of the Asian Society of Pediatric Infectious Diseases and served as its President from 2012 to 2014. Additionally, he was a Board Member of the World Society of Pediatric Infectious Diseases from 2016 to 2019. While his passion lies in pediatric infectious diseases, he has also significantly contributed to the Sri Lanka Epilepsy Association, transforming it into a prominent academic organization affiliated with the International League Against Epilepsy.

Outside of his professional endeavors, Dr. Wickramasinghe is an avid wildlife photographer.

**Dr. Zulkifli Ismail** is a distinguished Clinical Professor at KPJ University of Healthcare, with active roles as a Paediatric Cardiologist at KPJ Selangor Specialist Hospital and a visiting consultant at Damansara Specialist Hospital. He has an illustrious background in paediatrics, having served as the Past President of the Malaysian Paediatric Association and currently holds the position of Secretary-General of the Asia Pacific Pediatric Association (APPA), where he previously served as President from 2012 to 2016. Dr. Zulkifli also led the Asian Strategic Alliance for Pneumococcal Disease Prevention (ASAP) and was a Standing Committee member of the International Pediatric Association.

A proactive voice in disease prevention, he is a member of the Rotavirus Organisation of Technical Allies (ROTA) Council and the Asia Dengue Voice & Action (ADVA) group. Recently, he established and chairs the Dengue Prevention Advocacy Malaysia (DPAM). His commitment to child health advocacy is further reflected through his leadership of the Positive Parenting program, a parent education initiative by the Malaysian Paediatric Association since 2000, and the Immunise4Life technical committee, a vaccination advocacy program initiated in 2013.

Previously, Dr. Zulkifli held the title of Professor of Paediatrics and Paediatric Cardiology and served as Director of the teaching hospital at Universiti Kebangsaan Malaysia, where he was also Medical Director of the institution's private wing before taking early retirement. His contributions to medical literature include over 35 peer-reviewed publications, numerous abstracts, presentations, four co-authored books, and numerous articles for the lay public in mainstream media. Recognized for his impact, Dr. Zulkifli was awarded the Panglima Mahkota Wilayah in 2008, and was honored as the 'Outstanding Asian Pediatrician' by APPA in 2012

Session 4

#### **Vaccine Implementation**

Moderator: Charissa Fay Tabora (Philippines)

- Vaccine Equity Hanna Nohvnek (Finland, SAGE WHO)
- **Strategies for NIP-inclusion**
- Tony Nelson (China)
  Vaccination Campaigns and Activities Musa Nordin (Malaysia)

safety, acceptance, SARS-CoV-2, RSV, influenza, pertussis and pneumococcus.

Hanna Nohynek is a professor with MD PhD, who has special competences in vaccinology, international and travel health. She works as Chief Physician in the Unit Prevention of Health Threats of the Department of Public Health in the Finnish Institute for Health and Welfare (THL), which is a governmental public health research agency. She served as the secretary of the Finnish NITAG until August 2023, still being a member, and is chairperson of the WHO SAGE since 1/2023, and former chairperson of the WHO SAGE working group on covid-19 vaccines (4/2020-12/2022). After diagnostic methods development, and coordinating several Phase II trials and major Phase III trial on 11PCV against childhood pneumonia in the Philippines until 2010, Nohynek joined THL, where her research responsibilities are in vaccine programme design and evidence-based policy/decision making, vaccine impact, vaccine

01:45 pm - 03:00 pm





#### **IPAP Pre-Conference Vaccinology Masterclass**

Cebu Grand Ballroom, Marco Polo Plaza Cebu

**Tony Nelson** graduated from the University of Cape Town in 1978 and obtained his doctorate from the University of Otago in 1989. He joined The Chinese University of Hong Kong in 1993 and move to The Chinese University of Hong Kong, Shenzhen in 2021. His research includes rotavirus and other vaccines, diarrhoeal and respiratory disease surveillance, obesity and child growth, breastfeeding promotion and sudden infant death syndrome. He chairs the Steering Committee of Immunization Partners in Asia Pacific that organize biennial Asian Vaccine Conferences and is a member of the ROTA Council.



A 1982 graduate of Cardiff University (UK), **Musa Nordin** is a consultant paediatrician and neonatologist at Damansara Specialist Hospital and Clinical Professor of Paediatrics at the KPJ Healthcare University

Since 1999, he has served on various international advisory boards related to vaccines & immunisation. These included advisory boards related to, Pneumococcal, Meningococcal, MMRV, HPV Hexavalent, Influenza and Dengue vaccines.

He is a founding member of the Asian Strategic Alliance on the Prevention of Pneumococcal Disease (ASAP), Malaysian Influenza Working Group and Immunise4Life.

His latest book "Immunisation Controversies - What you really need to know" has been translated into 4 languages.



Coffee Break 03:00 pm - 03:15 pm

#### Session 5

#### Vaccines in different life stages

Moderator: Daniel Goh (Singapore)

- Infants/Children: Meningococcal, HPV, Rotavirus vaccine, RSV Cynthia Aguirre (Philippines)
- Infants/Children: Japanese encephalitis Rajeshwar Dayal (India)
- Elderly: Influenza, PCV, RSV, Shingles Tan Maw Pin (Malaysia)
- New Vaccines: Dengue, Malaria and more Anggraini Alam (Indonesia)

03:15 pm - 04:30 pm

**Dr. Cynthia Aguirre** is an accomplished pediatric infectious disease specialist, currently affiliated with The Medical City Department of Pediatrics, where she is part of the Section of Infectious Diseases and the Pediatric Liver Transplant Group. Dr. Aguirre earned her medical degree from the University of the Philippines College of Medicine, completed her general pediatrics training at The Medical City Department of Pediatrics, and pursued subspecialty training in Infectious Diseases at the University of the Philippines-Philippine General Hospital-Research Institute of Tropical Medicine (UP-PGH-RITM).

She has an extensive background in immunization and infectious disease advocacy, having served as Chair of the Committee on Immunization for the Pediatric Infectious Disease Society of the Philippines (PIDSP) from 2007 to 2018. Currently, she holds key leadership positions, including Board Member and Treasurer of both the PIDSP and the Philippine Foundation for Vaccination (PFV). She also serves as Vice President of the Immunization Partners for Asia Pacific (IPAP) and President of the International Society of Tropical Pediatrics-Philippines.

**Dr Rajeshwar Dayal** is working as Professor, Department of Pediatrics, S.N. Medical College Agra, India. His area of special interest is infectious diseases (especially tuberculosis and leprosy). His studies on diagnosis of leprosy and tuberculosis are internationally acclaimed. He has over a 100 publications. He has authored Chapters in reputed textbooks including the Red Book of American Academy of Pediatrics. He has served as Visiting Professor in universities in India and abroad (University of Philippines, Manila-2003) and University of Putrajaya, Kuala Lumpur, Malaysia -2006).

Dr. Dayal was elected as the National Vice President of the Indian Academy of Paediatrics (IAP) in 2011. He was also elected as Vice President of National Academy of Medical Sciences, India (NAMS) in 2021. In the year 2018-2020, he was appointed as the Chairperson of the Task Force on Tuberculosis by the Asia Pacific Pediatric Association (APPA). During his tenure, he coordinated with the various National Pediatric Societies of the Asia Pacific region and encouraged them to develop their own national guidelines for the diagnosis and management of Tuberculosis.

Dr. Dayal is presently the Chairperson of the IPA Working Group on Tuberculosis. He is currently serving as the President of International Society of Tropical Paediatrics (ISTP) (2023-2026). Since the year 2002, he has been consecutively elected, nine times as Member, Standing Committee of Asian Society of Pediatric Infectious Diseases(ASPID). Last year he was elected as a member of the Standing Committee of International Paediatric Association (IPA) for the period 2023-2025.

In recognition of his contributions, the Honourable President of India conferred the highest award of the Medical Council of India, namely, the Dr. B.C. Roy National Award on him in 2016.





#### **IPAP Pre-Conference Vaccinology Masterclass**

Cebu Grand Ballroom, Marco Polo Plaza Cebu

**Dr Tan Maw Pin** is a Professor of Geriatric Medicine at Universiti Malaya. After completing her undergraduate medical training at the University of Nottingham and her core medical training at Nottingham City Hospital, Prof Tan went on to subspecialise in Geriatric Medicine at Newcastle upon Tyne, United Kingdom, where she also undertook two years of full-time research training at the Institute of Ageing and Health, Newcastle University. She is currently the Principal Investigator of the Ministry of Higher Education Malaysia Long-Term Research Grant Scheme funded project, TrAnsforming CoGnitivE Frailty into Later-lifE Self-Sufficiency (AGELESS), and is the immediate past President of the Malaysian Society of Geriatric Medicine. She also chairs the senior subcommittee for the Malaysian Influenza Working Group which has successfully lobbied for government funded influenza vaccines for older Malaysian residents.



**Dr. Anggraini Alam** is a consultant in infection and tropical diseases with substantial experience and expertise in the field. Within the Indonesian Pediatric Society, Dr. Alam has been entrusted with various leadership responsibilities and roles, such as becoming the Head of the Working Group of Infection & Tropical Diseases of the Indonesian Pediatric Society 2017–2024. Dr. Alam is renowned expert in the field, she contributed of the national guideline of Dengue for Children and Adolescent, Dengue National Strategies, and VPD as well.

She is also a lecturer and Head of Infection and Tropical Diseases at Child Health Department/Medical Staff Group, Medical Faculty Universitas Padjadjaran- Hasan Sadikin General Hospital. She is also board member of the ASPID and member of the SAG on COVID-19, Antimicrobial Resistance, and Infectious Disease of the International Paediatric Association.



Plenary 2

#### Vaccines and Vaccinations for the Future: What Can and Should We Expect? Linfa Wang (Singapore)

04:30 pm - 04:50 pm

**Dr. Linfa Wang** is a professor of the Programme in Emerging Infectious Diseases at Duke-NUS Medical School, and the inaugural executive director of PREPARE, Ministry of Health, Singapore. He is an international leader in the field of emerging zoonotic viruses and virus-host interaction. His current research focuses on why bats are such an important reservoir for emerging viruses and on how we can learn from bats to make us more resilience to infection and diseases in general. He is a member of the WHO SARS Scientific Research Advisory Committee and played a key role in identification of bats as the natural host of SARS-like viruses.

In response to the COVID-19 pandemic, he has served/is serving on multiple WHO committees for COVID-19, including the WHO IHR Emergency Committee. Prof Wang has more than 500 scientific publications, including papers in Cell, Nature, Science, NEJM and Lancet. He was the Editor-in-Chief for the Virology Journal from 2012-2022. Prof Wang was an elected Fellow of the Australian Academy of Technological Sciences and Engineering 2010, the American Academy of Microbiology 2021, the Australian Academy of Science 2024. He received the Singapore President Science Award in 2021.

# Concluding Remarks and Call to Action Closing

Mayan Lumandas (Philippines)

04:50 pm - 05:00 pm

#### **IPAP Vaccinology Masterclass Organizing Committee**

Chair **Daniel YT Goh, MD** 

Members International

Tony Nelson, MD Zulkifli Ismail, MD H.T. Wickramasinghe MD Kim Mulholland, MD

Local

Lulu Bravo, MD Cynthia Aguirre, MD Mayan Lumandas, MD

Secretariat

James John Galac, RN Sivill Anan Galera, RMT





REGULAR PRE-CONGRESS



#### Morning Session (10:00 am - 12:00 pm)

### Module 1 **Neurology**

#### **Objectives**

- Acquaint the participants on the CPG for Febrile seizures in infants and children.
- Discuss the bases of the CPG in management of febrile seizures in children.
- Apply the CPG in clinical scenarios seen in practice.

Room Assignment
Tokyo A
Marco Polo Plaza Cebu



## Review of the Clinical Practice Guidelines for Febrile Seizures in Infants and Children

Margaret S. Modequillo, MD
Chair and Pediatric Neurologist
Department of Pediatrics
Perpetual Succour Hospital, Philippines



# First Unprovoked Seizure in Children: Evaluation and Management

Jo Janette R. Dela Calzada, MD Training Officer and Pediatric Neurologist Department of Pediatrics Cebu South Medical Center, Philippines



## Developmental and Behavioral Pediatrics

#### Objectives

- Provide determinants for school readiness
- Discuss components of relevant curriculum post-pandemic
- Discuss the different types of schools and how to match it to different learners

Room Assignment
Manila B & C
Marco Polo Plaza Cebu



Evaluating School Readiness: Ready... Get Set... Go to School

Bernadette C. Benitez, MD Chairman Section of Developmental and Behavioral Pediatrics Makati Medical Center, Philippines



#### The New Curriculum After the Pandemic

Jack Alexander C. Herrin, MD
Developmental and Behavioral Pediatrician
Residency Training Officer
Department of Pediatrics
Cardinal Santos Medical Center



School for Thought: Choosing the Right School for your Child

Angelita R. Sievert-Fernandez, PhD, RPsy Consultant, Counseling, and Developmental Psychologist Pain Clinic, St. Luke's Medical Center, Global City, Philippines





#### Morning Session (10:00 am - 12:00 pm)

#### Module 3

#### **Neonatology**

#### Objective.

- Discuss the benefits of noninvasive ventilation on the
  newborn
- Identify best practices, current care protocols and guidelines to improve health outcomes for preterm infants
- Assess and enhance adoption of the Kangaroo Mother Care intervention

Room Assignment
Tokyo B
Marco Polo Plaza Cebu



## Non-Invasive Ventilatory Strategies in Newborn Infants

Nathalie Anne R. Hernaez, MD
Department Chair and Neonatologist
University of Cebu Medical Center
Mandaue City, Cebu, Philippines



#### Management of Premature Infants in the Asian Region: An Asian Neo Collaborative Study

Ma. Lourdes A. Salaveria-Imperial, MD
Head of NICU
Quirino Memorial Medical Center
PSNBM Representative to the Asian Neo Collaboration



Country Adoption of the Kangaroo Mother Care (KMC) Intervention in the Asian Region

**Socorro G. De Leon-Mendoza, MD** Chairperson & President Kangaroo Mother Care Foundation Phil., Inc.



#### Ohiectives

- Discuss recognition and management of pediatric anaphylaxis
- Present an overview of pediatric allergic diseases
- Highlight specific updates to the guidelines specific to the pediatric population

Room Assignment
Manila A
Marco Polo Plaza Cebu



# Case-based Pediatric Emergencies Workshop: Anaphylaxis

Grace Angela S. Garcia-Pimentel, MD Consultant and Pediatric Allergologist Perpetual Succour Hospital, Philippines



Atopic Dermatitis (Eczema) Guidelines 2023

Vanessa M. Fajardo-Nery, MD Head, Pediatric Allergy and Immunology Section of Allergy, Department of Pediatrics, Chong Hua Hospital, Cebu City, Philippines





#### Afternoon Session (02:00 pm - 04:00 pm)

#### Module 5 **Hematology**

- Provide a platform for pediatricians to gain a comprehensive understanding of current evidence-based practices in patient blood management (PBM) for neonates and pediatric patients.
- Discuss practical strategies for implementing PBM guidelines in routine pediatric practice, addressing potential challenges and promoting adherence.

Room Assignment Tokyo A Marco Polo Plaza Cebu



#### **Patient Blood Management**

Desiree U. Dy-Holaysan, MD

Head and Pediatric Hematologist and Oncologist Section of Pediatric Hematology and Oncology Chong Hua Hospital, Cebu City, Philippines



#### **Neonatal & Pediatric Transfusion Guideline**

Lynda Mae P. Lepatan, MD

Section Head Pediatric Unit – Hematology / Oncology Cebu Cancer Institute of Perpetual Succour Hospital,



#### Recognizing and Managing TARs

Maria Suga A. Dioko-Ibones, MD

Pediatric Hematologist and Oncologist Department of Pediatrics Department of Bioethics Cebu Institute of Medicine



#### How to Choose the Asthma Maintenance Medications

Brenda Lou Lovely H. Noel-Abanilla, MD

Consultant and Pediatric Pulmonologist Chong Hua Hospital, Mandaue City, Cebu, Philippines



#### **Proper Use of Asthma Gadgets**

**Arnold Nicholas T. Lim, MD** 

Consultant and Pediatric Pulmonologist Chong Hua Hospital, Mandaue City, Cebu, Philippines



#### Frequently Asked Questions on Asthma

Jacob C. Viniegas, MD

Consultant and Pediatric Pulmonologist Chong Hua Hospital, Mandaue City, Cebu, Philippines



Discuss the modes of action of different asthma medications used for maintenance in Asthma

Module 6 **Pulmonology** 





#### **Thursday, 14 November 2024**

#### Afternoon Session (02:00 pm - 04:00 pm)

#### Module 7

#### **Nephrology**

- Objectives

  Determine what kind of fluid resuscitation should we give to an acutely ill child
- Compare various methods of determining the presence of Acute kidney injury among pediatric patients
- Define Beverage Hydration Index and apply it in choosing the best fluids to give to children

Room Assignment **Tokyo B** Marco Polo Plaza Cebu



**Updates on Fluid Management of an** Acutely III Child to prevent AKI

Monina Cristina S. Cabral, MD Section Head and Pediatric Nephrologist Pediatric Nephrology, Chong Hua Hospital, Cebu City, Philippines



AKI: AKI BASICS to BIOMARKERS and Anything in Between

Maria Dalla J. Dosado, MD Consultant and Pediatric Nephrologist Perpetual Succour Hospital of Cebu



**Beverage Hydration Index:** A New Kid on the Block

Agnes A. Alarilla-Alba, MD Institute Director and Pediatric Nephrologist Institute of Pediatrics, The Medical City, Philippines



#### **Thursday, 14 November 2024**

factors components for cardiovascular disease (CVD)

Point out the red flags for

Provide an educational

Adulthood

their families

Room Assignment
Manila A
Marco Polo Plaza Cebu

prevention and checklist per component to reduce CVD in

opportunity that screening provides to educate children and

Discuss tracking progress of screening to identify the

effectiveness of interventions and lifestyle modifications and aid in modifying treatment strategies as children grow

#### Afternoon Session (02:00 pm - 04:00 pm)



## Introduction to the Policy Brief Recommendation of Metabolic Syndrome in Children

Martha Socorro M. Santiago, MD
Past President and Pediatric Cardiologist
Philippine Society of Pediatric Cardiology
Philippine Heart Center



## The Red Flags of Obesity and Overweight: Screening Recommendation

Lorna R. Abad, MD
Professor and Pediatric Endocrinologist
University of the Philippines College of Medicine
Philippine General Hospital
Department of Pediatrics



#### The Pre-Diabetes Curb in Children

Sylvia C. Estrada, MD
Chief, Training Officer and Pediatric Endocrinologist
Division of Pediatric Endocrinology
University of the Philippines College of Medicine
Philippine General Hospital
Department of Pediatrics



#### All about Blubbers: Hyperlipidemia and Fatty Liver

Joy Kimberly N. Militante, MD
Head and Pediatric Gastroenterologist, Hepatologist,
Nutritionist Section of Pediatric Gastroenterology,
Chong Hua Hospital, Philippines



Mercury Rising Alert: Hypertension in Children-Treatment and Control of Risk Factors

Anna Marie S. Cabaero, MD Associate Professor and Pediatric Cardiologist Cebu Institute of Medicine, Philippines







# MAIN CONGRESS



#### Friday, 15 November 2024 (Day 1)

#### Plenary Lectures (09:00 am - 12:00 pm)

Prof. Tufail Muhammad (Pakistan)

Pacific Grand Ballroom Waterfront Cebu City Hotel

The State of Children in the Asia-Pacific: Building the Game Plan @ Assiact

Prof. Igbal Ahmad Memon, MD (Pakistan)

Plenary 1: Newborn Medicine

Term Respiratory Distress @ Abstract

Prof. Santosh T. Soans, MD (India)

Plenary 2: Caring for the Carer

Well-being of the Healthcare Worker @ Abstract

Assoc. Prof. Daniel YT Goh, MD (Singapore)

Plenary 3: Preventive Pediatrics

Vaccine Hesitancy and Refusal, Understanding Better to Handle Better @ Assistance

Prof. Zulkifli Ismail, MD (Malaysia)

#### Simultaneous Sessions (02:00 pm - 05:00 pm)

Simultaneous Session 1

**Adolescent Medicine/ Developmental and** Behavioral

Prof. Madeleine Grace M. Sosa (Philippines)

Room Assignment Mediterranean Room Waterfront Cebu City Hotel

Simultaneous Session 2

Endocrinology/

Prof. Aman Bhakti Pulungan

Waterfront Cebu City Hotel

Neurology/ Genetics/

**Metabolism** 

Room Assianment Aegean Room

(Indonesia)

**Family-Centered Interventions for** 

Neurodevelopmental Disorders in Low-Resource Countries @ Abstract

Jacqueline O. Navarro, MD (Philippines)

Mental Health in Adolescence: Protection and Preservation @ Abstract

Francis Xavier Daniel M. Dimalanta, MD (Philippines)

Intergenerational Transmission of Abuse Abstract

Bernadette J. Madrid, MD (Philippines)

Free Paper Presentation

Parental Awareness of Child Abuse and Neglect on Outpatient Pediatric

Patients in Dr. Jose Fabella Memorial Hospital @ Abstra

Mara Aren Israel Bernabe, MD (Philippines)

Advances in Genetic Testing and Therapeutics in Pediatrics 

Abstract

Chin Hui Lin, MD (Singapore)

Growth Hormone Deficiency Disorders @ Abstract Prof. Muhammad Yazid Jalaludin, MD (Malaysia)

**The Spectrum of Primary Headache Disorders** in Children and Adolescents @

Martha Lu-Bolaños, MD (Philippines)

Delineating Autoimmune from Infectious Encephalitis in Children @ Abstract

Prof. Marissa B. Lukban, MD (Philippines)

Free Paper Presentation

Long-term Follow-up Observation on the Efficacy and Safety of **GnRHa Treatment in 5 Cases of Central Precocious Puberty** 

Caused by Hypothalamic Hamartoma @ Ass

Siqi Huang, MD (China)

A Case report on Chronic Subdural Hemorrhage Secondary to a Ruptured Arachnoid Cyst in an Adolescent Female @ Abstract

Alfred Sebastien Adan Recio, MD (Philippines)

Sugar Crash: A Case of a Neonate with Congenital Hyperinsulinism due to ABCC8 Gene Mutation @ Abstract

Rhenna Mae B. Bontuyan, MD (Philippines)





Non-Infectious Manifestations of Primary Immunodeficiency @ Abstract Assoc. Prof. Intan Hakimah Ismail, MD (Malaysia) Climate Change and the Rise of Pediatric Allergies @ Abstract Maria Carmela A. Kasala, MD (Philippines) Simultaneous Session 3 Hematology/ Improving Thalassemia Care through Newborn Screening Abstract Oncology/ Maria Beatriz P. Gepte, MD (Philippines) Allergology/ Nutritional Anemias: Challenges and Responses @ Abstract **Immunology** Assoc Prof. Edwin V. Rodriguez, MD (Philippines) Ma. Minerva B. Ramos, MD Free Paper Presentations (Philippines) **Analysis the Actuality of Diagnosis, Treatment and Influence of** High-Risk Factors on the Prognosis of Children with Retinoblastoma Caspian Room from 3053 Cases Data in China @ Abstract Waterfront Cebu City Hotel Zhang Yi, MD (China) Case Report: A rare case of methimazole-induced agranulocytosis in a female teenager with multiple autoimmune disorders @ Abst Maynard O. Galingana, MD (Philippines) Disorders Of Gut-Brain Interaction: The Microbiota as the Third Wheel @ Abstract Felizardo N. Gatcheco, MD (Philippines) Understanding the Gut Microbiome @ Abstract Josie Grace C. Castillo, MD (Philippines) Free Paper Presentations **Gut Microbiota Profile of Stunted Children Across Asia-Pacific:** A Systematic Review on Environmental Enteric Dysfunction in Stunting @ Asset Vellia Justian, MD (Indonesia) A Meta-Analysis on the Efficacy and Safety of Saccharomyces Boulardii on Simultaneous Session 4 Diarrhea Due to Amoebiasis in Children: An Update @ Assa Gastroenterology/ Felizardo Gatcheco, MD (Philippines) Hepatology/ Nutrition **Evaluation of Microbial Viability, Population, and Contamination** in Probiotic Products in the Philippines @ Maria Christina H. Ventura, MD Randy Urtula, MD and Mary Jean Guno, MD (Philippines) (Philippines) Room Assignment
Arctic 2 Parental Attitude and Perception Towards Rotavirus Immunization Using the Health Belief Model @ Abstract Waterfront Cebu City Hotel Krizel Jane C. Tormis, MD (Philippines) Seroprevalance of Hepatitis A Antibodies in Non-Vaccinated Adolescents Aged 9 to 12 Years @ Mukesh Dhankar, MD and Anurag Agarwal, MD (India) Effect of Nutrient-Dense Oral Supplement on Physical Growth and Health-

(ENDORSE study) @ Ab

Related Consequences of Nutritionally At-Risk Preschool Filipino Children

Jossie Rogacion, MD and Melchor Victor Frias IV, MD (Philippines)





Beyond Survivorship: Post Intensive Care Syndrome in Children @ Abstract Prof. Tang Swee Fong, MD (Malaysia) Best Practices in DHF Management: The Asia-Pacific Experience @ Abstract Ronald V. Limchiu, MD (Philippines) Pediatric ARDS @ Abstract Wilfredo Tente E. Dublin Jr., MD (Philippines) Trends in Mortality Related to Unintentional Poisoning in the Asia-Pacific (2) Australia Simultaneous Session 5 **Pediatric Emergencies/** Charmaine V. Micu-Oblefias, MD (Philippines) Toxicology/ **Critical Care Medicine** Free Paper Presentations Clinical Profile and Outcome of Accidental and Intentional Toxic Substance Ingestion in Patients Ages 0 to 18 Years Old Admitted in Tertiary Hospital, Michael M. Resurreccion, MD Pre-, During and Post-Covid-19 Pandemic from 2017 to 2023: (Philippines) A Retrospective Descriptive Cohort Study @\_\_ Jenessa Mae C. Perito, MD (Philippines) Arctic 1 Room Waterfront Cebu City Hotel **Effect of Albumin Rescue on Patient Outcomes in Children** with Severe Dengue: A Non-Randomized Control Trial Gurdeep Singh Dhooria, MD (India) **Determination of Post-Menstrual Age and Weight at Extubation and its** Relationship with Extubation Success in Premature Infants at a Neonatal Intensive Care Unit in a Tertiary Hospital in Manila, Philippines: Michaella Alvarez, MD (Philippines) Challenges in the Management of Pediatric Urologic Conditions

@ Assets Joan Marie S. Flor, MD (Philippines) Glomerular Disease in Children: When to do a Biopsy Abstract Elmer Kent A. Lopez, MD (Philippines) Simultaneous Session 6 Nephrology/ **Urology Overview of Hypertension in Children** with Acute and Chronic Kidney Disease @ Abstract Moderator Adj. Prof. Nitin Kapur (Australia) Selva Kumar Sivapunniam, MD (Malaysia) Free Paper Presentations OHVIRA Syndrome in a Ten-Year-Old Female: A Case Report @ Abstract Arctic 3 Room Waterfront Cebu City Hotel Jean Cathlene D. Banzon, MD (Philippines) A Boulder in My Bladder:

A Case of Vesical Megalithiasis in an 8-Year-Old Boy @ Asstract

Cricelle Rose V. Cobre, MD (Philippines)





#### Saturday, 16 November 2024 (Day 2)

#### Plenary Lectures (09:00 am - 11:15 am)

Moderator
Prof. Iqbal Ahmad Memon
(Pakistan)

Venue Pacific Grand Ballroom Waterfront Cebu City Hotel Plenary 4: Environmental Pediatrics

Climate Change and Planetary Health: Impact on Childhood Diseases @ Austract
Prof. Tufail Muhammad, MD (Pakistan)

Plenary 5: Nutrition and Food Security

Eliminating the Double Burden Malnutrition @ Abstract

Dr. Aman Bhakti Pulungan, MD (Indonesia)

Plenary 6: Infectious Diseases and Tropical Pediatrics

**The Fight Continues:** 

Reducing the Menace of Childhood TB in the Asia Pacific @ Abstract

Prof. Rajeshwar Dayal, MD (India)

#### Simultaneous Sessions (02:00 pm - 05:00 pm)

Simultaneous Session 7

Newborn Medicine

Moderator **Prof. Santosh T. Soans** 

(India)

Room Assignment Caspian Room Waterfront Cebu City Hotel

Simultaneous Session 8

(Philippines)

Arctic 2 Room

A/Prof. Nepthali R. Ordonez

Waterfront Cebu City Hotel

Reducing Harm: A Systems Approach Abstract

Alvin Chang, MD (Singapore)

Hyperbilirubinemia: Current Guidelines and Emerging Therapies @ Austract Maria Esterlita V. Uy, MD (Philippines)

Breastfeeding: The Golden Hour: First Hour After Delivery @ Abstract

Aurora Gloria I. Libadia, MD (Philippines)

Free Paper Presentations

A Comparative Study on the Outcomes of the Use of 70% Ethyl Alcohol versus Dry Cord Care on Newborns

Delivered at a Lying-In in Muntinlupa City from January to April 2024 @ Activated Giuseppe Danielle Gallardo Jaring-Guerra, MD (Philippines)

Diagnostic Accuracy of Newborn Early Warning Score (NEWS) in predicting the incidence of neonatal mortality:

a retrospective analysis of cases from October to December 2021 @ Asset

Jehan Jayme Moncal, MD (Philippines)

Asthma and Preschool Wheeze @ Abstract
Adj. Prof. Nitin Kapur, MD (Australia)

**Walking Pneumonia in Children** Abstract

Alfredo L. Bongo, Jr., MD (Philippines)

Optimizing Infant and Child Sleep @ Abstract

Assoc. Prof. Daniel YT Goh, MD (Singapore)

Pulmonology Free Paper Presentations

Clinical Profile and Outcome of

Childhood Interstitial Lung Disease (CHILD) Syndrome

in a Tertiary Pediatric Hospital: A 10-Year Review (2013 – 2022) @ Abstract

Juan Carlos Domingo Moreno, MD (Philippines)

Association of Fluid Balance During the First 48 Hours of Assisted Mechanical Ventilation with Clinical and Weaning Outcomes among Pediatric Patients with Severe Pneumonia in a Tertiary Government Hospital in the Philippines @ Address of the Price of the Point Patients of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Assistation of Fluid Balance During the First 48 Hours of Fluid Balance During the Fluid Bal

Jessica Lobenia Mariano, MD (Philippines)

Clinical Profile and Outcome of Pediatric Patients with Unplanned Extubation at De La Salle University Medical Center @ Accreat







Simultaneous Session 9 Cardiology

Ninfa J. Villanueva, MD (Philippines)

Arctic 3 Room Waterfront Cebu City Hotel **Current Clinical Profile of Acute Rheumatic Fever:** Subclinical Carditis and Its Implications @ Abstract

Edgardo E. Ortiz, MD (Philippines)

**Current Assessment of the RF-RHD BOD in Asia:** Implementing Programs for Prevention and Control @ Abstract Juliet J. Balderas, MD (Philippines)

Options for PDA closure in the high-risk newborn:

**Current recommendations** <a>②</a> Babie Catherine R. Causapin, MD (Philippines)

Free Paper Presentations

Comparison of Pain Scale in the Use of Lidocaine as a Diluent versus Lidocaine Plus Coughing Technique During Benzathine Penicillin G Administration in Pediatric Patients with Rheumatic Fever and **Rheumatic Heart Disease: A Randomized Clinical Trial** at Mariano Marcos Memorial Hospital and Medical Center @ Abstract Charmaine A. Tabin, MD (Philippines)

**Risk Factors Associated with Clinical Outcomes** among Rheumatic Heart Disease Patients Ages 5 to 17 Years Old in Bulacan Medical Center: A Prospective Cohort Study @ Abstract Beatrice Joy B. Tomboc, MD (Philippines)

Effectiveness of Intravenous Immunoglobulin and Corticosteroid in Pediatric Acute Myocarditis: A Systematic Review and Network Meta-Analysis @ Acute Myocarditis: A Systematic Review and Network Meta-Analysis Thi Bao Trang Thai, MD (Taiwan)

Simultaneous Session 10

Rheumatology/ Ethics/ **Professionalism** 

A/Prof. Edwin V. Rodriguez (Philippines)

Room Assignment Aegean Room Waterfront Cebu City Hotel Cultivating Professionalism and Ethical Practice in Pediatrics @ Abstract

Assoc. Prof. Pacifico Eric E. Calderon, MD (Philippines)

Autoinflammatory Diseases in Children 

Abstract Assoc. Prof. Christine B. Bernal, MD (Philippines)

Universal Health Care: The Philippine Experience So Far @ Abstract Gabriel R. Borlongan, MD (Philippines)

Impact of Chronic Pain and Disability in Children with Rheumatic Disorders @ Abstract Maricar A. Bayo-Ang, MD (Philippines)

Free Paper Presentation

Validation of the 2019 European League Against Rheumatism/American College of Rheumatology Classification Criteria for Childhood-Onset Systemic Lupus Ervthematosus (CSLE) @ Mar Christopher F. Epetia, MD (Philippines)

**Consensus-Generating Participatory Approach in the Development of an** Evidence-Based and Best Practices Preventive Care Baby Book @\_\_\_ Melchor V.G. Frias, IV, MD (Philippines)

**Digitally Supported Remote Training for District Healthcare Providers** to Improve Essential Newborn Care Skills: A Pilot Cluster Randomized Trial in Lao PDR @ Abstract Sayaka Horiuchi, MD (Japan)

TABLE OF CONTENTS



Simultaneous Session 11
Infectious Diseases/
Tropical Medicine

Moderator

A/Prof. Wilfredo R. Santos, MD
(Philippines)

Room Assignment Mediterranean Room Waterfront Cebu City Hotel Revisiting Malaria in the Asia-Pacific @ Austract Fe Esperanza Caridad J. Espino, MD (Philippines)

**Rebuilding Confidence in Vaccine Advocacy through Communication \*\*** *Assistation 1. Gimenez, MD (Philippines)* 

Pediatric HIV in the Asia-Pacific: Improving Outcomes 

Abstract

Jay Ron O. Padua, MD (Philippines)

Covid 19 in Children: The Way Forward @ Abstract Prof. Cecilia Maramba-Lazarte, MD (Philippines)

Building Vaccine Resilience @ Abstract H.T. Wickramasinghe, MD (Sri Lanka)

Immunization Strategies to Bridge Health During Pandemics @ Abstract Roger Evans, MD

Simultaneous Session 12

Infectious Diseases/ Tropical Medicine

Moderator Prof. Zulkifli Ismail (Malaysia)

Room Assignment
Arctic 1 Room
Waterfront Cebu City Hotel

**Updates on Jap B Encephalitis @ Abstract**Prof. Rajeshwar Dayal, MD (India)

**Diarrhea and Malnutrition: Overcoming Lingering Threats to Child Health** *(a)* Abstract Prof. Igbal Ahmad Memon, MD (Pakistan)

Immunization as Part of Pandemic Preparedness @ Abstract
Assoc. Prof. Smriti Mathema (Nepal)

Life Course Immunization: IA2030 @ Abstract

Emer. Prof. Lulu C. Bravo (Philippines)

Vaccine Access: Maximizing Equity, Minimizing Disparity @ Austract Deep Thacker, MD (India)

Free Paper Presentations

Factors Affecting Hesitancy Toward the COVID-19 Vaccine
Among Parents of Children Aged 5-17 Years in San Juan, Metro Manila 
Meryl Louise Su, MD (Philippines)

Association of COVID-19 Vaccine Status with Disease Severity and Outcome Among Confirmed COVID-19 Pediatric Patients
Admitted in a Tertiary Referral Center 

Shaiva Nur O. Mangaccat, MD (Philippines)

Immunogenicity of Accelerated Two Dose Intradermal Pre-Exposure Rabies Prophylaxis Regimen in Children with No Known Immunodeficiency Versus Children Exposed to Immunosuppressant Therapy Accelerated Two Dose Intradermal Pre-Exposure Rabies Prophylaxis Regimen in Children with No Known Immunodeficiency Versus Children Exposed to Immunosuppressant Therapy Accelerated Two Dose Intradermal Pre-Exposure Rabies Prophylaxis Regimen in Children with No Known Immunodeficiency Versus Children Exposed to Immunosuppressant Therapy Accelerated Two Dose Intradermal Pre-Exposure Rabies Prophylaxis Regimen in Children with No Known Immunodeficiency Versus Children Exposed to Immunosuppressant Therapy Accelerated Two Dose Intradermal Pre-Exposure Rabies Prophylaxis Regimen in Children with No Known Immunodeficiency Versus Children Exposed to Immunosuppressant Therapy Accelerated Two Dose Intradermal Pre-Exposure Rabies Prophylaxis Regimen in Children With No Known Immunodeficiency Versus Children Exposed to Immunosuppressant Therapy Prophylaxis Regimen Immunosuppressant Therapy Pr

#### Sunday, 17 November 2024 (Day 3)

**Plenary Lectures (09:00 am - 11:15 am)** 

Moderator A/Prof. Cesar M. Ong (Philippines)

Venue
Pacific Grand Ballroom
Waterfront Cebu City Hotel

Plenary 7: Research and Public Health in Pediatrics

Impact of the NBS Program in Changing the Landscape

of Newborn Care in the Asia-Pacific Abstract
Prof. Carmencita D. Padilla, MD (Philippines)

Plenary 8: Digital Health in Pediatrics

Transforming Healthcare @ Abstract

Ms. Maria Michaela B. Limcaoco (Philippines)

Plenary 9: Contemporary Health Issues in Pediatrics

Respiratory Health in the Post-Covid World @ Assets

Assets In Pediatrics

Adj. Prof. Nitin Kapur, MD (Australia)





# POSTER PRESENTATIONS



The Prevalence of Obesity among Adolescent Learners Studying In Public Senior High Schools in Bataan on the School Year 2023-2024: A Cross-Sectional Study @ A Jethro N. Arambur, MD (Bataan General Hospital and Medical Center) Knowledge, Attitudes, Promoters And Barriers Towards Vaccination, among Completely and Incompletely Immunized Adolescents in a Private School in Caloocan City @ Abstract Denise Lorraine A. Arlegui, MD (Veterans Memorial Medical Center) **Adolescent Suicide Attempts during the COVID-19 Pandemic:** Clinicodemographic Profiles, Associated Factors and Clinical Outcomes @ Abstract Maria Nikki Luberth N. Balce, MD (East Avenue Medical Center) Knowledge, Perceptions and Patterns of Electronic Cigarette Use among Filipino High School Students Ages 12-18 Years Old in a Public High School in Diliman, Quezon City @\_\_ Joy Valerie Catameo, MD (East Avenue Medical Center) Screening of Anxiety and Depression among Chronically III Adolescents seen at the Southern Philippines Medical Center Using the Hospital Anxiety and Depression Scale English and Pilipino Version (HADS/HADS-P): **Adolescent Medicine** A Cross Sectional Study Mithrica Mae D. Fantone, MD (Southern Philippines Medical Center) Level of Knowledge, Attitudes and Practices Towards Covid-19 of High School Students and their Parents of Barangay. 83 San Jose, Tacloban City @ ... Krisha Katreena Pamate Uribe Jusayan, MD (Divine Word Hospital) The Relationship of Parenting Styles with Depression and Anxiety in Adolescents: A Systematic Review and Meta-Analysis @\_\_\_ Kathleen Jade B. Pascual, MD (East Avenue Medical Center) Health Literacy and Handwashing Behavior of Adolescents @ Ass Patricia Louise Pineda, MD (De La Salle Medical and Health Sciences Institute) Coping Mechanism Strategies and Treatment Adherence among Adolescents with Epilepsy in Northern Mindanao Medical Center Outpatient Department @ Abstract Nathalie Curtny Valdehueza, MD (Northern Mindanao Medical Center) Impact of COVID-19 Pandemic on Physical Activity, Sedentary Behavior, and Dietary Practices of Children Ages 10 to 18 years old Living in Barangay San Perfecto, San Juan City @ Ass Pamela Joanne C. Yu, MD (UERM Medical Center) The Effect of Lavendula (Lavender) Oil Massage as an Adjunct Management on the Reduction of Anxiety Scores of Children (aged 8-16 years old) with Autism-Spectrum-Disorder: A Randomized Controlled Cross-Over Trial Peatrice Alyssa Marie S. Tan, MD (Capitol Medical Center) **Developmental and Behavioral Pediatrics** 

Characteristics of Circle Drawing Movements of Preschool Children with Developmental Disorders under Varied Drawing Conditions (\*\*) Abstract Mei Yamada, MD (Kyoto University [Japan])





Unusual Connection: A Case of Spinal Epidural Arteriovenous Fistula 

Abstract Mary Ann Gonzales Argame, MD (Asian Hospital and Medical Center) A 3-Year-Old with Sturge-Weber Syndrome who presented with Bilateral Port-Wine Stain and Seizure: A Case Report @ Abstract Raye Cielo R. Bercero, MD (Vicente Sotto Memorial Medical Center) Unveiling the Stealth Threat: Japanese Encephalitis in Focus, A Case Report @ Alexza C. Ceballos, MD (Cebu South Medical Center) Sanfilippo Syndrome - A Case Report @ Abstract Ina O. De Guzman, MD (St. Louie University Sacred Heart Medical Center) Abnormal Inter-Brain Neural Synchrony in Autism during Caregiver-Child Interaction: An Exploratory EEG Hyperscanning Study @ Abstract Lin Deng, MD (Xinhua Hospital [China]) Posterior Reversible Encephalopathy Syndrome (PRES) in a 7-year-old Child who Initially Presented with Severe Headache: A Case Report @ Abstract Jeson de Vicente, MD (St. Elizabeth Hospital, Inc.) Neurology Spinocerebellar Ataxia Type 1 (SCA 1) in a Filipino Boy: A Case Report @ Abstract Joanna Lissa F. Payuran Gatchalian, MD (University of Sto. Tomas Hospital) Role of Multiple Sleep Latency Test (MSLT) In the Workup of Children with Hypersomnolence @ Abstract Niharika Malhotra, MD (Queensland Children's Hospital [Australia]) **Enigma: A Case on Anti-N-Methyl-D Aspartate Receptor** (Anti-NMDAR) Encephalitis @ Abstract Angelica G. Quitasol, MD (Dr. Pablo O. Torre Memorial Hospital - Riverside Medical Center Inc.) **Demographic & Clinical Profile of Children with Intracranial Abscess and** Cyanotic Congenital Heart Disease in a Tertiary Hospital in Manila: A Correlation of Factors @ Sunshine Marie T. Reinbold, MD (Jose R. Reyes Memorial Medical Center) Hypokalemic Periodic Paralysis in an Adolescent Male in the Philippines:

Danielle Bleu V. Reyes, MD (Makati Medical Center)

A Case Report @





**Genetics/Genomics** 

Clinical, Biochemical, and Genetic Profiles of Patients **Screened with Fatty Acid Oxidation Disorders:** A Single Institution Experience @ A Quino Alden Szi Alberto. MD (Philippine General Hospital) 10p Deletion Syndrome in a Filipino Child: A Case Report @ Abstract Quino Alden Szi Alberto, MD (Philippine General Hospital) A Case Report of the First Filipino Infant Diagnosed with Cystic Fibrosis Through the Philippine Newborn Screening Program @ Bernadette Macrohon, MD (Zamboanga City Medical Center) Pneumothorax as an Initial Symptom of Undiagnosed Marfan Syndrome: A Case Report @ Abstract Loren Bernadette D. Banario, MD (Divine Word Hospital) **A Novel Pathogenic Variant Identified** in a Rare Case of Harlequin Ichthyosis @ Abstract Adrienne D. Caluag, MD (Region I Medical Center) **Atypical Phenotypes and Novel OCRL Variations** in Southern Chinese Patients with Lowe Syndrome @ Abstract Rong Du, MD (Guangzhou Women and Children's Medical Center [China]) "The Missing Piece of a Greek Warrior" Grand Rounds on Wolf Hirschhorn Syndrome @ Abstract Jena Mariella Gutierrez Dimayuga, MD (National Children's Hospital) A Filipino Child Presenting with Primrose Syndrome with a Deletion on the ZBTB20 Gene Variant @ Abstract Triane Claire Lastimosa, MD A Rare Case of Caudal Regression Syndrome in a Newborn @ Abstract Olivia Angelyn R. Matela, MD (Cebu Velez General Hospital) A Case Report: Testicular Regression Syndrome @ Abstract Carissa B. Rodenas, MD (Ospital ng Makati) **When Two Become One:** A Case of Monochorionic, Diamniotic Twins with only Twin 2 Diagnosed with Medium Chain Acyl Coenzyme-A Dehydrogenase (MCAD) Deficiency 2 Abstract Rizza Mae V. Salvania, MD (Ospital ng Maynila Medical Center) Swyer Syndrome: A Rare but Important Cause of Primary Amenorrhea @ Abstract Madeline C. Sibulo, MD (St. Luke's Medical Center) A Case Report on Beckwith-Wiedemann Syndrome Presenting as Persistent Asymptomaric Hypoglycemia in the Newborn @ Australia Madeline C. Sibulo, MD (St. Luke's Medical Center) A Case of Osteogenesis Imperfecta Krystabel Adriah R. Suarez, MD (De La Salle University and Medical Center) A Case Report of Potter Syndrome in Region II Trauma and Medical Center @ Actual Gerly A. Tolentino, MD (Region II Trauma and Medical Center) Beyond Recurrent Epistaxis, a Deeper Danger Awaits @ Abstract Ang Chen Xiang, MD (National University Hospital [Singapore])





Monogenic Hyperinsulinism due to Paternally Inherited Pathogenic ABCC8 Variant: A Case Report @ Abstr Gabriel Melangelo T. Alatraca, MD Impact of the Covid-19 Pandemic on Children Diagnosed with Diabetic Ketoacidosis Admitted in a Tertiary Pediatric Hospital @ Abstract Camille S. Cantalejo, MD Gastroesophageal Reflux Disease in an Infant with Maple Syrup Urine Disease (2) Abstract
Gemima June Moneva, MD (Vicente Sotto Memorial Medical Center) **Endocrinology and Metabolism** Chronic Hip Pain Management of a Filipino Adolescent with Hutchinson Glifford Progeria Syndrome in a Tertiary Hospital in the Philippines @\_\_\_ Lester Lloyd Vinz C. Ngo, MD (Philippine General Hospital) **Central Precocious Puberty in a 4-year old Male:** "A Case Report of Hypothalamic Hamartoma-Induced Early Puberty" @ Abstract Laila R. Quitaleg, MD (Region I Medical Center) Lipidemia: Not to be Confused with Obesity @ Abstract Atrio Ericmond T. Wee Eng, MD (Davao Doctors Hospital) Transient Abnormal Myelopoiesis (TAM) in a Neonate with Down Syndrome: A Case Report @ Aileen Jane H. De Claro, MD (Bulacan Medical Center) From Cough to Cancer: Alk-Positive IMT in a Child Treated with Novel Chemotherapy @ Abstract Chiranjeet Narayan Dev, MD (National University Health System [Singapore]) **Solid Pseudopapillary Neoplasm:** A Case of Rare Neoplasm of the Pancreas @ Abstract Heisler Yu Entote, MD A Two-Month Old Infant with Kasabach Merritt Phenomenon: A Case Report @ Audited Melissa Grace R. Labador, MD (Medical Center Manila) Successful Management of Intracranial Hemorrhage in a 14-year old Filipino Male with Severe Hemophilia A with Inhibitor @\_\_ Karen Louise Deiparine-Galaura, MD (Brokenshire Medical Center) Hematology/Oncology Impact of Emicizumab Prophylaxis on Indian Children with Hemophilia-A: Case Series and Clinical Insights @ Nehal Patel, MD (Gmers Medical College and Hospital [India]) The Enigma of an Infiltrating Tongue Mass: A Case of Fibrolipoma @ Abstract Marie Blanche J. Ruyeras, MD (Davao Medical School Foundation Hospital) A Rare Case of Genital Infantile Hemangioma @ Abstract Hannah Carize Maranan Sangalang, MD (St. Luke's Medical Center) Diagnostic Challenge Of Pediatric Primary Extraskeletal Ewing Sarcoma From A Limited Resource Setting: A Case Series @ Hannah Grace B. Segocio, MD (Southern Philippines Medical Center) **Analysis Of Effect Of Ultrasound-Guided Drug Injection** In The Treatment Of Pediatric Superficial Lymphangioma @ Pediatric Superficial Lymphangioma Liu Ya, MD (Chongqing Youyoubaobei Women And Children's Hospital [China])





**Maternal Knowledge, Perception And Practice** Towards Exclusive Breastfeeding During The Covid-19 Pandemic 

Abstract Alyanna Katrizia Y. Kasilag, MD (East Avenue Medical Center) **Recurrent Intestinal Intussusception In An Adolescent** With Peutz-Jeghers Syndrome: Treatment And Surveillance @ Abstract Pauline Adrineth D. Luzon, MD (Philippine General Hospital) **When Gut Meets Flow:** A Case Of Colovesical Fistula In An Adolescent Male @ Address Charlene Mae Calara Manaloto, MD (Angeles University Foundation and Medical Center) Late Onset Bowel Obstruction Secondary To Congential Colonic Stenosis In A Four Month-Old Infant @ Shirlyn G. Romo, MD (Cebu Doctors' University Hospital) Gastroenterology/ **Probiotic Use In Acute Diarrhea Among Children Less Than 5: Hepatology/Nutrition** Attitude And Practices Of Filipino Physicians 

One Marie Blanche J. Ruyeras, MD (Davao Medical School Foundation Hospital) Non-Surgical Case Of Acute Abdomen In An Adolescent Male: A Case Report On Epiploic Appendagitis @\_\_\_ Laurice S. San Jose, MD (University of Santo Tomas Hospital) Meckel's Diverticulum Causing Partial Small Bowel Obstruction And Diverticulitis: A Case Report @ Clarissa Dy Tan, MD (UERM Medical Center) **Prevalence And Predictors Of Overweight/Obese** Junior High School Students In Cagayan De Oro City During The Coronavirus Pandemic: A Correlational Study @ Abstract Charmaine Kate P. Tubongbanua-Arao, MD (Maria Reyna Xavier University Hospital) Insulin-Responsive Severe Amlodipine Toxicity In An Adolescent With COVID-19 Toxicology/ Pandemic-Related Adjustment Disorder @ Ass **Pharmacology** Monique Louise Maglaqui, MD (Philippine General Hospital)



Effect Of Lactobacillus Reuteri Supplementation On Weight Gain Among Very Low Birthweight Preterm Neonates: A Randomized Controlled Trial Abana Mae T. Abalos, MD (Region I Medical Center)

Level Of Knowledge About Neonatal Danger Signs Among Post-Natal Mothers And Its Association With Maternal Factors In A Tertiary Hospital In Makati From June-August 2021

May Cathleene L. Bicomong, MD (Ospital Ng Makati)

Clinical Profiles And Outcomes Of Neonates Born To Mothers With SARS-COV-2 Infection In A Tertiary Private Hospital In Angeles City, Pampanga August Kristynelle D. Bonifacio, MD

Single Cell Atlas Of Pineal Gland Development After Hypoxic Ischemic Brain Damage (HIBD) @ Abstract

Xin Ding, MD (Children's Hospital Affiliated To Soochow University [China])

Clinical Outcomes Of Preterm Neonates Delivered Among Mothers Given Antenatal Dexamethasone At A Tertiary Government Hospital Phoney Child Urena Gerona, MD (Eastern Visayas Medical Center)

Neonatal Outcomes Of Group B Streptococcus Colonization Among Term Pregnant Mothers At A Private Tertiary Hospital In The Philippines Accordage Jayeanne M. Bihag Lomibao, MD (St. Luke's Medical Center)

A Systematic Review And Meta-Analysis On The Effectiveness Of The Feed And Swaddle Technique For Infants Aged 6 Months And Below Undergoing Magnetic Resonance Imaging: A Systematic Review And Meta-Analysis On The Effectiveness Of The Feed And Swaddle Technique For Infants Aged 6 Months And Below Undergoing Magnetic Resonance Imaging Automatic Paye Antonette Evangelista Maramag, MD (The Medical City)

Prevalence Of Retinopathy Of Prematurity Among Premature Neonates Delivered At A Tertiary Government Hospital Advance Noemi Alexandra G. Nueva, MD (Eastern Samar Provincial Hospital)

Factors Associated With Awareness Of Mothers On Expanded Newborn Screening Test At Perpetual Help Medical Center – Las Piñas (2) Abstract Jamaica D. Prodigo, MD (Perpetual Help Medical Center)

Neonatal Outcomes Of COVID-19 Confirmed Mothers In Zamboanga City Medical Center @ Assaula Narges D. Susulan, MD (Zamboanga City Medical Center)

Hospital Outcome Of Newborns Delivered Among COVID-19 Confirmed Positive Mothers At A Tertiary Government Hospital Operation Ma. Earlaine D. Tabiongan, MD (Eastern Visayas Medical Center)

"Her Latency In My Infancy" A Case Of A Neonate With Congenital Syphilis @ Assact Stephanie R. Villar, MD (Cebu South Medical Center)

#### **Newborn Medicine**





Prevalence Of Pediatric Pleural Effusion In A Tertiary Government Hospital In Manila; A 3-Year Retrospective Study @ About 19 Page 1 Analyn Dizon, MD (Ospital Ng Maynila Medical Center) Respiratory Panel Testing: Experience In A Tertiary Pediatric Government Hospital @ Also Rachel Mae B. Estrada, MD (National Children's Hospital) "Cilia" Can't Walk The Talk: A Case Of Kartagener Syndrome @ ADSTRACT **Pulmonology** Mae Jessel L. Montano, MD (Divine Word Hospital) A Case Report Of A 6-Year-Old Child With Loeffler's Syndrome @ Abstract Daisybel Calgo Dayag, MD (Region II Trauma And Medical Center) An Unusual Case Of Haemoptysis Secondary To Congenital Bronchial-Pulmonary Artery Shunt @ Daryl Yeo Yuan Chong, MD (National University Health System [Singapore]) Clinicodemographic Profile And Outcomes Of Pediatric Patients With Acute Rheumatic Fever And Rheumatic Heart Disease And Association Of Laboratory Parameters To Mitral Regurgitation Severity In A Tertiary Hospital In Manila From 2020-2023 @ A Selina A. Fernandez, MD (Ospital ng Maynila Medical Center) Left Atrial Myxoma As An Unusual Cause Of Near Syncope Cardiology In An Early Adolescent @ Abs Kryzl L. Maranan, MD (Philippine General Hospital) **Takayasu Arteritis In An Adolescent Male Presenting With Blurring Of Vision @ Ass** Ena Nicole Ashlee E. Wong, MD (Philippine General Hospital) **Gastrointestinal And Hepatic Involvement In An Adolescent** With Systemic Lupus Erythematosus @ Ass Joannes Paulo V. Castro, MD (Philippine General Hospital) Navigating Challenges: Recurrent Kawasaki Disease In A Three-Year-Old Male @ Justin Paolo T. Magsanoc, MD (Region I Medical Center) **Polyarteritis Nodosa In An Adolescent:** A Rare Case Report From Nueva Vizcaya, Philippines @ Abstract Rheumatology Cherry Mae Y. Pe Benito, MD (Region II Trauma And Medical Center) The Peculiar Face Of A Rash: A Case Of A 10 Year Old Female With Juvenile Dermatomyositis @ Abstract Andrea Paningbatan Rivera, MD (Region I Medical Center) A Case Report Of Antiphospholipid Syndrome In A Male With Systemic Lupus Erythematosus @ Abstract Lily N. Xiao, MD (Bicol Medical Center)





**Infectious Diseases** 

(Set A)

Clinical Outcomes Of Pulmonary Tuberculosis Two Years In Children Treated With Daily Regimen Of Antitubercular Drugs @ Abstract Anurag Agarwal, MD (Maulana Azad Medical College [India]) Fulminant Meningococcal Septicemia: A Case Report @ Abstract Honeya S. Bato, MD (Cebu South Medical Center) Knowledge, Attitudes And Practices Of Mothers At The East Avenue Medical Center Pediatric Sick And Well Baby Outpatient Department With Children Ages 1 To 5 Years Old Regarding Childhood Immunization (National Immunization Program) @ Ma. Wilhelmina Bautista, MD (East Avenue Medical Center) Creepy Crawlers, A Case Of Biliary Ascariasis @ Abstra Lady Jonah M. Casas-Beltran, MD (Ospital Ng Muntinlupa) Understanding MIS-C, Before You Mis-It! A Case Report On Multisystem Inflammatory Syndrome In Children (MIS-C) @ Ass Kristynelle D. Bonifacio, MD A Case Report On Pediatric Pulmonary Tuberculous Pseudotumor @ Assessed Jaiun Calacday, MD (Ospital Ng Makati) Clinico - Radiologic Profile And Outcome Of Covid 19 Positive Pediatric Patients Admitted In Perpetual Help Medical Center Biñan From March 2020 To December 2022 @ Maria P. Carteciano, MD (Perpetual Help Medical Center) Leptospirosis Associated With Hemophagocytic Lymphohistiocytosis And Severe Thrombocytopenia In A Child: Case Report @\_\_\_ Gurdeep Singh Dhooria, MD (Dayanand Medical College And Hospital [India]) **Recurrent Microbial Carriage And Skin And Soft Tissue Infections** In New Zealand Children: A Cohort Study @\_\_\_ Thomas Ding, MD (Starship Children's Hospital [New Zealand]) Baby Fever: A Case Report On Neonatal Dengue @ Abstract Harlyn Jan B. Espela, MD (Davao Doctors Hospital) Clinical Outcome Of Filipino Neonates Born To Covid-19-Infected Mothers In A Tertiary Government Hospital In Davao City (A Two-Year Study) @ 🔤 Eunice Jade Oconer Labasano, MD (Southern Philippines Medical Center) **Epidemiological Change Of Acute Respiratory Viral Infection In Children After** The COVID-19 Pandemic In The Asian Region: A Systematic Review @ Assault Annisa Larasati, MD (Ciptomangun kusumo General Hospital [Indonesia]) **Predictive Factors Of COVID-19 Vaccine Hesitancy** Among Middle Adolescents In Marawi City @ Ass Harissa Lucman, MD (Amai Pakpak Medical Center)

**Factors Influencing Vaccine Hesitancy Among Families** With Less Than One Year Old In An Urban Community In Cotabato City @ Abstract Al-Anbari A. Maca Ayan, MD (Cotabato Regional Medical Center)

Clinical Profile And Immediate Outcome Of Patients With Multisystem Inflammatory Syndrome In Children (MIS-C) In A Tertiary Pediatric Hospital @

Kyla Grace D. Magno, MD (National Children's Hospital)

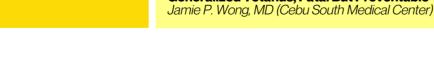




**Infectious Diseases** 

(Set B)

The Silent Threat: Missed Maternal Syphilis And Early Congenital Manifestations @ Debbie Denise Racho Martinez, MD (Southern Philippines Medical Center) **Clinical Outcome Among Confirmed COVID-19 Pediatric Patients** Admitted At A Tertiary Government Hospital @ Abstract Akemi E. Ohata, MD Innocence Under Threat: Understanding Dengue's Impact On The Developing **Brain: A Case Of Acute Hemorrhagic Encephalopathy (AHEM)** In Dengue Infection @ Merthyll Gail V. Ontal, MD (Davao Doctors Hospital) **Prevalence Of Healthcare-Associated Infections Among Pediatric Patients** With Neoplastic Diseases Admitted At Perpetual Help Medical Center - Las Piñas From 2017 To 2021 @ Ass Kate Sante Peremne, MD (Perpetual Help Medical Center) Factors Associated With Severity, Mortality And Survival Among Covid-19 Pediatric Patients In Southern Philippines Medical Center @ Maria Rosario Francesca M. Pizarro, MD (Southern Philippines Medical Center) Congenital Neurosyphilis, The "Other" Great Imitator @ Abstract Joana Pamela Calimlim Pua, MD (Region 1 Medical Center) Lingual Pseudomembranes In A Probable Case Of Diphtheria: A Case Report @\_\_ Klareza Klen U. Quiñanola, MD (Cebu South Medical Center) **Childhood Tuberculosis: Treatment Outcomes And Associated Factors Among Patients Enrolled In Tb-Dots Program In Negros Oriental** From January 2018 To January 2022 Pearl Angelie T. Rada, MD (Silliman University Medical Center) Typhoid Fever In Children In Goroka, Papua New Guinea @ Abstract Whitney Ato Ruape, MD (Goroka Provincial Hospital [Papua New Guinea]) Clinical Profile And Outcome Of Covid-19 Infection In Pediatric Cancer From A Limited Resource Setting: A Single-Center Experience @ Abstract Hannah Grace B. Segocio, MD (Southern Philippines Medical Center) All Eyes And Ears: An Atypical Case Of Congenital Cytomegalovirus Infection @ Abstract Roxanne Mae Buena Timbang, MD (National Children's Hospital) **Clinical Profile And Outcome Of Patients Diagnosed With Central Nervous** System Infection Admitted In A Tertiary Hospital In Bataan @ Ass Rendz Mark M. Tuazon, MD (Bataan General Hospital And Medical Center) Congenital Dengue In A Three-Day-Old Newborn First Reported In The Philippines: Case Report @ Azerost
Stephannie Gay Fuscablo-Valdez, MD (Southern Philippines Medical Center) Generalized Tetanus, Fatal But Preventable @ Address







A Case Report On Boerhaave Syndrome: Effort Rupture Of The Esophagus @ Assact Jelyn Faith M. Almario, MD (Ospital Ng Makati) **Nutrition Status And Some Factors Associated With Malnutrition Of Children** From 0 To 24 Months At The Department Of General Pediatrics And Medicine, The E Hospital, Vietnam @ Nguyen Thi Ngóc Anh, MD (E Hospital Vietnam) Blue's Clues: A Case Report On Blue Rubber Bleb Nevus Syndrome @ Abstract Karen I. Balbastre, MD (Ospital ng Makati) Gastroenterology/ **Hepatology/Nutrition Determinants Of Exclusive Breastfeeding Among Covid-19 Confirmed Mothers** At A Tertiary Hospital In Quezon City: A Retrospective Study @ Abstract Jedidiah T. Bolivar, MD (UERM Medical Center) Brilliant Yellow Child- A Case Of Probable Wilson's Disease @ A Lizlie Anne D. Calar, MD (San Juan De Dios Educational Foundation, Inc.) **Insides Out: A Case Report Of Gastroschisis** With The Application Of Spring-Loaded Silo Bag @ Abstract Dea Regina A. Dalupang, MD Parental Confidence And Perception Of Infant Sleep In A Community-Based Screen - Findings From The Sleep Easy Program (SLEEP), Singapore @ Assets Jessie Guat Teng Ooh, MD (National University Health System [Singapore]) **Community Pediatrics** Findings Of A Community-Based Infant Sleep Programme: The Sleep Easy Programme (Sleep), Singapore @ Nurul Azirah Binte Johari, MD (National University Health System [Singapore]) Born With A Tint Of Purple, A Mark Of Royalty Or A Trace Of Mystery? Cutis Marmorata Telangiectatica Congenita, A Case Report 2 Princess Grace A. Montaño, MD (Mandaluyong City Medical Center) **Skin-Deep Connection:** A Case Of Mycoplasma-Induced Rash And Mucositis @ Abstract **Dermatology** Danica Kim M. Pama, MD (National Children's Hospital) **Toxic Epidermal Necrolysis In Coronavirus Disease 2019** A Rare Association @ Phyllis Micubo Sontillanosa (Silliman University Medical Center) **Levels Of Depression And Anxiety Among Students Of Leyte National High** School After Reopening Of In-Person Classes @\_Asst Jenelyn P. Cadion, MD (Divine Word Hospital) Prevalence Of Burnout Syndrome And Its Risk Factors Among Pediatric Resident Charis Joyce B. Cauyao, MD (Ospital ng Maynila Medical Center) A Qualitative Study On The Lived Experiences Of Pediatric Resident Physicians **Mental Health** Handling Confirmed Covid-19 Patients In Vicente Sotto Memorial Medical Center Severe Acute Respiratory Unit (SARI) And Emerging Re-Emerging Infectious Disease (EREID) Unit @ Paul Gibson S. Reyes, MD (Vicente Sotto Memorial Medical Center) Stress Level Of Filipino Primary Caregivers Of Young Children With Autism Using The Filipino Version Of Friedrich Short Form Questionnaire On Resources And Stress (QRS-F) @\_\_ Dexter Villegas Vierneza, MD (Perpetual Help Medical Center)





**Health Care Transition Knowledge And Attitudes** Of Pediatric And Internal Medicine Residents, Fellows And Consultants At The East Avenue Medical Center @M Patricia Grace S. Bautista, MD (East Avenue Medical Center) A Cross-Sectional Study On Patterns Of Internet Use Among Adolescents Enrolled In Government High Schools In Makati @ Abst Josephine Angela D. Canasa, MD (Ospital ng Makati) The Role Of Filipino Parents On Their Preschoolers' Screen-Based Media Use **During The COVID-19 Pandemic** Angeli-Tristel Saquitan, MD (Philippine General Hospital) Risk Factors Of Digital Eye Strain Among Filipino School Age Children On E-Learning During The COVID-19 Pandemic @ Airiz Mariel Guy Lerios, MD (St. Luke's Medical Center Quezon City) The Effect Of Virtual Reality On Pediatric Needle-Related Procedural Pain, Monique Louise L. Maglaqui, MD (Philippine General Hospital)

**Others** 

The Clinical Diagnostic Accuracy Of Zero-Shot Prompt Vs. Structured Prompt Vs. Iterative Prompt In Chat Generative Pre-Trained Transformer Version 3.5 Among Admitted Patients In The Pediatric Emergency Room Of Zamboanga City Medical Center

Edward Ariel M. Tadea, MD (Zamboanga City Medical Center)

A Drought Brought About By The Pandemic:
A Cross-Sectional Study To Compare The Pediatric Emergency Room Census
In UERM Memorial Medical Center From March 2019- February 2020
and March 2020- February 2021
Sheela Mae G. Tan, MD (UERM Medical Center)

The Association Of Gadget Screen Time On The Quality Of Sleep
Of Senior And Junior High School Students In A Public School In Makati 

Celestine S. Tating, MD (Ospital ng Makati)









# HANDAAN: PISTANG PILIPINO

#### WELCOME RECEPTION

November 14, 2024, Thursday 6:00 PM - 8:00 PM Marco Polo Plaza, Cebu

"Pista/Fiesta" (n: festival, in Filipino). A significant part of Philippine culture, usually a vibrant and joyful grand celebration honoring a locale's patron saint, marked by a "handaan" or party. The 18th Asia Pacific Congress of Pediatrics organizing committee cordially invites you to our Welcome Reception to experience our version of the Filipino Fiesta.

ATTIRE | SMART CASUAL BLACK ATTIRE WITH TRADITIONAL/ETHNIC ACCESSORIES (EARRINGS, NECKLACES, HEADGEAR)

#### **PROGRAM**

Ecumenical Prayer Philippine National Anthem PPS Hymn

Opening Remarks JOSELYN ALONZO-EUSEBIO, MD Overall Chair, 18th APCP

Musical Number

Welcome Messages PROFESSOR IQBAL AHMAD MEMON Honorary Chair

PROFESSOR ZULKIFLI ISMAIL Secretary-General

Pistang Pilipino Presentation

Welcome Toast
CESAR M. ONG, MD
President, Philippine Pediatric Society, Inc.

Closing Remarks
BERNADETTE C. BENITEZ, MD
Co-Chair, Non-Scientific Cluster

Masters of Ceremonies
FRANCIS XAVIER DANIEL M. DIMALANTA, MD
Co-Chair, Scientific Cluster

MARY JOAN LEDESMA-MILLONADO, MD Co-Chair, Socials Committee







Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific

# OPENING CEREMONIES "MABUHAY"

November 15, 2024, Friday 8:30 AM - 9:00 AM Waterfront Hotel, Cebu City

**BUSINESS ATTIRE** 

#### **PROGRAM**

Ecumenical Prayer Philippine National Anthem PPS Hymn

Welcome Remarks JOSELYN ALONZO-EUSEBIO, MD Overall Chair, 18th APCP

CESAR M. ONG, MD
President, Philippine Pediatric Society, Inc.

PROFESSOR IQBAL AHMAD MEMON Honorary Chair

APCP/APPA In Focus

Opening Salvo Presentation

Presentation of Plaque to Host Nation PROFESSOR IQBAL AHMAD MEMON Honorary Chair

Masters of Ceremonies FRANCIS XAVIER DANIEL M. DIMALANTA, MD Co-Chair, Scientific Cluster

MARY JOAN LEDESMA-MILLONADO, MD Co-Chair, Socials Committee







# **GALA DINNER**

# "MAGKAISA: A CELEBRATION OF UNITY"

November 16, 2024, Saturday 6:00 PM - 9:00 PM Waterfront, Cebu City

In celebration of our collective and noble pursuit of common goals and the grace of our shared heritage, the Organizing Committee of the 18th Asia Pacific Congress of Pediatrics invites you to a Gala Night to celebrate hope that rises above challenges, and showcase our strengthened solidarity and collaboration amidst diversity.

| NATIONAL ATTIRE |

#### **PROGRAM**

PART I

"Magkaisa" Parade
Parade of all delegates in their national attire

Welcome Remarks JOSELYN ALONZO-EUSEBIO, MD Overall Chair, 18th APCP

Awarding Ceremonies PROFESSOR ZULKIFLI ISMAIL Secretary-General

**Turnover Ceremonies** 

Messages PROFESSOR DR. IQBAL AHMAD MEMON President, APPA

JOSELYN ALONZO-EUSEBIO, MD President-Elect, APPA

PROFESSOR DR. V PUJITHA WICKRAMASINGHE President-Elect of the Sri Lanka College of Paediatricians

PART II

Solidarity Message PROFESSOR IQBAL AHMAD MEMON Honorary Chair

18th APCP Highlights

Fellowship Games

Fellowship Night Presentation

Closing Remarks CESAR M. ONG, MD President, Philippine Pediatric Society, Inc.

Masters of Ceremonies FRANCIS XAVIER DANIEL M. DIMALANTA, MD Co-Chair, Scientific Cluster

BERNADETTE C. BENITEZ, MD Co-Chair, Non-Scientific Cluster







Redesigning the Horizon of Pediatric Healthcare in the Asia Pacific

# CLOSING CEREMONIES "PASASALAMAT"

November 17, 2024, Sunday 11:15 AM - 11:45 AM Waterfront Hotel, Cebu City

**BUSINESS ATTIRE** 

#### **PROGRAM**

Thanksgiving Message

JOSELYN ALONZO-EUSEBIO, MD

President-Elect, APPA

Awarding of Certificates of Appreciation

JOSELYN ALONZO-EUSEBIO, MD

Over-all Chair, 18th APCP

ROMEO D. SANTOS, MD Chair, Ways and Means Committee

MA. LOURDES L. SIMANGAN, MD
Chair, Awards and Certificates Committee

Closing Remarks
PROF. DR. V. PUJITHA WICKRAMASINGHE
President-Elect,
Sri Lanka College of Paediatricians

18th APCP Congress Highlights

Master of Ceremonies

JACQUELINE O. NAVARRO, MD

Secretary, 18th APCP



# ABOUT THE CONGRESS SPEAKERS

Keynote Speech

#### The State of Children in the Asia-Pacific: Building the Game Plan

Prof. Iqbal Ahmad Memon, MD (Pakistan)



Children are our future, children are our love & children are our Life too.

Asia Pacific is a large region with diverse cultures, many countries with differing income quantiles & as many varied spectrum of diseases and issues faced by this, the largest children's population in this region of the world with reference to International Pediatric Association

Asia Pacific region has economy giants like, Japan and China; Enormous Population hubs like India and China with different countries having children' well being / health receiving wide spectrum of budgetary allocation.

The issue of Child rights and protection, Education, safety, and preventive health has been prioritized and framework of rules and regulations floated by world bodies like WHO, UNICEF, WFP, GAVI, JICA and many other such bodies. Many a support programs are in place, including well known program of immunization, defined further by individual countries needs and health issues.

Environmental factors causing economic, weather disasters and health issues have variedly affected different countries which have hampered progress towards Sustainable developmental Goals (SDG). The environmental changes and disasters, including man-made disasters like wars, are already making immense impact on nutrition, health, immunization, flare up of diseases, safety and child neglect.

Hence the march towards health and well protected, educated pediatric community must continue through all out efforts to implement health agenda already in place with further improvisation of plans to adjust activities, surmounting, all the existing obstacles and tailoring to overcome the newer difficulties/ disasters with vision, planning and prioritization of health and education cum protection of this vulnerable population. Special attention has to be given to family/families, as a stable family provides a strong base for stronger future tomorrow. Pediatric societies, individually and or collectively (APPA) play their role of advising governments and other social avenues to help overcome the health of children in their countries and the region.

#### **Medical Studies and Trainings**

- DOW medical College Karachi (Karachi University) MBBS 1972/73 College of Physicians of Pakistan, Karachi 2019 FCPS-Peds GI/Liver Fellow Royal College Of Physicians And Surgeons Of Canada 1983 F.R.C.P.(C)
- University Of Texas Medical Branch, Galveston Texas, USA 1982-83 Fellowship Ped-Gastroenterology/ Liver Disease And Nutrition
- Fellow American Academy Of Pediatric USA1980 F.A.A.P
- American Board of Pediatrics USA1979 DABP

#### **Work Experience and Major Affiliations**

- Consultant Pediatrics/Gastroenterologist
  Park lane General Hospital, Clifton, Karachi- ongoing

- Founding Member Asian Strategic Advisory for Pneumococcal infection (ASAP)
  Convener, Pakistan Chapter ASAP Ongoing
  Patron Full Survival Program Goling Control of Sindh Govt of Sindh, Pakistan 2010 to date
- Chairman Expert Review committee Sindh, Polio Eradication Program
  - Polio Eradication Program Govt of Sindh 1998 to date
- Chairman, Save our Children- CHK Trust, Karachi
- Civil Hospital Karachi 1998 to date
- Ex- President/ Life Member, Memon Professional Forum
- Member Strategic Advisory Board (SAB), Memon Professional Forum
- Pakistan Pediatric Association Ex-President, Life member and executive committee member
- Asia Pacific Pediatric Association Current president, executive and standing committee member
- International Pediatric association standing committee member
  - Founding Member ASAP
  - Life Member Pakistan Medical Association





Newborn Medicine

#### **Term Respiratory Distress**

Prof. Santosh T. Soans, MD (India)



Respiratory distress in a term neonate can be caused by a variety of factors, both common and uncommon. Here are some common and uncommon causes of respiratory distress in term neonates:

#### Common Causes

- 1.Transient Tachypnea of the Newborn (TTN): This is one of the most common causes of respiratory distress in term neonates. It occurs due to delayed clearance of fetal lung fluid.

  2.Respiratory Distress Syndrome (RDS): Also known as hyaline membrane disease, RDS is caused by surfactant deficiency in
- premature infants but can also occur in some term infants.

  3. Meconium Aspiration Syndrome: When a newborn inhales meconium-stained amniotic fluid, it can cause respiratory distress
- due to airway obstruction and chemical pneumonitis.
- 4. Pneumonia: Infections such as group B streptococcus, E. coli, or viruses can lead to pneumonia in neonates.

  5. Persistent Pulmonary Hypertension of the Newborn (PPHN): This condition is characterized by high pulmonary vascular resistance leading to right-to-left shunting of blood and hypoxemia.

It is important to promptly identify the underlying cause of respiratory distress in a term neonate to provide appropriate management and support. This often involves a thorough clinical evaluation, imaging studies, laboratory tests, and sometimes genetic testing. Treatment may include respiratory support, antibiotics, surfactant replacement, surgery, or other interventions depending on the specific cause.

#### **Work Experience and Major Affiliations**

- Professor and HOD Pediatrics, AJ Institute of Medical Sciences, Mangalore, India
- Chief of Neonatal & Pediatric Intensive Care Division, AJ Hospital & Research Center National President, Indian Academy of Pediatrics (IAP) 2018
- Member of the Standing Committee, International Pediatric Association (IPA) 2023–2025
- Pediatrician and pediatric intensivist in Mangalore, India, MBBS, MD, DCH FIAP. 30 years of experience as a medical educator
- Served at Kasturba Medical College, Manipal, Father Muller Medical College
- Actively involved with Indian Academy of Pediatrics (IAP), which has over 42,000 members, since 1995. I have been its National President (2018), National Vice President (2010), National Chairman of the IAP Pediatric Intensive Care Chapter (2013), and the Founder Chairman of the IAP Medical Education Chapter (IAP-MEC), which reaches out to about 11,000 medical educators in India.
- Scientific Chair for the IPA Congress 2023 hosted by IAP at Gandhinagar in Gujarat state, India.
- Authored five books and delivered more than 30 orations at state and national conferences.
- Examiner for UG, PG and DM in Pediatric Critical Care.
- Pioneered pediatric intensive care in Karnataka state and organised over 1000 rural pediatric health camps through AJIMS in the past 18 years.
- Founder President of the Organised Medicine Academic Guild of India (OMAG, a confederation of 23 medical specialty associations), which coordinates with the Government of India for research and medical education.
- Standing committee member of the Asia-Pacific Pediatric Association
- A recipient of prestigious recognitions like the Outstanding Asian Pediatrician Award 2019. the National IMA Doctor's Day Award 2019 and the IMA Karnataka State BC Roy Award 2019.
- Rotarian and a Freemason





Caring for the Carer

#### **Well-being of the Healthcare Worker**

Assoc. Prof. Daniel YT Goh, MD (Singapore)



Healthcare is a stressful work environment with fast-paced routines, heavy workloads, long work-hours and even moral conflicts. Healthcare is a complex organizational system with many interacting groups of people, systems and processes. Healthcare is about caring for our patients and their families, where the emphasis is primarily all about caring for the patient. There is often little emphasis on caring for the care-giver - the healthcare worker.

Healthcare heroes are also human; they are susceptible to fatigue and even burnout. Our healthcare workers can only give of their best to our patients when they feel cared for themselves. What does it mean to care for our healthcare workers? What does wellbeing in the healthcare setting entail? As we transition out of the Covid-19 pandemic, it is an important time to relook the wellbeing of our healthcare workers and how healthcare systems can and should focus on staff wellbeing as a critical element in an effective and sustainable healthcare system.

#### **Medical Studies and Training**

- National University of Singapore and trained in Paediatrics in Singapore.
- Underwent Paediatric Pulmonology and Sleep Fellowship at the Johns Hopkins Children's Centre, USA

#### **Work Experience and Positions**

- Served as Head of Paediatrics (2007 to 2017) and Paediatric Cluster Chair (2012 to 2019) at the National University Hospital
- President of the Singapore Paediatric Society (2004 to 2011)
- President of the ASEAN Paediatric Federation (2011 to 2014)
- Council Member of the College of Paediatrics and Child Health, Singapore (2017 to 2021) Standing Committee Member of the Asia Pacific Paediatric Association (2018 to date)
- Currently the Chief Wellbeing Officer in the National University Health System.

#### **Awards**

- NUHS Mochtar Riady Pinnacle Award in 2015; Outstanding Asian Paediatrician Award (by the Asia Pacific Paediatric Association) in 2018
- National Day Award (Public Administration Bronze Medal) in 2018
- Distinguished Senior Clinician Award, NUHS in 2019 National Medical Excellence Award Clinician Mentor Award in 2022
- NUHS Teaching Excellence Award in 2023.

#### **Clinical Interests**

- Childhood respiratory conditions
- Asthma and allergies
- Sleep in childhood
- Sleep-related breathing disorders
- Fiberoptic bronchoscopy
- Vaccinology



**Preventive Pediatrics** 

## **Vaccine Hesitancy and Refusal, Understanding Better to Handle Better** *Prof. Zulkifli Ismail, MD (Malaysia)*



Vaccine hesitancy and refusal are experienced in every country where vaccination takes place. The vaccination programme is a victim of its own success; as more vaccine-preventable diseases are being controlled, the less need for vaccination is felt.

Vaccine hesitancy is a continuum and should never be equated with the anti-vaccination movement. The spectrum is diverse and understanding the causes locally will make targeted preventive strategies more effective. Knowledge of local customs and beliefs is of utmost importance so as not to offend any particular group. Working with other organizations and individuals (including celebrities and media influencers) as well as authoritative government bodies will provide credibility and strength in numbers to make vaccination advocacy efforts work.

An example is the tripartite collaboration of professional organizations with the ministry of health and industry to make up the Immunise4Life programme (www.ifl.my) in Malaysia. There are many other examples in other countries but there must be a few motivated and strong advocates to lead and the political will to move forward. Vaccine advocacy is every healthcare worker's responsibility and it requires dedication, tenacity and dedication in time and effort.

Dr. Zulkifli Ismail is a distinguished Clinical Professor at KPJ University of Healthcare, with active roles as a Paediatric Cardiologist at KPJ Selangor Specialist Hospital and a visiting consultant at Damansara Specialist Hospital. He has an illustrious background in paediatrics, having served as the Past President of the Malaysian Paediatric Association and currently holds the position of Secretary-General of the Asia Pacific Pediatric Association (APPA), where he previously served as President from 2012 to 2016. Dr. Zulkifli also led the Asian Strategic Alliance for Pneumococcal Disease Prevention (ASAP) and was a Standing Committee member of the International Pediatric Association.

A proactive voice in disease prevention, he is a member of the Rotavirus Organisation of Technical Allies (ROTA) Council and the Asia Dengue Voice & Action (ADVA) group. Recently, he established and chairs the Dengue Prevention Advocacy Malaysia (DPAM). His commitment to child health advocacy is further reflected through his leadership of the Positive Parenting program, a parent education initiative by the Malaysian Paediatric Association since 2000, and the Immunise4Life technical committee, a vaccination advocacy program initiated in 2013.

Previously, Dr. Zulkifli held the title of Professor of Paediatrics and Paediatric Cardiology and served as Director of the teaching hospital at Universiti Kebangsaan Malaysia, where he was also Medical Director of the institution's private wing before taking early retirement. His contributions to medical literature include over 35 peer-reviewed publications, numerous abstracts, presentations, four co-authored books, and numerous articles for the lay public in mainstream media. Recognized for his impact, Dr. Zulkifli was awarded the Panglima Mahkota Wilayah in 2008, and was honored as the 'Outstanding Asian Pediatrician' by APPA in 2012.



#### Adolescent Medicine/Developmental and Behavioral





#### **Family-Centered Interventions for Neurodevelopmental Disorders** in Low-Resource Countries

The prevalence of developmental disabilities is increasing globally with about 52.9 million under the age of 5 years old experiencing a developmental disability. About 95% of these children live in low and middle income countries and access to care and therapy services are limited for most of these children. There is good evidence that caregivers can learn skills to support their children's social communication and adaptive behavior and reduce their challenging behavior. There is therefore a need for straighten and evidence their challenging behavior. for available, practical and sustainable programs for families of children requiring special care. Strengthening parents and caregivers through skills training will empower them to actively engage in their children's intervention process to support their children's development and behavior and to manage parent stress and feelings of inadequacy. The lecture will discuss the characteristics of good family based interventions that are effective in low resource areas. A few programs meeting these characteristics will be explored.

Medical Training
Doctor Navarro had her college degree in BS Biology at University of the Philippines,
Diliman, Quezon City and medical degree at University of the Philippines, Manila. She
took her Pediatric residency at The Medical City Department of Pediatrics,
Mandaluyong City and further specialized in Developmental and Behavioral
Pediatrics Fellowship at John Hunter Children's Hospital New South Wales,
Australia. She also had a master's degree in clinical Epidemiology at University of Newcastle, New South Wales, Australia

#### Work Experience

Work Experience
She is currently the consultant director of the Center for Developmental Pediatrics at the Medical City where she is also an active consultant staff at Institute of Pediatrics. She is currently the Co-Chair of the Task Force on Mental Health for Children and Youth of the Philippine Pediatric Society. She is also currently the President of the Philippine Society for Developmental and Behavioral Pediatrics.



#### **Mental Health in Adolescence: Protection and Preservation**

Adolescence is a pivotal period marked by rapid biological, cognitive, and Adolescence is a pivotal period marked by rapid biological, cognitive, and psychosocial changes that shape an individual's future mental well-being. This lecture provides a comprehensive review of the critical developmental milestones during provides a comprehensive review of the critical developmental milestones during adolescence, highlighting the unique vulnerabilities and mental health challenges that often arise during this stage. Participants will explore evidence-based strategies that promote resilience, prevent mental health disorders, and support overall emotional well-being in adolescents. Emphasis will be placed on the proactive roles that healthcare workers and child advocates must play in identifying risks, fostering healthy environments, and providing early interventions. With the increasing prevalence of mental health issues among adolescents, this presentation seeks to exceive professionals with the knewledge and tasks to promote mental health and equip professionals with the knowledge and tools to promote mental health and support adolescents through this critical phase of development.

Medical Training
Doctor Dimalanta had his college degree in BS Psychology at University of the Philippines and medical degree at University of the East Ramon Magsaysay Memorial Medical Center. He took his Pediatric residency at St. Luke's Medical Center and his Fellowship training in Developmental and Behavioral Pediatrics Fellowship at University of the Philippine College of Medicine, Philippine General Hospital-Multidisciplinary Child and Adolescent Unit.

Doctor Dimalanta received further training and observership from the following international institutions: The Children's Hospital Boston - Developmental Medicine Center, Harvard Medical School; Clinical Observership at the New York-Presbyterian Hospital Division of Child Development Weill-Cornell Medical Center; Montefiore Hospital Division of Child Development Welli-Cornell Medical Center; Monteriore Medical Center Children's Evaluation and Rehabilitation Center, Fisher Landau Center for the Treatment of Learning Disabilities; Rhode Island Hospital / Hasbro Children's Hospital - Child Development Center, Brown University; and, Yale New Haven Hospital - Child Study Center, Yale University

#### Work Experience

le was the past Residence Training Officer of St. Luke's Medical Center Institute of He was the past Residence Training Officer of St. Luke's Medical Center Institute of Pediatrics and Child Health, and he is currently the Section Chief of the Developmental and Behavioral Pediatrics and the Assistant head of the Institute of Pediatrics and Child Health of St. Luke's Medical Center. He is a Clinical Assistant Professor at the St. Luke's College of Medicine, William Quasha Memorial and a member of the Section of Community Pediatrics at St. Luke's Medical Center. He is the current Vice President of the Philippine Society for Developmental and Behavioral

#### Major Achievements and Recognition

Major Achievements and Recognition
Doctor Dimalanta was awarded with the Most Outstanding Alumni of St. Luke's
Medical Center in 2012 and the Most Outstanding Alumni in Community Service of
UERMMMC in 2020. He was awarded with the Advocacy Award by the Special
Education Network in Asia (Singapore) in 2014 and the Autism Advocate Award by
the Philippine Association for Citizens with Developmental and Learning Disabilities Inc, (PACDLD) in 2020.

#### Adolescent Medicine/Developmental and Behavioral





#### Intergenerational **Transmission of Abuse**

Child maltreatment is a global pandemic. Exposure to childhood maltreatment can lead to developmental problems with enduring long-term effects across the lifespan including mental health problems and chronic diseases like hypertension and diabetes. Prevention of childhood maltreatment is a major public health concern. It is a common notion that "maltreatment begets maltreatment," that is, a parent's history of maltreatment increases the risk that his or her child will also suffer maltreatment of maltreatment increases the risk that his or her child will also suffer maltreatment and the cycle goes on to the next generation. However, research consistently finds that the majority of people who experience child maltreatment do not go on to abuse and neglect their own children. Likewise, among adults who maltreat their children, the majority did not experience maltreatment in their own childhood. The lecture will discuss the social and biological factors that might contribute to transgenerational patterns of abuse and neglect in an integrative way examining the effects of social support, poverty and structural disadvantage, mental health and emotion regulation, the epigenetic effects of child abuse and neglect, the timing of maltreatment and gender. It will address the interaction between social factors ("nurture") and biological factors ("nature") that may drive the intergenerational patterns of child abuse and neglect, it will stress what interventions have been found to work to disruot the harmful intergenerational pattern. to work to disrupt the harmful intergenerational pattern.

**Medical Training**Doctor Madrid had her college degree in BS Psychology and her medical degree at at University of the Philippines, Manila.

**Work Experience**She was the previous Head of the Ambulatory Section of the Philippine General Hospital, where she is currently the Head/Clinical Associate Professor of the Child Protection Unit of the Department of Pediatrics. She is currently the Executive Director of the Child Protection Network Foundation, Inc and a Convenor of the Child Abuse, Neglect and Exploitation Study Group of the National Institute of

#### **Major Achievements and Recognition**

Major Achievements and Recognition
She was awarded with the Ramon Magsaysay Award 2022, Lifetime Achievement Award by the University of the Philippines Medical Alumni Society, Outstanding Pediatrician for 2021 by the Philippine Pediatric Society, Most Influential Filipina Woman in the World Award 2019 by the Filipina Women's Network and the Most Outstanding Alumnia for Child Advocacy 2015 by the Department of Pediatrics of Philippine General Hospital. She was also the Most Distinguished Alumni for Service Award 2013 of the University of the Philippines Alumni Association and she received the Outstanding Service Award on Child Protective Services 2012 from the National Children's Advocacy Center, and she also recognized as one of the Outstanding Children's Advocacy Center and she also recognized as one of the Outstanding Women leaders in Manila in 2009 by the Soroptimist International.



Simultaneous Session 2

#### Neurology/Genetics/Endocrinology/Metabolism





#### **Advances in Genetic Testing and** Therapeutics in Pediatrics Chin Hui Lin, MD (Singapore)

Genetic testing has an increasingly ubiquitous role in the diagnosis of pediatric conditions, earlier in their diagnostic journeys. This talk aims to cover the new technologies in genetics such as long read sequencing and optical genome mapping, and share, with patient cases, how these can be applied towards patient care. We also aim to cover an overview of the principles of gene therapies for genetic conditions, and provide an update on what is currently available and what is to come.

Doctor Chin Hui-Lin had her Bachelor of Medicine and Surgery, Masters of Medicine in Pediatrics and Masters of Clinical Investigation at National University of Singapore.

She is currently the Deputy Undergraduate Education Director of Pediatrics in National University of Singapore. She is also the Deputy Programme Director at Lee Kong Chian School of Medicine. She is the Medical Genetics Advisor in Cytogenetics and Molecular Diagnosis Centre at the National University Hospital and the Medical Lead (Asia)/Co-Founder of Alamya Health. She is an active consultant in the Division of Genetics and Metabolism in the Department of Pediatrics at Khoo Teck Puat-National University Children's Medical Institute and the Department of Pediatrics of Ng Teng Fong General Hospital.

#### **Major Achievements and Recognition**

She was awarded by Singapore's National University and National Hospital with GREAT Teacher Award in 2023, 2022, and 2019. She was also awarded the Department of Pediatrics Junior Researcher with the Highest Impact Factor Publication in NUH in 2022, and received the Gold Medal in Genetics Proficiency Test 2019 in Baylor College of Medicine. She also received the Jane Prize in Pediatrics in 2010 and Statistical West Academics Available Academics In 1997. 2010 and obtained the Academic Excellence Award for achieving the highest possible grades in GCE A Levels in 2005.



### Growth Hormone Deficiency Disorders Prof. Muhammad Yazid Jalaludin, MD (Malaysia)

Growth hormone deficiency (GHD) is a rare condition in which the body does not produce enough growth hormone (GH). Among children with short stature, GHD happens in approximately 1:4,000 to 1:10,000 cases.

GH is essential for normal growth, muscle and bone strength, and distribution of body fat. It also helps control blood glucose and lipid levels. Without enough GH, a child is likely to grow slowly and be much shorter than other children of the same age and

GHD can either be due to congenital disorders or acquired. Children with congenital GHD may lack additional hormones produced by the pituitary gland. Some children with congenital GHD are found to have mutations that involve the development of the pituitary gland or GH production and action. In certain instances, congenital GHD also can be seen as part of a syndrome that may affect the development of the middle of

Acquired GHD may develop after any process that can damage the pituitary gland or the surrounding brain area. Causes of acquired GHD include brain tumor, surgery, severe brain injury, or radiation (treatment of cancer). Rarely, acquired GHD can be the result of a chronic inflammation of the pituitary (hypophysitis). In all these cases, the individual may have additional deficiencies of other pituitary hormones.

GHD can be treated with either daily or weekly subcutaneous recombinant human growth hormone (rhGH). Regular monitoring is essential.

Professor Dr Muhammad Yazid Jalaludin is The Deputy Dean (Undergraduate Studies) and a Professor of Paediatrics at the Faculty of Medicine, Universiti Malaya. He practices as a Senior Consultant Paediatrician and Senior Consultant Paediatric Endocrinologist at the University Malaya Medical Centre (UMMC) and UM Specialist Centre. He completed his fellowship in Pediatric Endocrinology and Diabetes at Children's Hospital of Philadelphia (CHOP), USA after obtaining his MBBS and Masters in Paediatrics both from Iniversity Malaya in Paediatrics, both from University Malaya.

He is currently the Chairman of the Malaysian Paediatric Endocrinology and Diabetes Group (MPEDG), Vice President of the Malaysian Endocrine and Metabolic Society (MEMS 2024-2026), and Executive Council Member of the Diabetes Malaysia (DM 2023-2025). He was the Past President of Malaysian Paediatric Association (MPA; 2017-2019) and Asia Pacific Paediatric Endocrine Society (APPES, 2018-2020). He currently co-chairs Changing Diabetes in Children (CDiC) Malaysia and Identification & Management of Feeding Difficulties (IMFeD Malaysia) programs.

Prof Jalaludin main research interest is in obesity and T2DM, growth (nutrition) and vitamin D in children. He holds many national and international research grants and acts as Scientific Advisor and Expert Panel member for many multi-centre international researches. He has published more than 100 articles in various academic international researches. journals including the prestigious New England Journal of Medicine (NEJM).

imultaneous Session 2

#### Neurology/Genetics/Endocrinology/Metabolism





#### **The Spectrum of Primary Headache Disorders** in Children and Adolescents

An increase in the incidence of childhood headache and migraine was reported over An increase in the incidence of childhood headache and migraine was reported over the last 30 years. Thus, headache is considered as another type of pandemic in children and adolescents in 2020. Headaches especially the debilitating types like migraine, have profound effects on health-related quality of life, school attendance and social functioning of this very active population. The worldwide prevalence of primary headache disorders was found to be 58.4% in children, and 54.4% in adolescents.12 in the Global Burden of Disease (GBD) 2007-2017, migraine and tension-type headache together account for 37.5% of all-cause prevalence and for 7% of all-cause years lived with displicit. VII Da? J. However, there is with a logic floor interview in the last productions and the statement of the production of the statement of the statemen with disability (YLDs).3 However, there is still a lack of local epidemiological study of headache in the pediatric population. We will be looking at the incidence and prevalence of headache syndromes in the Asia-Pacific region, as well as the different episodic syndromes in children that are associated with migraine. The current management of migraine and tension-type headache in the pediatric population will be presented.

#### **Medical Training**

Doctor Lu- Bolaños had her BS Psychology degree at University of the Philippines, Diliman and her medical degree at University of the East Ramon Magsaysay Memorial Medical Center

#### Work Experience

She is currently a medical specialist at Philippine Children's Medical Center and Philippine General Hospital.

#### Major Achievements and Recognition

She is currently the Vice-President of the Philippine Headache Society and an active fellow of the Child Neurology Society Philippines and Philippine Headache Notiery.



#### **Delineating Autoimmune** from Infectious Encephalitis in Children

Prof. Marissa B. Lukba

The number of viruses that cause acute infectious encephalitis have been increasing. Because of the pathophysiology of the disease, the symptoms include a prodromal phase of fever, malaise, headache and nausea followed by severe neurologic symptoms that include altered mentation, seizures and focal neurologic deficits. The presence of cognitive, behavioral and personality change favor encephalitis over meningitis as the diagnosis for the central nervous system infection. More recently acute to subacute presentations of encephalitis are due to autoimmune encephalitis (AE). The most common presentation is a triad of seizures, movement disorders and psychiatric manifestations

Herpes simplex virus (HSV1) encephalitis (HSVE) is the most common cause of life-threatening sporadic encephalitis globally affecting all age groups but more common in children and adolescents and those above 50 years of age. For autoimmune encephalitis (AE), the most found autoantibody is the anti-N-methyl-D-aspartate receptor (NMAR), presents an acute or subacute course usually evolving over 6 weeks. Other antibodies against neuronal cell surface and synaptic neurons had been reported and in some still undetected and are now collectively called antibody negative probable AE

Clinical cases will be presented to help the clinician differentiate HSVE from AE. Differentiating these two entities is of importance as the management is totally different.

Doctor Lukban had her medical degree at at University of the Philippines, Manila. She had her residency training in Pediatrics and fellowship training in Child Neurology at University of the Philippines, Philippine General Hospital. She further specialized in Pediatric Clinical Neurology and Neurophysiology at Royal Alexandria Hospital for Children Neurophysiology. Children New South Wales, Australia.

Work Experience
She was the past Vice Chair of the Department of Pediatrics of Philippine General Hospital from 2019 to 2021, where she is currently the Chairman of the department. She is currently a member of the Institutional Review Board of the Manila Doctors

#### **Major Achievements and Recognition**

She was awarded by the University of the Philippines Medical Alumni Society in America with the Elena Tan Professorial Award in 2021 and the Jesse and Libby de Leon UPCM 1969 Professorial Chair Award in 2022 and 2023.



#### Hematology/Oncology/Allergology/Immunology





#### **Non-Infectious Manifestations** of Primary Immunodeficiency

Primary immunodeficiency diseases (PIDs) encompass a heterogeneous group of Primary immunodeliciency diseases (PIDS) encompass a neterogeneous group or genetic disorders impacting the humoral and cellular components of the immune system. Affecting approximately 1 in 3,000 individuals annually, PIDs can present at any age and are often associated with severe infections, immunopathology, and malignancies. However, there is increasing recognition of primary immune regulatory disorders (PIRDs), which are characterized more by immune dysregulation than deficiency and ear present with a represent properties. deficiency and can present with a range of non-infectious manifestations.

- Non-infectious manifestations of PIDs include:
   Malignancies: Elevated risk of cancers such as lymphoma and leukaemia.
- Allergic conditions: Increased prevalence of allergic reactions and hypersensitivity disorders
- Inflammatory disorders: Chronic conditions like inflammatory bowel disease and arthritis
- Autoimmune diseases: Autoimmune conditions may be the primary or dominant presentation, including systemic lupus erythematosus and autoimmune haemolytic anaemia

This talk will highlight the broad spectrum of non-infectious manifestations associated with PIDs, including malignancies, allergic conditions, inflammatory disorders and autoimmune diseases. It emphasizes the importance of recognizing these manifestations for timely diagnosis and effective management.

Early diagnosis and tailored therapeutic strategies are essential to mitigate the risk of severe complications and enhance the quality of life for affected individuals. Delays in diagnosis and suboptimal management can lead to significant morbidity and permanent organ damage. Healthcare providers should be aware of the broad range of possible manifestations to ensure timely intervention and optimal patient outcomes.

#### **Current Positions**

- Deputy Dean Academic, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia (UPM)
- Consultant Clinical Immunologist, Hospital Sultan Abdul Aziz Shah, UPM
- President-Elect, Malaysian Society of Allergy and Immunology (MSAI)
  Associate Editor, Malaysian Journal of Medicine and Health Sciences (MJMHS)

- Doctor of Medicine, University Kebangsaan, Malaysia Master of Medicine in Pediatrics, University Sains, Malaysia Doctor of Philosophy, The University of Melbourne

#### **Pioneering Work**

- first female Clinical Immunologist in Malaysia established the Clinical Immunology and Allergy services at UPM in 2012



#### Climate Change and the Rise of Pediatric Allergies

Climate change refers to long-term alterations in temperature and weather patterns, caused by increased emission of greenhouse gases in the atmosphere, thus leading to global warming. This results in extreme weather events and ocean acidification affecting marine life and other ecosystems. This also has an impact on human health.

One particularly concerning effect is the RISE IN ALLERGIC DISEASES AMONG CHILDREN. Allergies, asthma, and other respiratory conditions have become more prevalent and severe, posing healthcare treatment challenges for children and their feetiling.

Efforts must be done by the global community to slow down climate change and mitigate the condition from worsening. The time to call for CLIMATE ACTION was YESTERDAY! But we continue to call on everyone TODAY to do one's share to combat climate change and global warming as we march on to better health of TOMORROW

#### **Medical Training**

- Clinical Fellowship in Allergy, University of California San Francisco Ambulatory Care Clinics
- Fellowship Training in Allergy, University of the Philippines Philippine General Hospital
- Residency Training in Pediatrics, The Medical City Post-graduate Internship, Veterans Memorial Medical Center (VMMC)
- Doctor of Medicine, University of the East Ramon Magsaysay Memorial Medical Center (UERMMMC)

#### Professional Societies

- Pellow, Philippine Pediatric Society
  Fellow, Past President and Adviser, Philippine Society of Allergy, Asthma and **Immunology**

#### **Current Affiliations**

Consultant, Department of Pediatrics, The Medical City



### Hematology/Oncology/Allergology/Immunology





# **Improving Thalassemia Care** through Newborn Screening

In this session, the impact of newborn screening for thalassemia in the Philippines will be discussed. Since its nationwide implementation and 100% insurance coverage in 2019, it has resulted in increased awareness of the condition among families and health care workers. As its enforcement further improves, it has the potential to improve outcomes and prevent long term complications among children with thalassemia, especially those who are transfusion dependent. Successful implementation of NBS for thalassemia generates positive results by facilitating early diagnosis, enabling timely treatment, reducing healthcare costs and promoting genetic counseling. Its broader public health implications can help control the disease's prevalence, improving long-term care and quality of life for affected children.

### **Present Positions**

- Head, Leukemia Lymphoma Program and Clinical Operations, Cancer and Hematology Division, Philippine Children's Medical Center (PCMC)
  Chairperson, Blood Transfusion Committee, Sub Committee on Pediatric Therapeutics Apheresis, PCMC
  Chairperson, Thalassemia Experts Committee, Philippine Newborn Screening Program, Department of Health

- Head Pediatric Oncology Unit, Lung Center of the Philippines (LCP)
  Visiting Consultant, National Kidney and Transplant Institute (NKTI) & FEU Hospital

- Medical Training

  International Visitors Program, Solid Tumor and Leukemia/Lymphoma Services, International visitors Program, Solin Turnor and Leukeminal Lymphorina Services, St. Jude Children's and Research Hospital, Memphis Tennessee, USA Diploma in International Health, University of the Philippines Open University Master in Public Health, UP College of Public Health Fellowship in Hematology and Oncology, Philippine Children's Medical Center Residency in Pediatric Medicine, Philippine Children's Medical Center (Chief Possident)

- Medical Internship, Far Eastern University -NRMF Hospital Doctor of Medicine, FEU-NRMF Institute of Medicine

### **Professional Societies**

- of Stational Societies
  Fellow, Philippine Pediatric Society
  Fellow, Philippine Society of Pediatric Oncology
  Fellow, Philippine Society of Hematology and Blood Transfusion



### **Nutritional Anemias: Challenges and Responses** ssoc Prof. Edwin V. Rodriguez, MD (Philippi

Nutritional anemia remains a significant public health in many parts of the developing world, particularly among children in low- and middle-income countries. The etiology is multifaceted with a focus on iron deficiency, the most prevalent cause together with deficiencies in folate vitamin B12 and other micronutrients

Understanding the pathophysiological mechanism that led to anemia, its corresponding clinical manifestations in different age groups, and the long-term consequences of untreated anemia on cognitive and physical development is key to mapping strategies to cure and prevent its occurrence. Guidelines on the diagnosis and classification of anemia in children, emphasizing the importance of early detection and intervention are equally important discussion points.

Evidence-based strategies for prevention and treatment including dietary interventions, supplementation, and public health initiatives aimed at reducing the burden of anemia shall be also tackled

Special attention will be given to the role of health care providers in educating families and communities about the importance of adequate nutrition and in implementing effective management protocols in both clinical and community settings.

Through a comprehensive approach integrating clinical practice, research and public health initiatives, all concerned stakeholders must be empowered with the knowledge and tools needed to fight nutritional anemias and improve the overall health outcomes for children around the world.

Medical Training
Master in Health Professions Education, University of Santo Tomas Graduate School (Magna cum laude)

Fellowship Training in Pediatric Hematology, University of Santo Tomas Hospital

Residency Training in Pediatrics, Cardinal Santos Medical Center

Doctor of Medicine, University of Santo Tomas Faculty of Medicine and Surgery

### **Current Positions**

- rrent Positions

  Assistant Dean, Chinese General Hospital Colleges-College of Medicine
  President, Philippine Society of Experimental and Clinical Pharmacology
  Chairman, Department of Pediatrics, Cardinal Santos Medical Center
  Vice-President, Philippine Society of Pediatric Hematology
  Secretary, Philippine Pediatric Society
  Training Officer, Section of Pediatric Hematology-Oncology, University of Santo Tomas Hospital

### **Professional Societies**

- Fellow, Philippine Pediatric Society Fellow, Philippine Society of Hematology and Blood Transfusion
- Fellow, Philippine Society of Experimental and Clinical Pharmacology



Simultaneous Session 4

### Gastroenterology/Hepatology/Nutrition





### **Disorders Of Gut-Brain Interaction:** The Microbiota as the Third Wheel

Felizardo N. Gatcheco, MD (Philippines)

Disorders of Gut-brain interaction (DGBIs), formerly called Functional Gastrointestinal Disorders (FGIDs), are a set of chronic or recurrent GI symptoms, unexplained by structural or biochemical abnormalities, with significant interference on the child and family's quality of life. The global occurrence of these disorders is 40% based on the Rome IV Diagnostic Criteria. Increasing evidence indicates that the microbiota has a substantial role in the pathogenesis of DGBIs.

Bidirectional connections exist among the gut, microbiota and brain. An altered microbiota, associated with a compromised gut barrier and activated mucosal immune response, initiates the liberation of molecules with inflammatory and neuroactive properties into the bloodstream. These substances subsequently reach the brain, triggering cognitive and behavioral alterations. Conversely, external factors like stress can disrupt mucosal immunity, the gut microbiota, and barrier function leading to gut dysfunction. The intricate interplay linking the gut, microbiota, and brain, inhibitative both the pathyrune of compressions are constrained from the property of the pro highlighting both the pathways of communication from gut to brain and from brain to gut may lead to DGBI.

Functional abdominal Pain disorders including Functional Dyspepsia, Irritable Bowel Syndrome (IBS), Abdominal Migraine and Functional Abdominal Pain not Otherwise specified (FAP-NOS) will be discussed in this lecture. Probiotics are not yet recommended for dyspepsia and pediatric IBS but L. reuteri DSM 17938 may be a promising probiotic for FAP-NOS.

- Masters in Clinical Epidemiology, UP College of Medicine Fellowship Training in Pediatric Gastroenterology and Applied Nutrition, UP-PGH Residency Training in Pediatrics, Manila Doctors Hospital Dector of Medicine 1 IST
- Doctor of Medicine, UST Faculty of Medicine and Surgery

### **Current Positions and Professional Societies**

- Fellow and Chair, Committee on Research, Philippine Pediatric Society Fellow and Past President, Philippine Society for Pediatric Gastroenterology, Hepatology and Nutrition

  Member, Asian Society for Pediatric Research

  Member, Asia Pan Pacific Society for Pediatric Gastroenterology, Hepatology and
- Nutrition

### **Hospital Affiliations**

- Manila Central University Hospital
- Jose R. Reyes Memorial Medical Center Mandaluyong City Medical Center Manila Adventist Medical Center



# Understanding the Gut Microbiome Josie Grace C. Castillo, MD (Philippines)

The gut microbiome plays an integral role in health and disease. It is characterized as a vital organ with multidirectional connecting axes with other organs. It exerts considerable effects on the child's physical and mental development through its essential functions in the body's immunological, metabolic, structural and neurological

Gut dysbiosis is a potential pathogenic factor for developing various childhood disorders such as obesity, inflammatory bowel disease, allergies and functional gastrointestinal disorders. The gut microbiota interactions, its role in health and disease and the effect of nutritional interventions and probiotics in managing these disorders will be presented.

- Fellowship Training in Pediatric Gastroenterology, Hepatology and Nutrition, University of the Philippines Philippine General Hospital Residency Training in Pediatrics, University of the Philippines Philippine General
- Doctor of Medicine, University of Santo Tomas College of Medicine and Surgery

### **Current Positions**

- Tent Positions Chair, Department of Pediatrics, St. Paul's Hospital, Iloilo Chair, Membership and Credentials Committee, Philippine Society for Pediatric Gastroenterology, Hepatology and Nutrition
  Immediate Past President, Philippine Pediatric Society Western Visayas Chapter

### Professional Societies

- Fellow, Philippine Pediatric Society
  Fellow, Philippine Society for Pediatric Gastroenterology, Hepatology and Nutrition

### Pediatric Emergencies/Toxicology/Critical Care Medicine





### **Beyond Survivorship:** Post Intensive Care Syndrome in Children Prof. Tang Swee Fong, MD (Malaysia)

Paediatric intensive care has evolved since the first paediatric intensive care unit was established 70 years ago. Advances in mechanical ventilation as well as artificial organ support systems have led to lower mortality rates and more critically ill children are support systems have led to lower mortality rates and more critically ill children are now surviving. There is also evidence that long-term outcome in terms of quality of life after paediatric intensive care admission is good or normal for the majority of surviving children. However, in recent years, a new entity 'Post-intensive Care Syndrome (PICS)' has been described in children. Defined as 'new and worsening impairments in physical, cognitive, or health status arising after critical illness and persisting beyond acute care hospitalization, the effects of PICS might continue for months and even years. Risk factors for PICS in children include opioid and sedation exposure, the use years. This had been so in or in a fine in the severity of illness and injuries and length of stay in the PICU. It is therefore important to be aware of the magnitude and effects of complications after discharge from the intensive care unit so that assistance can be provided for ongoing problems and follow-up strategies can be developed. Evaluation of physical and psychological sequelae as well as quality of life of survivors and their families has become increasingly more important and the goal of intensive care should therefore be expanded from lifesaving to identification and improvement of functional health status and quality of life.

### **Current Positions and Professional Societies**

- Adjunct Professor, Taylor's University School of Medicine Visiting Lecturer, Faculty of Medicine, National University of Malaysia
- Consultant Pediatrician and Pediatric Intensivist, Faculty of Medicine, National University of Malaysia
- Board Member, Pediatric Acute & Critical Care Medicine Asian Network

- Secretary, Malaysian Pediatric Association
  Assistant Secretary, Malaysian Society of Intensive Care
  Training Centre Faculty, AHA Paediatric Advanced Life Support Course
  Instructor, Paediatric BASIC for doctors and Paediatric BASIC Nursing courses



### **Best Practices in DHF Management:** The Asia-Pacific Experience

Ronald V. Limchiu, MD (Philippines)

This 20-minute talk will focus on best practices in the management and prevention of dengue fever culled from experiences from Asia Pacific and Southeast Asian countries. The lecture will end with our own best practices in the Philippines in our fight against Dengue as espoused by the Philippine Pediatric Society Inc. with the goal of a zero mortality rate by 2030.

- Medical Training
  Fellowship Training in Pediatric Critical Care Medicine, Philippine Children's Medical Center
- Residency Training in Pediatrics, Cebu Doctors' Hospital
- Doctor of Medicine, Cebu Institute of Medicine

### **Hospital Affiliations**

- Chong Hua Hospital Fuente Cebu Doctors' Hospital

- Professional Societies
   Fellow, Philippine Pediatric Society
- Fellow, Society of Pediatric Critical Care Medicine Philippines

### Pediatric Emergencies/Toxicology/Critical Care Medicine





### **Pediatric ARDS** Wilfredo Tente E. Dublin Jr., MD (Philippines)

Pediatric Acute Respiratory Distress (PARDS) is a severe condition characterized by acute lung injury and hypoxemia, requiring prompt diagnosis and management. The PALICC-2 guidelines provided updated insights into the pathophysiology, diagnosis and treatment of PARDS, reflecting developmental differences in pediatric patients.

The pathophysiology of PARDS involves inflammation-driven alveolar damage and impaired gas exchange. The guidelines refine diagnostic criteria with a focus on oxygenation indices and imaging, offering a graded severity classification. Management strategies emphasize lung-protective ventilation, individualized PEEP and the judicious use of adjunctive therapies such as ECMO. PALICC-2 also highlights the need for ongoing research to improve outcomes in pediatric patients with PARDS.

- Medical Training
   Foreign Rotation Fellowship Training in Pediatric Intensive Care, University of Maryland, Hospital for Children, Baltimore, Maryland, USA
   Fellowship Training in Pediatric Intensive Care, Philippine Children's Medical
- Residency Training in Pediatrics, Vicente Sotto Memorial Medical Center
- Doctor of Medicine, Cebu Institute of Medicine

### **Current Positions**

- Program Director and Training Officer, Department of Pediatrics, VSMMC
- Section Head, Pediatric Intensive Care Unit, VSMMC PICU Director, Pediatric Critical Care Medicine Subspecialty Fellowship Program,
- Member Board of Directors SPCCMP

### **Professional Societies**

- Diplomate, Philippine Pediatric Society
  Fellow, Society of Pediatric Critical Care Medicine Philippines
  Fellow, Philippine Society of Critical Care Medicine



### **Trends in Mortality Related to Unintentional Poisoning in the Asia-Pacific**

Charmaine V. Micu-Oblefias, MD (Philippines)

This lecture explores the prevailing and emerging trends in mortality related to unintentional poisoning in the Asia-Pacific region. Unintentional poisoning remains a significant public health concern, with varying mortality rates across different countries and demographic groups. Key factors such as the availability and misuse of household chemicals, pesticides, industrial toxins, and counterfeit medications will be analyzed to understand their impact on different age groups and communities. The discussion will also identify gaps in public health infrastructure on these trends. By highlighting both common and region-specific risk factors, this lecture aims to provide a comprehensive understanding of the current landscape and guide strategies for prevention and intervention to reduce mortality rates in the Asia-Pacific.

### **Medical Training**

- Service, UP College of Medicine, PGH
  Residency Training in Pediatrics, National Poison Control and Information
  Service, UP College of Medicine, PGH
  Residency Training in Pediatrics, National Children's Hospital
  Doctor of Medicine, Far Eastern University- Dr. Nicanor Reyes Memorial
- Foundation

### **Current Positions**

- Medical Specialist II, National Poison Management and Control Center UP-PGH
   Member, Philippine Pediatric Society Child Health Informatics Committee

### **Hospital Affiliations**

- Far Eastern University- Dr. Nicanor Reyes Medical Foundation Manila Doctors Hospital
- Mary Chiles Hospital

### **Professional Societies**

- Fellow, Philippine Pediatric Society
  Diplomate, Philippine Society of Clinical and Occupational Toxicology



Nephrology/Urology





# Challenges in the Management of **Pediatric Urologic Conditions**

Pediatric urologic conditions still pose unique diagnostic and therapeutic challenges to primary care physicians and general pediatricians. Diverse presentations of phimosis, undescended testes, hydrocele, and hernia are common clinical consults that may require specialist referral for surgical intervention. Even pediatric urologists still encounter difficult cases of hydronephrosis, complicated urinary tract infections, vesicoureteral reflux, ureteropelvic junction obstruction, and disorders of sexual development. The review discusses current trends in managing common urological disorders in children and the indications and timing for referral. The relevance of transitional urology and the integration of multidisciplinary care will be emphasized. It also highlights the necessity for ongoing research and innovation to address these challenges and improve clinical outcomes for pediatric patients with urologic conditions

- Education and Training
   Fellowship Training: Pediatric Urology Clinical and Research Fellowship, University of British Columbia, British Columbia Children's Hospital, Vancouver,
- British Columbia, Canada Residency Training: University of the Philippines-Philippine General Hospital,
- Straight Urologic Surgery Residency
  Postgraduate: University of the Philippines- College of Medicine, Doctor of Medicine, Cum Laude, Top 6
  Tertiary: University of the Philippines- Manila, Bachelor of Science Major in
- Biology, Magna Cum Laude, Class Valedictorian

- Active Consultant, De La Salle University Dasmarinas
  Active Consultant, South Imus Specialists Hospital; Perpetual Help Medical
  Center- Las Piñas; Divine Grace Medical Center; Our Lady of the Pillar Medical
  Center; The Medical City-South Luzon
- Visiting Consultant, Bacoor Doctors Medical Center; Medical Center Imus; City of Imus Doctors Hospital

- of Imus Doctors Hospital
  University Researcher, University of the Philippines Manila
  Medical Officer III (Urology Fellowship), Division of Urology, Department of
  Surgery, University of the Philippine-Philippine General Hospital
  Clinical Internship (Track B), Rotations to 5 Major Departments (Surgery,
  Obstetrics and Gynecology, Internal Medicine, Pediatrics and Family and
  Community Medicine) plus 3 elective courses (Neurology, Radiology and
  Perinatology), Philippine General Hospital
  Clinical Clerkship, Philippine General Hospital
  Community Health Service, Barangay Mahabang Kahoy in Indang, Cavite
  Pahinungod FR Volunteer, UP-PGH

- Pahinungod ER Volunteer, UP-PGH
- Peer Tutor, Learning Resource Center



### Glomerular Disease in Children: When to do a Biopsy Elmer Kent A. Lopez, MD (Philippine

Glomerular disease remains an important cause of renal disease in children. It is one of the most common causes of irreversible kidney damage and, as such, is not only a source of personal suffering but also a major socioeconomic problem.

Glomerulonephritis (GN) is used in the contemporary scientific literature to define noninfectious inflammatory lesion affecting the glomeruli. The clinical manifestations of GN encompass a spectrum that may include gross or microscopic hematuris, proteinuria, and nephrotic syndrome. Renal dysfunction and hypertension may also be present in many patients. Etiopathogenesis of GN also varies, being idiopathic in a large majority, while some may result from infections, such as hepatitis or human immunodeficiency virus 1, or from known immune disorders, such as systemic lupus erythematosus

Kidney biopsy has a cardinal role in the management of kidney diseases. Biopsy proven kidney diseases impart valuable information about incidence, distribution and possible control of disease with effective and directed treatment. Specific indications for performing biopsy in children include steroid-resistant nephrotic syndrome (NS) and secondary nephropathies.

- Master of Arts in Health Professions Education (MAPHEd): Completed Academic Requirements, Xavier University, Cagayan De Oro City
  Doctor of Medicine, SWU-Matias H. Aznar Memorial College of Medicine, Urgello St., Cebu City, Dean's Medal for Academic Excellence Award (Rank 1), Don Matias H. Aznar Scholarship Award, Leadership Award
  Bachelor of Science in Biology, University of San Carlos, Talamban, Cebu City, Cum Laude/Consistent Dean's List

- Subspecialty Training in Pediatric Nephrology, Department of Pediatric Nephrology, National Kidney and Transplant Institute (Chief Fellow)
  Residency Training in Pediatrics, Department of Pediatrics, Vicente Sotto Memorial Medical Center (Chief Resident)
- Recipient: Leadership Award

### **Current Positions**

- rrent Positions
  Training Officer, Section of Pediatric Nephrology, Vicente Sotto Memorial Medical Center (VSMMC)
  Vice Chair, Research Ethics Committee, VSMMC
  Chairman, Department of Pharmacology, Cebu Normal University-Vicente Sotto Memorial Medical Center (CNU-VSMMC) College of Medicine

- Memorial Medical Center (CNU-VSMMC) College of Medicine
  Member, Special Human Resource Merit Promotion and Selection Board (HRM-PSB) -Medical Division, VSMMC
  Member, Department Residency Training Committee, VSMMC
  Member, Department Research Technical Review Board, VSMMC
  Member, Blood Transfusion Committee, VSMMC
  Member, Gender and Development Committee, VSMMC
  Clinical Coordinator, MHAM Senior Clerkship Pediatrics Rotation at VSMMC
  Clinical Coordinator, Clinical Exposure, MHAM College of Medicine
  Past Chapter Secretary, Phillippine Pediatric Society-Central Visayas Chapter,
  2020-2022

- 2020-2022



Nephrology/Urology





# Overview of Hypertension in Children with Acute and Chronic Kidney Disease

Hypertension is a frequent finding in acute and chronic kidney disease (CKD), particularly glomerular or vascular disorders. The pathogenesis and preferred treatment of hypertension vary with the type of kidney disease and its duration. Hypertension is a common complication in both paediatric and adult patients with chronic kidney disease (CKD). In children, hypertension is often a consequence of CKD rather than a cause, and it plays a significant role in accelerating the progression of CKD to and store renal disease.

progression of CKD to end-stage renal disease.

The complexities of managing blood pressure in this vulnerable population will be highlighted. Hypertension is prevalent in children with CKD, particularly as the disease progresses to more advanced stages, often requiring a combination of antihypertensive agents. The renin-angiotensin-aldosterone system (RAAS) antihypertensive agents. The renin-angiotensin-aldosterone system (RAAS) blockade is central to treatment, although side effects such as hyperkalaemia are common. Masked hypertension is a significant challenge in paediatric CKD, necessitating diligent monitoring, often through ambulatory blood pressure monitoring. The pathogenesis and treatment of hypertension will be addressed here. Hypertension in CKD is multifactorial, involving sodium retention, increased renin-angiotensin system activity, and sympathetic nervous system hyperactivity. Management strategies focus on achieving target blood pressures to slow CKD progression and reduce cardiovascular risk, with diuretics and ACE inhibitors as key therapeutic agents. Emphasis will be on the critical role of early and aggressive hypertension management in preventing CKD progression and mitigating hypertension management in preventing CKD progression and mitigating cardiovascular complications in the paediatric population.

**Designation**Pediatrician (Nephrologist) Hospital Selayang, Lebuh Raya Selayang – Kepong, Batu Caves, Selangor, Malaysia

- Doctor of Medicine, Universiti Kebangsaan Malaysia (UKM), Bangi
- Master of Medicine(Paediatrics) Universiti Kebangsaan Malaysia, (UKM), Bangi

### **Most Recent Appointments**

- Selangor State Head of Paediatric Services MOH
- Consultant Pediatrician and Pediatric Nephrologist, Hospital Selayang Head of Paediatric Department Hospital Selayang
- Consultant Pediatrician and Paediatric Nephrologist, Hospital Tengku Ampuan Afzan Kuantan.
- Alzan Kuantan.
  Paediatrician and Paediatric Nephrologist, Pediatric Institute, HKL
  Clinical Fellow, Renal Unit Royal Hospital for Sick Children, York Hill, Glasgow
  Paediatric Nephrology Trainee, Pediatric Institute, HKL
  Pediatrician, Hospital Mentakab, Pahang
  Pediatrician, Hospital Tengku Ampuan Afzan, Kuantan

**Environmental Pediatrics** 

# Climate Change and Planetary Health: Impact on Childhood Diseases

Prof. Tufail Muhammad, MD (Pakistan)



Climate change, a pervasive and escalating global crisis, poses profound threats to human health, with children being among the most vulnerable populations. In the Asia Pacific region, the adverse effects of climate change are particularly pronounced, exacerbating existing health challenges and fostering the emergence of new ones. This plenary talk explores the intricate relationship between climate change and childhood diseases, focusing on the current impacts, emerging threats, and actionable strategies to protect children's health in this dynamic context.

The presentation begins by elucidating the current phenomenon of climate change, highlighting its key drivers and manifestations, such as rising temperatures, extreme weather events, and ecosystem disruptions. Emphasizing the unique vulnerabilities of children, it delves into the specific health impacts in the Asia Pacific region, where climate-induced phenomena like malnutrition, respiratory ailments, and vector-borne diseases are taking a significant toll on young populations.

The talk further distinguishes between "emerging" diseases, such as Zika virus and chikungunya, whose spread is facilitated by changing climatic conditions, and "lingering" diseases, including asthma and diarrheal illnesses, that are exacerbated by environmental degradation. These health challenges underscore the urgent need for robust, climate-resilient health systems. In response, the presentation proposes a comprehensive action framework aimed at mitigating these impacts and fostering resilience. Key strategies include strengthening healthcare infrastructure, promoting climate-adaptive practices, empowering communities through education and capacity-building, and advocating for policy changes that prioritize climate resilience and child health.

By addressing the multifaceted challenges posed by climate change on childhood health in the Asia Pacific, this talk aims to catalyze collaborative efforts and inspire actionable solutions to safeguard the well-being of future generations. Through a blend of scientific insights and practical recommendations, it seeks to contribute to a sustainable, health-oriented approach to climate resilience.

### **Education**

- Khyber Medical College Peshawar. University of Peshawar campus, Pakistan 1970 1976 MBBS
- College of Physicians and Surgeons Pakistan College of Physicians and Surgeons, Karachi 1977-89 MCPS
- Diploma in Child Health KMC, Peshawar University. 1889-80 DCH

### **Work Experience**

- President International Society for Child Abuse and Neglect. International Society for Child Abuse and Neglect 2018-2020
- Chairperson Child Rights Group Pakistan Pediatric Association. Pakistan Pediatric Association 2018 till date
- Coordinator Technical Action Group on Child Right, Children and Environment. Asia Pacific Pediatric Association 2021 till date
- Member Technical Advisory Group child health. Khyber Institute of Child Health, Peshawar, Pakistan Jan 20 23 till date Member Board of Governors GK Medical College Swabi, Pakistan. Gajju Khan Medical College Swabi. Pakistan June 2021 till
- International Society for Prevention of Child Abuse and Neglect. International Member Distinguished Advisory Board Sept2023 till date
- Diabetes Association KP, Pakistan. Provincial/KP chapter, General Secretary March 2024 till date

### Major Achievements, Citations, Recognition and Awards

- President of Pakistan Gold Médal for outstanding pediatric Services Govt of Pakistan.
- Global Multidisciplinary Team Award.
  International Society for Prevention of Child Abuse and Neglect (USA)
  Meritorious Services Award Ministry of Population Welfare. Govt of Pakistan.
- Gold Medal and Doctor of the Year Award.
  - Key Social Marketing and Pakistan Medical Association.



Nutrition and Food Security

Eliminating the Double Burden Malnutrition

Dr. Aman Bhakti Pulungan, MD (Indonesia)



Non-communicable diseases (NCDs) in children are often overlooked due to their association with adult health. However, NCDs alongside injuries account for nearly half of the global mortality of children aged 5-14 years old. Considering the lifelong impact of NCDs, such as obesity and diabetes, the Sustainable Development Goal 3—aimed at reducing premature mortality from NCDs by one-third—remains an important objective.

Childhood obesity and overweight is projected to continue to rise. In the US, the rate of obesity among children and adolescents has more than tripled from 5% to 19%, and it is estimated that over half of children will be obese by age 35 by 2050. Moreover, during the COVID-19 pandemic, the rate of BMI increase has doubled, therefore increasing the number of children at risk of developing diabetes. Other regions, such as Southeast Asia, are also experiencing rising rates of overweight. Obesity is also a multifaceted issue; in addition to genetic and environmental factors, community and policies also play important roles in the rise of childhood obesity and overweight. Furthermore, childhood obesity is known to cause significant health impacts, which includes glucose intolerance, dyslipidemia, hypertension, and polycystic ovarian syndrome (PCOS); all of which disrupt long-term well-being of children. Therefore, prevention and cultivation of healthy lifestyle remains the key in curbing childhood obesity; this includes promoting behaviors such as physical activity, healthy dietary patterns, limiting screen time, and adequate sleep.

This talk will review the current status of childhood obesity and its complications, offering insights for healthcare professionals. It will focus on intervention, as well as age and region-specific preventive strategies to address obesity in Asia-Pacific based on the Asia-Pacific Consensus, and discuss related complications such as diabetes and PCOS.

Aman B Pulungan is a professor of pediatrics, executive director of the International Pediatric Association, senior consultant in Pediatric Endocrinology, Faculty of Medicine, University of Indonesia, member of the NCD Child Governing Council, immediate past president of the Asia Pacific Pediatric Association, immediate past president of Indonesian Pediatric Society, and past president of the Asia Pacific Paediatric Endocrine Society (APPES). For the past 28 years, he has been involved in many programs for diabetes in Indonesia and in the region, amongst others, is the project leader of the World Diabetes Foundation type 1 DM in Indonesia, and is the project leader of the Changing Diabetes in Children in Indonesia. As a clinician and researcher, he has published more than 100 scientific articles in various international journals and book chapters, as well as popular articles.

The Indonesian MOH has given him an award as one of the most eminent person actively involved in the national immunization program. He has received a honorary fellowship from the Turkish National Pediatric Association for dedication and contribution to child health and a honorary fellowship from the Royal College of Physicians of Ireland (RCPI). Furthermore, he also received the Republika.co.id Inspirational Figure Award 2021 for his work in children's health during the COVID-19 pandemic and the Advocacy and Lifetime Achievement in Pediatrics Award 2024 by the European Association of Pediatrics, Union of National European Pediatric Societies and Association (EPA/UNEPSA).

He is also a member of the health advisory board of The Australia-Indonesia Centre and media and communications division of The Global Pediatric Endocrinology and Diabetes.

He initiated the formation of IKADAR, an organization for families with diabetic children, including patients, doctors, and educators. He took important roles in the formation of Foundation for Congenital Adrenal hyperplasia Families (KAHAKI), Families Forum for Osteogenesis Imperfecta (FOSTEO), and Turner Society Indonesia (TSI).

He is a member of various international organizations such as APPES, ESPE, ISPAD, International Fellow of American Academy of Pediatrics, GPED, DOHAD Society, and the Endocrine Society. He is part of the editorial board of Global Pediatric Health, Human Biology and Public Health, Clinical Pediatric Endocrinology, Annals of Pediatric Endocrinology and Metabolism, International Journal of Pediatric Endocrinology.

His research interests include the genetic profile of Pygmies Rampasasa in Flores, short stature and stunting, congenital hypothyroidism, early life and metabolic syndrome, as well as global health.

He is the copyright holder of the Indonesian National Growth Charts and the Pediatric Online Immunization Reporting System (I-Points) Application and Manual Book.







Infectious Diseases and Tropical Pediatrics

### The Fight Continues: Reducing the Menace of Childhood TB in the Asia Pacific Prof. Rajeshwar Dayal, MD (India)



Tuberculosis (TB) continues to be among the top ten causes of Under-5-mortality. The WHO global TB report 2023 states that 7.5 million people were diagnosed with TB in 2022. Out of these, 4.8 million belonged to the South-East Asia region and another 1.8 million belonged to the Western Pacific region. 12 out of 30 high burden countries for TB are in the Asia-Pacific region. Globally, TB caused 1.3 million deaths in 2022 of which the Asia-Pacific region accounts for 0.7 million deaths. Child population accounts for 18% of total TB deaths.

The Asia Pacific region constitutes one of the hotspot regions for "missing TB" cases, with 8 out of the top 10 countries with the largest gap between estimated and notified TB cases belonging to this region. The combined effect of high TB burden and missing cases has led to a minimal decline in TB incidence rate in the Asia-Pacific region, which is a crucial END TB target.

### **Education**

- MBBS: Sarojini Naidu Medical College Agra / Dr. B.R. Ambedkar University Agra MD: Sarojini Naidu Medical College Agra / Dr. B.R. Ambedkar University Agra
- DNB: National Board of Examinations-New Delhi
- DCH: Royal College of Physicians

### **Work Experience**

- Professor, Department of Paediatrics, Sarojini Naidu Medical College Agra Professor and Head Department of Paediatrics, Sarojini Naidu Medical College Agra

### **Major Achievements**

- Appointed as Chairperson of the Task Force on Tuberculosis by the Asia Pacific Pediatric Association (APPA) for the period 2018-2020
- Appointed as Co-Chairperson of the Scientific Advisory Group on Tuberculosis and HIV by the Internationnal Pediatric Association for the period 2019 to 2021
- Elected as the Member of Standing Committee, International Pediatric Association for the period 2023-2025
- Elected as President, International Society of Tropical Paediatrics for the period 2023-2026

### **Publications**

Total 103 in foreign and national journals, including 25 chapters in various textbooks, including the prestigious 'Red Book' of Americal Academy of Pediatrics



**Newborn Medicine** 





**Reducing Harm: A Systems Approach** 

When a patient is harmed, the approach in handling the incident by the institution matters. Institutions that look into who committed the error often find that the incidents recur after a period of time. Imposing sanctions or taking disciplinary action against staff members who commit errors had proven ineffective in preventing errors from recurring. Instead, adopting a non-punitive response to errors should be the way forward when dealing with incidents. A systemic approach to errors- human factors, tools, processes, the physical work environment etc. and identifying problems in these areas had been shown to be more effective at introducing long-term, stable measures for further improvement

Obviously, this requires a change in mindset at the way how incidents are dealt with. Support from leadership is imperative to drive this change. Leadership forms the base to drive a change in mindset that most incidents are a result of a problem in the system. Driving the idea that we should learn from incidents to improve the system should receive leadership endorsement. With this, the safety culture in the organization snoula receive leadership endorsement. With this, the safety culture in the organization will steer in a direction where there is psychological safety in openly reporting errors by the frontline clinicians and healthcare staff. There will be a tendency to look at incidents in a broader mindset that systemic factors do play an important role when our healthcare staffs are involved in incidents. It had been proven that putting in measures to deal with systemic factors help to prevent further incidents from happening in future. Obviously, when there is a malicious intent, this must be dealt accordingly to the institutions disciplinary policies. This is within the fair and just culture framework. framework

When the safety culture of institutions improved (i.e. staff members feel safe enough to report errors), everyone will be able to help contribute in creating robust processes in our institutions. This leads to improved reliability of our complex work environment and ultimately improved patient safety levels.

### **Education and Training**

- Manipal Academy of. Higher Education (MBBS)
- Post-Graduate
  Royal College of Paediatrics and Child Health Royal College of Physicians of Edinburgh

- Director and Senior Consultant, KK Women's and Children's Hospital (2010 to present) Consultant Hospital Selayang, Malaysia (2007-2009)

- Consultant Hospital Joelayal Ig, Malaysia (2007-2009)
  Consultant Hospital Ipoh, Malaysia (2006-2007)
  Registrar NSW Newborn and Paediatric Emergency Transport Service (NETS),
  Sydney, Australia (2006)
- Fellow Royal Hospital for Women, Sydney, Australia (2005-2006)

### **Awards**

- 2023 Covid-19 Medal Award Ministry of Health, Singapore

- 2021 Long Service Award- 10 years SingHealth, Singapore 2020 Target Zero Harm Award- Team Category SingHealth DUKE-NUS Institute for Patient Safety and Quality (IPSQ) 2020 Target Zero Harm (Team Category)- Excellence Award KK Women's and Children's Hospital,Singapore 2019 Gold Award, Asian Healthcare Management Asian Health Care
- 2019 Gold Award- Asian Healthcare. Management Asian Health Care



Hyperbilirubinemia: **Current Guidelines and Emerging Therapies** 

Hyperbilirubinemia remains the most common neonatal morbidity. Commonly considered a benign condition, bilirubin encephalopathy or kernicterus still occurs worldwide

As such, pre-discharge bilirubin screening is recommended to prevent occurrence of severe hyperbilirubinemia (requiring intervention like phototherapy). The Filipino newborn infant is at a higher risk of developing severe hyperbilirubinemia due to belonging to the East Asian race and a higher incidence of G6PD deficiency.

As part of the advocacy of the Philippine Society of Newborn Medicine, a multicenter study involving hospitals all over the Philippines was completed through the research grant from the PCHRD-DOST. The objective was to determine what bilirubin level at the 24th hour of life will predict the subsequent development of severe hyperbilirubinemia at the 72nd HOL. After more than 1600 Filipino infants recruited, the 24th HOL bilirubin level found to have the highest predictive value was 7.5 mg/dL. This study will serve as basis for future implementation of pre-discharge bilirubin screening programs in the Philippines.

### Education

- Maction
  University of the Philippines-College of Medicine MD 1984-1989
  University of the Philippines-College of Public Health MSPH 2010- 2019 Public
- Health Nutrition
  Philippines General Hospital Pediatric residency 1990-1992
- Mayne State University- Children's Hospital of Michigan & Hutzel Hospital, Detroit, MI Neonatology Clinical Fellowship 1993-1997
  Wayne State University- Children's Hospital of Michigan & Hutzel Hospital, Detroit, MI Neonatology Research Fellowship 1997-1998

### **Designations**

- Director Institute of Child Health and Human Development, NIH-UP Manila Clinical
- Associate Professor College of Medicine, University of the Philippines Assistant Chair for Research Department of Pediatrics, UP-Philippine General Hospital Asst. Division
- Chief Division of Newborn Medicine , UP-Philippine General Hospital Member-EHRO PGH
- Head Section of Neonatal Intensive Care Unit, St. Luke's Medical Center Quezon City (2014- present)
  Member RESMOB, PNHRS
  Training Officer Neonatology Fellowship Program, University of the Philippines-Philippine General Hospital (up to January 2019)
  Training Officer Pediatric Residency Program J. Delgado Memorial Hospital (up to Echrena) 2017)

- to February 2017) Co-Chair, Technical Review Board, NIH- UPM (up to 2015)

**Newborn Medicine** 





# **Breastfeeding: The Golden Hour: First Hour After Delivery**

The vast majority of mother/newborn dvads stand to benefit from Early Essential Newborn Care or FENC

Formative research from Philippine hospitals (2008) exposed gaps in labor/delivery and immediate newborn care practices. This led to a package of simple evidence-based actions - the "Four Core Steps" of 1) immediate and thorough drying to prevent hypothermia and stimulate breathing; 2) immediate and sustained skin-to-skin contact for at least one hour to prevent hypothermia, and hypoglycemia and promote initiation of sustained breastfeeding; 3) properly-timed cord clamping to reduce the risk of anemia and other complications, and 4) non-separation for early breastfeeding risk of anemia and other complications, and 4) non-separation for early breastfeeding for initiation. The short and long-term benefits of early and exclusive breastfeeding for babies, mothers, and their families are innumerable, including reduced morbidity, mortality, and later non-communicable diseases. This initial sequence of time-bound interventions – the Essential Intrapartum and Newborn Care (EINC) Protocol evolved into a national quality improvement initiative, that was later adopted by the Western Pacific Regional Office (WPRO) of WHO as EENC. Our social marketing handle "Unang Yakap" became "The First Embrace" in 2014 with a scaleup in 9 priority countries, targeting both supply and demand sides for behavioral change. Since then, EENC has impacted the lives of at least 10 million babies and their mothers in 29 countries in 4 regions of the WHO. countries in 4 regions of the WHO.

This standard package of services, practice-based training or "coaching", multidisciplinary working groups, and regular assessments emphasize the actions to improve policies and enabling environments to improve birth outcomes. Quality improvement has been supported by the incorporation of pre-service medical, nursing, and midwifery curricula and licensure exams, health promotion, and health financing packages. Evidence has demonstrated that uninterrupted skin-to-skin contact impacts the chances of successful breastfeeding thereafter. breastfeeding thereafter.

Newborn care practices have improved through health system approaches. The path to wider implementation of EENC is still strewn with obstacles but as many as there are challenges, so are there creative solutions, practical lessons, and low-hanging fruit for picking. As we approach our 2030 SDG targets, we will all benefit from an even sharper focus on breastfeeding, zeroing in on what we can all do to grant our future generations the environments that will enable their best start.

### Medical Education

- Far Eastern University-Nicanor Reyes Medical Foundation-Medicine (Rank: 4th out of 252 students, 1995, Academic Scholar)
  Far Eastern University- Nicanor Reyes Medical Foundation-Medical Technology,
- (Magna Cum Laude)

### **Designations**

- Clinical Associate Professor, Division of Newborn Medicine, Department of Pediatrics, College of Medicine-Philippine General Hospital, University of the Philippines Manila since 2006
- Assistant Chief, Division of Newborn Medicine, Department of Pediatrics, College Assistant Chief, Division of Newborn Medicine, Department of Pediatrics, College of Medicine-Philippine General Hospital, University of the Philippines Manila, 2024 Chair, Department of Pediatrics, Adventist Medical Center Manila since 2021 Secretary, Philippine Society of Newborn Medicine, 2023-2024 Member, Board of Trustees, Philippine Society of Newborn Medicine, since 2019 Head, Lactation Unit and Human Milk Bank Center, Philippine General Hospital Co-Chair, Breastfeeding Committee, Philippine General Hospital Treasurer, Human Milk Bank Association of the Philippines Coordinator, STABLE, Philippine General Hospital

- Former Board Member, Philippine Pediatric Society -Southern Tagalog Chapter (2016-2020)

### **Specialty Training**

- Fellowship Training in Neonatology, Philippine General Hospital, 2003 Residency Training in Pediatrics, Philippine General Hospital, 1999 Outstanding Second Year Resident, 1998

- Observership training in Newborn Medicine, Hutzel Women's Hospital, and Wayne State University, Children's Hospital of Michigan, Detroit, USA, 2006
- Observership training in Human Milk Bank Operations, Meyer Hospital, Florence, Italy, 2010
- Observership training in Human Milk Bank Operations, Scotland, United Kingdom and Queen's Hospital, London, 2017 Observership training in Newborn Medicine, Children's Mercy Hospital, Kansas, USA 2019
- Most Outstanding Intern, Clark Airbase Medical Center, 1991



Pulmonology





### **Asthma and Preschool Wheeze** dj. Prof. Nitin Kapur, MD

One in three children have had at least one episode of wheezing prior to their third birthday, and more than half the children would have had at least one episode of wheeze before their sixth. Most wheeze in preschool children is associated with viral upper respiratory tract infections, which recur frequently in this age group. As a result, recurrent wheeze is one of the most common clinical problem facing practitioners throughout the world.

This simultaneous symposium would be covering aetiology, epidemiology, diagnosis, treatment and prevention of pre-school wheeze and asthma in children. We would be discussing the phenotypic variation in clinical presentation, risk of long-term wheeze and some recent research on treatment approaches in this common condition.

### **Summary of Credentials**

- Paediatric Respiratory and Sleep Physician at the Queensland Children's Hospital (QCH) in Brisbane.
- Director of Paediatric Education (DPE) and the Director of Clinical Training (DCT) at the same hospital
- Doctor of Medicine (MD) in Paediatrics and a PhD in Paediatric Bronchiectasis.

  Currently the President of the Paediatric & Child Health Division of the Royal
- Australasian College of Physicians (RACP) for 2022-2025
  Adjunct Professor at the School of Medicine at the University of Queensland as well as the Queensland University of Technology.

- Senior Medical Officer in the Department of Respiratory & Sleep Medicine
- Clinical Training Director of Paediatric Education (DPE) at the QCH (0.1FTE) (2015-current).
- current). Notable achievements include:

  Director of Clinical Training (DCT), in charge of pre-vocational training at the QCH (0.1FTE) (2015-current).
- (O.IF IE) (2016-current). President for Paediatric & Child Health Division (PCHD) of the Royal Australasian College of Physicians (RACP) May 2022 to May 2025. President-elect for the same for 2020-2022.
- Adjunct Professor with the School of Medicine, University of Queensland (UQ) since 2022. Associate Professor 2017-2022. Senior lecturer from 2012-2017. Acting Deputy Director of Medical Services (A/DDMS) 2013-2014, Royal
- Children's Hospital.

  Deputy-chair of RACP Queensland Regional Committee (2020-2022). Through
- this role I assessed:
- Convener of the Paediatric Special Interest Group (SIG) for the Thoracic Society of Australia & New Zealand (TSANZ) (2014-2018)

  Chair of the Australian Paediatric Respiratory Medical Group (APRMG) since 2016
- Deputy-chair of Medical Specialist Association (MSA), QCH (2019-2022)



### Walking Pneumonia in Children Bongo, Jr., MD (Phi

Atypical pathogens such as Mycoplasma pneumoniae, Chlamydophila pneumoniae and Legionella pneumophila are increasingly recognized as important causes of community acquired pneumonia (CAP) worldwide. The prevalence of atypical pneumonia varies by country and region, accounting for 10%-20% of all cases of CAP. Community acquired pneumonia (CAP) caused by M. pneumonia or C. pneumoniae is common in children presenting as mild and self-limiting disease. Atypical pathogens have no cell walls; therefore they do not respond to beta lactam Atypical participants have no cell wais; therefore they do not respond to beta factarn antibiotics. Macrolides are the first line antibiotics used in children because of their low minimum inhibitory concentrations and high safety. Pediatricians should be careful with empirical therapy of macrolides in children with mild to moderate CAP not to increase the risk of macrolide resistant Mycoplasma pneumoniae pneumonia

### **Medical Studies and Training**

- Medicine: UV-Gullas College of Medicine
  Residency Training: Pediatrics- Chong Hua Hospital
- Fellowship Training: Pediatric Pulmonology and Critical Care Medicine, Philippine Heart Center

### Work Experiences

- A Experiences

  Training Officer: Section of Pediatric Pulmonology, Chong Hua Hospital

  Assistant Chairman: Department of Pediatrics, Chong Hua Hospital Mandaue

  Active Staff: Department of Pediatrics: Chong Hua Hospital, Perpetual Succour Hospital, Visayas Medical Center Visiting Staff: Cebu Velez General Hospital, UCMED, St Vincent General Hospital
- Past President: Philippine Pediatric Society Central Visayas Chapter 2020-2022

### **Affiliations**

- Fellow: Philippine Pediatric Society
- Fellow: Philippine Academy of Pediatric Pulmonologists Fellow: Philippine Society of Critical Care Medicine
- Fellow: Asia Pacific Society of Respirology
- Member: American Thoracic Society

Pulmonology





# Optimizing Infant and Child Sleep Assoc. Prof. Daniel YT Goh, MD (Singapore)

Sleep is of vital importance to health and life. This is especially so in young children as they are in the phase of rapid growth and development, the phase where sleep habits are established and also the period when sleep problems are highly prevalent. Sleep problems in early childhood can impact on the wellbeing of mothers, as well as the family; it can also potentially affect the health and disease in adulthood.

Sleep is often not routinely evaluated in well-baby and immunization visits in infancy; Sleep is often not routinely evaluated in well-baby and immunization visits in infancy. Sleep problems are also not often actively reported to the clinician and not considered a 'medical problem' in many Asian cultures. The importance of active screening and early intervention in infancy is highlighted. A community-based infant sleep screening and early intervention programme in Singapore will be described. The wide spectrum of sleep disorders in various stages of childhood to adolescence will be discussed, together with some practical principles to achieve good sleep in infants and children.

### **Medical Studies and Training**

- National University of Singapore and trained in Paediatrics in Singapore.
  Underwent Paediatric Pulmonology and Sleep Fellowship at the Johns Hopkins Children's Centre USA

### Work Experience and Positions

- Served as Head of Paediatrics (2007 to 2017) and Paediatric Cluster Chair (2012 to 2019) at the National University Hospital
  President of the Singapore Paediatric Society (2004 to 2011)
  President of the ASEAN Paediatric Federation (2011 to 2014)
  Council Member of the College of Paediatrics and Child Health, Singapore (2017 to 2004)

- to 2021) Standing Committee Member of the Asia Pacific Paediatric Association
- Currently the Chief Wellbeing Officer in the National University Health System.

- NUHS Mochtar Riady Pinnacle Award in 2015; Outstanding Asian Paediatrician Award (by the Asia Pacific Paediatric Association) in 2018
  National Day Award (Public Administration Bronze Medal) in 2018
  Distinguished Senior Clinician Award, NUHS in 2019
  National Medical Excellence Award – Clinician Mentor Award in 2022

- NUHS Teaching Excellence Award in 2023.

### **Clinical Interests**

- Childhood respiratory conditions Asthma and allergies

- Sleep in childhood Sleep-related breathing disorders
- Fiberoptic bronchoscopy
- Vaccinology

Cardiology





## **Current Clinical Profile of Acute Rheumatic Fever: Subclinical Carditis and Its Implications**

ARE/RHD is a major public health problem and has remained the most common cause of acquired heart disease in developing countries. Its prevalence is high in 120 countries where more than half of the world's 8 billion population live and where

poverty, overcrowding and poor access to health care exist.

Diagnosis is based on Jones Criteria which was proposed 80 years ago. The latest revision was done in 2015 and can be applied to diagnose both initial attacks of ARF and recurrent attacks. The revision has emphasized the need to classify the geodemographics of the countries as low risk and medium to high risk populations; and the value of echocardiography in the diagnosis.

Subclinical carditis is defined as presence of mitral or aortic valve pathology as diagnosed by echocardiography with or without heart murmurs on auscultation. It is now recognized as a major criterion for carditis and valuable in determining prognosis. The World heart Federation, in 2023, further strengthened this criterion by putting forward and defining the echocardiographic parameters necessary for its diagnosis.

It has been established that 40% of patients with RHD will be missed if diagnosis is based solely on auscultation and highlights the need for continuous secondary prophylaxis in this group of patients to avoid progression to severe RHD.

Doctor Ortiz had his medical degree at University of the Philippines. Manila and he was the Chief Resident in his pediatric residency training at UP-Philippine General Hospital. He had his Fellowship training in Pediatric cardiology at Hospital for Sick Children and national Heart Hospital Londo, United Kingdom. He had his Masters in Health Services Administration in Ateneo de Manila Graduate School of Business.

He was the past Medical Director of Vaccines in Glaxo Smith Kline in Indonesia from 2009 to 2015 and in Vietnam, Cambodia, Myanmar, Laos from 2015 to January 2020. Currently he is a consultant in Glaxo Smith Kline Philippines.

Major Achievements and Recognition
Doctor Ortiz was awarded as a Distinguished Scientist (2006), Distinguished Service
(2012), and Distinguished Fellow (2020) by the Philippine Heart Association. He was
also a TOYM Awardee for Medicine in 1992 and was awarded the Most Outstanding Research in Cardiology in 1995 by the Philippine Heart Association.



# Current Assessment of the RF-RHD BOD in Asia: **Implementing Programs for Prevention and Control**

Rheumatic fever and rheumatic heart disease over the years continue to pose a significant burden in Asia due to socioeconomic and healthcare challenges. In the Philippines is the 39th leading cause of Mortality in the country. What will be the strategies to prevent and control Rf RHD? The actual prevalence rate may be 3-5x more since the New Jones Criteria recognizes that most are asymptomatic denying a history of frequent tonsillitis but with definite valvular changes on echocardiogram, Prevention and control is challenged by :(1) Risk factors as to socioeconomic status with decreased access to healthcare , (2) Lack of adequate diagnostic tools – echocardiogram, (3) decreased healthcare awareness in the primary care , (4) lack of Standardized secondary prophylaxis protocols, (4) economic burden to the affected individuals with chronic valvulopathy and heart failure. For Asia, a collaborated effort should be done to standardize strategies in Tertiary prevention through hospital valve teams for risk assessment of definite RHD Patients (2) Standardized secondary Rheumatic fever and rheumatic heart disease over the years continue to pose a should be done to standardize strategies in 1 eriary prevention trirough hospital valve teams for risk assessment of definite RHD Patients. (2) Standardized scondary prophylaxis protocols emphasizing the advantage for IM Benzathine Penicillin prophylaxis and providing it for FREE under the Philhealth RF RHD OPD Package (3) Highlight Primary Care prevention and Screening of schoolchildren ages 5-15 years through mobile handheld ultrasound and training of nonexperts.

### **Medical Training**

Medical Training
Doctor Balderas was a Cum Laude in her degree in BS Biology at University of the Philippines, Baguio City and she had her medical degree at University of the East Ramon Magsaysay Memorial Medical Center. She was the Chief Resident in her residency training in Pediatrics at University of the East Ramon Magsaysay Memorial Medical Center and she was also a Chief Fellow in her Pediatric Cardiology fellowship training Philippine Heart Center. She further specialized in Pediatric Echocardiography at Philippine Heart Center. She also had her Masters of Science in Public health- Major Epidemiology and Hospital Facility Management at East Ramon Magsaysay Memorial Medical Center and is currently on working on her Graduate School Thesis Defense on Developing A Screening Recommendation for Metabolic Syndrome among Filipino High School Students ages 12- 16 yrs old using Prick Method for Fasting Blood Sugar (FBS) and Total Cholesterol versus Serum Determination. Determination.

### Work Experience

She is currently the Officer in Charge- Chairman and the Department Manager of the Department of Pediatric Cardiology of Philippine Heart Center. She is also the current Section Chief of Pediatric Cardiology of University of the East Ramon Magsaysay Memorial Medical Center and Asian Hospital Medical Center.



Cardiology





### **Options for PDA closure in the high-risk newborn: Current recommendations**

Patent Ductus Arteriosus (PDA) has a pivotal physiological role in fetal circulation. However, when physiologic PDA becomes pathological in high-risk newborn, "A therapeutic dilemma: to treat on not to treat," is still an ultimate challenge. Continuous comprehensive assessment of the neonate is needed prior to therapy recommendation. The journey of trials to close PDA had concluded some indications for therapeutic closure. This lecture will highlight in areas such as:

• Who, When and How to treat sick neonates with PDA: Friend or Foe

• Recent studies on closure of preterm PDA

• Does an optimal drug exist for medical closure of the PDA?

- Does an optimal drug exist for medical closure of the PDA? Transcatheter and/or Surgical Closure option for PDA Some of PDA Cases encountered

Medical Training
Doctor Causapin had her degree in BS Microbiology at University of Santo Tomas and her medical degree at University of the East Ramon Magsaysay Memorial Medical Center, where she also had her residency training in Pediatrics. She had her fellowship training in Pediatric Cardiology and further subspecialty training in Pediatric Interventional Cardiology at Philippine Heart Center.

### **Work Experience**

She is currently a medical specialist in Philippine Heart Center, Department of Pediatric Cardiology and Philippine Children's Medical Center. She is also an Assistant Professor in the University of the East Ramon Magsaysay Memorial Medical Center



### Rheumatology/Ethics/Professionalism





### **Cultivating Professionalism and Ethical Practice in Pediatrics**

oc. Prof. Pacifico Eric E. Calderon, MD (Philippines)

In this presentation, I examine key aspects of professionalism and ethical practice in clinical pediatrics, focusing on the unique triadic relationship between the physician, patient, and parent. I discuss strategies to address common ethical dilemmas, such as end-of-life care, vaccine hesitancy, and ethical gaps in pediatric research. I begin by exploring foundational concepts of professionalism and ethics in pediatrics. Here I emphasize the importance of prioritizing the child's best interests and involving parents—and children when appropriate—in shared decision-making. Next, I identify major ethical challenges, including decision-making conflicts, communication barriers, and moral distress. I then discuss strategies to address these challenges through ethics education, reflective practice, and institutional support. Additionally, I highlight the need to integrate real-world ethical issues into medical education and clinical ethics practice and research. In conclusion, I recommend continuous ethics education and strong institutional support to uphold professionalism and ethical standards in pediatric practice.

### Education

2022 – Master of Education, with distinction Faculty of Education, Monash University, Australia Academic scholarship from St. Luke's Medical Center, Philippines

2020 - Master of Bioethics

Faculty of Medicine and Health, The University of Sydney, Australia Full scholarship from the Australian Government (Australia Awards Scholarships)

Faculty of Medicine and Surgery, University of Santo Tomas, Philippines Graduated with the grade of 'benemeritus' in the oral examinations

2006 – Bachelor of Science in Biology, cum laude College of Science, University of Santo Tomas, Philippines Academic scholarship from the University of Santo Tomas (Santo Tomas Scholarship)

### Designations

- Visiting Research Fellow (Clinical Bioethics), Kyoto University
- International Visiting Fellow (Medical Ethics and History of Medicine), Ruhr University Bochum
- Associate Professor, St Luke's Medical Center College of Medicine William H. Quasha Memorial
- Head, Clinical Ethics Services, St. Luke's Medical Center Quezon City and Global
- Medical Specialist II. National Children's Hospital

### **Trainings and Qualifications**

- University Leadership and Management Training Programme (UNILEAD).
- Ossietzky Universität Oldenburg, Germany. Scholarship from the German Academic Exchange Service (Deutscher Akademischer Austauschdienst
- 2022 Intensive Bioethics Course, Baylor College of Medicine, Texas, USA 2017 UNESCO Ethics Teachers' Training Course, Sri Lanka Foundation Colombo, Sri Lanka
- 2015 Intensive Bioethics Course, Centre for Bioethics, Monash University Victoria, Australia



# Autoinflammatory Diseases in Children Assoc. Prof. Christine B. Bernal, MD (Philippines)

Autoinflammatory diseases in children represent a distinct group of disorders characterized by recurrent episodes of systemic inflammation without the involvement of high-titer autoantibodies or antigen-specific T cells. These conditions are primarily of nign-titer autoantibodies of antigen-specific I ceils. These conditions are primarily driven by dysregulation of the innate immune system, often due to genetic mutations affecting pathways like IL-1, NF-kB, and inflammasome activation. Key examples include Familial Mediterranean Fever (FMF), Mevalonate Kinase Deficiency (MKD), and Cryopyrin-Associated Periodic Syndromes (CAPS). Clinically, these diseases manifest with symptoms such as fever, rash, serositis, and musculoskeletal pain, the significant variability in severity and frequency. Early recognition and accurate diagnosis are crucial for managing these disorders effectively, as targeted therapies, including IL-1 inhibitors, can significantly reduce disease activity and improve quality of life. Advances in genetic testing have enhanced our ability to diagnose these conditions, though challenges remain in differentiating them from other inflammatory or autoimmune diseases. Continued research is needed to further elucidate the underlying mechanisms and to develop more precise treatment strategies.

Dr. Bernal is a pediatric rheumatologist who, after her residency training in pediatrics in Dr. Bernal is a pediatric rheumatologist who, after her residency training in pediatrics in UST Hospital, pursued her fellowship training in rheumatology in Baylor College Medicine, Houston, Texas. While training abroad, she was a recipient of several prestigious awards including Drs. Ralph and Judith Feigin Resident Award of Excellence, American College of Rheumatology (ACR) outstanding fellow award and ACR Amgen Pediatric Rheumatology Research Award. Her research works on ulpus, Kawasaki, polyarteritis nodosa and juvenile idiopathic arthritis has been published in international journals including Arthritis and Rheumatism, International Journal of Rheumatic Diseases and APLAR Journal of Rheumatology. She also authored a chapter on Juvenile idiopathic arthritis for Arthritis and Allied Conditions (a textbook in Rheumatology) in 2005. a chapter on Disorders of Bones & Connective Tissues for chapter on Juvenile (diopathic arthritis for Arthritis and Allied Conditions (a textbook in Rheumatology) in 2005, a chapter on Disorders of Bones & Connective Tissues for Fundamentals of Pediatrics in 2014 and in the newest edition of Avner textbook of Pediatric Nephrology on the chapter of lupus nephritis and in the PCP Textbook of Internal Medicine (2023) on the topic on transition in Rheumatology.

A graduate of UST Faculty of Medicine and Surgery, she now serves her alma mater as Associate Professor 5. She is the current president of the PPS Section of Pediatric Rheumatology, chair of the Special Interest Group on Pediatric Rheumatology of the Philippine Rheumatology Association (PRA) and the country representative on the same SIG of the Asia Pacific League of Association in Rheumatology.



### Rheumatology/Ethics/Professionalism





### **Universal Health Care:** The Philippine Experience So Far . Borlongan, MD (Philippines)

Universal Health Care has been a common aim across countries. Aspired for since the 1970s, this was institutionalized as a vision in the Philippines through the passage of the Universal Health Care Act of 2019. The Act formalizes the organization and financing of health services under primary care and through health care provider networks, among other reforms that span health governance, health financing, human resources for health, access to medicines, vaccines and technology, health information systems, and health service delivery. Not long after the law has passed, and its implementing rules and regulations were released, the country had to deal with and its implementing rules and regulations were released, the country had to deal with COVID-19, which emphasized the need for the systemic interventions enshrined in the Act. Learnings from the pandemic response showed that more has to be written and acted upon beyond what is explicitly stated in the law. Enabling all the actors of the Philippine health care system from the national to local levels, from health system management to direct health service delivery, and both public and private actors, to perform their roles in health protection, health promotion, and disease prevention, are further requisites towards the realization of the dream of better health outcomes, financial risk protection and a responsive health extend financial risk protection and a responsive health system.

### **Summary of Credentials**

- Doctor of Medicine. College of Medicine, University of the Philippines, Manila, Philippines.
- Masters in Public Management Major in Health Systems and Development. Graduate School of Public Development and Management, Development Academy of the Philippines, Pasig, Philippines. Chief /Medical Officer V Department of Health,(Field Implementation and Coordination Team Technical Office Policy, Planning and Strategy Development Division).
- Guest Lecturer Graduate School of Public and Development



### Impact of Chronic Pain and Disability in Children with Rheumatic Disorders Maricar A. Bayo-Ang, MD (Philippin

Rheumatic diseases are associated with inflammation leading to chronic pain. Children are not spared from this condition and pain is one of the debilitating symptoms a child can have. Chronic pain poses a lot of burden not only to the patient but to the society as well. Frequent absences from school, disrupted sleep, low selfesteem, anxiety and depression are some of the consequences of chronic pain to the patient. Economic aspect such as absences from work of the parents, additional expenses for the medications or for caregivers to name a few.

As a general pediatrician, how can we alleviate and support these children having chronic pain. As a lawmaker, what might be the programs that could unburden parents with the economic aspect of this condition.

- Fellowship Training in Pediatric Rheumatology, University of Santo Tomas Hospital, Manila
- Active Staff Consultant: Iloilo Mission Hospital. Western Visavas State University Medical Center, Guimaras Specialist Hospital
  Asst Professor: College of Medicine, Western Visayas State University

# **ABOUT THE CONGRESS SPEAKERS** 18th Asia Pacific Congress of Pediatrics

### Infectious Diseases/Tropical Medicine





### **Revisiting Malaria in the Asia-Pacific** Fe Esperanza Caridad J. Espino, MD (Philippines

Twenty-two of the 38 states in the Asia Pacific have the regional goal of malaria elimination by 2030. Efforts become country-specific as these countries approach the pre-elimination stage; however, there are common challenges faced by these countries ranging from imported malaria, resurgence, drug and insecticide resistance to financing country efforts and cross-border malaria. The conundrum of knowlesi malaria, the zoonotic malaria, and the climate change/crisis which adversely affects countries of footbe declarate the comparity of malaria divinistic. The country efforts also underscore the complexity of malaria elimination. The presentation will discuss the malaria status in the region, unified country efforts with regard to the elimination goal and dealing with the various challenges and ways forward.

### **Summary of Credentials**

- Advanced Fellowship in Clinical Product Development, Product Research and Development Unit, World Health Organization Special Programme for Research and Training in Tropical Disease (WHO TDR-PRD), Geneva, Switzerland Chair, Health Sciences Division, Scientific Career System, NAST-DOST, DOST
- Compound, Bicutan, Taguig
  Member, Institutional Review Board, Research Institute for Tropical Medicine
  (RITM), Department of Health (DoH)



### **Rebuilding Confidence in Vaccine Advocacy** through Communication

The session will deal with a description of the utility of current available methods in addressing the various challenges brought on by vaccine hesitancy which have impacted on immunization coverage rates on a national scale.

- Fellowship in Pediatric Infectious Diseases, Philippine Children's Medical Center Vice president Pediatric Infectious Disease Specialists of the Philippines Training Officer Fellowship Program for Pediatric Infectious Disease, PCMC





### **Pediatric HIV in the Asia-Pacific: Improving Outcomes** Jay Ron O. Padua, MD (Philippines)

HIV remains a major global public health concern, having claimed an estimated 42.3 million lives to date and transmission goes on practically in all countries around the world, although the burden of the epidemic continues to vary considerably between countries and regions. In 2023, approximately 685 children became infected with HIV each and approximately 250 children died from AIDS-related causes, mostly due to inadequate access to HIV prevention, care and treatment services. This talk aims to give an overview of the burden of disease, clinical management and challenges of pediatric HIV in the Philippines and the Asia-Pacific region.

### **Summary of Credentials**

- Fellowship in Pediatric Infectious Diseases, Philippine Children's Medical Center Medical Specialist San Lazaro Hospital, Philippine Children's Medical Center Chief, Section of Infectious Diseases, Department of Pediatrics, University of
- Santo Tomas Hospital



# Covid 19 in Children: The Way Forward Prof. Cecilia Maramba-Lazarte, MD (Philippines)

COVID-19 presents unique challenges for children in Asia, exacerbating healthcare, education, and social disparities, especially in low-income regions. Transmission in children is often asymptomatic or mild, but vulnerable groups face severe risks. Variants require ongoing surveillance and adaptable public health measures.

Treatment is largely based on adult protocols, with recent advances targeting pediatric-specific responses, such as MIS-C. Vaccination is key, alongside preventive measures like masking and social distancing in schools. Managing COVID-19 in children demands flexible strategies, global collaboration, and equitable access to vaccines and treatments.

- Fellowship in Pediatric Infectious Disease, Philippine General Hospital and College of Medicine, UP Manila
  Masters of Science in Infectious Diseases, London School of Hygiene and
- Tropical Medicine, University of London Director, Institute of Herbal Medicine, National Institutes of Health, UP Manila
- Professor 12, Department of Pharmacology and Toxicology, UP College of Medicine





# **Building Vaccine Resilience**

In 2023, 14.5 million infants did not receive an initial dose of DTP vaccine, pointing to a ck of access to immunization, and an additional 6.5 million are partially vaccinated. Of the 21 million, 60% of these children live in 10 developing countries

The vaccine ecosystem is a complex, interconnected system that includes vaccine development, procurement, distribution, and administration. It is vulnerable to disruptions from various stressors, such as political, economic, environmental, or sociocultural pressures. These disruptions can negatively impact vaccination programs. The ability of a vaccine program to quickly respond to and minimize the adverse impact is known as "vaccine program resilience. Developing countries, already facing challenges within their vaccine systems, may have to struggle hard to build this resilience. build this resilience.

The COVID-19 pandemic severely disrupted global immunization efforts, particularly in developing countries, leaving over 80 million children without vaccines. While catch-up programs have been launched, many nations struggle with vaccine shortages, financial constraints, weak healthcare systems, and increase in vaccine hesitancy. Lessons from the pandemic highlight the need to improve healthcare infrastructure, vaccine supply, and distribution, as well as to strengthen outreach, subsidize costs, engage communities, enhance immunization data systems, and foster regional collaboration and local vaccine production.

### **Summary of Credentials**

- innary of credentials
  Fellow of the Sri Lankan College of Paediatrician
  Senior consultant Pediatrician with special interest in infectious diseases, VPDs, Vaccine hesitancy and communication
  Senior Consultant SAITAM Medical college – Sri Lanka; Asiri Group of Hospitals –



# **Immunization Strategies** to Bridge Health During Pandemics

Immunization is one of the most effective and successful public health interventions. Immunization is one of the most effective and successful public realm interventions. During 2000-2022, measles vaccination prevented an estimated 57 million deaths worldwide. The introduction of various vaccines globally for the COVID-19 pandemic could be considered a turning point in its eventual control. The usefulness of vaccination in the prevention of morbidity and mortality in any public health situation including pandemics is undisputed. Therefore, having such an important role, what is the current ethicities of routine important to in the properties in th the current situation of routine immunization in countries within the Asia Pacific regions? Strong routine immunization is an essential foundation upon which to address future health emergencies. The promotion and protection of health through immunization in emergencies will be discussed during this presentation and lessons learnt from the pandemic and current developments within the field of immunization will be presented.

- Laboratory Virologist
  WHO Technical Officer, WHO Regional Office for the Western Pacific, Philippines
- PhD Medical Microbiology, Aberdeen, United Kingdom





# **Updates on Jap B Encephalitis**

Epidemiology and transmission

Japanese encephalitis is a neurological disease caused by a ss-RNA Virus known as Japanese encephalitis virus (JEV) of Flaviviridae family. The disease is endemic to two WHO regions namely the South-east Asia region and the Western Pacific region. According to the WHO data of 2024, studies estimate about 100,000 clinical cases each year with approximately 25,000 deaths. It is transmitted by bite of mosquitoes of the species Culex (commonly Culex triataeniorhyncus) in rural areas mainly in monsoon or post-monsoon season affecting children 1-15 years of age. Transmission occurs in rural agricultural areas often associated with rice cultivation and flood irrigation. The reservoir are pigs and water birds because humans do not develop sufficient viraemia to infect feeding mosquitoes.

Diagnosis, management and prevention

Diagnosis, management and prevention Following an incubation period of 10-15 days, <1% patients present with fever, headache, vomiting and neurologic symptoms constituting acute encephalitis syndrome. It progresses to weakness, confusion, disorientation, inability to talk, coma and seizure in next few days. Various tests for diagnosis of JE include the IgM antibody in serum/CSF, four-fold rise in IgG titre, virus isolation from brain tissue, antigen detection by immunofluorescence and PCR to detect nucleic acid. Patients are managed appearable by the propositions. are managed conservatively by managing airway, breathing, circulation, temperature, anticonvulsant for seizures, proper fluid electrolyte and calorie management and controlling raised intracranial pressure.

Since there is no specific antiviral medicine available for JE, prevention by vaccination since there is no specific antiviral medicine available for JE, prevention by vaccination is crucial. Vaccination strategies vary among geographical regions based on endemicity and burden of the disease. Mandatory vaccination for high risk age group is recommended in South-east Asian region and the Western Pacific region. Indian guidelines call for universal vaccination of all children 1–18 years in endemic areas and adult vaccination (>15 – 65 years) in 20 high burden districts of the following states-Assam, Uttar Pradesh and West Bengal. For people moving to JE endemic country with intended stay for > 1 month or frequent travellers, vaccination schedule is to be completed at least 1 week before travel. Absolute contraindication is allergy to vaccine component and relative contraindication includes pregnancy.

- Vaccines are primarily divided into:1. Inactivated vaccines- IXIARO (US & Europe), JESPECT (Australia), JEEV (India), JENVAC (India), JEBIK-V (Japan) & ENCEVAC (Japan)
  2. Live attenuated vaccine- CD- JEVAX (China)

  - Live attenuated recombinant chimeric vaccine- ChimeriVax-JE (Australia/Thailand)

It is essential that endemic countries formulate and implement specific guidelines suitable to their needs regarding vaccination against JE to contain the incidence.

### **Summary of Credentials**

- Professor Department of Paediatrics, Sarojini Naidu Medical College, Agra, India Member, Standing Committee International Paediatric Association (IPA) (2023-
- President International Society of Tropical Paediatrics (ISTP) (2023-2026)



### **Diarrhea and Malnutrition:** Overcoming Lingering Threats to Child Health

Diarrhea is a common ailment in children specially in Asia and Africa, with significant mortality as well, being the second leading cause of death of children under 5 in developing countries. Its major co-morbidities are: Dehydration of varying grades, Severe Acute Malnutrition (SAM), Protein Calorie Malnutrition, Stunting and adverse Neurodevelopmental impact.
Malnutrition and Diarrhea propagate each other and lead to more severer situation to

the point of no return, unless appropriate and timely intervention is made.

This vicious cycle can be broken by multiple interventions, tailored to community situations. WASH, food fortification, breastfeeding, proper weaning and vaccination having the universal applicability. Food insecurity, safe water, sanitation, affordable toilets and health education about risk factors and behaviors can bring in long term benefits. Use of protocols for management of Diarrhea / Dehydration, Severe Acute Malnutrition etc can save many lives as well.

The government, communities and social welfare organization should give priority to the issues of diarrhea and malnutrition inclusive of social support cum health education and provision of increased funds for health related services can make a dent in morbidity and mortality in short and long range outcomes.

- mmary of Credentials

  MBBS[Dow][72/73], DABP [USA] [79], FAAP [USA] [80] FRCP [Canada][83].
  Fellowship in Pediatric Gastroenterology/Hepatology & Nutrition [USA] [83].
  FCPS-Peds Gastroenterology & Liver Disease 2019
  President, APPA [Asia Pacific Pediatric Association] 2022-2024







### **Immunization as Part of Pandemic Preparedness** Assoc. Prof. Smriti Mathema (Nepal)

The number of high-threat infectious hazards continues to rise; some of these are re-emerging and others are new. These microbial threats have the capacity for adaptation, evasion, diversification and persistence. Human mobility and conflict along with human development and ecological changes increase the risk of these impending pandemics. Traditional public health approaches have not been adequate to anticipate or respond effectively to new zoonotic or vector-borne viral diseases or to manage existing threats with known solutions, let alone prepare for the vast number of pending risks. Vaccines of the 21st century will be needed as a public health tool for on perfuling risks, vaccinies of the 21st certifully will be needed as a public health foot in emerging infectious diseases. New era of vaccinology and technology opportunities could transform vaccine development into an engineering exercise. Vital strategies toward preparedness are advanced preparation to apply the technologies, surveillance and discovery to fill in periodic table of viruses and early detection; prototype antigen designs and clinical data; platform technologies for manufacturing; lightly interpretative, for curvoillance virus discovery and eligible virus discovery. global infrastructure for surveillance, virus discovery and surge capacity; new mitigation plans with government-to-government or public-private partnerships to accomplish advanced development and distribution with equitable access to immunization.

### **Summary of Credentials**

- Associate Professor in the Department of Pediatrics at Kathmandu Medical College, Nepal
- With special interest in preventive and social pediatrics, trained Vaccinologist Executive member of the Nepal Pediatric Society (NEPAS)
  Coordinator, Vaccinology Chapter, NEPAS



### **Life Course Immunization: IA2030** Emer. Prof. Lulu C. Bravo (Philippines

The World Health Organization (WHO) has established the IA2030 initiative, seeks to create a world where "everyone, everywhere, at every age fully benefits from vaccines for good health and well-being". This ambitious goal will be achieved through four key principles: a population-centered approach, country-led partnerships, evidence-driven decision-making with high-quality data, and extensive networking and collaboration. In the Philippines and neighboring countries, improving vaccination coverage is a crucial step towards pandemic preparedness. The lessons learned from COVID-19 have highlighted the critical role of vaccines in saving lives. Beyond addressing vaccination and extensive properties are described to the critical role of vaccines in saving lives. highlighted the critical role of vaccines in saving lives. Beyond addressing vaccine hesitancy, combating misinformation and disinformation is essential through effective public education, particularly for policymakers, and widespread dissemination of accurate information. Countries must also establish robust surveillance systems for early detection and control of vaccine-preventable disease outbreaks, which often occur due to low vaccination rates or a significant number of zero-dose children. The target for 2030 includes achieving a 90% coverage of essential vaccines, a 50% reduction in zero-dose children, and the introduction of new or underutilized vaccines to effectively prevent outbreak situations. to effectively prevent outbreak situations.

- Summary of Credentials

  Professor Emeritus at the College of Medicine, University of the Philippines Manila

  Head of the Vaccine Study Group of the NIH UPM

  President of the Immunization Partners in Asia Pacific (IPAP)

  Current Executive Director and past President of the International Society of Tropical Pediatrics (ISTP)





# **Vaccine Access:** Maximizing Equity, Minimizing Disparity Deep Thacker, MD (India)

Vaccine access in developing countries faces numerous challenges, from insufficient healthcare infrastructure to economic barriers and political instability. The vaccine access landscape is marked by stark inequities especially in rural and underserved areas. Developing nations often rely on global supply chains and international aid, which can lead to delayed delivery and insufficient coverage, or even delayed access to newer vaccines. These challenges are further exacerbated by the high cost of vaccines, logistical hurdles, and a lack of local manufacturing capacity. This disparity between developed and developing nations underscores the need for a more equitable approach to vaccine distribution.

To maximize equity in vaccine distribution, international cooperation is essential. Initiatives such as COVAX, which aims to ensure global access to vaccines, must be strengthened and expanded. Additionally, investments in healthcare infrastructure, particularly in developing countries, are necessary to enhance vaccine delivery. Governments should prioritize partnerships with local organizations to build trust and delivery users to be provided to the provided of the provide address vaccine hesitancy. Technology, including mobile health platforms, can play a crucial role in reaching marginalized populations, ensuring they receive timely information and access to vaccines.

In the Asia-Pacific region, concrete measures to reduce vaccine access disparities include establishing regional vaccine manufacturing hubs to decrease dependency on external supplies. Governments & alliances like GAVI should promote transparent and equitable allocation of vaccines, prioritizing high-risk groups. Strengthening supply chain management and enhancing cold storage capabilities are critical to ensuring vaccine availability. Furthermore, targeted financial aid and subsidies can help lower-income countries procure vaccines more affordably, ensuring a more balanced regional distribution. These measures are key to fostering a fairer and more resilient healthcare system across the Asia-Pacific. healthcare system across the Asia-Pacific.

- Masters in Public Health, Global health, Harvard University, Boston USA
- Deputy Director India Health Action Trust Manager Global Health Strategies

Research and Public Health in Pediatrics

# Impact of the NBS Program in Changing the Landscape of Newborn Care in the Asia-Pacific Prof. Carmencita D. Padilla, MD (Philippines)



Newborn bloodspot screening (NBS) is a well-recognized public health prevention program introduced by Dr. Robert Guthrie in the '60s and has saved thousands of babies worldwide from mental retardation and death. Of the approximately 134 million births in 2023, over 43% (57.5 million) are born in the Asia Pacific region which extends from Mongolia in the north to New Zealand in the south and reaches beyond India to Pakistan in the west region. Across the region there are large variations in country sizes, economics, governmental structure, languages, and cultural sensitivities, each presenting a different challenge with respect to establishing and maintaining sustainable NBS program. Vast size differences exist and geographic obstacles including mountains, deserts, and islands create unique opportunities for creativity in NBS service delivery. NBS Implementation is varied from 'no program' to 100% coverage across the Asia Pacific region. The objectives of this session are: 1) to present updates on the NBS implementation across the region [coverage, expansion, challenges, organized collaboration within the region]; and 2) present an update on the Philippine program which has successfully developed a sustainable system implemented in 7200+ newborn screening facilities in 7600+ islands with coverage of >95% of the newborn population.

Dr. Carmencita D. Padilla is Professor Emeritus of College of Medicine, University of the Philippines (UP) Manila. She is a pediatrician, a clinical geneticist and a health policy expert. She is a pioneer in genetics in the Philippines and the Asia Pacific Region. She initiated newborn screening (NBS) for the country and has developed a sustainable NBS system that serves as a model for developing programs. She is responsible for the lobby efforts for the passage of the Newborn Screening Act of 2004 (Republic Act No 9288) and the Rare Diseases Act of 2016 (Republic Act No 10747).

Her service to the country has included holding many key positions including Chancellor, University of the Philippines Manila (2014-2023); Founding Director, Institute of Human Genetics and Newborn Screening Reference Center of the National Institutes of Health (2006-2014), UP Manila; Executive Director, Philippine Genome Center (2011-2016); President of the Asia Pacific Society for Human Genetics (2008-2010); and Vice President/Treasurer of International Society of Neonatal Screening (2013-2016).

Dr. Padilla has received numerous awards including being chosen as one of the 100 Most Influential Filipina Women in the World by the US-based Women's Network; Eric C. Nubla Excellence Award (highest award of Professional Regulation Commission [PRC]); Outstanding Professional of the Year Award in the field of Medicine given by PRC; Outstanding Pediatrician given by the Philippine Pediatric Society; UPAA Distinguished Alumna Award for Health Education; The Outstanding Filipino Physician (TOFP) given by JCI Senate of the Philippines and Department of Health; Lingkod Bayan Award given by the Civil Service Commission; The Outstanding Young Men (TOYM) Awardee for Medicine (Medical Genetics) by Philippine Jaycees.

Dr Padilla was elected Academician of the National Academy of Science and Technology in 2008. The President of the Philippines conferred on her the title of National Scientist in 2023 followed with issuance of Presidential Proclamation No. 642 last August 2, 2024.



Digital Health in Pediatrics

### **Transforming Healthcare**

Ms. Maria Michaela B. Limcaoco (Philippines)



Artificial Intelligence (AI) is at the forefront of a healthcare revolution, offering new tools and capabilities that are transforming how care is delivered across the globe. This talk will explore the powerful potential of AI to support and enhance healthcare, with a particular focus on its application in Southeast Asia (SEA).

Globally, AI is driving significant advancements in areas such as diagnostic imaging, personalized treatment plans, and patient management. These technologies are enabling healthcare professionals to diagnose diseases more accurately, tailor treatments to individual needs, and monitor patient health more effectively. The result is a more responsive and efficient healthcare system that can deliver better outcomes for patients.

In the SEA region, Al is emerging as a critical tool to address unique healthcare challenges, such as providing access to care in remote and underserved areas, managing the burden of infectious diseases, and supporting doctors in making informed decisions for a rapidly aging population. The talk will showcase how AI is being integrated into healthcare practices across the region, empowering doctors with tools that can lower costs and improve access to quality healthcare for their patients.

By focusing on the tangible benefits and real-world applications of AI in healthcare, particularly in Southeast Asia, this talk will highlight the immense potential of these technologies to transform healthcare delivery, support doctors, and improve patient outcomes across the region.

### **Education**

Stanford University, Stanford, California Coterminal Degree (class of 2018): B.S.H. Human Biology (honors program) - Data Analysis and Modelling for Health Policy M.S. Community Health & Prevention Research

### **Professional Experience**

- Cofounder, Sala Health, Manila, Philippines
- Head of Growth and Data, Pomelo (\$55m raised, backed by Founders Fund) San Francisco, California
- Head of Data, Tia Health, New York, New York Senior Data Analyst, Care/of, New York, New York
- Data Consultant, Department of Health, Manila, Philippines
- Data Science Intern, Nuna Health, San Francisco, California
- Network and Communications Summer Analyst, Oscar Health, New York, New York



Contemporary Health Issues in Pediatrics

# **Respiratory Health in the Post-Covid World**

Adj. Prof. Nitin Kapur, MD (Australia)



The Corona virus pandemic was a catastrophic global challenge for health, welfare and economics. This plenary talk will cover some of the direct and indirect effects of this pandemic on the state of respiratory health in children including direct effect of the virus on the paediatric lung including risk of future chronic lung disease. We will also discuss the indirect effects such as impact of lockdowns, tele-health, remote monitoring, global vaccination trends and mental health effects of the pandemic on lung health of children. Emerging respiratory conditions in children after the pandemic would be discussed and ways to address and mitigate these conditions in the future would be addressed.

### **Summary of Credentials**

- Paediatric Respiratory and Sleep Physician at the Queensland Children's Hospital (QCH) in Brisbane. Director of Paediatric Education (DPE) and the Director of Clinical Training (DCT) at the same hospital.
- Doctor of Medicine (MD) in Paediatrics and a PhD in Paediatric Bronchiectasis.
- Currently the President of the Paediatric & Child Health Division of the Royal Australasian College of Physicians (RACP) for 2022-2025
- Adjunct Professor at the School of Medicine at the University of Queensland as well as the Queensland University of Technology.

### **Appointments**

- Senior Medical Officer in the Department of Respiratory & Sleep Medicine (0.8FTE) (2012-current).
- Clinical Training Director for the Queensland Basic Paediatric Training Network in capacity of the Director of Paediatric
- Education (DPE) at the QCH (0.1FTE) (2015-current). Notable achievements include:

  Director of Clinical Training (DCT), in charge of pre-vocational training at the QCH (0.1FTE) (2015-current).

  President for Paediatric & Child Health Division (PCHD) of the Royal Australasian College of Physicians (RACP) May 2022 to May 2025. President-elect for the same for 2020-2022.
- Adjunct Professor with the School of Medicine, University of Queensland (UQ) since 2022. Associate Professor 2017-2022. Senior lecturer from 2012-2017.
- Acting Deputy Director of Medical Services (A/DDMS) 2013-2014, Royal Children's Hospital.
- Deputy-chair of RACP Queensland Regional Committee (2020-2022).
- Convener of the Paediatric Special Interest Group (SIG) for the Thoracic Society of Australia & New Zealand (TSANZ) (2014-2018)
- Chair of the Australian Paediatric Respiratory Medical Group (APRMG) since 2016
- Deputy-chair of Medical Specialist Association (MSA), QCH (2019-2022)





# • RESEARCH • ABSTRACTS



# PAPER PRESENTATION ABSTRACTS

Simultaneous Session 1

Adolescent Health



## Parental Awareness of Child Abuse and Neglect on Outpatient Pediatric Patients in Dr. Jose Fabella Memorial Hospital

Mara Aren Israel Bernabe, MD, Vicente Carlomagno D. Mendoza II, MD

**Background:** Child abuse and Neglect is a worldwide issue that profoundly impacts children's well-being. Parents play a crucial role in preventing their children from exposure to abuse. This study evaluated the level of awareness of parents and most important ways to detect child abuse and neglect.

**Objective:** This study aims to explore parental awareness of child abuse and neglect among outpatient Pediatric patients aged 0-18 years at Dr. Jose Fabella Memorial Hospital from June 2023 to August 2023.

**Methods:** Cross-sectional descriptive study design was used. The data were collected using a survey questionnaire from parents/guardians. A score was assigned to each question related to different types of abuse. The scores were summed up to develop a total score for knowledge about the types of child abuse. According to the median score, the respondents were divided into two groups: poor knowledge and good knowledge. The two groups were compared with regards to their socio-demographic factors. This study is a single – centered study conducted at Dr Jose Fabella Memorial Hospital, a tertiary government hospital located at the City of Manila, Philippines. A total of 132 parents/guardians of patients seen at the pediatric clinic from June 2023 to August 2023 participated in the study after providing their consent.

**Results:** The respondents showed good knowledge of physical neglect, safety neglect and medical care neglect. According to the respondents, the most common types of abuse in the community were physical abuse, neglect and sexual abuse; the most common risk factors were drug abuse and parents' low level of education. A high percentage of respondents did not know places that can help in dealing with abuse cases.

**Conclusion:** Majority of the respondents displayed a poor level of knowledge about the different types of abuse. This underscores the importance of targeted educational campaigns and interventions aimed at improving awareness and knowledge among parents, caregivers, and the public. By addressing these knowledge gaps identified in this study, efforts can be better focused on preventing and addressing child abuse, ultimately safeguarding the well-being of children in our communities.

Simultaneous Session 2
Neurology/Genetics/
Endocrinology/Metabolism



# Long-term Follow-up Observation on the Efficacy and Safety of GnRHa Treatment in 5 Cases of Central Precocious Puberty Caused by Hypothalamic Hamartoma

Siqi Huang, Zhe Meng, Hui Ou, Yingying Xu, Liyang Liang\*

**Background:** Hypothalamic hamartoma (HH) is the most common causeof organic central precocious puberty (CPP). The use of gonadotropin-releasinghormone analogs (GnRHa) for treating CPP associated with HH is currentlythe recognized method. However, there is a lack of long-termfollow-upstudies on HH patients in China.

**Objective:** To describe anthropometric measurements, gonadal function, andglucose and lipid metabolism before and after treatment with GnRHa inpatients with CPP caused by HH, and to evaluate the long-termclinical efficacy and safety of GnRHa treatment for central precocious puberty caused by hypothalamic hamartoma.

**Methods:** This is a single-center retrospective and cross-sectional study that included 5 patients (4 females) with central precocious puberty causedbyhypothalamic hamartoma, all treated with GnRHa. The study assessedgrowthrate, body mass index (BMI), gonadal axis suppression, glucose and lipidmetabolism, and final adult height before and during treatment, as well asduring follow-up.

**Results:** The duration of GnRHa treatment was 7.7 years in boys and 4.92-9.25 years in girls. Two patients had discontinued GnRHa treatment: oneboy at the age of 12.58 years and one girl at the age of 11 years. The growthrate during treatment was 5.1-6 cm/year in boys and 4-6 cm/year in the four girls. At the last follow-up visit, the chronological age (CA) was 14.5 yearsfor the male patient and 10-13.75 years for the female patients. Of the five patients, two reached near adult height within the normal range (SDSof Ofor males, SDS of +0.5 for females), and the predicted height for the remainingthree patients was within the target height range. The average BMI in femaleswas significantly higher, with one case of obesity and two cases of overweight. One female developed insulin resistance with normal blood glucose oneyear after discontinuing medication, which returned to normal after dietary and exercise adjustments. Another case of insulin resistance and impairedfastingglucose was observed after three years of treatment, which also normalized after lifestyle changes. During treatment, the hypothalamic-pituitarygonadal axis was well suppressed in all five patients, with LH, FSH, E2, and T returningto prepubertal levels. Gonadal function remained normal in the two patientswho were monitored after discontinuing GnRHa, and one female patient experienced menarche 1.5 years after stopping treatment.

**Conclusion:** GnRHa effectively suppressed the gonadal axis in patients withCPP caused by HH. Although a significant growth deceleration was observedduring treatment, the near adult height or predicted adult height of the patients reached or approached normal levels. A higher prevalence of overweight/obesity and abnormal glucose levels was observed amongfemalepatients. No abnormalities in gonadal function were found in either gender after discontinuing GnRHa treatment.

Keywords: Hypothalamic Hamartoma, Central Precocious Puberty, GnRHa, Efficacy, Metabolism



Simultaneous Session 2
Neurology



### A Case report on Chronic Subdural Hemorrhage Secondary to a Ruptured Arachnoid Cyst in an Adolescent Female

Alfred Sebastien Recio, MD

**Background:** Arachnoid cyst is rare as prevalence among the pediatric population is only 2.6%. Usually, it is asymptomatic and an incidental finding in imaging studies but can also cause headache and seizures. The objective of this clinical case report is to discuss arachnoid cysts and its epidemiology in the National Capital Region and in The Medical City (TMC) in Ortigas and to discuss pertinent signs and symptoms in adolescents presenting with headache which would aid in appropriate management and treatment.

Case Presentation: An 11-year-old female, not a known migraine-former, came into the emergency department due to headache. Patient reported that headache started 4 days prior and characterized as frontal, bilateral, intermittent, throbbing, non-radiating, with a pain severity of 5/10. After doing three cartwheels, headache increased to 10/10 now waking her from sleep and three episodes of vomiting. On physical exam, a 2x2cm flesh-colored, non-erythematous, nontender mass was palpated on the left temporal area of the skull. Neurological physical examination was unremarkable. Due to acute history, she was initially as assessed as tension headache rule out intracranial lesion.

At the emergency department, she was seen comfortable with headache characterized as frontal and orbital, throbbing, more on the right eye. Treatment was initiated with analgesic which provided relief. She was supposedly to be sent home. However, patient slept and upon waking up, noted progression of headache to pain score 10/10. Cranial magnetic resonance imaging was done with findings of arachnoid cyst with hemorrhage in the middle cranial fossa and possible rupture causing subdural hemorrhage. Mass effects include beginning left uncal herniation and midbrain compression, compression of the underlying brain parenchyma, rightward subfalcine herniation, and left lateral ventricle compression.

Patient was then admitted and treated with low-dose mannitol for decompression, levetiracetam for seizure prophylaxis, and analgesic. She then underwent left temporal craniotomy, evacuation of chronic subdural hematoma; fenestration of arachnoid cyst. Intraoperative findings were noted with intra- and extra-cystic hemorrhage. The arachnoid cyst was tented to the dura via multiple cortical draining veins.

Post-operatively, patient complained of severe post-operative site pain, relieved by an opioid analgesic, with associated vomiting and onset of diplopia. Plain cranial computed tomography scan was done which revealed left temporalis muscle hematoma and soft tissue swelling impinging on the left lateral rectus nerve. Analgesic was shifted to a muscle relaxant which provided and relief. The patient was then discharged stable on the 6th hospital day.

Official histopathology results show the sample is consistent with arachnoid cyst. Upon follow up, the headache and diplopia were resolved with no recurrence or onset of new symptoms. Currently, the patient has no recurrence of headache and was able to return to baseline function

### **Discussion/Conclusion:**

Arachnoid Cysts

Presented in this case report is a female adolescent with arachnoid cyst who presented headache aggravated by possible head trauma and associated with vomiting. Arachnoid cysts are collections of cerebrospinal fluid arising from the arachnoid membrane with etiology to be unclear. Most common location of arachnoid cyst is the middle cranial fossa but can also be found in the anterior cranial fossa or retrocerebellar locations.

Based on the Philippine Pediatric Society registry, there have been reported of 208 cases of arachnoid cysts in the National Capital Region January 2006 until April 2024 with majority of the cases being prevalent among males and the age group of 5-9 years old. In TMC, there were already 20 pediatric cases reported with all of them having favorable outcomes.

Arachnoid cysts are generally asymptomatic and commonly detected as an incidental finding in imaging studies. However, the cyst can rupture and fluid would accumulate in the subdural space which would cause generalized symptoms such as headache, vomiting, and seizure. Hence, it is important to include them in the differential when managing a patient presenting with headache.

### Approach to Headache

Identifying the red flags of headache is essential in creating differential diagnoses and facilitate management and treatment in young adolescents. Primary headaches are always considered; however, when doing history and physical examination, secondary causes should be taken account as well. The mnemonic SNOOP (systemic symptoms, neurological deficits, onset, papilloedema, positional changes, and progression) should be utilized when looking for possible causes of secondary headache.

Physical exam should be focused but enables the pediatrician to look for findings that may contribute to headache. It should not only be limited to complete neurological exam but should also consider other systems that may cause headache such as cardiovascular or gastrointestinal.

When managing patients presenting with headaches, a complete medical history and conducting a comprehensive physical examination are crucial. This allows healthcare providers to accurately diagnose the underlying cause of the headache and formulate an appropriate treatment plan tailored to the patient's specific needs. By carefully assessing factors such as the onset, duration, and characteristics of the headache, as well as any associated symptoms or potential triggers, clinicians can gather essential information to guide their clinical decision-making effectively. Additionally, a detailed physical examination helps in identifying any neurological signs or other relevant findings that may further inform the diagnosis. These steps ensure a holistic understanding of the patient's condition and facilitate the delivery of optimal care.

Keywords: arachnoid cyst, headache



Simultaneous Session 2

Genetics/Genomics



## Sugar Crash: A Case of a Neonate with Congenital Hyperinsulinism due to ABCC8 Gene Mutation

Rhenna Mae B. Bontuyan, MD

**Background:** Congenital hyperinsulinism is a rare condition that causes severe and persistent hypoglycemia in neonates and children. It represents a group of genetic disorders characterized by dysregulated insulin secretion by the pancreatic beta cells.

**Objective:** This case report aims to understand more about congenital hyperinsulinism with regard to its pathogenesis, clinical presentation, and current, management.

Case: We present a case of congenital hyperinsulinism in a large for gestational age newborn with no gross anatomic abnormalities who presented with persistent and severe hypoglycemia a few hours after birth. The diagnosis of hyperinsulinism was based on the demonstration of hypoglycemia with inappropriately elevated insulin levels taken on the 6th and 24th day of life. The patient presented with repeated hypoglycemic episodes of less than 70mg/dl which was associated with hypothermia and transient tachypnea. She was initially treated with continuous glucose infusion, nutritional support by frequent feeding, octreotide, and nifedipine, however, the patient continued to have persistent hypoglycemic episodes and eventually developed seizure. The patient eventually received oral diazoxide with a good initial response, however, eventually developed tolerance. A genetic study was done on the patient which revealed a heterozygous paternally inherited pathogenic ABCC8 frameshift variant. The identification of this variant confirms the diagnosis of Congenital Hyperinsulinism, and may predict the presence of focal hyperinsulinism. An 18F-DOPA PET CT-Scan was recommended for the patient to identify and localize the focal lesion for possible surgical removal.

**Conclusion:** Early recognition and treatment of hypoglycemia are vital to minimize neurocognitive impairment.

Keywords: Hyperinsulinism, Congenital, Hypoglycemia

Simultaneous Session 3
Hematology/Oncology



To Analysis the Actuality of Diagnosis, Treatment and Influence of High-Risk Factors on the Prognosis of Children with Retinoblastoma from 3053 Cases Data in China Zhang Yi, Wang Yizhuo, Huang Dongsheng,

**Background:** Retinoblastoma (RB) was a rare tumor, but it was a most common intraocular malignancy in children. The incidence of RB is related to the mutation of the Rb1 gene, and there is a genetic predisposition.

Zhang Weiling, GuHuaLi, Li Song, Liu Tingting

**Objection:** with the advantage of large samples in one single center, we aimed to analyze the clinical characteristics and prognosis of children with retinoblastoma (RB) spanning 17 years.

**Method:** Collect clinical data of 3053 children with retinoblastoma who visited our hospital from 1th Jan , 2006 to 31th Dec, 2022, including general information (gender, age distribution, family history, eye type of onset), clinical staging, enucleation, clinical efficacy, and prognosis. Use SPSS 20.0 statistical software for statistical analysis to identify the clinical characteristics and pathogenic risk factors of pediatricRB.

Result: There were 3953 affected eyes in all 3053 cases of RB, and 47 cases (1.5%) were familial RB. The median age was 27.2 months (10day-267.2m), 1 case had nocomplete data, bilateral RB was 29.5% (901/3052), trilateral RB was 0.6%(only 18cases), unilateral RB was 69.9% (2151/3052) (right eyes RB vs left eyes RB= 1089vs 1062). 1987 cases (65.1%) of unilateral enucleation and 31 cases (1.0%) of bilateral enucleation. The medium follow-up time was 54.2 months. 2816 cases were followed, 237 RB were drop up, and 121 cases died. the OS was 95.7% (2695/2816). K-Manalysis suggests that the survival prognosis of children undergoing longterminterventional chemotherapy is lower than that of children undergoing systemic chemotherapy (OS: 91.4% vs 96.2%, P=0.003); The preferred survival rate for children undergoing vitrectomy is lower than that for children undergoing comprehensive treatment (OS: 91.3% vs 95.7%, P=0.001). 18 cases of metastatic RBimproved survival prognosis after APBSCT treatment after chemotherapy remission, reaching 83.3%. The OS of familial RB is 79.5%, and it of trilateral RB was only 42.1% (7/17).

**Conclusion:** The OS rate of children with RB was higher. The timing of eye protection treatment and enucleation should be comprehensively judged to avoid thereduction of prognosis due to the delay of operation timing. Vitrectory and IACshould be carefully selected for staging. Widespread Group D and Group E are not recommended as the preferred treatment.

Simultaneous Session 3
Hematology/Oncology



# Case Report: A rare case of methimazoleinduced agranulocytosis in a female teenager with multiple autoimmune disorders

Maynard O. Galingana, Cynthia G. Feliciano

Methimazole is the first line drug in the treatment of pediatric Graves' Disease. Agranulocytosis is a rare and idiosyncratic reaction to Methimazole. The incidence of Methimazole-induced Agranulocytosis has been estimated at around 0.2-0.5%. We report a rare case of a 17-year-old female with multiple autoimmune disorders who developed Agranulocytosis. She has Systemic Lupus Erythematosus (SLE) initially presenting as Chronic Autoimmune Urticaria with Graves' Disease. Agranulocytosis developed after a month of taking Methimazole for Graves' Disease while the full-blown symptoms of SLE appeared a week after the onset of Agranulocytosis while the patient was admitted at a tertiary center. The condition was managed by prompt discontinuation of Methimazole being the offending drug, clinical and laboratory guided use of broad-spectrum systemic antibiotics and rescue administration of Filgrastim. In the absence of Methimazole, Graves' Disease was temporarily managed by Propranolol and Lithium. Low-dose Prednisone and analgesics were initially given for SLE symptoms and was shifted to High-dose Prednisone after lysis of fever, resolution of Agranulocytosis and decrease in Procalcitonin. Other related complications such as Hypertension and Nephrotic Syndrome were managed accordingly. This case higlights the importance of a multidisciplinary team approach being a vital component in the management of Agranulocytosis, considering the condition was aggravated by multiple factors and the complications it could bring. In any individual with multiple autoimmune disorders, management of Methimazole-induced Agranulocytosis requires a concerted approach and collaboration among different pediatric subspecialties.

Keywords: Agranulocytosis, Chronic Autoimmune Urticaria, Graves' Disease. Methimazole. Systemic Lupus Erythematosus

Simultaneous Session 4 **Gastroenterology/Hepatology/Nutrition** 



# Gut Microbiota Profile of Stunted Children Across Asia-Pacific: A Systematic Review on Environmental Enteric Dysfunction in Stunting

**Vellia Justian, MD, Cut Nurul Hafifah** 

**Background:** Stunting affects millions of children in the Asia-Pacific region, leading to long-term adverse outcomes in physical and cognitive development, as well as an impaired response to oral vaccines. Despite extensive efforts in nutritional intervention, water quality, sanitation, and hygiene, the incidence of stunting remains high, necessitating a new approach. Recent research highlights the critical role of environmental enteric dysfunction (EED), which is a subclinical syndrome characterised by intestinal inflammation, gut barrier disruption, and dysbiosis, in stunting. However, the characterization of dysbiosis in stunted children in the Asia-Pacific has not yet been established. By investigating the microbial composition and diversity of the gut, we can identify specific dysbiosis patterns associated with stunting.

**Objective:** this systematic review aims to investigate the differences in gut microbiota profile between stunted and healthy children (HCs) across the Asia-Pacific region, identify the dominant bacterial taxa and explore the association between specific microbiome composition and linear growth.

**Methods:** Peer-reviewed articles published from the year 2014 to 2024 were searched in PubMed, SCOPUS and Cochrane. Observational studies which report gut microbiota profiles of children under the age of 5 years who were diagnosed with stunting and HCs were included. Interventional studies, including nutritional and biotics intervention, were excluded. Quality assessment of the studies were conducted using Newcastle-Ottawa scale.

Results: Six papers met the inclusion criteria, including research from Indonesia, India, and Bangladesh. Compared to HCs, stunted children exhibited decreased gut diversity and increase in enteropathogens, such as Escherichia and Shigella. Multiple studies reported a depletion of Bacteroidetes (34-44.39% vs. 46-51.29%) and an increase in Firmicutes (45.71-50% vs. 39.91-42%) among stunted children, with a study reporting the difference between two phylums depended not only on nutritional status, but also age group. Probiotic species that were found to positively correlate with anthropometric z-scores across studies, such as Bifidobacterium and Lactobacillus, were found to be lower in stunted children. Interestingly, Prevotella, which has been associated with dietary fibre fermentation important for gut health, was depleted in Indonesian and Bangladeshi stunted children, but enriched in Indian stunted children

**Conclusion:** Gut dysbiosis is evident in stunted children. Although the most abundant phyla and taxa are similar in studies across Asia, the gut microbiota profiles and their relative abundances vary between countries, suggesting the need for further country-specific research to characterise the microbiota profiles of stunted children, and to develop targeted, population-based biotic interventions.



Simultaneous Session 4 **Gastroenterology/Hepatology/Nutrition** 



# A Meta-Analysis on the Efficacy and Safety of Saccharomyces Boulardii on Diarrhea Due to Amoebiasis in Children: An Update

Felizardo Gatcheco, MD, Ma. Grace Rosales, Manuel Villanueva MD, Erica Garcia MD

**Background:** Amebiasis remains a leading cause of death worldwide. The drug of choice is still Metronidazole but there are cases which remains unresponsive to it.

**Objective:** To review the efficacy and safety of Saccharomyces boulardii as adjunctive treatment for acute diarrhea secondary to amebiasis in children

**Methods:** We searched PubMed, the Cochrane Library, and other databases for published and unpublished literature. We included randomized controlled trials comparing S. boulardii plus metronidazole therapy versus metronidazole therapy alone among children with confirmed Entamoeba histolytica-associated acute diarrhea. GRADE was used to assess evidence quality. Fixedeffects models were used when heterogeneity among studies was not significant.

**Results:** Five studies (two published trials from Turkey, three unpublished trials from the Philippines) were included in the analysis. Collectively, the studies had a high risk for performance, detection, and attrition bias. Pooled data from all studies (N=311) showed that addition of S. boulardii significantly reduced the duration of diarrhea compared with metronidazole therapy alone (mean difference: -0.56 [-0.76, -0.36] days; fixed-effects). Subgroup analyses revealed the same significant benefit, regardless of publication status or country income level. Furthermore, pooling of three studies (N=146) demonstrated a significantly lower risk of diarrheal persistence on day 5 in the S. boulardii group versus controls (risk ratio: 0.30 [0.10, 0.94]; fixed-effects). No significant differences between the groups were found in terms of duration of bloody diarrhea or abdominal pain and persistence of cyst passage. No adverse events were reported from included trials.

**Conclusion:** Based on low-quality evidence, S. boulardii may be used as adjunctive treatment for acute diarrhea secondary to amebiasis in children. Further studies are recommended.

Simultaneous Session 4 **Gastroenterology/Hepatology/Nutrition** 



# Evaluation of Microbial Viability, Population, and Contamination in Probiotic Products in the Philippines

Mary Jean Guno, Randy Urtula, Jossie Rogacion, Felizardo Gatcheco, Jo-Anne de Castro, Mark Carascal, Raul Destura

### **Background:**

- Probiotic products are widely used in the food industry, with claims to improve overall health and well-being of consumers.
- Probiotics have been marketed to induce health benefits such as enhancing the immune system, improving digestion, and reducing the risks of infections.
- The claims on safety, efficacy, and functional activities of probiotics highly depend on the quality of the preparations and the probiotic microorganisms used.
- In the Philippines, there are no investigations on the microbial claims of the probiotic products in the market.

**Objective:** This study evaluated the microbiological properties of seven probiotic products in the Philippines.

### Methods:

- Acquire seven locally available probiotic products from the Philippines: BF, EF, FC, NG, OM, PC, TP
- Determine total aerobic bacterial/yeast count of the probiotic products
- Perform 16S rRNA sequencing and molecular identification of the bacterial contaminants from the probiotics

### **Results:**

- Aerobic cultures and microbial counts:
  - Products with Bacillus clausii (EF, PC, TP), mixed probiotics (OM), and Saccharomyces boulardii (FC, NG) yielded viable aerobic microorganisms.
  - Product with anaerobic Lactobacillus reuteri (BF) did not yield aerobic microbial growth.
  - The aerobic bacterial counts for EF and PC are within their declared concentrations (108 colony forming units (CFU)/mL), while the counts for TP (107 instead of 108 CFU/mL) and OM (105 instead of 106 CFU/g) are lower than their commercial declarations.
  - The yeast count for NG is within its commercial declaration (109 CFU/g) while that of FC is lower (106 instead of 109 CFU/g).
- Contaminant cultures from the probiotic products
  - Contaminations found in some of the probiotic products tested range from Bacillus spp. (in OM and PC), Achromobacter spp. (TP), and coliforms (NG).
  - No contaminants cultured from the probiotic products BF and EF.

**Conclusion:** All of the tested products with aerobic strains produced viable microbial growths, with three probiotics having microbial counts within their declared commercial concentrations. Only two products had no contamination, with the rest harboring bacterial contaminants. The probiotic viability, accuracy of microbial count, and presence of contaminations have implications in the intended effect and safety of the tested products.



Simultaneous Session 4 **Gastroenterology/Hepatology/Nutrition** 



### Parental Attitude and Perception Towards Rotavirus Immunization Using the Health Belief Model

Krizel Jane C. Tormis, MD

**Background:** Diarrhea is one of the leading causes of child mortality worldwide and rotavirus remains the most common cause of severe diarrhea in children 5 years old and below. Majority of rotavirus deaths occur in low- and middle-income countries.

In the Philippines, rotavirus diarrhea causes 84,590 clinic visits, 50,565 emergency department visits, and 31,498 hospitalizations among the under five.4 Monovalent rotavirus vaccine was introduced in the Philippines last July 2012 free-of-charge to infants of families belonging to the lowest economic quintile. During the pre-vaccination years 2009 to 2011, diarrheal hospitalizations averaged 1141 per year. Diarrheal hospitalizations reduced up to 63% during year 2013 to 2016.

Rotavirus vaccination was positively correlated with parent's education level and monthly family income. In this study, the researcher would like to determine the correlation of parental behavior to the favorable reception of the rotavirus vaccine using the Health Belief Model.

**Objective:** To determine the correlation between the parental behavior to the favorable reception of rotavirus immunization as measured by the Health Belief Model.

**Method:** The Health Belief Model questionnaire on gastroenteritis and rotavirus immunization was adapted from the study of Morin et. al in Canada. The questionnaire was pre-validated and was tested in their study. The questionnaire had 17 questions. After approval from the Institutional Review Board and the Medical Director, the names of the parents were collected and were contacted for invitation to participate in the study. They were made to answer the questionnaire by themselves in the OPD while waiting for check-up or online through Google forms.

**Results:** This study showed that fathers and mothers had a positive behavior towards rotavirus immunization and was reflected by the actual vaccination of their infant with rotavirus vaccine.

**Conclusion:** The key finding of this study is that mother and fathers had a positive health behavior and accepted rotavirus immunization as seen by the actual vaccination of their infant. Fathers and mothers refused rotavirus immunization because it is costly and some of them do not have any idea regarding the vaccine. Fathers and mothers who accepted the immunization believed that the vaccine can prevent the disease and its complications. Father and mothers who accepted the immunization acquire their information from their pediatricians.

Keywords: diarrhea, rotavirus immunization, health belief model

Simultaneous Session 4 **Gastroenterology/Hepatology/Nutrition** 



## Seroprevalance of Hepatitis A Antibodies in Non-Vaccinated Adolescents Aged 9 to 12 Years

Dr Anurag Agarwal, Dr Shweta Sajlan, Dr Surendra Bahadur Mathur

**Background:** Hepatitis A poses a global health threat with 1.5 million cases worldwide. Severity increases with age, but infection confers lifelong immunity. WHO classifies countries by Hepatitis A prevalence and recommends vaccinating children over one year in transitioning regions. Improved sanitation and socioeconomic development contribute to decreased seroprevalence.

**Objective:** This study was conducted with the objective to determine the seroprevalence of Hepatitis A antibodies in non-vaccinated adolescents aged 9-12 years and to study the socio demographic factors associated with the seroprevalence of Hepatitis A in urban areas of Northern India.

**Methods:** The study included 94 children and adolescents aged 9 to 12 years not vaccinated against Hepatitis A. It was conducted in the department of Pediatrics of a tertiary teaching hospital in North India from September 2022 to December 2023 after approval by the institutional ethics committee & registration in Clinical Trial Registry – India. Detailed history and clinical examination was documented in a predesigned proforma. Two mL blood sample collected was immediately centrifuged and the sera obtained was stored at -20 degree Celsius till analysis. The sample was tested using competitive ELISA for IgG antibody against Hepatitis A.

**Results:** Out of 94 adolescents enrolled, 85 (90.4%) were seropositive. Hepatitis A seropositivity was significantly influenced by low socioeconomic status (p=0.008), lower parental education level (p=0.039, 0.008), lower parental occupation status (p=0.001, 0.007) and lesser total monthly income (p=0.001).

**Conclusion:** In spite of efforts at improving sanitation practices, the lower socio-economic strata of our population remain a high endemicity zone without vaccination for Hepatitis A. Thus, there seems to be a doubtful role of Hepatitis A vaccine in adolescents aged 10 years or above, belonging to lower, upper lower and lower middle socioeconomic strata in Northern India.

Keywords: Hepatitis A, Seropositivity, Immunoglobulin G, Endemicity, Socioeconomic Status



Simultaneous Session 4 **Gastroenterology/Hepatology/Nutrition** 



# Effect of Nutrient-Dense Oral Supplement on Physical Growth and Health-Related Consequences of Nutritionally At-Risk Preschool Filipino Children (ENDORSE study)

Melchor G. Frias, Jossie M. Rogacion, Garner A. De Los Santos, Jimmy M. Bautista, Reinachell D. Daclan, Cielo I. Ruanto, Cynthia G. Wagayen, Grace H. Diaz, Mark A. Lansangan, Danaida B. Marcelo

**Background:** Feeding of children beyond infancy may prove difficult especially if the fundamentals of nutrition have not been properly implemented during the early years. Slower growth is expected and growth faltering becomes an issue resulting from causes related to inadequate intake, problems in nutrient absorption and utilization, and increased requirements. Among the steps to increase nutrient intake is the use of oral nutritional supplements (ONS).

**Objective:** To determine the effects of a nutrient-dense oral supplement on growth and health of children aged 3 to 5 years old.

**Methods:** A prospective, community-based, single-arm study was conducted in an urban setting involving 223 nutritionally at risk children given ONS. After a baseline assessment, the outcome measures, dietary record of intake on 2 non-consecutive days and dietary counseling were done on the 14th, 30th, 60th, 90th and 120th day. Outcome measures included the weight-for-age (WFA), height-for-age (HFA), and weight-for-height (WFH), occurrence of respiratory and gastrointestinal infections, need for medical consultation or hospitalization, use of antibiotics and antipyretics, adequacy of nutrient intake and dietary diversity score.

**Results:** WFA, HFA and WFH mean percentile changes showed statistically significant increasing trend during the 4-month intervention period. The percent change from baseline to each assessment period for WFA, HFA, and WFH were likewise found to be statistically significant. The occurrence of upper respiratory tract infection (URTI) was most common. Antipyretic use, antibiotic use and occurrence of diarrhea were less common. The rates of URTI and diarrhea and use of antibiotics and antipyretics during the first month of ONS intake were significantly higher compared to the last month of intake. The percent adequacy of nutrient intake significantly increased during the intervention period and the dietary diversity score significantly improved from 3.86 to 5.08 at end of study.

**Conclusion:** ONS provides favorable effects on growth and health of nutritionally at risk children with significant improvements in WFA, HFA, WFH, adequacy of nutrient intake and dietary diversity. Dietary counseling may play an important ancillary role in realizing these improvements.

Simultaneous Session 5
Toxicology



Clinical Profile and Outcome of Accidental and Intentional Toxic Substance Ingestion in Patients Ages 0 to 18 Years Old Admitted in Tertiary Hospital, Pre-, During and Post-Covid-19 Pandemic from 2017 to 2023:

A Retrospective Descriptive Cohort Study Jenessa Mae C. Perito, MD.

Paulene Ver A. Serna – Zarate, MD, FPPS, DPSNbM

**Background:** Toxic substance ingestion is an injury caused by an exogenous substance that causes cellular injury or death. Prevalence and types of poisoning vary depending on the socioeconomic, cultural, and geographical characteristics of different communities. The psychosocial and economic effects of the COVID-19 pandemic may have possible effects on the pediatric toxic substance ingestion cases in the country.

**Objective:** To determine the clinical profile and outcome of accidental and intentional toxic substance ingestion before, during, and after COVID-19 pandemic.

**Methodology:** This is a retrospective single-center descriptive cohort study of the clinical and demographic profile, and outcomes of accidental and intentional toxic substance ingestion in a private tertiary hospital in Muntinlupa City admitted from 2017 to 2023

**Results:** A total of 31 toxic substance ingestion patients were admitted, wherein most of the cases were accidental poisoning (52.61%). Most were females (67.74%) belonging to the adolescent age group (43.38% and Major Depressive Disorder (MDD) (19.35%) predominates for those with co-morbidities. Paracetamol was the most common toxic substance ingested, particularly in the adolescent age group. During the Covid 19 Timeline, most of the toxic substance ingestion cases occurred before the Covid-19 pandemic (80.64%). Most of the admitted patients were discharged, improved (83.87%), followed by morbidity (16.12%). No mortality was recorded during the study. Risk factors associated with poor outcomes include adolescent age group, female gender, MDD, intentional poisoning, and intake of Paracetamol. The comparison of outcomes of toxic substance ingestion during the COVID-19 timeline showed no significant difference.

**Conclusion:** The majority of the 31 admitted patients had non-fatal outcomes. Changes in healthcare access, public health measures, or societal behaviors during the COVID-19 pandemic did not significantly alter the outcomes of toxic substance ingestion.

Simultaneous Session 5
Critical Care Medicine



# Effect of Albumin Rescue on Patient Outcomes in Children with Severe Dengue: A Non-Randomized Control Trial

Prof Gurdeep Singh Dhooria, Prof Deepak Bhat

Introduction: Around 100 million cases of Dengue Fever and half a million cases of severe Dengue are estimated to occur annually. Most dreaded complication of Dengue infection is vasculopathy presenting as a systemic vascular leak syndrome. 25% Albumin can help to reduce the extravasation because it can increase oncotic pressure and maintain intravascular volume, thus can prevent worse outcome.

**Objective:** To determine, if initial fluid resuscitation with 25% Albumin in addition to standard treatment as per WHO improves survival in patients with severe dengue.

**Study design:** Ambispective interventional non-randomized study.

**Methods:** The present study was conducted among severe Dengue patients aged 1 month to 18 years old, admitted in DMCH from 2019 to 2023. Those patients who were still in circulatory shock even after 20-30ml per kg of crystalloid bolus and 10ml per kg of Colloid bolus (Gellofusion) were Categorized into 2 groups equally. (ST plus)(Prospective patients)(n=35) who receive Albumin infusion (0.5-1 g/kg) along with standard treatment as per WHO guidelines. (ST ONLY)(Retrospective patients)(n=35) who receive standard treatment as per WHO guidelines.

**Results:** Baseline characteristics were comparable among groups. Patient who receive albumin infusion has 20% better survival than those who receive only standard treatment as per WHO guidelines (96% vs 76%) (p=0.043). Fall in Hematocrit (-8.4 vs -0.68), positive fluid balance (PFB) (-3.48 vs 94 ml/kg), need and duration of Inotropic support (68% vs 96%) was significantly better in the Albumin group compared to standard treatment group (P value < 0.05). Also need for dialysis was less in Albumin group (P value < 0.05).

**Conclusion:** Albumin infusion in addition to standard treatment could be an important intervention to improve morbidity and mortality in Severe dengue not responding to standard treatment.

Simultaneous Session 5
Critical Care Medicine



Determination of Post-Menstrual Age and Weight at Extubation and its Relationship with Extubation Success in Premature Infants at a Neonatal Intensive Care Unit in a Tertiary Hospital in Manila, Philippines: A 10-Year Retrospective Study

Michaella M. Alvarez, M.D., Sheryl Del Rosario-Famadico, M.D., Robert Dennis J. Garcia, M.D.

**Background:** Respiratory distress at birth is commonly seen in preterm neonates, often necessitating non-invasive respiratory support. If this approach is unsuccessful, mechanical ventilation may be required. However, prolonged mechanical ventilation is associated with risks. Currently, there are no guidelines regarding endotracheal extubation for preterm neonates. The decision to extubate often depends on clinicians' personal experiences and clinical judgment, informed by the interpretation of blood gas values as ventilator settings are gradually reduced and by the perceived increasing lung maturity of the neonate.

**Objective:** To determine the post-menstrual age and weight at extubation, and their relationship with extubation success in premature infants at a neonatal intensive care unit in a private tertiary hospital.

**Methods:** A retrospective, case-control study was done to assess the patient demographics, maternal variables, neonatal comorbidities, ventilator parameters, clinical parameters and blood gas values of preterm neonates previously endotracheally intubated in the neonatal intensive care unit of a private, tertiary hospital from January 1, 2013 to December 31, 2022.

**Results:** The study included 156 patients, of whom 127 (81%) underwent successful endotracheal extubation. Compared to those who were unsuccessfully extubated, those successfully extubated were significantly older in gestational age at birth, at amedian of 30 weeks; heavier at birth, at a median of 1076 grams; older at extubation, at a median corrected age of 30.6 weeks; and heavier at the time of extubation, at amedian of 932 grams. The proportion of female neonates successfully extubatedwas higher. On further analysis, weight at the time of extubation (median, 932 grams; range, 787-1138 grams) and female sex were the only two factors that were significantly associated with successful extubation.

**Conclusions:** Only weight at extubation (median, 932 grams) and female sex were theonly two factors significantly associated with successful endotracheal extubation.

Simultaneous Session 6
Nephrology/Urology



## OHVIRA Syndrome in a Ten-Year-Old Female: A Case Report

Jean Cathlene D. Banzon, M.D.
Marie Josephine Conifedd G. Almaria, M.D., FPOGS, FPSRM,
Alyce Gail Arejola-Tan, M.D., FPPS, FPSN, FPNSP,
Ann Marie Tan-Ting, M.D., FPPS

**Background:** OHVIRA or Herlyn-Werner-Wunderlich syndrome, is a rare Müllerian duct anomaly with a triad of uterus didelphys, unilateral obstructed hemivagina, and ipsilateral renal anomaly. It affects one in 2,000 to 28,000 of women worldwide. This report will discuss the youngest patient among the eleven reported cases in the Philippines.

Case: This is a case report on a ten-year-old female, who presented with intermenstrual bleeding and progressive abdominal pain on the hypogastric and right lower quadrant areas. Initial impression was Acute Appendicitis versus Primary Dysmenorrhea; Abnormal Uterine Bleeding secondary to Immature Hypothalamic Pituitary Ovarian Axis. Laboratory results showed leukocytosis with segmenter predominance, hematuria, and bacteriuria with a negative urine culture. Whole abdominal CT scan and pelvic MRI showed uterine didelphys, right-sided hematocolpos with possibility of vaginal septum, and right renal agenesis. Kidney function tests were normal. The patient was started on ethinyl estradiol and drospirenone combination pill and underwent ultrasound-guided incision of the longitudinal vaginal septum with evacuation of hematocolpos which consequently provided resolution of her symptoms.

**Conclusion:** A delay in the diagnosis of OHVIRA Syndrome may eventually result in reproductive and renal dysfunction, highlighting the importance of early recognition, complete work up, and timely treatment of this syndrome.

Keywords: OHVIRA Syndrome, Herlyn-Werner-Wunderlich Syndrome, Müllerian Duct Anomaly, Case Report Simultaneous Session 6 **Nephrology/Urology** 



## A Boulder in My Bladder: A Case of Vesical Megalithiasis in an 8-Year-Old Boy

Cricelle Rose V. Cobre, MD

Bladder urolithiasis in pediatric patients is a rare occurrence comprising 5% of all urinary calculi and is common among children residing in impoverished or rural areas as a result of their low socioeconomic position, consumption of a diet low in protein and animal milk, and dehydration. The etiology and common clinical presentation of bladder stones observed in children will be discussed in this paper, as well as the appropriate management of bladder stones in pediatric patients. Herein, we discuss a case of an 8-year-old child who presented with dysuria and hypogastric pain. He was diagnosed with a urinary bladder stone through x-ray imaging which showed a large, radiopaque bladder stone. The patient was successfully managed with open cystolithotomy, extracting a bladder stone weighing 52 grams and measuring 45cm x 30cm x 25cm in dimension. Biochemical analysis of the stone showed positive for calcium, ammonium, phosphate, and magnesium. The prevalence of bladder stones in pediatric populations remains a significant issue, particularly in less developed nations. When diagnosing patients with signs and symptoms of bladder stones, it is important to consider risk factors and conduct a comprehensive examination. In order to reduce the increasing occurrence of bladder stones in children residing in areas with a high prevalence, it is crucial to prioritize sufficient daily fluid consumption, prevention of dehydration, and provision of proper nutritional support.

Keywords: Urinary bladder stone; vesical megalithiasis; cystolithotomy



Simultaneous Session 7

Newborn Medicine



A Comparative Study on the Outcomes of the Use of 70% Ethyl Alcohol versus Dry Cord Care on Newborns Delivered at a Lying-In in Muntinlupa City from January to April 2024

Giuseppe Danielle G. Jaring-Guerra, MD, Marian G. Colasito, MD, FPPS, FPSNbM, Kris Isaac A. Brugada, MD, DPPS, DPSPH,FPSHBT, Rolando L. Dela Merced, MD,FPPS

**Background:** Omphalitis, an infection of the umbilical cord stump, is a significant cause of neonatal sepsis and mortality, particularly in developing countries with unsanitary cord care practices. Despite World Health Organization recommendations for hygienic cord care, these guidelines are often disregarded. The demographic profile and existing practices influence umbilical cord stump care outcomes.

**Objective:** To compare the outcomes between the use of 70% ethyl alcohol and dry cord care among newborns delivered at a lying-in in Muntinlupa from January to April 2024. Methodology: This is a prospective cohort study comparing the outcomes of the Use of 70% Ethyl Alcohol vs. Dry Cord Care on Newborns Delivered at a Lying-in in Muntinlupa City from January to April 2024

**Results:** The study included 67 newborns and mothers, with the majority of mothers being multigravida (80.6%), having no comorbidities (94%), and finishing at least secondary education (52.2%). Most mothers were unemployed (68.7%), and 71.6% had no cultural beliefs about newborn care. Most newborns were male (65.7%), within the 2501-3000 grams birth weight range (74.6%), and classified as term infants. Newborns in the dry group had more exudates around their umbilical cord stumps, but there was no statistically significant difference between them. No significant differences were observed in cord status, exudates, or discharge color, except that care was more frequent in the alcohol group. Cord separation time for both alcohol and dry cord care groups occurred predominantly on days 7-8, with no statistically significant difference between them.

**Conclusions:** This study compared dry cord care with 70% ethyl alcohol for infant umbilical cord care, finding no statistically significant differences in cord complications or separation time between the two methods. Dry cord care is simple, cost-effective, and safe, without adverse effects on newborn health.

Simultaneous Session 7

Newborn Medicine



Diagnostic Accuracy of Newborn Early Warning Score (NEWS) in predicting the incidence of neonatal mortality: a retrospective analysis of cases from October to December 2021

Jehan J. Moncal, MD, Aimee Cristine T. Lucero, MD, DPPS, DPSNbM, Cleo Anna Marie D. Pasco, MD, DPPS, DPIDSP

Background: As of 2019, the infant mortality rate in the Philippines was at about 21.6 deaths per 1,000 live births. The overall neonatal case fatality rate in the institution alone, Vicente Sotto Memorial Medical Center (VSMMC) for 2020 ranges from 20-25%. The Newborn Early Warning Score (NEWS) is a 'traffic-light' coded observation chart to enable early identification of adverse changes in physiological parameters, which has been developed to standardize the initial assessment, and care of newborn babies. As Pediatric Early Warning Score (PEWS) have been widely used, no such tools have been developed or fully evaluated in the newborn population.

**Objective:** The aim for this research is to determine the diagnostic accuracy of NEWS in predicting the incidence of neonatal mortality among neonates delivered in Vicente Sotto Memorial Medical Center from October to December 2021.

**Methods:** A retrospective, analytical, cross-sectional study design was used to determine NEWS of neonates delivered in the institution taken at birth then every hour thereafter until the fourth hour of life. A cut-off score was taken from the Area Under the Curve (AUC). A score of 1 and below predicted good prognosis.

**Results:** The data analyzed in this research showed that the AUC is equal to 0.833 which showed a value closer to 1 which means better accuracy. When Orange color score is considered as a cut off value, the sensitivity of 83.33% and the specificity of 75%, Positive Predictive Value (PPV) of 2.46% and Negative Predictive Value (NPV) of 99.83% compared to when Red color score is used having a sensitivity of 33.33% and specificity of 92.55%, PPV of 3.33% and the NPV of 94.46%. Hence, NEWS is a test that would be able to give fewer false positive results.

**Conclusion:** This research has proved that NEWS is an effective tool in predicting the incidence of neonatal mortality since it is both highly sensitive and specific.



Simultaneous Session 8
Pulmonology



#### Clinical Profile and Outcome of Childhood Interstitial Lung Disease (CHILD) Syndrome in a Tertiary Pediatric Hospital: A 10-Year Review (2013 – 2022)

Juan Carlos D. Moreno, MD

**Background:** Childhood interstitial lung disease (chILD) comprises over 200 rare pulmonary disorders with impaired gas exchange and diffuse radiologic infiltrates, leading to high morbidity and mortality. Incidence and prevalence vary across studies, with limited data compared to adult cases. A 2019 study at the Philippine Children's Medical Center (PCMC) linked computerized tomography scans, histopathology, and illness severity to patient survival but underestimated chILD prevalence by excluding non-biopsied cases. Diagnosis often relies on non-invasive methods, and outcomes vary by age, with overlapping symptoms internationally. Further research is needed to improve understanding, treatment, and international collaboration for chILD.

**Objectives:** This study describes clinical profiles, outcomes, age, and gender distribution chILD at PCMC from 2013 to 2022, focusing on symptoms, diagnostics, therapeutics, and clinical outcomes of admitted patients.

**Methods:** This retrospective study reviewed records of children diagnosed with interstitial lung disease at PCMC from 2013 to 2022. Approved by the institutional review board, it included patients aged 0-18 with clinical signs of chILD, excluding those with other specific conditions. Data on clinical courses, diagnostic tests (chest radiographs, high-resolution CT scans, bronchoscopy), therapeutic management, and follow-up outcomes were collected. Ethical considerations ensured confidentiality and patient privacy, with data anonymized and securely stored. Outcomes included symptom improvement and mortality, assessed from initial therapy to last available follow-up. Results were presented as frequencies and percentages.

**Results:** Twenty-three patients were included in this study. Most (52.17%) were diagnosed between 2013-2017, and were within the ages of 0-2 years. Majority of patients had normal nutritional status (52.17%). Common clinical presentation on admission included breathing difficulties, with chest retractions, crackles, and hypoxemia. Few had a family history of chronic lung disease. Comorbidities included pulmonary hypertension (30.43%) and pulmonary tuberculosis (21.74%). Chest radiography revealed infiltrates in all cases, and HRCT scans showed ground glass opacities in 82.61%. Prednisone was the primary treatment (86.96%). Lung biopsy results (43.48%) were mostly unclassified or nondiagnostic, with lymphoid interstitial pneumonia as the predominant diagnosis (20%). Improvement of signs and symptoms was seen in 39.13% of cases, whereas death occurred in 21.74%. Furthermore, the outcome remained undetermined in as much as 34.78% of cases due to inadequate follow up.

**Conclusions:** This retrospective study emphasizes chILD's prevalence in infants under 2 years, with male predominance. Nutritional variations underscore the need for supplementation. Various common signs include crackles, retractions, and hypoxemia, with breathing difficulty as a frequent symptom. The diagnostic process involves imaging and ancillary tests, advocating a systematic approach with noninvasive methods like CXR and HRCT, reserving lung biopsy for inconclusive cases. Corticosteroids, whether used alone or in combination, prove beneficial in managing chILD by suppressing inflammation.

Simultaneous Session 8
Pulmonology



Association of Fluid Balance During the First 48 Hours of Assisted Mechanical Ventilation with Clinical and Weaning Outcomes among Pediatric Patients with Severe Pneumonia in a Tertiary Government Hospital in the Philippines

Jessica Lobenia Mariano, MD, Grace V. Malayan, MD, FPPS, FPAPP

**Background:** Fluid therapy is critical in managing pediatric patients because it ensures adequate organ perfusion and maintain homeostasis. The interaction between fluid status, gas exchange, and respiratory mechanics complicates fluid management during mechanical ventilation. However, most research on fluid balance and mechanical ventilation in pneumonia patients are conducted in the adult population.

**Objective:** This study aims to determine the association of fluid balance during the first 48 hours of assisted mechanical ventilation (AMV) with weaning and clinical outcomes among pediatric patients with severe pneumonia.

**Methodology:** This study is a retrospective cohort study that analyzed the records of pediatric patients with severe pneumonia admitted to the Pediatric Intensive Care Unit (PICU) at Ospital ng Makati between January 2018 and December 2022. Demographic information, vital signs, admission weight, diagnostics, fluids administered, urine output, length of hospital stay, PICU stay and AMV, acute respiratory distress syndrome (ARDS) incidence, and mortality were recorded for each patient. The weight-based technique was utilized to calculate the percentage fluid overload. Investigations on the relationships between fluid balance and outcome indicators were conducted using both univariate and multivariable analysis.

**Results:** A total of 143 pediatric patients with severe pneumonia were analyzed. For patients with less than 5% fluid balance, 98% did not develop ARDS and survived, 95% had less than 7 days of AMV, and 87% had less than 7 days of PICU stay. While for patients with more than 10% fluid balance, 81% develop ARDS, 72% had prolonged AMV and PICU stay. Statistically significant relationship was found between the fluid balance during the first 48 hours AMV and the duration of ventilation support (p<0.001), weaning failure (p<0.001), duration of PICU stay (p=0.009), hospital stay (p=0.030), incidence of ARDS (p<0.001), and mortality (<0.001). The positive odds ratios imply that an increase in fluid balance during the first 48 hours of AMV increases the odds of ARDS, mortality, and duration of PICU stay.

**Conclusion:** The findings of the study showed that increase in fluid balance during the first 48 hours of AMV increased the likelihood of weaning failure, ARDS, and mortality as well as the length of the AMV, PICU, and hospital stay. Thus, careful fluid administration and strict monitoring of all fluid intakes, including intravenous fluids, enteral and parenteral nutrition, blood products, administered medications, and fluid output, should be performed to prevent fluid overload, which is detrimental to pediatric patients with severe pneumonia receiving ventilation support.



Simultaneous Session 8
Pulmonology



#### Clinical Profile and Outcome of Pediatric Patients with Unplanned Extubation at De La Salle University Medical Center

Erika Alyssa V. de Jesus, M.D., Bethzaida Rachel S. Fabian, M.D.

**Background:** Healthcare professionals managing critically ill patients must possess essential knowledge in airway assessment and management. Endotracheal intubation (ETI) is widely used but with notable complication of unplanned extubation (UPE). Research on this field highly focuses on high resource developed countries, with limited investigation conducted in the Philippines. The significance of addressing this modifiable aspect of patient safety cannot be overemphasized, thus the need for further research and interventions in the local context.

**Objective:** To determine the incidence and outcomes of unplanned extubation and describe patients, aged 0-18 years, who experienced it at DLSUMC from January to August 2023. Design and Methodology: This study employed a descriptive prospective study design. Data was collected using questionnaires and chart review. Frequencies, mean, median and modes were computed for each factor.

**Results:** Unplanned extubation rate was 0.28 which is within the cited acceptable rate. Twenty seven events occurred per 100 ventilator days, occurring in neonates with equal gender distribution. Most patients were on continuous ventilation due to pulmonary issues, on uncuffed endotracheal tubes secured with tape, and tubes correctly positioned. Patients requiring frequent suctioning were at higher risk. Incidents were associated with factors such as patient positioning, lack of sedation, and use of physical restraints during periods of rest without active nursing care. Monitoring and detection often relied on alarms, patient vocalization, and staff observation.

**Conclusions:** This research shows the significance of UPE. It calls for the urgent implementation of evidence-based interventions and standardized protocols to reduce UPE in pediatric critical care. Emphasis should be placed on patient selection, securement and sedation strategies, nursing practices, and staffing levels. Addressing these factors will enhance patient safety and outcomes in pediatric critical care settings.

Keywords: Unplanned extubation, pediatric intensive care unit, endotracheal tube, developing country, prospective study

Simultaneous Session 9

Cardiology



Comparison of Pain Scale in the Use of Lidocaine as a Diluent versus Lidocaine Plus Coughing Technique During Benzathine Penicillin G Administration in Pediatric Patients with Rheumatic Fever and Rheumatic Heart Disease: A Randomized Clinical Trial at Mariano Marcos Memorial Hospital and Medical Center

Charmaine A. Tabin, MD, Maria Eloisa Lazaro, MD, FPPS, FPCC, FPSE, Ma. Rosita Manangan, MD, FPPS, FPCC, FPSE

**Background:** Benzathine penicillin G as secondary prophylaxis is proven effective method in the prevention of progression of Rheumatic Fever (RF) and Rheumatic Heart Disease (RHD). Caveat to this is pain associated with injection experienced, after which fear of succeeding injection limits patients' adherence.

**Objective:** This study aims to compare the pain scale of lidocaine as diluent versus lidocaine plus coughing technique during benzathine penicillin G (BPG) administration in patients with RF and RHD

**Methods:** Randomized single-blind, crossover study, total of 47 RF and RHD patients aged 10-18 years old receiving BPG injection every 21/28 days in Mariano Marcos Memorial Hospital and Medical Center out-patient department were divided into three groups for three visits. First group received BPG diluted with sterile water followed by BPG diluted with 4ml Lidocaine Hydrochloride 1% followed by BPG diluted with 4ml Lidocaine Hydrochloride 1% plus coughing technique. Reverse order for second and third group. Pain scale was measured using Wong Baker pain scale right after injection.

**Results:** Overall, there was significant reduction pain scale of patients who received lidocaine as diluent plus coughing technique with pain scale: 0 (IQR: 0-1). There is a statistically significant difference between intervention and pain scale with p-value: 0.000\*.

**Conclusion:** Lidocaine hydrochloride 1% as BPG diluent and coughing technique significantly reduces pain. BPG with lidocaine hydrochloride 1% with cough technique should be used in patients with RF and RHD to decrease injection pain, improve adherence and outcome.

Simultaneous Session 9
Cardiology



#### Risk Factors Associated with Clinical Outcomes among Rheumatic Heart Disease Patients Ages 5 to 17 Years Old in Bulacan Medical Center: A Prospective Cohort Study

Beatrice Joy B. Tomboc, MD, Esther Tan-Medina, MD, FPPS, FPNSP

**Background:** Rheumatic Heart Disease (RHD) continues to be one of the preventable causes of cardiovascular death and disability. It is believed to be the disease of the poor due to its high prevalence in the low income settings in the face of effective preventive strategies.

**Objective:** This research study aimed to determine the risk factors associated with clinical outcomes after 6 months of follow-up among pediatric patients ages 5-17 years old diagnosed with RHD.

**Methods:** A prospective cohort study was conducted among 32 RHD patients from January 2022 to March 2023 in Bulacan Medical Center. All statistical tests done were two tailed test using SPSS software. Null hypotheses were rejected at 0.05 level of significance. Demographic and clinical profile and patient outcome were summarized using frequency and proportion. Fisher's exact/Chi-square test was used to determine association between variables. Odds ratio were computed as a measure of association.

**Results and Discussion:** The mean age of the patients was 12 years old. The majority were female (56.3%), Roman Catholic (90.6%), residing in urban areas (56.3%), enrolled in school (81.3%) and used both income from family members and financial assistance from the government/LGU as source of funds for consultations, work-ups, and medications. Those who are overweight, non adherent to medications, had greater odds of having unimproved/progressed outcome. Those participants who had pleural effusion, signs of RHD in activity, and signs of heart failure during the initial time of consult developed improvement during their follow-up.

Over the 6-month study period, improvements were noted on the patients' BMI, blood pressure, chest x-ray, signs of RHD activity, and heart failure symptoms. Mitral regurgitation was the most common valvular involvement (100%). Subjects initially presenting with pulmonary regurgitation and pericardial effusion showed positive outcomes after 6 months. Effort intolerance was the most common complaint related to signs of heart failure among the subjects.

**Conclusion:** This study revealed that risk factors associated with unimproved or progressed outcomes in RHD patients include a lack of educational privilege, absence of financial support from family, overweight status, non-adherence to medications, and recent hospital admission within the past 6 months. There was noted improvement in the severity of valvular involvement and majority of the symptoms of heart failure resolved after the 6 month follow-up. Despite having improved 2D echo findings, effort intolerance still persisted in most of our subjects.

Simultaneous Session 9

Cardiology

Back to Program

# Effectiveness of Intravenous Immunoglobulin and Corticosteroid in Pediatric Acute Myocarditis: A Systematic Review and Network Meta-Analysis

Thi Bao Trang Thai, MD, Yi-No Kang, Hoi Huu Vo, Phuc Huu Phan, Ka-Wai Tam

**Background:** Acute myocarditis remains a significant challenge in pediatrics. The benefits of intravenous immunoglobulin (IVIG) and steroids are inconclusive, highlighting the need to assess their impact on optimizing treatment strategies.

**Objective:** To investigate the effectiveness of IVIG, steroids, a combination of both, and standard heart failure treatment in pediatric acute myocarditis.

**Methods:** PubMed, Embase, Web of Science, and Cochrane databases were searched. Randomized controlled trials and non-randomized studies evaluating the effects of adjunctive IVIG, steroids, and their combination with standard treatment were included. A random-effects network meta-analysis was performed utilizing Frequentist and Bayesian approaches. Risk ratios (RR) and mean differences (MD), along with 95% confidence intervals (CI) were calculated to assess the relative effectiveness of interventions

**Results:** Thirteen trials (2 RCTs, 11 cohort studies; 2850 participants) were included. IVIG reduced in-hospital mortality (RR, 0.52; 95% CI 0.30–0.90), overall mortality (RR, 0.50; 95% CI, 0.34–0.76), and the composite of mortality and transplant (RR, 0.61; 95% CI, 0.43–0.88). IVIG was ranked as the most effective therapy for these outcomes (P-scores 0.993, 0.999, 0.986, respectively). Steroids or the combination showed no significant effect on mortality or transplant. IVIG improved cardiac function, increasing left ventricle ejection function (MD, 6.00%; 95%CI, 0.94-11.06) and reducing left ventricular end-diastolic dimension (MD, -3.77 mm; 95% CI, -7.02 - -0.52), whereas steroids did not considerably affect.

**Conclusions:** Integrating IVIG into standard treatment may significantly enhance outcomes in children with acute myocarditis. However, the use of steroids or their combination with IVIG did not demonstrate benefits.

Simultaneous Session 10
Rheumatology



Validation of the 2019 European League Against Rheumatism/American College of Rheumatology Classification Criteria for Childhood-Onset Systemic Lupus Erythematosus (CSLE)

Mar Christopher F. Epetia, MD, Leonila F. Dans, MD, FPPS, FPRA, M.Sc. CE, Cherica A. Tee, MD, FPPS, FPRA

**Background:** cSLE is a complex disease with diverse clinical manifestations. There was no previous validation study for 2019 EULAR/ACR classification criteria by experienced pediatric rheumatologists.

**Objective:** To validate the use of 2019 EULAR/ACR Criteria in Filipino children with cSLE.

**Methodology:** A total of 300 archived scenarios were retrieved from a previously done study. The case scenarios were evaluated by 5 participating pediatric rheumatologists using the 2019 EULAR/ACR Classification Criteria. The diagnostic performance of the 2019 EULAR/ACR was evaluated using the consensus diagnosis.

**Results:** The 2021 EULAR/ACR classification criteria demonstrated a sensitivity of 87.33% and a specificity of 98% in a population of Filipino cSLE cases. There are 22 misclassified cases in which 19 were false negatives and 3 were false positives.

**Conclusion:** The 2019 EULAR/ACR classification criteria is a valid guide in the diagnosis of Filipino children with cSLE.

Simultaneous Session 10

Professionalism



#### Consensus-Generating Participatory Approach in the Development of an Evidence-Based and Best Practices Preventive Care Baby Book

Melchor Victor G. Frias IV, Jindra H. Tetangco, Kristyn A. Yatco

**Background:** The Aruga (Care) Project is one of the child advocacy programs of the Philippine Pediatric Society – Southern Tagalog Chapter (PPS-STC). Preventive pediatric health care, an important advocacy agenda of the chapter, is addressed by the Aruga project. The development of a new tool, a pediatric health record called the Aruga baby book, is the focus of this research.

**Objective:** To develop an evidence-based and best practices preventive care pediatric health record or baby book through consensus generating participatory approach.

**Methods:** The study utilized a participatory design research specifically a user centered design research, an iterative design process that involves users in the design of a product (baby book) that is intended for them. The content of the tool was founded on a comprehensive literature review of the evidence and best practices in the development of a pediatric health record. The first version was presented for evaluation of its content, format and utility to a consensus panel of key stakeholders and intended users. To come up with the penultimate version, consensus building techniques in the form of nominal group, delphi and consensus development conference techniques were utilized.

Results: The development of Aruga was mainly based on the PPS's Preventive Pediatrics Handbook and the American Academy of Pediatrics' Bright Futures Handbook. Further assessment of evidence published in the medical literature were done. Correlation with local pediatric practice and cultural peculiarities were taken into consideration. The format consists of three parts: Well Baby/Child Consults, Sick Consults and Health Guides. The nominal group technique yielded 22 preventive care, 9 nutrition, 8 clinical practice, 6 immunization, 4 growth and development, and 3 illness content issues. Twenty (20) format issues were mainly on design and organization. There were no utility issues raised. Twenty-five (25) unresolved issues were settled by Delphi technique. The penultimate version was presented in a consensus development conferences that yielded minor revisions in content.

**Conclusion:** Participatory research approach and formal consensus building techniques are pragmatic methods that can be utilized for developing an evidence-based and best practices baby book.

Simultaneous Session 10
Professionalism



#### Digitally Supported Remote Training for District Healthcare Providers to Improve Essential Newborn Care Skills: A Pilot Cluster Randomized Trial in Lao PDR

Sayaka Horiuchi, Rachel Smith,
Bouasengnignom Phrasithideth, Outhevanh Kounnavongsa,
Hongkham Xayavong, Kentaro Sakamaki,
Sommana Rathana, Joshua P Vogel

**Background:** In Lao People's Democratic Republic (Lao PDR), neonatal care provision, knowledge and skills of healthcare providers at district hospitals rapidly degrades after completion of formal training (Early Essential Newborn Care (EENC) coaching) due to lack of regular supervision and/or refresher training. Additionally, healthcare providers have limited opportunities to practice newborn resuscitation skills. Available evidence suggests that low-dose, high-frequency (LDHF) approaches, as well as more frequent supportive supervision, can improve and sustain essential newborn care practices, including resuscitation skills. This study used a novel intervention that combined frequent self-practice and mobile-based supportive supervision, to help improve provider's essential newborn care practice in Lao PDR.

**Objective:** This pilot study aimed to evaluate the potential effectiveness, feasibility, acceptability, and possible barriers and enablers of a novel training intervention on newborn care.

**Methods:** This was a cluster-randomised pilot trial with qualitative research using focus group discussions (FGD). It was conducted between October 2023 and February 2024. Four district hospitals in two provinces in Lao PDR were randomly assigned to intervention and control (usual practice) by province. In each hospital, we recruited all healthcare providers providing newborn care. In the intervention group, participants received initial EENC coaching, and encouraged to perform bi-weekly self-practice of management of breathing and non-breathing babies. They also fortnightly received mobile-based supportive supervision from central and provincial facilitators. In the control group, participants received EENC coaching only, and continued with usual practice. At baseline and endline (3 months post-intervention), we evaluated district healthcare providers' knowledge and skills on EENC. Central and provincial facilitators also participated in the FGDs.

**Results:** A total of 44 district health care providers, 22 each in intervention and control groups, participated in the trial. Thirty-seven providers and 18 facilitators completed data collection and participated in FGDs. At endline, the mean score in the intervention group was 0.80 points higher than in the control group for managing a breathing baby, and 2.89 points higher for managing a non-breathing baby, after controlling for baseline scores. The intervention was generally well received by providers and facilitators. Although providers struggled to find time to practice, they felt the intervention improved their interaction with facilitators. They believed that continuing the intervention would improve their clinical performance and neonatal health outcomes.

**Conclusion:** This pilot trial showed the intervention is feasible and promising for improving the quality of neonatal care. A larger trial to evaluate effectiveness on provider clinical practice and health outcomes is warranted.

Simultaneous Session 12
Infectious Diseases



## Factors Affecting Hesitancy Toward the COVID-19 Vaccine Among Parents of Children Aged 5-17 Years in San Juan, Metro Manila

Meryl Louise Su, MD, Ann Marie Tan-Ting, Rowena Therese Francisco

**Background:** To examine the COVID-19 vaccination hesitancy level and influencing factors among parents of children aged 5–17 years residing in San Juan City. Results determined parental concerns and identified effective measures for health education.

**Objectives:** To determine the prevalence of COVID-19 vaccine hesitancy amongst parents of children aged 5-17 years in San Juan City and identify the factors and their associations.

#### **Methods:**

- Research Design: Cross-sectional analytical study conducted in San Juan City during January to June of 2023.
- Participants: Modified SAGE questionnaire on vaccine hesitancy was distributed online or face-to-face to the eligible 472 participants.
- Measurements: Data regarding the frequency of vaccine hesitancy, relevant factors to decision making, and sources of information were analyzed using descriptive statistics.
- Statistical Analysis: Frequencies and percentages summarized the categorical variables; chi-square test determined correlations with and among the factors associated with vaccine hesitancy and refusal. Binary logistic regression between hesitancy and the hypothesized factors was performed to determine the point and 95% confidence interval adjusted odds ratio estimates. All tests were performed at 5% level of significance.

**Results:** Vaccine hesitancy was measured at 26.5% (n=125) and the stated reasons included concerns about the vaccine safety, exposure to negative media, having heard negative feedback from someone they know, and disbelief in its efficacy. There were significant associations between vaccine hesitancy and parental refusal for the vaccination for themselves (n=26, 92.8%) and younger age of children below 13 years (n=52, 41.6%; n=62, 49.6%). Participants who obtained their information from doctors were significantly more willing to consent to vaccinate (n=183, 52.7%), while those who relied on social media were significantly more hesitant. (n=72, 57.6%)

**Conclusion:** COVID-19 vaccine hesitancy in San Juan City had a prevalence of 26.5%. The significant factors associated with this included parental hesitancy for the vaccine for themselves and having children below 13 years of age. The decision to give the vaccine to their children was negatively influenced by social media and positively by physicians. These findings may be used to strategically form local campaigns and encourage active participation of healthcare professionals to promote COVID-19 vaccination in children.

Keywords: COVID-19 vaccination, Vaccine hesitancy, Children, Philippines



Simultaneous Session 12
Infectious Diseases



#### Association of COVID-19 Vaccine Status with Disease Severity and Outcome Among Confirmed COVID-19 Pediatric Patients Admitted in a Tertiary Referral Center

Shaiva Nur O. Mangaccat, MD, Maria Bennette C. Kuong MD

**Background:** The ongoing threat of SARS-CoV-2 infection persists on a global scale, with a notable discrepancy in reported cases between children and adults.

**Objective:** To determine association of Covid-19 vaccination status with disease severity and outcome among admitted confirmed COVID 19 pediatric patients in a tertiary referral center. DESIGN: Analytic, retrospective, cross sectional study SUBJECTS: Children aged 0 to 18 years, with positive RT-PCR for SARS-COV-2, admitted in a tertiary hospital from October 2021 to October 2023.

Methodology: Data on Covid-19 vaccination status, clinicodemographic profiles, disease severity and outcome of 183 patients were collected through chart review and analyzed using descriptive statistics (mean and standard deviation), Chi-Square and Fisher's Exact tests for group comparisons, and logistic regression to determine association of covid vaccination status with disease severity and outcome. A p-value of ≤ 0.05 was considered statistically significant.

**Results:** Among 183 subjects, majority (84%) were unvaccinated (mostly under 5 years old), and only 16% were vaccinated (over 5 years old). The majority were male (59%), with unknown COVID-19 exposure (58%), and had mild COVID-19 infection (42%). Vaccinated participants had higher rates of asymptomatic (10%) and mild (69%) cases, while unvaccinated children had higher rates of severe (16%) and critical (12%) cases. Most common symptoms included fever (39%), difficulty breathing (27%), and cough (14%). The most prevalent co-morbidities were infectious (13%), cardiovascular (6%), and pulmonary conditions (4%). Majority required oxygen support (56%), with non-invasive ventilation being predominant (80%). The median time to clinical improvement was 4 days (IQR = 3–6). COVID-19-associated complications were more prevalent in severe to MIS-C cases ( $\chi$ 2=50.29, p=0.001). All vaccinated participants were discharged versus 93% among unvaccinated participants with 7% mortality. However, when Crude and Adjusted Odds Ratio were computed, statistical analysis showed that COVID 19 vaccination status was not significantly associated with COVID-19 disease severity.

**Conclusion:** This study shows that while vaccinated pediatric patients with COVID-19 were more likely to experience asymptomatic or mild infection. Unvaccinated children had higher rates of severe and critical cases, yet the statistical analysis showed no significant association between vaccination and disease severity and outcome.

Keywords: Children, COVID-19, Covid-19 vaccination status, disease severity, outcome

Simultaneous Session 12
Infectious Diseases



# Immunogenicity of Accelerated Two Dose Intradermal Pre-Exposure Rabies Prophylaxis Regimen in Children with No Known Immunodeficiency Versus Children Exposed to Immunosuppressant Therapy Dr Anurag Agarwal, Dr Charu Singh

**Background:** Rabies is fatal, most common in children but vaccine preventable. India accounts for one third of global rabies deaths, and thereby the need of preexposure rabies prophylaxis.

**Objective:** The study was aimed at gathering data on immunogenicity of recommended abbreviated 2 dose intradermal preexposure rabies prophylaxis regimen, as introduced by recent WHO and ACVIP guidelines. National guidelines as per NCDC still recommends 3 dose intradermal regimen.

**Method:** Comparative, follow up study conducted with administration of intradermal 2-site 2- dose PrEP regimen at day 0 and 7, using vero cell culture rabies vaccine. Titers assessed on day 28, 90 and 180 of vaccination to ensure adequate antibody response and compare results in subjects with no known immunodeficiency versus in those exposed to immunosuppressant therapy (patients of JIA and NS). Booster administered in those with insufficient titers and titers assessed after 7 days.

**Result:** After two dose abbreviated intradermal regimen, in those with no known immunodeficiency day 28 seroconversion rate (SCR) of 100% with geometric mean titer (GMT) of 2.168 EU/ml was observed. On day 90, SCR of 90% with GMT of 1.358 EU/ml was observed. On day 180, SCR of 100 % (PP analysis) with GMT of 2.23 EU/ml was found as a booster was given in those with insufficient titres at day 90.

In subjects exposed to immunosuppressant therapy SCR of 100% with GMT of 1.547 EU/ml on day 28, and SCR of 70% with GMT of 0.962 EU/ml on day 90 was observed. On day 180, a SCR of 100% with GMT of 1.53 EU/ml was found as a booster was given in those with insufficient titres at day 90.

Post booster titers in patients from both groups demonstrated sufficient levels of seroconversion. Vaccine was safe in all, and no serious side effects were noted.

**Conclusion:** Accelerated 2-dose ID PrEP regimen in Indian pediatric population is found to be effective in producing protective rabies virus neutralizing antibody titers in both the group of patients, corroborating with the new WHO recommendations.





# POSTER PRESENTATION ABSTRACTS

**Adolescent Medicine** 



#### The Prevalence of Obesity among Adolescent Learners Studying In Public Senior High Schools in Bataan on the School Year 2023-2024: A Cross-Sectional Study

Jethro N. Aramburo, MD Erwin John R. Vicaldo, MD

Background: Adolescents are in a critical period of development where health concerns should be established. There is rise in adolescent obesity globally and locally. Concentrated efforts should be given to create policies and programs that will address the increasing trend of obesity in adolescence.

**Objectives:** This study aimed to estimate the prevalence rate of obesity and to describe the demographic profile, dietary behavior and physical activity among adolescents with obesity.

Methods: This was a descriptive cross-sectional study conducted on adolescent learners enrolled in Public Senior High Schools in Bataan during the SY 2023-2024. Multi-stage sampling was employed in selecting participants. After securing informed consents and assents, their weight and height were taken, computed BMIs were plotted on the appropriate WHO BMI-for-Age chart, then, eligible adolescents with obesity were asked to answer the Philippine's Global School-Based Student Health Survey 2019. Stata MP version 17 software was used for data processing and analysis.

Results: There were 666 study participants. Of these, 7.51% were determined to have obesity. The combined prevalence of obesity and overweight was determined to be 19.22%, which is higher than the national average of 13% according to the 2021 Expanded National Nutritional Survey. Among study participants, the mean age was 17.3 years, there is equal number of males and females, most are in Grade 12 and majority were from Limay. Majority of adolescents with obesity experience hunger and have poor dietary habits despite being taught the benefits of healthy eating. Moreover, 92% of adolescents with obesity reported not being physically active and 54% encages in sedentary activities.

**Conclusion:** The prevalence of obesity among adolescent learners in Btaan is higher than data from similar studies done locally and internationally. These adolescents experience food insecurity, have poor dietary behavior and are physically inactive. These factors need to be addressed to promote better health outcomes among adolescent learners.

**Adolescent Medicine** 



#### Knowledge, Attitudes, Promoters And Barriers Towards Vaccination, among Completely and Incompletely Immunized Adolescents in a Private School in Caloocan City

Denise Lorraine A. Arlegui, MD

**Background:** About one-half to two-thirds of adolescents' lack of knowledge of the existence of certain vaccines and its necessity, contributes to their perception and underestimation of the risks of vaccine-preventable diseases.

**Objective:** This study aims to determine the knowledge, attitudes, drivers and barriers towards vaccination, among completely and incompletely immunized adolescents in a private school in Caloocan City

Methodology: A descriptive cross-sectional study that included 108 adolescent students from a private school in Caloocan City. A standardized questionnaire adopted from a European study (by Hessel et al) was administered through an electronic survey administration software. Mann Whitney U test was used to compare the median values of continuous and Fisher's Exact test was used to compare the frequency of categorical variables.

Results: Most students rated their level of information regarding vaccination at a median 7 leading towards being very well informed. Ninety two (85.19%) respondents said that purpose of vaccination is a way to avoid a disease / sickness. A median rate of 9 perceived that benefits of vaccination as a protection against diseases to oneself, family and community. Seventy (64.81%) respondents said that the "iliness the vaccine protects against is serious" impacted their decision to get vaccinated. More than half of all respondents cited the main sources of information on vaccination were their parents, family (87.04%), healthcare professionals (65.74%) and the internet (62.04%).
Conclusion: Majority of the adolescents were well

Conclusion: Majority of the adolescents were well informed about vaccination regardless of vaccination status. There was a positive attitude towards the benefits of vaccination as a protection against diseases to oneself, family and community.

Keywords: Adolescent, Vaccination

**Adolescent Medicine** 



#### Adolescent Suicide Attempts during the COVID-19 Pandemic: Clinicodemographic Profiles, Associated Factors and Clinical Outcomes

Maria Nikki Luberth N. Balce, MD Michelle Anne Noblejas-Mangubat, MD

**Background:** Adolescence has been described as a period of "storm and stress". The immaturity of the adolescent brain increases the risk for depression and suicidality. The significant stress brought about by the COVID-19 pandemic has greatly impacted the mental health of adolescents.

**Objective:** To determine the clinicodemographic profiles, associated factors and clinical outcomes of adolescent suicide attempts during the COVID-19 pandemic

Methods: This is a retrospective cross-sectional analytic study. Data was analyzed using SPSS version 28. Descriptive statistics was used to describe clinicodemographic profiles of the adolescents. Chi square test of association was used to determine the association of the clinicodemographic factors with suicide attempt outcomes.

Results: Data from the charts of 162 adolescents ages 10-18 years old with suicide attempts during the COVID-19 pandemic was included. Majority of the patients were female (78.4%), late adolescents (64.2%) and had no previous suicide attempts (71%). School difficulties (34%) was the most prevalent psychosocial issue noted among the adolescents. The most common reason for attempting suicide was parental conflict (45.1%). Medication overdose was the most common method used (69.8%), with majority ingesting multiple drugs (37.7%). Only 11% had pre-existing mental health conditions while 34% had a history of non-suicidal self-injury (NSSI). Majority of those previously (8.6%) and newly (71.6%) diagnosed with psychiatric disorders had Major Depressive Disorder. Among the clinicodemographic characteristics of the patients, only the psychosocial issues (p<.05) were associated with their psychiatric diagnoses. The clinicodemographic characteristics of the patients, only the psychosocial issues (p<.05) were associated with their psychiatric diagnoses. The clinicodemographic characteristics mere not significantly associated with their psychiatric medical or psychiatric conditions. Based on their Patient Health Questionnaire 9 (PHQ-9) scores, 53% were noted to have moderate to severe depressive symptoms. Majority of the adolescents (80.2%) had high risk for suicidality based on their answers to the Columbia Suicide Severity Rating Scale (C-SSRS). All the patients included in this study were admitted at the ward and were discharged improved.

**Conclusion:** Academic pressure and parental conflicts played a major role in adolescent suicide attempts during the COVID-19 pandemic. Psychosocial screening is essential in order to facilitate early identification of risk factors for suicidality. Efforts to promote good mental health among adolescents should include stress management and strengthening of family relationships.





Knowledge, Perceptions and Patterns of Electronic Cigarette Use among Filipino High School Students Ages 12-18 Years Old in a Public High School in Diliman,

Quezon City Joy Valerie Catameo, MD Michelle Anne Noblejas-Mangubat, MD

**Background:** Despite its potential harmful effects, electronic cigarette use is gaining popularity among adolescents due to convenience, flavor variety, less smoke production and a lack of awareness of health risks involved.

**Objective:** To determine the knowledge, perceptions and patterns of electronic cigarette use among Filipino high school students ages 12-18 years old in a public high school in Quezon City

Methods: This is a descriptive cross-sectional study that utilized a validated self-constructed survey. SPSS version 23 was used for data analysis. Frequencies and proportions were used for categorical variables. Medians and inter-quartile ranges were utilized for non-normally distributed continuous variables. Means and standard deviations were computed for normally distributed continuous variables. Shapiro-Wilk test was used to check the normality of the continuous variables.

Results: A total of 120 high school students from Grades 7 to 12 were included in the study. Majority were middle adolescents aged 14-16 years old (50%) with a female predominance (n=66, 55%). While 18.3% admitted to have tried electronic cigarettes, only 8.3% were current users. More than half of the participants (54.2%) had family members who smoked traditional cigarettes. Most of the participants were aware that electronic cigarettes contained nicotine (59.2%) and other harmful chemicals (68.3%) and acknowledged their potential to harm to the brain (63.3%), lungs and other organs (86.7%). However, only 26.7% knew about the addictive nature of ecigarettes and 45% did not know whether these were less addictive than traditional cigarettes. The most common reasons for continuing to use e-cigarettes were peer pressure (40.0%) and relaxation/stress relief (30.0%). Thirty percent (30%) also reported drinking alcoholic beverages while using e-cigarettes.

**Conclusion:** Adolescents should be educated on the risk for addiction associated with electronic cigarette use. Anti-smoking programs should focus on providing alternative healthy activities for adolescents and teaching them how to resist peer pressure in order to avoid engaging in risk-taking behaviors.

**Adolescent Medicine** 



Screening of Anxiety and Depression among Chronically III Adolescents seen at the Southern Philippines Medical Center Using the Hospital Anxiety and Depression Scale English and Pilipino Version (HADS/HADS-P):

> A Cross Sectional Study Mithrica Mae D. Fantone, MD Dr. Mervin Edcel Flavier

Background: Anxiety and depression are common mental health concerns among children and adolescents with chronic illnesses which can impact their quality of life. Diagnosing these mental health issues can be challenging, especially in specific cultural contexts.

**Objective:** This study aims to determine the prevalence of anxiety and depression among chronically ill adolescents aged 12 to 18 years seen at the Southern Philippines Medical Center (SPMC) using the Hospital Anxiety and Depression Scale-Pilipino Version (HADS-P) and to identify potential risk factors associated with severe anxiety and depression.

**Methods:** In this cross-sectional study, 72 participants with chronic illnesses were included. Sociodemographic and clinical data were collected along with responses to the HADS/HADS-P to assess anxiety and depression levels. Statistical analysis was conducted to identify factors associated with increased risk for anxiety and depression.

Results: The participants had a mean age of 15.25 years, with a majority being female (66.7%). Most were in grades 9 to 11, with 11.1% not attending school. The clinical profile indicated a range of chronic illnesses, with rheumatic heart disease and epilepsy being the most common. Most participants (95.8%) were undergoing medical treatment, while 31.9% had chronic illnesses for over two years. Anxiety scores indicated a moderate level, with 31.5% experiencing mild to borderline symptoms and 6.8% at risk for clinical anxiety. Depression scores were notably higher, with an average of 15.38 and 83.6% at risk for clinical depression. Gender and hobbies were significantly associated with reduced risk of anxiety, while other factors showed no significant correlation.

Conclusion: This study reveals a high prevalence of depressive symptoms among chronically ill adolescents. While gender and hobbies were linked to reduced anxiety, depression remains a significant concern. The findings suggest the need for integrated care approaches that combine physical and mental health support. Routine mental health screenings, early intervention, and promoting awareness among caregivers and educators are recommended to address these mental health issues effectively. Further research is required to explore additional factors contributing to anxiety and depression among chronically ill adolescents in the Filipino context.

**Adolescent Medicine** 



Level of Knowledge, Attitudes and Practices Towards Covid-19 of High School Students and their Parents of Barangay. 83 San Jose, Tacloban City

Krisha Katreena Pamate Uribe Jusayan, MI Sarah C. Baquilod, MD, FPPS, FPAPP, Antonio E. Lim, Jr., PhD, FPASMAP

Background: Adolescents play an important role in helping their families promote health and practice effective health protective behaviors to prevent the spread of diseases such as COVID-19. This is significantly predicted by their knowledge and attitudes toward these measures however, there is scarce information particularly in our country regarding the knowledge, attitudes and practices of adolescents especially towards COVID-19.

**Objective:** To determine the level of knowledge, attitudes and practices towards COVID-19 among high school students and their parents of Barangay 83 San Jose, Tacloban City, additionally, to describe the demographic characteristics of the participants if it is related to their level of KAP towards COVID-19 and to determine if there's correlation between the KAP of students and their parents.

Methodology: The research design was a quantitative descriptive research, employing both a descriptive and correlational study, wherein, both descriptive statistical tools and correlational analysis were adopted (percentage, ratio, and mean; Chi-Square Test, Pearson Correlation Coefficient and T-Test). The study was done at Barangay 83 San Jose, Tacloban City where 165 households who had adolescent aged 12 to 18 years old, along with one parent, were asked to answer an adopted self-administered survey questionnaire.

Results: Of the 165 households, only 122 household completed the questionnaire. For the computed value and p-value of the students and their parents towards COVID-19, for knowledge (24.63, p-value of <.00001), for the attitude (16.49, p-value of <.00001) and for practices (16.89, p value of <.00001). For the association between the students' level of knowledge and their attitudes and practices, p-value of <.00001 and .0319, respectively. While for the parents, the only significant relationship was their level of knowledge and their attitude but didn't seem to have affected their practices which had a computed value of 1.85, p-value of .0662.

Conclusion: The level of knowledge of students and their parents had a very good score (61-80%) towards COVID-19 in terms of cause and symptoms, spread, prevention and control, treatment, care seeking. Positive attitude were also observed from the respondents choices, additionally, good practices on COVID-19 safety protocols were also observed. The demographic profile of the respondents did not affect their level of knowledge, attitude and practices towards COVID-19. However, there was a significant association between the knowledge, attitude and practices of the adolescents as well as their parents.

Keywords: Adolescent, Knowledge, Attitude, Practices, COVID-19



**Adolescent Medicine** 



#### The Relationship of Parenting Styles with Depression and Anxiety in Adolescents: A Systematic Review and Meta-Analysis

Kathleen Jade B. Pascual, MD Michelle Anne Noblejas-Mangubat, MD

**Background:** Parenting styles greatly impact all aspects of an adolescent's development including mental health.

**Objective:** This study aimed to determine the relationship of parenting styles with depression and anxiety in adolescents.

**Methods:** This is a systematic review and meta-analysis of the association of different parenting styles with depression and anxiety among adolescents ages 10 to 18 years old. Baseline demographic and clinical characteristics of the adolescents from the included studies were recorded and described using frequencies and percentages for categorical data and means and standard deviations for continuous data. Parenting styles reported in the study were also described using frequencies and percentages.

Results: Ten studies were included in the systematic review. All studies were cross-sectional, with sample sizes ranging from 100 to 2,179. Seven studies were conducted in Asia, one in South America, one in the Caribbean and one in Africa. The age of the study participants ranged from 8 to 22 years. The most prevalent parenting style in five studies was authoritative. Seven studies showed a consistent positive association between authoritarian parenting and depression while two studies documented a positive correlation between anxiety and authoritarian parenting. Authoritative parenting had a consistent negative correlation with depression in eight studies. Permissive parenting was negatively correlated with depression in four studies but positively correlated with anxiety in one study. Neglectful parenting was consistently correlated with higher levels of depression among adolescents.

**Conclusion:** High levels of warmth in authoritative and permissive parenting were negatively correlated with anxiety and depression among adolescents. On the contrary, low levels of responsiveness in authoritarian and neglectful parenting styles were associated with higher levels of adolescent depression and anxiety.

**Adolescent Medicine** 



#### Health Literacy and Handwashing Behavior of Adolescents

Patricia Louise Pineda, MD Karen Grace Santos, MD, DPPS

Background: In the year 2020, the SARS-CoV 2 virus has spread around the world and the World Health Organization declared it as a global pandemic. It was a public health emergency that posed dilemmas in the population's well-being at varying levels. Handwashing is an important aspect in the prevention of pandemics, and having a good health literacy greatly affects handwashing behavior especially in adolescents.

**Objective of the Study:** To determine if there is a correlation between health literacy and handwashing behavior among adolescents aged 12-18 years old.

**Methodology:** Data was collected by administering a questionnaire to 72 adolescents aged 12-18 years old in a private school in Binan, Laguna. Consent and assent forms were distributed prior the administration of the questionnaire. Frequency distribution was done, including the mean and standard deviation of the health literacy and handwashing behavior scores of the adolescent population. Pearson coefficient was computed to determine the association between health literacy and handwashing behavior among the adolescent participants.

Results: The study showed that majority of the adolescents garnered a medium score of health literacy, and they also had a high average score in their handwashing behavior. Demographics wise, the internet is still the major source of health information among adolescents followed by peers and family members. Majority of adolescents were female and between the age of 15-16 (middle adolescent). Handwashing with soap and water is still the main handwashing modality among adolescents. A higher academic standing, handwashing practices being taught at home and school, having a handwashing area available also led to a medium to high health literacy score and high handwashing behavior average.

Conclusion: The positive relationship between health literacy and handwashing behavior underscores the importance of health education programs that aim to enhance knowledge about health-related practices, such as handwashing, to potentially improve handwashing behaviors in this demographic. As the health literacy of adolescents increase, the handwashing behavior also increases. This is a significant finding since good handwashing behavior and practices lead to a lower transmission rate of infectious diseases and the prevention of pandemics. A high academic standing, teaching proper handwashing practices and availability of handwashing a greater health literacy and good hand washing behavior.

**Adolescent Medicine** 



#### Coping Mechanism Strategies and Treatment Adherence among Adolescents with Epilepsy in Northern Mindanao Medical Center

Outpatient Department Nathalie Curtny Valdehueza, MD Elaine Dawn Butron, MD, DPPS

Background: Chronic illness, such as epilepsy, in adolescence has a perceived social cost due to ongoing health conditions and subsequent treatment regimens that limit their daily activities and social capacities. Chronic illness in this age group is challenging because they have an increased risk for developing mental disorders in the course of managing their illness. The different coping strategies adopted by adolescents with chronic illness may affect their adherence to medication as well as over-all health outcome, physical and mental.

**Objective:** This study aims to define the coping strategies and effects to treatment adherence among adolescents with epilepsy.

Methods: An analytical prospective cross-sectional study using the Brief Coping Orientation to Problems Experienced (COPE) Inventory and Medication Adherence Report Scale (MARS) 5 questionnaires. Adolescents ages 10-18 years old who are close follow-up at the Neurology Clinic at Northern Mindanao Medical Center

Results: Among the 129 respondents who participated in the study, 45% were male and 55% were female. Majority (52.7%) were between ages 10-13 years old, 34% were 14-16 years old and 13.2% were 17-18 years old. Most of the participants were at the elementary level (86.8%). All of the participants (100%) had no seizure recurrence for about 1 year. Among the 129 respondents, 56.6% were classified as having a problem-focused coping mechanism, 27.9% had an emotion focused coping mechanism and 6.2% had avoidant coping. Participants with avoidant coping were 100% adherent to their medications whereas 82% of the participants with problem-focused coping were adherent and 88.9% of participants with emotion-focused coping were adherent to their medications; 83.3% of participants with 2 or more coping strategies for each type and the respondents' adherence to treatment. There was however no significant relationship between coping strategies for each type and the respondents' adherence to treatment.

**Conclusion:** Among the 129 participants, a majority (56.6%) had problem-focused coping mechanism and most of these participants were also adherent to their medications. The type of coping mechanism of an individual, in its own, has no relation to a patient's adherent to treatment.

Keywords: coping mechanism, treatment adherence, adolescence, epilepsy



**Adolescent Medicine** 



Impact of COVID-19 Pandemic on Physical Activity, Sedentary Behavior, and Dietary Practices of Children Ages 10 to 18 years old Living in Barangay San Perfecto, San Juan City

Pamela Joanne C. Yu, MD

No abstract

Developmental and Behavioral Pediatrics



The Effect of Lavendula (Lavender)
Oil Massage as an Adjunct
Management on the Reduction of
Anxiety Scores of Children (aged 816 years old) with Autism-SpectrumDisorder: A Randomized Controlled
Cross-Over Trial

Beatrice Alyssa Marie S. Tan, MD Marcelino Reysio-Cruz, MD

Background: Anxiety disorders are common among children with autism spectrum disorder. Aside from pharmacological management, other non-pharmacologic interventions are suggested to regain better control of their behavior. Massage and use of aromatic scents of lavender as complementary alternative medicine have been popularly studied. This study aims to address the limited choices of therapy for autism by providing a possible alternative with essential oils, as an adjunct to management of anxiety. Also, there is limited scientific trials supporting the use of essential oils in children and adults with autism and majority of claims come from case studies and the anecdotal writings of parents, caregivers, and practitioners.

**General Objective:** To determine the effect of aromatherapy (lavender oil) massage on the anxiety level of children with autism spectrum disorder using Anxiety Scale for Children – autism spectrum disorder (ASC ASD-P) score

Methodology: A randomized, open-label, cross-over design was used for this study with a wash-out period of 1 week. Included were children with autism spectrum disorder aged 8-16 years old, recruited from the patient pool of General and Developmental Pediatricians. The intervention studied is the use of a mixture of lavender oil of 2% in concentration, applied through massage to the upper and lower extremities 3x a week for 4 weeks, following a given massage protocol. The outcome measured was anxiety scores using the tool: anxiety scale for children with autism spectrum disorder (ASC-ASC)

**Results:** A total of 77 patients with ASD were included. The mean total post-intervention anxiety scale scores (12.7) were significantly lower than control (15.6) and baseline (17.4) (F=25.7, p value<0.0001). Also, all the mean subscale scores were significantly lower at post-intervention than in control and baseline: Performance anxiety (F=3.9, p-value=0.0219), Anxious arousal (F=8.0, p-value=0.0055, and Uncertainty (F=15.7, p<0.0001).

Conclusion: Lavendula (Lavender) oil massage as an adjunct management was effective on the reduction of anxiety scores among children with autism spectrum disorder. Further studies are needed to determine the frequency and massage techniques that will maximize its benefits.

Keywords: Lavender Oil, Autism Spectrum Disorder, Aromatherapy massage Developmental and Behavioral Pediatrics



#### Characteristics of Circle Drawing Movements of Preschool Children with Developmental Disorders under Varied Drawing Conditions

Background: Many studies on the characteristics of children's drawing have shown that fine motor skills play a crucial role in handwriting writing. Then, understanding the developmental status of these skills can help to clarify the characteristics of disorders such as developmental disorders and find effective ways to support children who have difficulty with handwriting. Circle drawing can be used as a quantitative measure of fine motor skills, and there are several studies that examine drawing characteristics of drawing circles in preschool children. However, there is still a lack of research on intervention methods for circle drawing tasks.

**Objective:** To examine how changes in drawing conditions affect the performance of preschool children with developmental disorders during circle drawing tasks.

**Method:** The subjects were 23 preschool children (4.74±0.74 years old) diagnosed with developmental disorders. Using TraceCoder® (manufactured by System Network), a device for objective measurement of upper limb coordination, circles were drawn three times under each of the following three conditions. 1) Tracing task, 2) Task to draw a circle without protruding between the double lines, 3) Indicator tracking task. Data such as scores (calculated based on the amount of deviation from the reference line or indicator, indicating the drawing accuracy), drawing speed (mm/s), and pen pressure were recorded for each condition.

**Results:** As a result of comparing the scores between the three conditions using the Wilcoxon test, the score for task 3 was significantly lower (p<0.01). Furthermore, analysis of Spearman's rank correlation coefficient revealed that there was a negative correlation between score and speed within a task(p<0.05), but no correlation was found between tasks.

Conclusion: In task 3, the children tended to draw a circle faster than the indicator, and the difficulty level was high. This may be due to the immature eye-hand coordination and an inability to sustain the concentration required to move the pen in synchronization with the movement of the indicator. There are two possible directions for future research. First, to clarify the characteristics of circle drawing in more detail by observing where children look during task 3. Second, to examine how the performance changes when the speed of the indicator in task 3.





#### Unusual Connection: A Case of Spinal Epidural Arteriovenous Fistula

Mary Ann Gonzales Argame, MI

Background: Back pain in children and adolescents may have always been associated with muscle strain from sports and activities, or perhaps considering this age of digital immersion, could be from poor posture and lack of physical activity brought by prolonged gadget use. This paper presents a seven year-old boy whose back pain goes beyond the usual suspects, that is, an arteriovenous fistula which started to evolve inside his spine, that slowly but progressively led to his dreadful roller coaster journey.

Case Presentation: This is a case of a 7-year-old male who presented with intermittent, sudden attacks of back pain in a span of two years which started as mild to moderate in intensity, no radiation to other parts of the body, no associated paresthesia, no weakness, no injury noted, and no known precipitating factor identified, initially relieved with Ibuprofen, and observed to be precipitated by poor posture that is, sitting position, with his shoulders and arms elevated on a high table, stretching his shoulders upward when using gadgets in prolonged use; he was still able to go on his usual daily routine until one day, pain recurred on his left upper back with greater pain intensity leading to limitation in moving his head and neck, hence he was brought to emergency room and was subsequently admitted.

The patient is a known case of G6PD Deficiency, with allergy to nuts and eggs, had no musculoskeletal deformity like scoliosis, nor any known blood disorder, with a family history of anemia, was fond of using his gadgets for a long time most of the day on poor posture (as described earlier), had no active sports nor any strenuous activity done prior to the onset of symptom.

Physical examination showed stable vital signs, no pallor, no bruise, no mass nor any discoloration on the back, negative for gibbus deformity and for Adam's test, GCS 15 (E4V5M6), with intact cranial nerves, normoreflexia, no atrophy, no sensory deficit, initially was able to move all his extremities but later developed weak bilateral hand grip, with tenderness on the left upper back and limitation in moving his head and neck. Fentanyl patient-controlled analgesia (PCA) was started, whole spinal x-ray revealed straightened spinal curvatures, series of Magnetic Resonance Imaging (MRI) of the whole spine showed intradural extramedullary foci with increasing size and extent at the lower cervical spine and upper thoracic spine, associated with cord compression and possible cord edema; CBC showed anemia, with thrombocytosis, no leukocytosis, prothrombin time, partial thromboplastin time, and clotting time were normal, bleeding time was slightly prolonged, reticulocyte count was normal, Factor 8 and Ristocetin cofactor activity tests were normal, and spinal angiogram was done which revealed extradural arteriovenous (AV) fistula without intradural drainage at the level of seventh cervical vertebra (C7) to first thoracic vertebra (T1), supplied by the left deep cervical artery. A multi-disciplinary team comprised of spine orthopedic surgeon, neurosurgeon, endovascular neurosurgeon, hematologist, and anesthesiologist collaborated, and patient underwent sixth cervical vertebra (C6) to T1 hemilaminectomy, partial evacuation of epidural hematoma however, surgery was aborted due to profuse bleeding in the surgical site, hence complete endovascular embolization of the left C7-T1 extradural spinal AV fistula using ethylene vinyl alcohol (Onyx) liquid embolic agent was done.

He was closely monitored postoperatively, there was resolution of upper back pain, no episode of headache, no dizziness, nor vomiting, his bilateral hand grip strength was improved, then was able to freely move his head, neck and upper extremities without any pain, Fentanyl PCA was tapered accordingly, and with repeat cervicothoracic MRI result of decreased cervical cord edema, the patient was then discharged with final diagnosis of Extradural Spinal AV Fistula, C7-T1, S/P Hemilaminectomy C6-T1, Partial Evacuation of Epidural Hematoma (07/05/22), S/P Endovascular Embolization of Left C7-T1 Extradural Spinal AV Fistula (07/05/23) G6PD Deficiency, and he was advised to follow-up after one week, and will be monitored in the next 6 months for any symptom, with a repeat spinal angiogram to observe for resolution of the embolized AV fistula.

Discussion and Conclusion: Spinal epidural AV fistula (SEDAVF) is rarely seen in the pediatric population, and its exact etiology and pathogenesis remain unclear, but studies show that having traumatic back injury and previous spine surgery can predispose patients to SEDAVFs, and that there is an increase in the venous pressure causing arterialization of the epidural venous plexus, thereby decreasing the AV pressure gradient, leading to the decreased drainage of other spinal veins, hence causing venous congestion, leading to engorgement of the epidural venous plexus, creating a mass effect and thereby causing compression myelopathy; these patients may present with weakness, gait disturbances, paresthesia, sensory loss, pain, and sphincter dysfunction; diagnosed with thorough history and physical examination, with MRI scans and spinal angiography. Immediately managed through

history and physical examination, with MRI scans and spinal angiography; immediately managed through collaboration with neurosurgeon and endovascular surgeon to evaluate whether surgical ligation or endovascular embolization would be the best mode of treatment; and with prognosis depending on the duration of symptoms and disability of the patient before treatment; where in studies show that 63% had improved motor disability, 55% had enhancement in sensory disturbances, others either remained stationary or developed deterioration of symptoms, hence such cases warrant a repeat MRI as there could be a possible recanalization of the shunt or a secondary shunt; or a follow-up angiography two to three months after endovascular or surgical treatment is also recommended, to have a total duration of 6 crucial months of surveillance and close monitoring.

It is recommended that further studies should be done in order to determine the exact etiology and precipitating factors of SEDAVFs in the pediatric population since most of the cases remain idiopathic; hence it is important to carefully evaluate any child who complains of back pain, as there may be an underlying serious medical condition such as this spinal epidural AV fistula.

Keywords: Spinal, fistula, back pain

**Neurology** 



#### A 3-Year-Old with Sturge-Weber Syndrome who presented with Bilateral Port-Wine Stain and Seizure: A Case Report

Raye Cielo R. Bercero, MI Victoria G. Bael, MD

**Background:** Sturge-Weber syndrome (SWS) is a congenital neurocutaneous vascular malformation that was first described in 1879. SWS more commonly presents as a unilateral rather than a bilateral port-wine stain, thus the need to report this case.

Case Presentation: This case report presented a case of a 3-year-old, male child, who was admitted for the second time to this institution due to seizures. The patient was delivered via normal spontaneous deliveries without prenatal, perinatal, or postnatal complications. There were noted bluish-green and grey spots on the torso, back, and lower extremities. There were also noted pink patches on the head, forehead, periorbital, with symmetric distribution across the face, and unilaterally on the left side of the chest and arm. No further work-up was initially done. He was first admitted in 2018 and diagnosed with Sturge-Weber Syndrome and Congenital Glaucoma. He was prescribed with Phenobarbital and advised Trabeculectomy with poor compliance. The patient was noted to have Global Developmental Delay and is not at par with age under the fine motor, expressive language, receptive language, and personal-social domains. Prior to admission, he had a week history of fever which was resolved temporarily by Paracetamol. There was noted gradual decrease in activity until he developed blank stares, clinching of jaws, and generalized stiffness on the day that he was eventually admitted. The classic triad in SWS includes a facial port-wine stain birthmark, leptomeningeal angiomas, and glaucoma with all these characteristics present in the patient. Neuroimaging showed frontotemporal atrophy with significantly widened Sylvian fissures with the white matter as well as insular and posterior parietal cortical abnormal signals also associated with a prominence of the choroid plexus bilaterally. This is concurrent with findings seen in the MRI of an SWS patient. Therapy is currently based and targeted on the multiple symptoms of the syndrome which include seizures, stroke-like episcodes, headaches, neurological and cognitive deterioration, hemiparesis, glaucoma, and visual field defects. Thus, management included the use of an oral anticonvulsants, aspirin, evaluation with an ophthalmologist for medical or surgical management of

Conclusion: Sturge-Weber syndrome may be a rare syndrome but with the current advancement in research and science, it has been understood better which has improved the response and management of the case. Over the years, the pathophysiology of the syndrome has been thoroughly studied and multiple hypotheses were tested but the established cause is due to a somatic point mutation in chromosome 9q21 in the GNAQ gene. The presentation of these cases may vary but a high suspicion should be noted for those with symptoms mentioned in the triad. Moreover, a less common presentation with bilateral port-wine stain should not mislead the physician to disregard an impression of SWS.

Keywords: Sturge-Weber syndrome, bilateral port-wine stain, leptomeningeal angiomas, glaucoma, seizure





#### **Unveiling the Stealth Threat:** Japanese Encephalitis in Focus, **A Case Report**

Japanese encephalitis is a mosquito-borne viral disease which causes infections and acute diseases in humans predominantly in Asia. The disease primarily affects children younger than 15 years of age and with a fatality rate highest in children ages 5-9. Disease progression trainfells follows. typically follows a 4-stage course: prodromal illness acute stage, subacute stage, and convalescence. The range of symptoms are characterized by an abrupt onset of fever, headache, respiratory symptoms, anorexia, nausea, abdominal pain, vomiting, and sensory changes including psychotic episodes. This case presents a 3year-old male child who presented with high grade fever associated with generalized tonic-clonic seizures and changes in sensorium. A lumbar tap was performed where Japanese Encephalitis virus was detected. After a fourteen-day course of definitive antibiotic as well as other adjunct medications, which included anti-seizure medications, was provided, resulted in seizure control and ultimately improvement in patient's condition, following a stormy course. This report highlights the importance in recognizing symptoms and a high index of suspicion in parallel with a thorough history especially in patients who are living or who had a history of travel in endemic areas. This case report also emphasizes the importance of childhood vaccination to prevent this vaccine preventable

Keywords: Japanese Encephalitis, Arboviral Infection, Flavivirus, Culex tritaeniorhynchus summarosus, Culex vishnui, Case Report

Neurology



#### Sanfilippo Syndrome -A Case Report

Mucopolysaccharidosis (MPS) type III, also known as Sanfilippo syndrome, is a rare autosomal recessive degenerative disease where fragments of partially degraded glycosaminoglycans (GAG) accumulate in the lysosomes, resulting in cellular dysfunction and clinical abnormalities. There are limited data regarding cases of MPS III in Filipino children. Furthermore, this is the first diagnosed and managed case in our institution.

This is the case of an 11-year-old Filipino male child who presented with neurodevelopmental regression and seizures. Early signs and symptoms of hyperactivity, speech delay, and delayed gross motor skills were observed. Coarse facial dysmorphism, joint contractures, and neuroimaging findings of cerebral atrophy and hydrocephalus were present. A diagnosis of Mucopolysaccharidosis type IIIA was confirmed by molecular genetic testing and multidisciplinary molecular genetic te management was started.

Emphasizing the importance of maintaining a high index suspicion for the presence of MPS disorder in a child exhibiting coarse facial features, progressive neurologic and cognitive decline, and sleep disturbances, this case report stresses the necessity for immediate counseling upon diagnosis confirmation, along with the initiation of appropriate supportive treatment and prognostication. Furthermore, there is an urgent need to move forward with clinical research on MPS, a disease that has a significant impact on the quality of life of affected children

Keywords: Mucopolysaccharidosis IIIA, San Filippo Syndrome, pediatric, lysosomal storage disease

**Neurology** 



#### **Abnormal Inter-Brain Neural** Synchrony in Autism during Caregiver-Child Interaction: An **Exploratory EEG Hyperscanning Study**

ND, Ling Wei, Jing-bo Go

**Background:** Autism Spectrum Disorder (ASD) is characterized by significant social and communication deficits. And hyper scanning techniques can capture the dynamic essence of social interactions.

**Objective:** This study employed EEG-based hyperscanning alongside the Autism Diagnostic Observation Schedule (ADOS) free play session to investigate the neural mechanism underlying ASD's social deficits in real-world settings.

Methods: The study included 28 children with ASD, aged Methods: The study included 28 children with ASIJ, aged 3-7 years and 34 typically developing (TD) children, aged 3-5 years along with their caregivers. We assessed interbrain synchrony (IBS) using the phase locking value (PLV) across theta, low alpha, and high alpha frequency bands alongside the Child's Initiation/Caregiver's Initiation (CCI) ratio. Partial Pearson correlation analyses were conducted to examine the relationships between IBS, clinical assessments and CCI.

Results: Significant IBS differences were observed in theta and low alpha bands, with decreased IBS in ASD dyads' posterior regions and increased IBS between ASD children's posterior and caregivers' anterior regions (all p < 0.05). The CCI ratio was significantly lower in ASD < 0.09. The CCI ratio was significantly lower in ASD dyads (p = 0.012), indicating reduced social initiation of ASD children. The IBS, across both frequency bands, was negatively correlated with ASD symptoms. Diminished IBS within posterior regions was associated with decreased social initiative in ASD children, and increased IBS behaves. ASD evidence acceptance and acceptance.</p> IBS between ASD children's posterior and caregivers anterior regions was correlated with greater caregiver social initiative (all p < 0.05).

Conclusion: Our study demonstrated the ecological validity of EEG hyperscanning in investigating the neural mechanism of social deficit for ASD. The disrupted interbrain posterior connectivity of ASD dyads could serve as a potential neural basis, offering targets for interventions to improve social dysfunction. And the enhanced caregiver-child anterior-posterior synchrony may be a compensatory mechanism reflecting the importance of compensatory mechanism, reflecting the importance of caregivers in behavioral interventions for ASD children.

Autism Spectrum Disorder, hyperscanning, Inter-brain synchrony, caregiver-child interaction, social initiation.





#### Posterior Reversible Encephalopathy Syndrome (PRES) in a 7-year-old Child who Initially Presented with Severe Headache:

A Case Report Jeson E. de Vicente, MD Michael Dorothy Frances M. Tamayo, MD, Ardynne Martin C. Mallari, MD

Background: Posterior reversible encephalopathy syndrome (PRES) is a novel clinical radiological syndrome that is rare in children with incidence of only 0.04% in general pediatric population worldwide and is characterized by headache, altered sensorium, seizures and focal visual disturbances, often associated with hypertension. This case report aimed to present the typical clinical and radiologic findings of PRES, its management and prognosis and to fill the gaps in literature for future research.

Case Presentation: A 7 year-old Filipino girl presented to our department with sudden onset of severe throbbing headache at the bitemporal area, associated with sudden loss of vision on both eyes, generalized tonic-clonic seizure for 3 minutes, altered consciousness and hypertension of 150/100mmHg. Neurologic and Fundoscopic Examination revealed normal findings with no meningeal signs. Plain Computed tomography (CT) scan revealed vasogenic edema prominent over the bilateral parieto-occipital areas and a thyroid function test was done and revealed hyperthyroidism which explains the hypertension. Patient was managed with strict blood pressure control by giving antihypertensive drug, anticonvulsants to control the seizure, and prophylthiouracil for hyperthyroidism and had remission of symptoms in less than 24 hours after initiating the treatment. Clinico-radiologic findings were all consistent with Posterior Reversible Encephalopathy syndrome.

Discussion/Conclusion: PRES is a disease that is well-known to neurologists and neuroradiologists however, it remains unfamiliar to many Pediatricians and delayed diagnosis and treatment may lead to a poor neurologic prognosis with irreversible brain damage. Therefore, early recognition of the symptoms, its characteristic radiologic findings and diagnosis of PRES is very essential in order to initiate immediate and appropriate patient management to prevent unwanted permanent neurologic injury or even death.

Keywords: Posterior Reversible Encephalopathy Syndrome, Vasogenic Edema, Hypertension, Hyperthyroidism Neurology



#### Spinocerebellar Ataxia Type 1 (SCA 1) in a Filipino Boy: A Case Report

Joanna Lissa F. Payuran Gatchalian Maria Antonia Aurora Moral-Valencia

Background: Spinocerebellar ataxia is a rare, inherited, progressive, neurodegenerative, and heterogenous disease that mainly affects the cerebellum with a worldwide prevalence of 2.7 per 100,000 on systematic review. Prevalence data for Asian countries is lacking due to limited access to specialists and genetic testing facilities, but there are Asian-specific, genotypic and phenotypic aspects reported.

Case Presentation: A 12 year old male from San Mateo, Rizal, Philippines presented with chronic progressive ataxia, speech difficulties and cognitive impairment. Three generation pedigree revealed similar symptomatology on the paternal side without genetic confirmation but is suggestive of the phenomenon of anticipation, with increasing severity of the disease and earlier age of onset of symptoms with successive generations. Cranial MRI with contrast showed cerebellar atrophy. Whole exome sequencing revealed a heterozygous pathogenic expanded allele (-71 CAG) in the full penetrance range identified in the ATXN1 gene.

**Discussion:** Upon current literature review, there has been no published reports of spinocerebellar ataxia type 1 (SCA1) in the Philippines. This case report contributes to the scarce local data on a rare disease which may also be underdiagnosed and under-reported and may aid in the recognition, knowledge and understanding of this condition hopefully leading to pathways of cure.

Keywords: Spinocerebellar ataxia, SCA1, ATXN1, Filipino

Neurology



#### Role of Multiple Sleep Latency Test (MSLT) In the Workup of Children with Hypersomnolence

liharika Malhotra, Dr Vikas Goyal, Kiara Sclip Dr David Kilner, Dr Nitin Kapur

Background: Hypersomnolence and excessive daytime sleepiness (EDS) can be idiopathic or associated with narcolepsy. The Multiple Sleep Latency Test (MSLT) is the gold standard for diagnosing narcolepsy, though significant gaps currently exist in understanding the interpretation of MSLT in diagnosing and managing paediatric hypersomnolence.

**Objectives:** This retrospective study aims to describe a) a cohort of children investigated for hypersomnia and b) their MSLT outcomes.

Methods: Clinical, demographic, and MSLT data were retrospectively collected from children who underwent hypersomnolence investigation at a tertiary paediatric hospital (January 2015- December 2023). Data included age, gender, body mass index (BMI), comorbidities, medications, polysomnography, MSLT results, diagnoses, treatment, and outcomes. Association between MSLT parameters and diagnostic outcomes was explored using the American Sleep Association criteria.

Results: 125 children (56F) were identified through our hospital database, with data on 72 (30F; median age 12.42 years, IQR=4.11) collected. 19 (26%) were HLA-positive for narcolepsy. MSLT parameters suggested narcolepsy in 13 (18.1%) children; 1 additional child had low orexin levels. The median sleep latency was significantly shorter in the narcolepsy group compared to the non-narcolepsy (01:39 minutes vs 12.58 minutes, p<0.001). No age or gender differences were observed between groups. Diagnostic PSG on the preceding night led to alternate diagnoses in 5 children.

**Conclusion:** While the data is only partially complete, interim analysis suggests narcolepsy present in a minority of this cohort. The night-before diagnostic PSG changed the diagnosis in 5 children. However, the 5th nap did not change any outcomes, so the utility of this practice needs to be re explored.





#### Enigma: A Case on Anti-N-Methyl-D Aspartate Receptor (Anti-NMDAR) Encephalitis

Angelica G. Quitasol, MD
Ma. Eugene G. Amante, MD,
FPPS, FCNSP, FPNA, MMHA,
Judah D. Gozar, MD, FPPS, FPCC, FPSCCI

Anti-N-Methyl-D-Aspartate receptor (anti-NMDAr) encephalitis rare and recently discovered subacute, autoimmune neurological disorder with a global incidence affecting one per 1.5 million per year. In the Philippines, a total of eighteen pediatric cases been identified from 2014-2021 at the Philippine General Hospital. our locality, this is the first diagnostically confirmed case.

This is a case of a thirteen-year-old female who presented at the emergency room with behavioral changes. She had intact cranial nerves and normal sensorimotor examination. Anxiolytics sedative were given. Lumbar puncture was done where cerebrospinal fluid (CSF) differential count showed lymphocytic pleocytosis. CSF sample was sent out for definitive testing for anti-N-methyl-D-Aspartate receptor (anti-NMDAr) which later turned out positive. Methylprednisolone, antiviral and intravenous immunoglobulin (IVIG) were given. Gradual improvement was but long hospital stay subjected the patient to infection.

As mental health issues arise in today's generation, distinguishing a psychologic from a neurologic disease is challenging especially in areas that lack facilities for definitive testing. This reviews an approach to patients presenting with behavioral changes, discusses the course progression of anti-NMDAr encephalitis and how it was promptly recognized and managed in a local setting.

Keywords: autoimmune encephalitis, psychosis, adolescents

Neurology



#### Demographic & Clinical Profile of Children with Intracranial Abscess and Cyanotic Congenital Heart Disease in a Tertiary Hospital in Manila: A Correlation of Factors

Sunshine Marie T. Reinbold, MD, Elissa Dyann B. Soriano, Felizardo Gatcheco, Maria Estrella Ilustre

**Background:** Brain abscess, a severe and potentially life-threatening condition, remains to be a significant challenge in managing patients with uncorrected or partially palliated congenital cyanotic heart disease.

**Objective:** By focusing on the children's profile variables, this paper sought to determine the relationship between their demographic profile, clinical profile, and clinical outcomes. Having a clear grasp of the intricate relationship between the factors mentioned above will pave the way for the provision of comprehensive care and vigilance in managing these complex patients.

**Methods:** The study utilized both descriptive and correlational methods. The online-based chart review which transpired from January 2016 to December 2023 has enabled the researcher to obtain data from all pediatric patients in Jose R Reyes Memorial Medical Center diagnosed with intracranial abscess via radiologic imaging with concomitant cyanotic congenital heart disease regardless of intervention and outcome within 7 years.

Results: Using both descriptive and inferential tools of statistics, the findings revealed that children with congenital heart disease and intracranial abscess are mostly males aged 10-18 years old. Weight for age and O2 saturation levels were 60-95%. Majority had a hospital stay of 31 to 50 days. Hemoglobin levels were mostly above 150 and hematocrit levels were 34-71%. About half of the patients were cured with no neurological deficits, 15% were cured but with residual neurological deficits and about 38% died.

Conclusion: The results of the Chi-square and Spearman rho test show that the following variables are correlated, to wit, hospital stay and age, hospital stay and nutritional status, as well as O2 saturation and clinical outcome. Shorter lengths of hospitalization have been linked to the children's nutritional status, while higher O2 saturation levels have served as predictors for favorable clinical outcomes. There is a weak association between the size of the abscess and the OR time with the children's clinical outcomes but a strong negative relationship between hematocrit levels and outcomes.

Neurology



#### Hypokalemic Periodic Paralysis in an Adolescent Male in the Philippines: A Case Report

Background: Hypokalemic periodic paralysis manifests as bilateral muscle weakness and low potassium levels, with minor episodes potentially resolving spontaneously and severe cases necessitating intensive medical care. Given its rarity, recommendations rely heavily on anecdotal evidence, emphasizing the significance of distinguishing this condition from other causes of weakness and paralysis for prompt and appropriate treatment, as highlighted by this case report.

Case Presentation: A 15-year-old Filipino male presented at the emergency department with bilateral weakness of both upper and lower extremities, impeding his ability to walk, with a history of leg weakness after strenuous physical activity at a theme park. The patient had no cardiorespiratory, gastrointestinal, or urinary symptoms, and had an unremarkable medical and family history. Examination revealed stable vital signs, with motor strength of 2 out of 5, hypotonia, areflexia and sensory deficits in the lower extremities. During the acute event, severe hypokalemia, an abnormal nerve conduction velocity study, and electrocardiogram changes were observed, which were features consistent with hypokalemic periodic paralysis. Treatment with potassium infusion led to rapid improvement in motor strength and with normalization of serum potassium levels at discharge.

**Discussion and Conclusions:** Hypokalemic periodic paralysis, linked to multiple etiologies, continues to be an uncommon yet treatable cause of acute-onset muscle weakness. In resource-limited settings, where genetic testing might not be available to support diagnosis of primary hypokalemic periodic paralysis, additional examinations are crucial to exclude alternative underlying conditions; timely identification of features is essential to avoid delays in treatment.

Keywords: Hypokalemic periodic paralysis, muscle weakness, potassium, pediatrics





#### Clinical, Biochemical, and Genetic **Profiles of Patients Screened with Fatty Acid Oxidation Disorders: A Single Institution Experience** Mary Ann R. Abacan, MD, MSc, FPPS

Background: Fatty acid oxidation disorders (FAODs) are a group of metabolic disorder with a heterogeneous clinical phenotype. There are no local studies that have reported the profiles of these FAODs patients.

Objectives: The aim of the study is to determine the clinical, biochemical, and genetic profiles of the patients screened by Expanded Newborn Screening (ENBS) with FAODs at the Institute of Human Genetics - National Institutes of Health (IHG-NIH). It also aims to determine the genotype-phenotype correlation of the FAOD confirmed or suspect patients.

Setting: The study was conducted in the IHG-NIH.

**Population:** All patients who screened positive for FAODs in the ENBS, and underwent plasma acylcarnitine and molecular genetic analysis from July 2021 to June 2023 were included in the study.

Methodology: Clinical, biochemical, and genetic features of FAODs patients diagnosed by newborn screening were reviewed and analyzed.

Results: A total of 148 patients were included in the study, 47.3 % of which are from Newborn Screening Center (NSC) - NIH. Newborn screening using tandem mass spectrometry was done at a mean age of 9.3 days. Majority of the patient included in the study flagged for MCAD deficiency (41.9%). Confirmatory test through plasma acylcamitine and genetic test were done at a mean age of 54.9 days and 56.8 days, respectively. Through genetic testing, we were able to confirm 2 fatty oxidation disorders (1 CPT1, 1 VLCADD), and 4 FAOD suspects (3 VLCADD, 1 MADD). All 6 patients were asymptomatic throughout the follow up period, however the CPT1 patient was noted to have liver dysfunction on baseline diagnostics.

**Conclusion:** There are no clinical and biochemical correlation that can be gathered from this cohort of patients as all patients were asymptomatic at the time of testing. Among those with mutations, no genotype-phenotype correlation was established perhaps this is due to the nature of the mutation and short follow up

Keywords: Fatty acid oxidation disorders, Expanded newborn screening, Genotype-Phenotype Correlation, CPT1, VLCADD, MADD

Genetics/Genomics



#### 10p Deletion Syndrome in a Filipino Child: A Case Report Quino Alden S. Alberto, MD, DPPS Leniza G. De Castro Hamoy, MD, MSGS

**Background:** We present a 3 months old Filipino male who presented with dysmorphic facial features, growth delay, developmental delay, hearing loss, atrial septal defect, right to left cross fused renal ectopia, and hypocalcemia. Chromosomal analysis revealed a terminal deletion of the distal short arm (p) of chromosome 10 from band p12 to the terminus. Review of literature showed that our patient shared clinical features previously reported in literatures.

Conclusion: 10p deletion syndrome/Monosomy 10p may present with a variable clinical presentation depending on the size, location and genes affected of the deletion. 10p deletion syndrome can have overlapping features with DiGeorge syndrome due to the genes affected by the deletion. FISH or chromosomal microarray studies can be done to better characterize these deletions and identify which genes are affected.

Keywords: 10p Deletion, Chromosome 10, DiGeorge syndrome

**Genetics/Genomics** 



#### A Case Report of the First Filipino Infant Diagnosed with Cystic **Fibrosis Through the Philippine Newborn Screening Program** Bernadette Macrobon MD

**Background:** Cystic Fibrosis (CF) is a rare condition among Asians and has not been reported in the arriorg Asians and has not been reported in the Philippines as of February 2023. The inclusion of this disease in the Philippines' Expanded Newborn Screening Program (ENBS) has provided this Filipino family the opportunity of early detection and appropriate management of this condition that could ensure the whiteleft the probability of the probability o survival of the proband and his other surviving siblings.

**Case Presentation:** Here we present a case of a 24-months-old male who had a positive Expanded Newborn Screening (ENBS) test for cystic fibrosis and eventually underwent further tests to confirm a homozygous deletion of exons 1 - 2 of the CFTR gene, an uncommon mutation seen in most cases of CF worldwide. He subsequently had recurrent pneumonia but is being managed by a team consisting of a pulmonologist, gastroenterologist and a metabolic dietitian. The proband had an older sibling whose Newborn Screening (NBS) test was normal and who eventually expired from recurrent bouts of pneumonia. This sibling was never managed as a case of cystic fibrosis. Implications on the diagnosis and management of CF in the local setting with limited resources is also discussed, including updates on the current status of the patient and his management in 2024.

Discussion/Conclusion: The importance of Discussion/Conclusion: The Importance of an appropriate CF panel customized to the local population should be reiterated and carrier testing should be encouraged to help with proper family counseling for future pregnancies for the family involved. A major limiting factor in the management of CF is the limited testing for family members as well as the limited testing for family members as well as the limited experience of health care workers in managing this condition.

Keywords: c cystic fibrosis, newborn screening, Philippines, case report





#### **Genetics/Genomics**



## Pneumothorax as an Initial Symptom of Undiagnosed Marfan Syndrome: A Case Report Loren Bernadette D. Banario MD.

Marfan Syndrome is a multisystem connective tissue disorder of autosomal dominant inheritance, that typically involves cardiovascular, skeletal, and ocular manifestations. Pneumothorax, while a recognized complication in Marfan syndrome, is not a common initial presentation with reported prevalence rates ranging from 4% to 14%. This case report describes a 16-year-old male, suffering from progressive left-sided chest pain and shortness of breath following weightlifting. He denied any history of trauma, respiratory illness, or family history of connective tissue disorders. Physical examination revealed a tall, thin individual with a body mass index of 13.6 kg/m². Pulmonary examination demonstrated diminished breath sounds over the left lung. Further examination revealed subtle marfanoid features, including arachnodactyly, positive wrist sign, positive thumb sign, mild pectus excavatum and, scoliosis. The chest computed tomography confirmed a pneumothorax of left lung. Echocardiography revealed mild aortic root dilatation. This finding, in conjunction with the patient's systemic features and the presence of spontaneous pneumothorax, strongly suggested a diagnosis of Marfan syndrome, which was subsequently confirmed by genetic testing. This case highlights that pulmonary symptom like primary spontaneous pneumothorax, while often benign, can be the presenting manifestation of a serious underlying genetic condition. A high index of suspicion, a comprehensive physical examination, and appropriate investigations are crucial for early diagnosis and management of Marfan syndrome.

Keywords: Pneumothorax, Marfan Syndrome, adolescent, aortic root dilatation, case report

### A Novel Pathogenic Variant Identified in a Rare Case of Harlequin Ichthyosis

Adrienne D. Caluag, Marc Andrew Perez, Ebner Bon Maceda, Melita Terrado

Background: Harlequin ichthyosis (HI) is a rare and the most severe form of autosomal recessive congenital ichthyosiform dermatoses which primarily affects the skin characterized by a profound thickening of the keratin layer in fetal skin which is associated with the adenosine triphosphate (ATP) – binding cassette subfamily A member 12 (ABCA12) gene mutation. It is thought to affect 1 in 300, 000 babies with no known sex or racial predilection. In the Philippines, only eight HI patients were documented in the central data of the Philippine Dermatologic Society Health Information System (PDS-HIS) from 2011 to 2017 while 24 cases were reflected in the Philippine Peciatric Society (PPS) registry since its inception in 2006. Neonates with HI are typically encased in a markedly thickened, hard stratum corneum, which is often described as armor-like at birth. Soon after birth, this thick casing cracks resulting in deep red transverse and longitudinal fissures separating thick, yellow plates of skin. They also demonstrate ectropion and eclabium, underdeveloped ears and nose, and edematous hands and feet

Case Presentation: This is a case of a full-term neonate with clinical features of harlequin ichthyosis noted at birth described as plate-like configuration separated by fissures with associated ectropion, eclabium, and underdeveloped hands and feet. Patient was admitted and a complete work – up were done including skin punch biopsy test and genetic testing which led to identifying a novel variant of this rare disease. Skin punch biopsy was facilitated which showed massive hyperkeratosis in the stratum corneum of epidermis which was consistent with harlequin ichthyosis. Invitae Congenital Ichthyosis Panel, which includes testing of ABCA12 gene associated with autosomal recessive congenital ichthyosis, was performed and the data analysis showed one pathogenic variant, c.12/10C>T (pArg404\*) present at exon 11 which was concluded to be a new variant and another of uncertain significance, c.7405T>C (p.Cys2469Arg) present at exon 50 identified in ABCA12 gene which was later on reclassified as likely pathogenic, associated with autosomal recessive congenital ichthyosis. Further parental studies showed one likely pathogenic variant, c.7405T>C (p.Cys2469Arg) from the paternal sample and a pathogenic variant, c.1210C>T (p.Arg404\*), was detected from the maternal sample resulting in the trait being inherited by the patient. Genetic evaluation has mapped an autosomal recessive mutation in the ABCA12 gene with the probable implication that ABCA12, Exon 11, c.1210C>T (p.Arg404\*) sequence change creates a premature translational stop signal (p.Arg404\*) in the ABCA12 gene that is expected to result in an absent of inspirated protein product. Loss of-function variants in ABCA12 are known to be pathogenic and this variant is not currently present in population databases. In addition, his has not been reported in the literature in individuals with ABCA12-related conditions. For these reasons, it has been observed in individuals with harlequin ichthyosis.

Because of the disease's rarity, no information on its racial and gender predisposition is available. The distinctive clinical features that caused its immobilization and the skin which was characterized as thick plaques separated by deep fissures cliniched the diagnosis of harlequin ichthyosis. Prenatal diagnosis can be done through fetal DNA analysis, which could be an option for those who had history of HI, and through amniocentesis or chorionic villous sampling. Advances in ultrasound technology are beneficial in diagnosing HI. Genetic confirmation of ABCA12 gene mutation is both reliable and conclusive in establishing the diagnosis. Since this is a novel variant coupled with the paucity of references regarding HI, the knowledge regarding this rare disorder remains to be elucidated and most information come from management approach and algorithm of other ichthyosis cases. Mapping mutations and identifying specific which will translate to effective management and tailored genetic counselling which will include estimation of risk of recurrence most especially in families with consanguineous background.

Discussion/Conclusion: Harlequin ichthyosis is a rare type of congenital ichthyosis that can cause a variety of problems throughout one's life but particularly during the neonatal period. The skin punch biopsy and the genetic study further solidified the impression and confirmed the diagnosis of congenital ichthyosis, phenotype harlequin ichthyosis. Genetic testing should be an indispensable part in the management hence the need for its availability and accessibility. It is necessary to form an interdisciplinary team in order to manage the patient effectively. This report also aimed to present a novel variant of a rare condition mainly diagnosed clinically through classic skin manifestations later confirmed by genetic testing. A call for publications of case reports and series regarding diagnosed HI patients and experiences in its management is in order to provide structure to future guideline development.

Keywords: autosomal recessive congenital ichthyosis, harlequin ichthyosis, ABCA12 gene, genetic testing





# Atypical Phenotypes and Novel OCRL Variations in Southern Chinese Patients with Lowe Syndrome

Rong Du, Chengcheng Zhou, Shehong Chen, Tong Li, Yunting Lin, Aijing Xu, Yonglan Huang, Huifen Mei, Xiaoli Huang, Dongdong Tan, Ruidan Zheng, Cuili Liang, Yanna Cai, Yongxian Shao, Wen Zhang, Li Liu, Chunhua Zeng

**Background:** Lowe syndrome is characterized by the presence of congenital cataracts, psychomotor retardation, and dysfunctional proximal renal tubules. This study presents a case of an atypical phenotype, investigates the genetic characteristics of eight children diagnosed with Lowe syndrome in Southern China, and performs functional analysis of the novel variants.

**Objective:** The study provides valuable insights into the clinical and genetic features of Lowe syndrome in Southern China. Urinalysis is an important and simple test for detecting atypical Lowe syndrome and should not be ignored. Novel OCRL variants contribute to a better knowledge of the disease's genetic spectrum.

**Methods:** Whole-exome sequencing was conducted on eight individuals diagnosed with Lowe syndrome from three medical institutions in Southern China. Retrospective collection and analysis of clinical and genetic data were performed, and functional analysis was conducted on the five novel variants.

Results: In our cohort, the clinical symptoms of the eight Lowe syndrome individuals varied. One patient was diagnosed with Lowe syndrome but idi not present with congenital cataracts. Common features among all patients included cognitive impairment, short stature, and low molecular weight proteinuria. Eight variations in the OCRL gene were identified, encompassing three previously reported and five novel variations. Among the novel variations, three nonsense mutations were determined to be pathogenic, and two patients harboring novel missense variations of uncertain significance exhibited severe typical phenotypes. Furthermore, all novel variants were associated with altered protein expression levels and impacted primary cilia formation.

**Conclusion:** This study describes the first case of an atypical Lowe syndrome patient without congenital cataracts in China and performs a functional analysis of novel variants in the OCRL gene, thereby expanding the understanding of the clinical manifestations and genetic diversity associated with Lowe syndrome.

**Genetics/Genomics** 



#### "The Missing Piece of a Greek Warrior" Grand Rounds on Wolf Hirschhorn Syndrome

This is a case of a 1-day old infant from Montalban, Rizal who came to National Children's Hospital (NCH) due to Prematurity. She was admitted last December 26, 2020 with an admitting diagnosis of Prematurity, 34 weeks AOG, Multiple Congenital Anomalies (microcephay, broad nasal bridge, hypertelorism, low set ears, micrognathia, preauricular sinus, both ears, Congenital heart disease, Acyanotic type probably ventricular septal defect, sacral dimpling, ventral hypospadias and cryptorchiclism) Smallfor Gestational Age. Further work-up revealed that he has Wolf Hirschhorn Syndrome.

**Genetics/Genomics** 



#### A Filipino Child Presenting with Primrose Syndrome with a Deletion on the ZBTB20 Gene Variant

Triane Claire Lastimosa, MD, Barbra Cavan, M.D, Myra Altonaga, MD, Nathalie Hernaez, MD

Background: Intellectual disability in association with congenital anomalies affects 1-3% of the population, and due to its diversity, diagnosis can be challenging. Primrose syndrome is one of these rare genetic conditions that present with such disability and anomalies. It is difficult to recognize early due to the limited number of reported case, and the more identifiable and distinct features manifest at a later age. This syndrome is caused by a defect in the ZBTB20 gene, reported as either a microdeletion or a missense variation. Both variants exhibit overlapping clinical manifestations, including intellectual disability psychomotor delay and characteristic facial features (macrocephaly, prominent forehead, down slanting palpebral fissures, ptosis and large ears). Other common features include skeletal malformations, normal birth weight and overgrowth. Missense variants specifically present with additional features such as muscle wasting and calcifications in the brain and pinnae, which are not observed in the microdeletion variant. Furthermore, corpus callosum abnormalities, diabetes mellitus and endocrine complications are more commonly associated with the missense variant with the microdeletion variant.

This report aims to present the case of an 8 year old Filipino female who was diagnosed with laryngomalacia, patent ductus arteriosus, and mild tricuspid regurgitation, global developmental delay and dysmorphic features (ocular anomalies, high anterior hairline, sparse eyebrows, down slanted palpebral fissures, and a high palate). Chromosomal analysis showed a normal female karyotype. However, next generation sequencing of a Neurodevelopmental Gene Panel revealed a heterozygous deletion of the entire ZBTB20 gene. This confirms Primrose syndrome in this child. The features this patient indeed aligns more with the microdeletion/copy number variant (CNV) phenotype described in literature. Management and surveillance guidelines emphasized evaluating for neurodevelopmental issues, hearing, eye, endocrine, and rarely, skeletal problems.

**Conclusion:** Patients with intellectual disability and multiple anomalies may benefit from DNA testing. Confirmation of the diagnosis in this patient guided the healthcare team in the multidisciplinary approach, including addressing the developmental concerns at this age.





#### A Rare Case of Caudal Regression Syndrome in a Newborn Olivia Angelyn R. Matela, MD

Background: Caudal regression syndrome (CRS) is agenesis or absence of the lower thoracic, lumbar, sacral, or coccygeal spine which occurs in 125,000 of cases and only 1% of these cases occurs above 6th thoracic vertebrae where it is incompatible with life as manifested in this patient. The objective of this clinical report is reinforcing good prenatal check-up, multidisciplinary care

of the child and parents along with palliative care.

Case Presentation: A case of CRS of a newborn baby of a newly diagnosed overt diabetic mother which was noted via prenatal ultrasound. The patient's history was taken from parents and physical examination was done upon birth. Plain radiographs were only taken for evaluation. Agenesis from the 6th thoracic vertebrae down to the sacral vertebrae associated with multiple congenital anomalies were observed. A multidisciplinary team managed the patient and parents until patient expired on the 8th day of life.

**Conclusion:** CRS is a rare congenital anomaly strongly associated with maternal diabetes where Filipinos are at high-risk. Control of diabetes is necessary to reduce the risk of occurrence and good prenatal care. Agenesis above the 6th thoracic vertebrae is incompatible with life.

Keywords: caudal regression syndrome, uncontrolled diabetes, agenesis

**Genetics/Genomics** 



## A Case Report: Testicular Regression Syndrome

Testicular regression syndrome is an uncommon condition wherein only a few cases have been reported in the Philippines. It is also known as vanishing testis or congenital anorchia, and is defined as the absence of testis in males with normal external genitalia. A lot of patients with this condition were initially diagnosed with Cryptorchidism, but with no detectable testis upon further workup. Presented in this case is a patient who was initially assessed as Cryptorchidism, but upon extensive investigation, cord structures and a testis were not visualized, leading to the diagnosis of vanishing testis. Considering the rareness of this condition and the limitation in the available literature, this case report aims to serve as stepping stone towards further studies to increase awareness among healthcare workers and subsequently lead to enhancement in the diagnosis and management of testicular regression syndrome.

Keywords: testicular regression syndrome, vanishing testes, non-palpable testes, congenital anorchia, case report

**Genetics/Genomics** 



# When Two Become One: A Case of Monochorionic, Diamniotic Twins with only Twin 2 Diagnosed with Medium Chain Acyl Coenzyme-A Dehydrogenase (MCAD) Deficiency Rizza Mae V. Salvania. MD

Medium Chain Acyl CoA Dehydrogenase (MCAD) Deficiency is an inherited autosomal recessive metabolic disorder that affects fatty acid oxidation and can lead to life-threatening metabolic crises. It is due to ACADM genetic mutation which encodes for the MCAD enzyme. This is a rare case of monochorionic, diamniotic twins

This is a rare case of monochorionic, diamniotic twins where only one of the twins presented with MCAD deficiency during the course in the neonatal intensive care unit. Both twins were initially managed as cases of neonatal pneumonia but the normal twin had a short course admission. The affected one had multiple hypoglycemic episodes and eventual liver enlargement and abdominal distention. The first twin was discharged well, however, the second twin demised.

The clinical presentation, diagnostic workup, and management of the affected twin are discussed, emphasizing the importance of newborn screening in the early recognition and prompt intervention to prevent severe metabolic decompensation.

Keywords: hypoglycemia; autosomal recessive; octanoylcarnitine (C8), decanoylcarnitine (C10), and hexanoylcarnitine (C6).





#### Swyer Syndrome: A Rare but Important Cause of Primary Amenorrhea

Madeline C. Sibulo, MD, Pocholo F. Madamba, MD

Background: Swyer Syndrome or 46 XY complete gonadal dysgenesis is a rare type of disorders of sex development (DSD) for which patients are phenotypically female and with presence of female internal genital tract structures. However, since this syndrome lack sex glands (ovaries), these patients have "gonadal streaks" meaning that the gonads are generally streaks of fibrous functionless tissues which would manifest clinically as amenorrhea and absence of secondary sexual characteristics

Case Presentation: Herein we report a case of a 17 year old female, Filipino, born to a non-consanguineous marriage who sought consultation for primary amenorrhea. There were no other accompanying symptoms. On pertinent physical examination obese (BMI 30), breast tanner 2, and absent axillary and pubic hair. Pelvic ultrasound which showed hypoplastic uterus and no ovaries were visualized. Blood tests revealed hypergonadotropic hypogonadism (FSH of 53.10 mIU/mL, LH 15.58 mIU/mL (H). Karyotyping showed a 46 XY pattern. Careful disclosure of the condition was made and then the patient underwent laparoscopic adhesiolysis, bilateral salpingectomy and gonadectomy. Operative findings of the uterus being small, approximately 2 x1cm, the fallopian tubes were grossly normal, with bilateral streak gonads. Patient then received hormonal replacement therapy and started menstruating around the sixth month of follow-up.

Conclusion: Swyer Syndrome or 46-XY complete gonadal dysgenesis is a rare but important cause of primary amenorrhea and therefore should be kept in mind whenever evaluating a case of primary amenorrhea. The management of these patients is complex and requires a multidisciplinary team. Early diagnosis is important because of the increased risk of germ cell turnor as well as to maximize growth of these patients.

Keywords: Swyer syndrome, 46 XY complete gonadal dysgenesis, primary amenorrhea, streaky gonads

**Genetics/Genomics** 



#### A Case Report on Beckwith-Wiedemann Syndrome Presenting as Persistent Asymptomayic Hypoglycemia in the Newborn

Background: Beckwith-Wiedemann Syndrome (BWS) is a disorder of growth regulation exhibiting somatic overgrowth and an increased predisposition to embryonal tumors. The clinical presentation is highly variable; some cases lack the characteristic findings of exomphalos, macroglossia, and gigantism as first described

Case Presentation: We present a case of a term newborn delivered via primary cesarean section from a non consanguineous marriage, APGAR 8,9 birth weight 3855 grams, Ballards score 40 weeks, large for gestational age, infant of diabetic mother who presents with asymptomatic hypoglycemia. Pertinent newborn physical examination included a 0.5x0.5cm hyperpigmented patch on the right chest, protruding tongue. Being an infant of diabetic mother, capillary blood glucose monitoring was done however that patient had persistent asymptomatic hypoglycemia despite intravenous infusion and expressed breastmilk as top-up, eventually needing an umbilical catheterization and requiring glucose infusion rate as high as 15. Pertinent work-ups done including septic work-up, ultrasound of the abdomen revealing normal results. Endocrinology work-up done revealing hyperinsulinism (serum insulin 11.60 ul/ml.; normal value 5-10ul/ml.). Patient was referred to a Geneticist for which a DNA methylation testing was done revealing a mosaicism for paternal uniparental disonny, which is consistent with a genetic diagnosis of Beckwith-Wiedemann syndrome.

Conclusion: Beckwith Wiedemann syndrome (BWS) has classically been characterized by macroglossia, macrosomia, abdominal wall defects and an increased risk for embryonal tumors. There is growing recognition that not all patients with BWS display all of these phenotypic features and that patients have remained undiagnosed because they did not present with one of these features. As such, high clinical index of suspicion is needed to clinch diagnosis along with laboratory tests. BWS should be included in clinical consideration in newborns with hypoglycemia. These is a paucity of report in the literature from developing countries and thus should be reported to create further awareness and highlight peculiarity of management as may be applicable.

Keywords: Beckwith-Wiedemann Syndrome, Asymptomatic hypoglycemia, protruding tongue, large for gestational age **Genetics/Genomics** 



#### A Case of Osteogenesis Imperfecta Krystabel Adriah R. Suarez, MD

Background: Osteogenesis imperfecta (OI) is a rare genetic disorder with several subtypes manifesting with mild to severe clinical features. For this case, the patient's mother, a licensed physician, already suspected OI due to the patient's history of recurrent fractures and blue sclerae, however other physicians initially dismissed the impression.

Case Presentation: Patient L.A. is a 3.5-year-old, male presenting with bluish sclerae and recurrent fractures after mild trauma. Patient was referred to a geneticist and genetic panel revealed pathogenic COL1A1 gene. Management included casting and medical management reserved for fracture recurrence. Currently, the patient has no complications and attends daycare with restricted physical activities.

Discussion/Conclusion: OI although a rare disorder should still be considered in a child with bluish sclerae most specially when associated with recurrent fractures. Thorough patient history and physical examination are crucial for accurate diagnosis, and rare conditions should not be overlooked based solely on their rarity.

Keywords: Osteogenesis imperfecta, OI, recurrent fractures, blue sclerae





## A Case Report of Potter Syndrome in Region II Trauma and Medical Center

Mary Erika V. Orteza, MD, DPPS

Background: Potter Syndrome is a rare and fatal congenital disorder caused by oligohydramnios due to renal agenesis, resulting in characteristic physical abnormalities and severe respiratory distress. This case emphasizes the importance of early prenatal diagnosis, prenatal care and the necessity for genetic prenatal counselling for anticipatory guidance, in terms of management, decision making and assistance in coping mechanism.

Case Presentation: This is a case of a newborn preterm male, delivered via Caesarean section to a 24-year-old primigravida mother. The patient presented with prominent epicanthal folds, deformed low set ears, abnormal positioning of the limbs, severe respiratory distress due to lung hypoplasia and bilateral renal agenesis. A post natal counselling was rendered. This case emphasizes the critical importance of early prenatal diagnosis and comprehensive perinatal and post natal management in cases of Potter Syndrome.

Discussion/Conclusion: Potter syndrome is an autosomal disease associated with multiple problems and mostly are incompatible with life. The complexity of its symptoms posses challenges in clinical management and psycho social impact to the parents. Clinicians should advocate for early detection and proactive management of congenital anomalies like Potter Syndrome through advanced prenatal screening. Future research should focus on refining diagnostic tools, exploring potential therapeutic interventions to mitigate fetal renal and pulmonary complications, and evaluating long-term outcomes for affected infants.

Keywords: Potter Syndrome, Bilateral Renal Agenesis, Oligohydramnios, Pulmonary Hypoplasia Genetics/Genomics



## Beyond Recurrent Epistaxis, a Deeper Danger Awaits

Ang Chen Xiang, Chin Hui-lin

Background: Hereditary Hemorrhagic Telangiectasia (HHT), also known as Osler-Weber-Rendu syndrome, is an autosomal dominant genetic disorder characterized by vascular malformations. Clinically, this can manifest as spontaneous recurrent epistaxis, mucocutaneous telangiectasias, and more insidious arteriovenous malformations (AVM) in visceral organs like the brain, pulmonary system and liver. HHT can be clinically insidious and easily missed if not clinically suspected. We present a proband and her family with HHT, including the subsequent diagnostic workup and pre-symptomatic management of positive HHT screening.

Case Presentation: A seven-year-old proband, youngest of three children and previously well, demised suddenly after experiencing acute severe headaches and vomiting following spontaneous atraumatic intracranial hemorrhage. She had infrequent epistaxis prior to this incident. She had a significant family history of multiple individuals in the family with recurrent spontaneous epistaxis, including her forty-two-year-old mother and fifteen-year-old brother, as well as multiple relatives in her extended family. There was no consanguinity, nor a family history of stroke or intracranial bleed.

Clinical gene panel analysis performed on the symptomatic mother identified heterozygosity for NM 0011147533(ENG):c.1134G>A (p.Ala378=), a known pathogenic variant. Cascade analysis on proband's brothers revealed that her fifteen-year-old brother carried the familial variant while the other tested negative. Sample from the deceased proband was unavailable.

Screening tests were performed for the affected brother; chest radiograph was normal but brain magnetic resonance angiography and subsequent 4-vessel angiography revealed multiple small intracranial vascular malformations. These were successfully presymptomatically treated with gamma knife surgery.

Discussion: Genetic disorders such as HHT can hide in plain sight. The clinical presentation of HHT tends to only become evident in adulthood as its penetrance increases with age, especially over the age of 40. Early recognition that recurrent epistaxis in the context of a positive family history of multiple similarly affected individuals and examination of older members of the family for telangiectasia will aid diagnosis. Diagnosis, comprehensive care and health surveillance for HHT can improve its associated morbidity and mortality risk in affected children.

**Conclusion:** A high index of suspicious for HHT aids early diagnosis and reduction in morbidity and mortality.

Keywords: Hereditary Hemorrhagic Telangiectasia, Genetic Testing, Genetic Disorder, Recurrent Epistaxis, Arteriovenous Malformation Endocrinology and Metabolism



## Monogenic Hyperinsulinism due to Paternally Inherited Pathogenic ABCC8 Variant: A Case Report

Background: Congenital Hyperinsulinism (CHI) is a rare but significant cause of persistent hypoglycemia in children, with potential for severe neurological consequences if not promptly recognized. Recent advancements highlight its genetic basis, particularly mutations in genes like ABCC8 and KCNJ11, which affect the adenosine triphosphate (ATP) - sensitive potassium channel and contribute to its focal variant pathophysiology.

Case Presentation: This case involves an 18-day-old female neonate presenting with seizures, born to nonconsanguineous parents with a history of maternal gestational diabetes. Despite initial management attempts including intravenous antibiotics for suspected sepsis and glucose infusions, seizures persisted, prompting transfer to a tertiary center where genetic testing revealed a paternally inherited ABCC8 variant, confirming focal monogenic hyperinsulinism. Medical management with diazoxide and later octreotide was unsuccessful, leading to a near-total pancreatectomy due to localized insulin hypersecretion.

**Discussion/Conclusion:** Our case highlights the intricate diagnostic and therapeutic challenges in managing neonates with CHI, especially in cases involving focal lesions. Genetic analysis revealing a paternally inherited ABCC8 mutation guided our decision for near-total pancreatectomy due to difficulties in localizing the lesion, underscoring the pivotal role of advanced imaging in surgical planning and management.

Keywords: Congenital hyperinsulinism, ABCC8 mutation, neonatal hypoglycemia



Endocrinology and Metabolism



#### Impact of the Covid-19 Pandemic on Children Diagnosed with Diabetic Ketoacidosis Admitted in a Tertiary Pediatric Hospital

Camille S. Cantalejo, MD Lorna R. Abad, MD

Background: The coronavirus disease 2019 (COVID-19) has plunged the world into an unprecedented crisis. Strenuous attempts to contain the COVID-19 pandemic at the national or regional level may have interfered with the efforts to prevent and control chronic illnesses like type 1 diabetes mellitus at the level of an individual, the community, and the healthcare system. According to several studies, the prevalence of diabetic ketoacidosis (DKA) rose in children and teenagers with type 1 diabetes mellitus throughout the COVID-19 pandemic.

**Objective:** This study aims to determine the effect of the COVID-19 pandemic on the incidence, severity, and outcome of children diagnosed with DKA admitted in a tertiary pediatric hospital.

Materials and Method: Two groups were identified and assessed retrospectively as the basis for classification: the pre-pandemic (2017–2019) and the COVID-19 pandemic (2020-2021). The severity of DKA was determined according to the standard definition of the 2022 ISPAD Guidelines for Diabetic Ketoacidosis.

Results: The study involved 136 participants, 63 of whom were recorded in the pre-pandemic period and 73 during the COVID-19 pandemic period. Data revealed no conclusive relationship between sex (p = 0.578), age (p = 0.225), or height (p = 0.876) across two time frames. However, data showed a significant difference between the weight (p = 0.007) and body mass index (p = 0.003) of children with DKA pre-pandemic and during the pandemic. Marked changes in weight and body mass index (BMI) reflect possible changes in health behaviors, healthcare access, or other variables that may have altered during the COVID-19 pandemic. Furthermore, there was no discernible difference between prepandemic and COVID-19 in terms of severity, incidence, or the amount of time between the onset of symptoms and consultation.

Conclusion: The incidence of DKA during the study periods offers important information despite not achieving statistical significance. The demographic and clinical characteristics of patients with DKA across two study periods indicate a degree of stability in patient profiles. Despite the unique circumstances of the pandemic, patient outcomes in terms of glycemic control and mortality were similar to those observed prepandemic. Meanwhile, the significant difference in weight and BMI emphasizes how crucial it is to monitor and metabolic health of DKA patients during times of crisis, like the COVID-19 pandemic. Comprehending these changes can provide focused treatments aimed at promoting the best possible health outcomes for susceptible patient groups.

Endocrinology and Metabolism



#### Gastroesophageal Reflux Disease in an Infant with Maple Syrup Urine Disease

a June Moneva, Melvina Baclavon

**Background:** The incidence of GERD among MSUD patients remains a study for in-depth undertaking.

Case Presentation/Discussion: Maple Syrup Urine Disease (MSUD) is a rare metabolic disorder with a newborn incidence of 1:185,000. It is the most common inborn error of metabolism in the Philippines, with a reported incidence of 1:82,354. GERD is the pathologic regurgitation of gastric contents into the oropharynx and/or esophagus, causing troublesome symptoms and/or complications, inevitably leading to problems in the nutrition of infants. It is a prominent phenomenon in children with underlying medical conditions, such as MSUD. The incidence of GERD among MSUD patients remains a study for in-depth undertaking. Furthermore, an association between the two is yet to be established.

The patient is a diagnosed case of MSUD who presented with persistent vomiting during the entire hospital course, despite not being in metabolic crisis. Work-up was subsequently done, revealing Severe GERD.

Treatment for GERD in infants is the same for those with and without inborn errors of metabolism and involves both pharmacologic and non-pharmacologic modalities. Conservative, non-pharmacologic approach includes thickening of formula milk (plain for non-MSUD patients and branched chain amino acids for MSUD patients) and positional therapy. Medical treatment involves using of H2 receptor antagonists or proton pump inhibitors, both of which have been proven safe and effective for the pediatric population as was applied in this case.

**Conclusion:** Given the insufficient data on these two, it is unclear whether GERD may be a consequence of metabolic crisis in MSUD, or a separate disease entity independent of leucine levels, as was the case. Regardless, the onset of GERD among MSUD patients, irrespective of leucine levels, is still of rare occurrence and worthy of further studies.

Keywords: rare metabolic disorder, maple syrup urine disease, gastroesophageal reflux disease

Endocrinology and Metabolism



#### Chronic Hip Pain Management of a Filipino Adolescent with Hutchinson Glifford Progeria Syndrome in a Tertiary Hospital in the Philippines

Tertiary Hospital in the Philippines
Lester Lloyd Vinz C. Ngo, MD,
Marie Arenbi I. Carillanes-Fiesta, MD,
Eva Maria C. Cutiongco-De La Paz, MD,
Monalisa L. Lim-Dungca, MD

Progeria is also known as Hutchinson-Gilford Progeria Syndrome (HGPS). A disease considered rare, fatal, "premature segmental aging" syndrome that causes children to age rapidly. They look healthy and normal at birth but eventually show signs of rapid aging in the first two years of life.

As of June 2022, according to the registry of the Progeria Research Foundation, the estimated birth incidence is 1 d million births while prevalence per total population is about 1 in 20 million. About 350 to 400 children living with Progeria worldwide are alive at any given time, and it affects both sexes equally with no ethnic background differences. Currently, there are only five living Filipino children diagnosed to have Progeria, with an estimated average life span of approximately 14.5 years, usually between 6 to 20 years old. Children with Progeria usually die due to complications brought about by cardiac and cerebrovascular disease, where more than 80% of the deaths are reported to be due to myocardial infarction and heart failure.

This case report highlights the importance of multidisciplinary care in managing patients with Progeria, ensuring comfortable, healthy and a longer life.

The patient is an adolescent Filipino female diagnosed with HGPS at one year of age and confirmed to have a mutation in the LMNA gene. At 14 years old, she was presented with bilateral hip pain for more than a year. The hip pain was described as dull aching on all movements. At the time of consultation, she was severely underweight and wasted; has short stature, prominent scalp vein, alopecia, characteristic facial features of HGPS, multiple joint contractures, hypoplastic fingernails, and absent toenails. She underwent bilateral pericapsular nerve group block with intra articular steroid injection which immediately relieved the pain, with no complaints of pain on any movement, and continues to have physical and occupational therapy. A multidisciplinary team continues to provide care. Once again, a multidisciplinary approach is critical to highlight the importance of good anticipatory and holistic care for patients with Progeria, which then allowed our patient to live past the average life span.



Endocrinology and Metabolism



#### Central Precocious Puberty in a 4-year old Male: "A Case Report of Hypothalamic Hamartoma-Induced

Early Puberty"
Laila R. Quitaleg, MD, Erik Estrada, MD,
Alma Estrada, MD

Precocious puberty is the early development of secondary sexual characteristics occurring before the age of 9 in boys while 8 years in girls with incidence of 1: 50,000 to 1: 10,000 children worldwide, with 41 reported cases in the Philippine Pediatric Society (PPS) Registry since 2006 in which 33 cases were females and only 8 were males with no cases coming from Northern Luzon making this the first case to be reported in Region I. The prevalence of central precocious puberty (CPP) is about 10 times higher among girls than in boys 1 while other sources have cited a female-to-male ratio as high as 20:16. The majority of boys with early puberty exhibit detectable pathological alterations and are more likely to reflect a significant etiology than girls with precocious puberty. This is a case of a 4-year-old male, diagnosed with CPP who presented with tall stature and early secondary sexual characteristics manifested as enlarged penis and scrotum, pubic hair growth, thin facial hair, facial acne and a history of body odor at 2 years of age. Plain radiographic examination of left hand and wrist revealed bone age of about 10-11 years old. Hormonal profile revealed elevated follicle stimulating hormone (FSH), luteinizing Hormone (LH) and, testosterone in the pubertal range. Cranial Magnetic Resonance Imaging (MRI) showed lobulated non-enhancing mass in the region of the right hypothalamus, which is consistent with a hypothalamic hamartoma. GnRH agonists serve as the drug of choice for the treatment of CPP because of its safety and rare adverse effects and that surgery entails risks and unsure of outcome. Depot preparation of GnRH analogues is preferred over daily formulations because it is less problematic in terms of compliance. The decision to treat is individualized. In this case report, we presented a-year-old male with central precocious puberty, being managed by multidisciplinary team with the aim of normal adult height preservation, relieving psychosocial stress, and improving the overall well-being with consta

Keywords: Central Precocious Puberty, Hypothalamic Hamartoma, GnRH analogue Endocrinology and Metabolism



#### Lipidemia: Not to be Confused with Obesity

Atrio Ericmond T. Wee Eng, MD, Eleonor Du-Amparado, MD Ameleen Bangayan, MD

The recent COVID-19 pandemic has given rise to a more sedentary lifestyle, increasing the prevalence of childhood obesity. As such, underlying conditions such as lipedema may be overlooked in some cases. This is a case of a 16-year-old female from Cotabato City who presented with a 3-year history of gradual weight gain, with preferential increase in the size of her lower extremities, sparing her feet, which persisted despite limiting her food consumption. She also had a 2-month history of postprandial vomiting and hypoglycemic episodes, a 1-month history of paresthesia and shooting pain over her hips to her soles eventually leading to difficulty in ambulating. At the emergency room, the patient was wheelchair bound with multiple, tender fat pads and skin dimpling present on her lower extremities. The patient had an Obese III BMI of 42.60kg/m², however, features such as tenderness, fat sparing the feet, and persistent fat deposits despite food limitation point to a diagnosis of lipedema. Classic features would include female gender, symmetric and bilateral overgrowth of lower extremities with normal feet, no infections, aching discomfort with tenderness; all were seen in the patient's case, due to the hypothesis of this condition to be the effect of an altered estrogen receptor pattern. As such, it is important to differentiate lipedema from obesity as there are nuances in their management to become effective. Especially for adolescent females, who are the most vulnerable to this disease entity, their needs and concerns should be addressed as this does not only affect them physically, but also emotionally and psychologically, being susceptible to scrutiny from their peers, like the patient above, who also was a victim of this.

Keywords: Lipedema, Obesity, Endocrinology

Hematology/Oncology @ Back to Program



#### Transient Abnormal Myelopoiesis (TAM) in a Neonate with Down Syndrome: A Case Report

Studies have shown that children diagnosed with Down Syndrome are more susceptible to develop acute leukemia than children without Down Syndrome. Based on the Philippine Pediatrics Society registry, since January 2006 up to present, out of over 5 million neonates, there are only 18 diagnosed cases of acute myeloid leukemia and over 1000 cases of Down Syndrome. This is a case report of a newborn who was admitted as a case of Early Onset Sepsis. On initial laboratories, patient had leukocytosis and thrombocytosis hence further work ups were done. On peripheral blood smear (PBS), patient was noted with several medium- to large-sized blasts with ovoid to irregular nuclei with nuclear lobations and folds, hence, blood dyscrasia was entertained. Flow cytometry was done showing a blast population of myeloid lineage most compatible with Acute Myeloid Leukemia. Patient was then managed as a case of Transient Abnormal Myelopoiesis (TAM) in Down Syndrome. Patient received a total of 3 bags of pRBC and 10 bags of platelet concentrate to correct anemia and thrombocytopenia and 14 cycles of cytarabine given every 12 hours for 7 days. Patient was then discharged after 63 hospital days. In almost 80 percent of neonates diagnosed with TAM, spontaneous resolution may occur but 20 percent may progress into acute megakaryoblastic leukemia. Given this risk of progression, most advocate that all neonates with DS must undergo screening for TAM with manual PBS review and GATA1 mutation analysis. Once GATA mutation is detected, routine laboratory examination is suggested periodically until early childhood.

Keywords: Transient Abnormal Myelopoeisis; Down Syndrome; Acute Myeloid Leukemia; Blood Dyscrasia



Hematology/Oncology @ Back to Program



#### From Cough to Cancer: Alk-Positive IMT in a Child Treated with Novel Chemotherapy

Dr Chiranjeet Narayan Dev, Dr Mahesh Babu Ramamurthy A/Prof Goh Yam Thiam Daniel Dr Michael Lim Teik Chung, Dr Daryl Yeo Yuan Chong

Background: The inflammatory myofibroblastic tumor (IMT) is a rare lesion of unclear etiology and variable clinical course. It may appear as an inflammatory mass or may have the characteristics of a tumor with the ability for metastasis. Historically, surgical resection has been the primary treatment modality due to the lack of effective alternative therapies. However, recent advances have identified anaplastic lymphoma kinase (ALK) translocations in a subset of IMTs, paving the way for targeted therapeutic approaches. Despite these advances, the diagnosis and management of IMT remain challenging, particularly in pediatric patients, due to its rarity and the nonspecific nature of its clinical presentation. This case report highlights a pediatric patient presenting with recurrent cough, ultimately diagnosed with ALK-positive IMT and successfully treated with a combination of endoscopic resection and Crizotinib, an ALK inhibitor.

Case Presentation: A 5 year old girl presenting with recurrent cough was initially treated on the lines of an infective diagnosis. Non resolution of symptoms compelled a review of diagnosis and investigations. A state of general well being, out of proportion to laboratory and radiological parameters pointed towards an alternate diagnosis.

Chest radiograph revealed left lung 'white out' initially thought to be due to mucus plug. However, possibility of a foreign body wasn't excluded. Computed tomography (CT) of the thorax showed intraluminal obstruction of left main bronchus. This necessitated a flexible bronchoscopy, revealing a fairly vascular polypoidal tissue; with granulation tissue and tumour as the differentials. Further workup with histology and immuno histochemistry divulged it to be an IMT with EML4-ALK translocation. Endoscopic tumour resection was achieved with argon laser coagulation via flexible bronchoscopy. The child was subsequently treated with neo adjuvant therapy with ALK inhibitor Crizotinib

**Discussion:** This case report illustrates a particularly challenging instance of IMT in a pediatric patient, where the initial symptoms and diagnostic confusion underscore the complexity of this condition. In this case, a 5-year-old girl presented with recurrent cough, a symptom commonly associated with respiratory infections in children. Initial treatment was directed towards an infectious etiology, which is a common initial approach in such presentations. However, the persistence of symptoms despite appropriate treatment necessitated a thorough re-evaluation. This emphasizes the importance of considering alternative diagnoses when clinical symptoms do not resolve as expected.

This case also highlights the importance of molecular diagnostics in guiding targeted therapy. The identification of ALK translocations in IMT has been a significant advancement in understanding and managing this rare tumor. ALK (anaplastic lymphoma kinase) gene rearrangements are found in a subset of IMTs and have opened new therapeutic avenues. The use of Crizotinib for ALK-positive IMT represents a promising therapeutic strategy, underscoring the potential of personalized medicine in treating rare pediatric tumors. This approach not only targeted the tumor more precisely but also minimized the need for more invasive surgical interventions, improving the patient's prognosis and quality of life.

Key Words: Recurrent cough, Inflammatory Myofibroblastic tumour, Molecular Diagnostics, Crizotinib, Flexible bronchoscopy

Hematology/Oncology @ Back to Program



#### **Solid Pseudopapillary Neoplasm:** A Case of Rare Neoplasm of the Pancreas

Heisler Yu Entote, MD, Jose Antonio Quitevis, MD, Ronald Limchiu, MD

Background: Solid pseudopapillary neoplasm (SPN) of the pancreas is an exceedingly rare tumor, comprising less than 3% of pancreatic exocrine neoplasms. Initially described as "papillary cystic neoplasm" in 1959, its nomenclature has since evolved due to advancements in understanding its histopathological features. SPN primarily affects young women in their second to third decades of life, typically presenting as a wellcircumscribed mass with a predilection for the pancreatic body and tail. Despite its low malignant potential, SPN necessitates surgical resection due to the risk of local invasion or distant metastasis.

**Objective:** This abstract aims to present an analysis of a case of solid pseudopapillary neoplasm (SPN) of the pancreas, a rare tumor. Through an examination of clinical presentation, radiological findings, clinical presentation, radiological findings, histopathological characteristics, treatment modalities, and outcomes, we seek to enhance understanding of SPN among healthcare professionals, contributing to improved diagnosis, management, and patient care.

Methods: In 2023, the author described a case involving a 14-year-old female who presented with persistent epigastric pain radiating to the back, associated with episodes of vomiting. Computed Tomography Scan revealed a soft tissue mass in the area of the pancreatic head and uncinated process. Ultrasound Guided Core biopsy was performed and revealed histologic findings consistent with pancreatic pseudopapillary formation.

Results: The patient was diagnosed with Solid Pseudopapillary Neoplasm of the Pancreas, and surgical operation was planned to excised the tumor, however, there was evident liver metastasis. Thus, hormonal therapy was planned.

**Conclusion:** Solid pseudopapillary tumor of the pancreas is a rare pathologic condition where more than 90% occur in young women, in their 2nd-3rd month. Thorough evaluation and diagnosis is important in the early diagnosis and treatment of a disease. A favorable outcome depends on early clinical suspicion and prompt diagnosis, and management. Female patients with SPN tumor of the pancreas can successfully be managed by surgical resection of the tumor, with compliance to follow up appointments.

Hematology/Oncology @ Back to Program



#### A Two-Month Old Infant with **Kasabach Merritt Phenomenon: A Case Report**

Melissa Grace R. Labador, MD, Maria Cristina H. Lozada, MD, Michael Salvador D. Cabato, MD, Jochrys I. Estanislao MD

**Background:** Hemangiomas are pediatric neoplasms resulting from abnormal proliferation of blood vessels.
When these cause platelet trapping or thrombocytopenia resulting to consumptive coagulopathy, the diagnosis of Kasabach-Merritt Phenomenon (KMP) is considered.

Case Presentation: We report a case of a two-month old boy with progressively enlarging hemangioma on the face, neck and chest wall associated with respiratory compromise necessitating intubation. Laboratory examinations showed anemia, thrombocytopenia, deranged bleeding parameters and elevated D-dimer levels; whereas, computed tomography scans of the neck and chest showed enhancing subcutaneous lesions on and oriest showed entirating subcottaneous resions on the face, submandibular space, neck and chest wall which may represent hemangioma, with soft tissue lesions in the neck insinuating in the masticator spaces, prompting the diagnosis of KMP. The patient was then given medical therapy with Propanolol, Prednisone, Sirolimus, Vincristine, as well as blood transfusions. He was eventually weaned off ventilatory support; however, was eventually weaned off ventilatory support; however, subsequent attempts at extubation were unsuccessful due to the size and location of the hemangioma causing airway obstruction and recurrent KMP. Thereafter, the patient was referred to Interventional Radiology and underwent Transarterial Embolization with Lipodilol and Bleomycin—the technical success of which was achieved with 80-90% devascularization of the facial and neck hemangiomas. The patient was then extubated and displayed undless the patient. discharged well on room air.

**Discussion/Conclusion:** Our report highlights the clinical presentation, medical management, and successful treatment with transarterial embolization of congenital hemangioma with KMP. In the Philippines, to our knowledge, our patient is the first reported case of a very young infant with congenital hemangioma and KMP who underwent successful treatment with transarterial embolization.

Keywords: Hemangioma, Kasabach-Merritt Phenomenon, Transarterial Embolization





#### **Successful Management of** Intracranial Hemorrhage in a 14-year old Filipino Male with Severe Hemophilia A with Inhibitor

**Background:** Hemophilia A is a rare congenital bleeding disorder and the incidence of mortality for those with hemophilia A with intracranial hemorrhage is quite high at 20%. Hence, there is a need to disseminate information on the importance of early recognition and prompt medical management

Case Presentation: This is a case of Patient S.B, 14 yrs old male, who was diagnosed with severe hemophilia A at 1 yr old. He was admitted due to persistent headache and dizziness after a traumatic head injury. He later presented with decreased sensorium and an elevated blood pressure (210/100mmHg) hence was transferred to the pediatric intensive care unit, wherein he also developed seizure. His cranial CT scan revealed subdural hemorrhage. Due to the presence of inhibitor, he was given factor 7 and Factor 8 inhibitor bypassing activity (FEIBA) which afforded relief of all his symptoms.

**Discussion:** Given the complexity of the patient's condition, it is imperative for the physician to be knowledgeable about the course of the disease, its management and possible complications. Time is of the essence when dealing with life-threatening conditions like this, hence the physician and caregivers must act fast and be vigilant at all times

Keywords: Hemophilia A, factor 8 inhibitor, intracranial

Hematology/Oncology @ Back to Program



#### **Impact of Emicizumab Prophylaxis** on Indian Children with **Hemophilia-A:** Case Series and Clinical Insights

Background: Hemophilia-A, resulting from mutations in the F8 gene leading to deficient factor VIII, significantly impacts pediatric patients. The disorder disrupts the coagulation cascade, causing recurrent hemarthroses, hematomas in children and disrupts their normal functioning, growth and development

India is home to the second largest population of patients living with Haemophilia, with an estimated 1,36,000 individuals grappling with haemophilia-A. Emicizumab represents a significant therapeutic advancement for Hemophilia-A patients in India, benefiting all hemophilic patients irrespective of their inhibitor status while also reducing the need for repeat on demand and prophylactic factor based therapies. Its use has had clinical, social and economic implications in the resourceconstrained setting of India with the patients and their caregivers preferring it to any other treatment. Here we report the clinical benefits of Emicizumab prophylaxis on quality of life and joint scores of Indian pediatric patients with severe haemophilia A.

Case Presentation: This is an Indian retrospective case series from a tertiary care setting, GMERS medical college and civil hospital, Sola, Ahmedabad. Seven pediatric patients with severe Hemophilia -A who had inhibitors against factor VIII and target joints with joint deformity, annual spontaneous bleeding rates of more than 10 prior to initiation of treatment with Emicizumab, were included. Patients, who had received Emicizumab for more than six months by the time of assessment in the month of June 2024, were eligible for inclusion in this case series. Annualised Bleeding rates[ABR] (overall ABR, ABR for bleeding due to trauma and ABR for spontaneous bleeding), target joints, Hemophilia Joint Health Score (HJHS) and Functional Independence Score in Hemophilia (FISH) score were recorded at the baseline and changes in the same parameters were baseline and changes in the same parameters were assessed over a period of 6 months and analysed. The median age and body weight of the patients in this case series was 8 years and 19 kg (kilograms) respectively. Emicizumab administration improved all the studied parameters in this case series.

**Discussion/Conclusion:** Six patients had received Emicizumab for more than 6 months at the time of assessment in June 2024 while one patient had been on the treatment for more than a year. The most commonly involved target joint was the knee joint with the ankles being involved in two patients. Emicizumab administration reduced the median overall ABR to 0 in six patients. Median spontaneous ABR before and after Emicizumab initiation were 5 and 0 respectively while the median treatment. initiation were 5 and 0 respectively while the median traumatic ABR before and after Emicizumab initiation were 6 and 0 respectively. Median HJHS after treatment improved from 17 to 0 with complete target joint resolution in all the patients and an accompanied improvement in the FISH scores from a pre treatment median score of 20.5 to 32. These results indicate significantly enhanced real world effectiveness and quality of life in patients receiving Emicizumab.

Emicizumab has become the standard of care for managing Hemophilia-A patients in India. All Hemophilia-A patients should receive access to the drug to ensure that the hemophilic patients lead a bleed free and uncomplicated life. The reduced need for medical visits and hospitalizations also alleviates healthcare system pressures, making Emicizumab a transformative option for both patients and healthcare providers in India

Keywords: Hemophilia-A, India, Emicizumab, ABR.HJHS

Hematology/Oncology @ Back to Program



#### The Enigma of an Infiltrating Tongue Mass: A Case of Fibrolipoma larie Blanche J. Ruyeras, I

Background: Lipoma is a relatively uncommon slow-growing, benign mass rarely seen at 0.5-5% of the oral cavity and oropharynx among children. In the Philippine Pediatric Society database from 2006 up to present, there are only 18 documented cases of lipoma at the

tongue or 0.0004% among the total cases reported

Case Presentation: This is a case of a 2-year old, girl who presents with a slow-growing, soft, immovable, non-tender, flesh-colored tongue mass with onset at 4 months old. There were no prior history of trauma with unremarkable maternal, birth and family history. Gradual increase to approximately 4-5 cm in diameter prompted consult. Plain computed tomography (CT) scan revealed a well-defined encapsulated soft tissue mass of fat density at the right submandibular region extending to the oral cavity. Histopathologic examination of the tongue mass revealed sheets of mature, adipose cells which are arranged into incomplete lobules by dense fibrous stroma and completely enclosed by fibrous capsule. Hence, the histological classification of fibrolipoma.

Discussion/Conclusion: Fibrolipoma may emerge as infiltrating adjacent tissues and may cause uncertainties with consideration of differential diagnosis such as malignancy. Excision of the mass is the treatment of choice, and a multidisciplinary team is needed in the management of fibrolipoma of the tongue and with proper resection of the capsule in the encapsulated forms of lipoma, the recurrence is minimal to none

Keywords: Fibrolipoma, lingual, tongue, ora



Hematology/Oncology @ Back to Program



#### A Rare Case of **Genital Infantile Hemangioma** nnah Carize Maranan Sanga

Infantile hemangiomas are rarely seen in the genital area, with a majority seen in the head and neck area. Furthermore, genital hemangiomas are prone to complications such as ulceration and infection. It is strongly associated with the female sex, prematurity, and family history of hemangiomas. Diagnosis is mostly clinical but an ultrasound and biopsy may be done. This case reports a four-month-old female presenting with a gradually enlarging erythematous mass in the right labia gradually enlarging erythematous mass in the right labia majora with ulceration. Whole abdominal ultrasound showed a fairly defined heterogeneous predominantly isoechoic structure in the subcutaneous region of the right labia with increased vascularity on Doppler imaging, consistent with a hemangioma. Observation is the common management but due to the ulceration and location, the patient was treated with oral Propranolol and monitored for side effects such as poor feeding and irritability. There was a decrease in the size of the tumor after six months of treatment with no reported side

Keywords: infantile hemangioma, genital hemangioma, oral propranolo

#### Hematology/Oncology @ Back to Program



#### **Diagnostic Challenge Of Pediatric Primary Extraskeletal Ewing** Sarcoma From A Limited Resource **Setting: A Case Series**

Mae Concepcion Dolendo, Cheryl Lyn Diez

**Background:** Primary extraskeletal sites in Ewing sarcoma are rare and cytogenetic studies demonstrating the pathognomonic t(11;22)(q24;q12) leading to EWSR1-FL11 fusion gene will confirm the diagnosis. This can be challenging in limited resource settings often leading to delays in treatment due to lack of capacity for further tests. This study describes three cases of cytogenetically confirmed pediatric primary Extraskeletal Ewing sarcoma

Case Presentation: Three cases were identified with mean age of 14.7 years (range: 10-18 years) at diagnosis and 1:2 male-to-female ratio. Two cases presented with renal mass with consideration of renal cell carcinoma while one case presented with posterior neck mass and managed as lymphoma, and all cases had no skeletal sites involved

Specimens were sent out to a high-income country for second opinion. Diffuse membranous positivity for CD99 was demonstrated in all cases. Two cases had EWSR1-FLI1 fusion gene while one had EWSR1 rearrangement. All patients already underwent tumor resection when referred to the cancer institute; two had tumor recurrence on admission, one had tumor spillage but no evidence of tumor recurrence on imaging. Adjuvant chemotherapy for Ewing sarcoma was given but only one patient completed treatment and is currently on remission while the other two who were initially started on different protocols, abandoned treatment and did not survive.

**Conclusion:** Diagnosis of EES is challenging in countries with limited resources that lack cytogenetic testing. Clinical correlation with high index of suspicion may aid in early detection of EES and improve outcome.

Keywords: extraskeletal ewing sarcoma, limited resources

Hematology/Oncology @ Back to Program



#### **Analysis Of Effect Of Ultrasound-Guided Drug Injection** In The Treatment Of Pediatric Superficial Lymphangioma

Objective: To compare and analyze the clinical treatment effects of ultrasound-guided drug injection for different types of pediatric superficial lymphangioma.

Methods: From September 2019 to September 2021, 34 superficial lymphangioleioma treated ultrasound-guided drug injection were observed by two dimensional and Colour Doppler Flow Imaging (CDFI) before and after surgery and grossly typed lymphangioma, and the changes of tumor size and internal anechoic area before and after the effective treatment of different types of lymphangioma by ultrasound-guided drug injection in the third month were compared to analyze the treatment effect

Results: 61.76% (21/34) of the 34 superficial lymphangioma showed simple multiple anechoic echogenicity on ultrasound, which was a simple large cystic type; 38.24%(13/34) showed mixed cystic and solid echogenicity on ultrasound, of which 8 cases were cystic dominated cystic solid lymphangioma and 5 cases were solid dominated cystic solid lymphangioma. The lymphoma was observed in the third month after the ultrasound-guided drug injection treatment reached the effective standard. 25 cases (73.53%) reached the curative standard, including one case with sudden enlargement of the tumour after the treatment, which was eniargement of the tumour after the treatment, which was considered as bleeding. Six cases (17.65%) were effective and three cases (8.82%) were effective. The number of treatments required for effective drug injection varied between different types of lymphangioma. 21 cases of simple large cystic lymphangioma could be cured after 1-2 treatments, whereas cystic solid lymphangioma 2 treatments, whereas cystic solid lymphangioma required several treatments to achieve the therapeutic effect, especially for solid echogenic lymphangioma, most of which required 3-4 treatments to be effective.

Conclusion: Ultrasound-guided drug injection for the treatment of superficial lymphangioma in children can be used to assess the general typology of lymphangioma used to assess the general typology of lymphangioma before surgery, to monitor the intraoperative dynamic situation of drug injection in real time, and to observe the treatment effect of different types of lymphangioma after surgery, although the number of drug injections for different types of lymphangioma varies, all of them can achieve the treatment runness which is refer and feacilities. achieve the treatment purpose, which is safe and feasible and can be promoted in clinical use. In the follow-up study, we can compare the therapeutic effects of different sclerosing agents and the combination of different sclerosing agents on lymphangioma. We will also conduct long-term follow-up of the recovery of the children after treatment, so as to provide more reasonable and effective data to support the choice of treatment plan for lymphangioma.



Gastroenterology/ Hepatology/Nutrition



#### Maternal Knowledge, Perception And Practice Towards Exclusive Breastfeeding During The Covid-19 Pandemic

Dr. Alyanna Katrizia Y. Kasilag Dr. Nely V. Dechaves, DPPS

Background: Exclusive Breastfeeding (EBF) rate in the Philippines falls from the target set by the World Health Organization (WHO), even before the onset of the Covid19 pandemic. This global health quandary has posed a greater challenge in promoting and implementing EBF protocols while adhering to the social restrictions needed to address the erratic surge in cases related to this novel corona virus.

**Objective:** To describe the demographic profile, assess the knowledge and perception of mothers on their practice of exclusive breast feeding.

**Method:** A web-based study via Google form was conducted in a private tertiary hospital in Davao City. Study design is cross sectional non-experimental.

**Outcome:** Among the 207 mothers who participated, only 22 (10.63%) practiced EBF. The average perception of mothers on breastfeeding is 5.22 (Sd=1.5) out of 6 correct items and can be considered as relatively high. Demographic profiles found to be significantly associated with compliance to EBF practice are employed mothers and those who delivered via spontaneous vaginal delivery. Mothers who practiced EBF show higher knowledge and perception on breastfeeding and COVID19

**Conclusion:** Knowledge and perception of mothers on EBF and Covid19 virus influenced their practice to exclusively breastfeed. Those who practice breastfeeding exclusively have higher level of knowledge and perception regarding the virus and it's transmission and on breastfeeding.

Gastroenterology/ Hepatology/Nutrition



#### Recurrent Intestinal Intussusception In An Adolescent With Peutz-Jeghers Syndrome: Treatment And Surveillance

Pauline Adrineth D. Luzon, MD Ma. Lourdes G. Genuino, MD, Leniza de Castro Hamoy, MD

Background: Peutz-Jeghers Syndrome (PJS) is a rare autosomal dominant inherited disorder affecting the skin, gastrointestinal tract, and breast, usually presenting at the emergency department with abdominal pain, pointing to possible intussusception and infarction of bowels, upper and lower gastrointestinal bleeding, and pallor. Prompt recognition of this syndrome gives way to appropriate multidisciplinary management – from symptom control, comprehensive screening, genetic testing and surveillance, and addressing psychological aspects of having chronic disease.

Case Presentation: A 15-year-old female came in at the emergency department for abdominal pain, presenting with 13-year history of dark spots under her nose, eventually involving the perioral, oral area, as well as fingers and soles and three year history of intermittent left lower quadrant pain with severity score 5 to 10, radiating to right lower quadrant and epigastric area, associated with bloatedness and nausea, with no relation to food intake. Due to her recurrent abdominal pain, she was admitted at a total of five institutions, treated with unrecalled antibiotics and intravenous pain medications, but no further diagnostics until seven months prior to consult where colonoscopy was done revealing nodular masses and polyps at the ileocecal area, and histopathology revealing hamartoma, with consideration of malignancy versus Peutz-Jeghers syndrome. Patient was admitted at Philippine General Hospital (PGH), still for complaints of non-resolving abdominal pain, where patient underwent diagnostic laparoscopy, manual reduction of intussusception, mini laparotomy, small bowel enterotomy and polypectomy. A multidisciplinary team was formed, involving General Pediatrics, Gastroenterology, Genetics, Pediatric Surgery, and subsequently Adolescent Medicine to address not just the intussusception but also counselling on long-term implications of having Peutz-Jeghers syndrome such as multiple recurrences of abdominal pain and having increased risk of malignancy.

Discussion/Conclusion: Peutz-Jeghers syndrome is an autosomal dominant disorder with key features of mucocutaneous lesions and hamartomatous polyps, commonly presenting with abdominal pain and gastrointestinal bleeding secondary to intussusception or polyp bleed. Aside from the need for earlier recognition, a multidisciplinary team is needed in managing patients with Peutz-Jeghers Syndrome to target not just symptom control, but also for surveillance and improved quality of life.

Keywords: Peutz-Jeghers Syndrome, intussusception, hamartoma, surveillance

Gastroenterology/ Hepatology/Nutrition



#### When Gut Meets Flow: A Case Of Colovesical Fistula In An Adolescent Male

Background: Tuberculosis (TB) may affect all age groups of which 12% of the population who were affected are under 15 years old in both globally and locally. Abdominal TB (ATB) is the sixth most frequent extrapulmonary site which comprises 0.3% of pediatric TB cases but some studies have said that it accounts for approximately 1-3% of all pediatric TB cases.

Case Description: A 16-year-old adolescent male was admitted due to intermittent abdominal pain and fecaluria. He was initially managed as a case of recurrent urinary tract infection due to dysuria and pyuria, but symptoms progressed with associated abdominal pain and fecaluria, which prompted a diagnosis of colovesical fistula with the aid of an abdominal computed tomography scan and voiding cystourethrography (VCUG). Intraoperative findings revealed presence of seeding of tuberculous bacilli in different parts of the abdominal cavity which greatly affected the dome of the bladder and part of the ileocecal area leading to a fistula formation. Histopathologic exam showed chronic caseating granulomatous inflammation with multinucleated giant cells of Langhans type. Acid Fast Bacilli smear of a lymph node from the omentum revealed 1+ AFB. Hence, a diagnosis of abdominal tuberculosis (TB) was made.

Conclusion: In patients presenting with intermittent abdominal pain or fecaluria, a differential diagnosis of abdominal TB disease must be considered due to the high burden of tuberculosis in our country. Abdominal TB is a potentially severe disease which is usually detected late due to its insidious onset and its mimicry of other disease processes. Anti-TB medications are still the first line treatment, and surgery is only warranted if presentation of abdominal TB is an acute abdomen.

Keywords: tuberculosis, abdominal tuberculosis colovesical fistula, extra-pulmonary tuberculosis



Gastroenterology/ Hepatology/Nutrition



#### Late Onset Bowel Obstruction Secondary To Congential Colonic Stenosis In A Four Month-Old Infant

**Background:** This case is reported due to the rarity and diagnostic challenges of congenital colonic stenosis presenting beyond the neonatal period. It highlights the need for considering this rare condition in infants with symptoms of bowel obstruction.

Case Presentation: A 4-month-old Filipino female with a history of prematurity and neonatal sepsis presented with abdominal distention, vomiting, poor feeding, and fever. Initial evaluations suggested Hirschsprung's disease, but exploratory laparotomy revealed congenital colonic stenosis at the splenic flexure. Surgical intervention involved longitudinal opening and transverse suturing of the stenotic segment, resulting in significant clinical improvement and eventual discharge in stable condition.

Discussion/Conclusion: This case underscores the importance of including congenital colonic stenosis in the differential diagnosis of intestinal obstruction in infants, especially given its rare and often delayed presentation. Early recognition and surgical intervention are crucial for improving patient outcomes. This case serves as a reminder to consider rare congenital anomalies in similar clinical scenarios and highlights the need for heightened awareness among clinicians. Future research could focus on developing diagnostic protocols to better identify such rare conditions preoperatively, reducing the reliance on exploratory surgeries.

Keywords: Congenital colonic stenosis, Intestinal obstruction, Pediatric surgery, Rare congenital anomalies, Diagnostic challenges

Gastroenterology/ Hepatology/Nutrition



#### Probiotic Use In Acute Diarrhea Among Children Less Than 5: Attitude And Practices Of Filipino Physicians

Marie Blanche J. Ruyeras, MD Ameleen B. Bangayan, MD, FPPS, FPSPGHAN

**Background:** Probiotics are increasingly recommended as an adjunct to oral rehydration therapy (ORT) in the management of acute diarrhea in children. There is limited data on the attitudes and practices of Filipino physicians regarding this treatment.

**Objective:** This study aims to evaluate the attitudes and practices of Filipino physicians concerning the use of probiotics in the management of acute diarrhea among children under five years old.

**Methods:** This study is a prospective cross-sectional survey done in Region XI, Philippines. A total sample size of N=378 was calculated using Raosoft, assuming a 95% confidence interval, a response rate of 50%, Z of 1,96, and a margin of error of 5% with n= 221 pediatricians, n= 141 family physicians, and n= 16 public health physicians. Purposive sampling technique with 378 physicians surveyed through an online questionnaire and in-person forms. The survey included questions on demographics, attitudes towards probiotics, practices, and barriers to probiotic use. Data were analyzed using frequencies, percentages, and binary logistic regression to identify the factors associated with positive attitudes and practices.

Results: The majority of participants were female (77%), with 44.4% having less than 5 years of clinical practice. There were 98% of pediatricians and family medicine physicians and 100% of public health physicians who prescribed probiotics. The preferred form among Filipino physicians is oral suspension at 51% which is given twice a day for up to 5 days. In addition, 82.3% of participants have a positive attitude toward the use of probiotics, while those having more than 5 years of practice showed more positive attitudes. The primary barriers to prescribing probiotics included cost, lack of availability in rural areas, and doubts about clinical benefits.

**Conclusion:** The study highlights the widespread positive attitudes towards probiotics among Filipino physicians and their prevalent use in managing acute diarrhea in children under five.

Gastroenterology/ Hepatology/Nutrition



# Non-Surgical Case Of Acute Abdomen In An Adolescent Male: A Case Report On Epiploic Appendagitis

Laurice S. San Jose, MD, DPPS Portia Menelia D. Monreal MD, FPPS, FPSPGHAN

Epiploic appendagitis (EA) is an inflammation of the epiploic appendage and is a rare cause of abdominal pain that often manifests with an acute onset of abdominal pain. Prevalence of this disease among the pediatric age group is unknown and is mentioned only in few case reports and series in the west. It can either be primary, wherein it occurs as an acute ischemic inflammation, resulting from torsion of an appendage or spontaneous thrombosis of a central draining vein. Or Secondary EA, when it is inflamed due to another process. We describe a rare case of Epiploic appendagitis in an eleven-year-old overweight adolescent male admitted as a case of acute abdomen, who presented with severe left lower quadrant pain. Computed tomography (CT) scan with contrast showed pathognomonic signs of the disease (fat density ovoid structure adjacent to proximal sigmoid colon showing peripheral fat strandings, and a hyperattenuating inng-like structure) and was managed with antibiotics and analgesics. Patient improved, sent home, and remained asymptomatic since then. With a thorough history and anytogen acute in the proposition of the piploic appendagitis to accurately diagnose this entity and avoid further non-indicated pharmaceutical or surgical intervention.

Keywords: epiploic appendagitis, acute abdomen, computed tomography, case report



Gastroenterology/ Hepatology/Nutrition



## Meckel's Diverticulum Causing Partial Small Bowel Obstruction And Diverticulitis: A Case Report

Meckel's diverticulum is due to the incomplete obliteration of the omphalomesenteric duct during the 7th week of gestation. This occurs in 2% of the general population and majority of patients remain asymptomatic. Symptomatic Meckel's diverticulum presenting in the neonatal period is rare. Pre-operative diagnosis is often difficult to establish despite different modalities available for use making this a diagnostic challenge. This is a case of a late preterm female, Filipino, 35 weeks age of gestation by ballard's score who presented with bilious output via orogastric tube drainage bottle on her third day of life. Abdomen was non-distended with hypoactive bowel sounds but soft and non-tender. Patient was also able to also have multiple episodes of bowel movement prior to onset of bilious orogastric tube output. These bowle movements tested positive for fecal occult blood test. Diagnostic imaging work up consisted of series of abdominal radiographs, abdominal ultrasound and upper gastrointestinal series with water soluble contrast however did not provide a definitive diagnosis to our patient. Treatment was initiated with broad spectrum antibiotics, gastric decompression and feeding withheld. However despite these interventions patient continued to present with bilious output on orogastric tube drainage and still with episode of bilious vomiting. Surgical laparotomy was scheduled and intraoperatively there was noted Meckel's diverticulum found at the ileum with internal herniation of the ascending colon but no ladds band present. There were however multiple adhesions located bowel to bowel and bowel to umbilicus. Resection of the ileum was done with side to side anastomosis along with appendectomy. After the surgical procedure, there was noted resolution of symptoms and patient was discharged tolerating milk feeding ad libitum. This case illustrates that there are instances wherein definitive diagnosis remains elusive and necessitates re-evaluation including surgical exploration to make a definitive diagnosis. Early recognition is critical to institution of appropriate intervention.

Gastroenterology/ Hepatology/Nutrition



#### Prevalence And Predictors Of Overweight/Obese Junior High School Students In Cagayan De Oro City During The Coronavirus Pandemic: A Correlational Study

Charmaine Kate P. Tubongbanua-Arao, MD John Paul L. Oliveros, MD, FPPSPGHAN

**Background:** The COVID-19 pandemic brought obesogenic changes in lifestyle and eating habits, increasing the number of overweight/obese in several countries. However, the pandemic's effect on the prevalence of overweight/obese Filipino teenagers is unknown.

#### **Primary Objective:**

Identify prevalence rate of overweight/obese adolescents adapting home-based learning in junior high school during the coronavirus pandemic in Cagayan de Oro City.

Secondary Objective: Determine change between prevalence of overweight/obese adolescents prepandemic and during the pandemic; identify the difference in prevalence rate of overweight/obese adolescents between modular and online learning delivery; and to correlate the predictors contributory to the change in prevalence of overweight and obesity.

Methods: This was an analytical cross-sectional study using stratified sampling method to select representative schools for each category of distance learning delivery. A total of 372 junior high school students (n=151 online, n=221 modular) were enrolled in the study. Subjects were given a parent-answered family income checklist, self-administered 24hr. diet recall, and questionnaire on their dietary behavior and physical activity (adapted from DOH global school-based student health survey). Pilot testing for the reliability of this questionnaire was done prior to the study.

Results: Overall prevalence rate of overweight/obesity during the pandemic was 7% which is 1.9% (p.0.87) higher than pre-pandemic. The online group had a higher prevalence rate (12.1 vs 3.1%) (p.0.04) than the modular group. Increased family income cluster and excess caloric intake had a weak positive correlation with being overweight/obese. Correlation with overweight/obesity on dietary behaviors examined in this study was negligible. Being physically active for more than 60 minutes a day, walking or biking three or more times a week and not eating fast food decreased the risk of being overweight/obese (moderate to very strong negative correlation)

**Conclusion:** Increase in the prevalence rate of overweight/obese junior high school students during the pandemic was not statistically significant. Excess caloric intake and increased family income were associated with obesity among Filipino adolescents. Physical activity and avoidance of fastfood were negative predictors.

Keywords: overweight, obesity, adolescent, COVID-19, predictors

Toxicology/
Pharmacology



#### Insulin-Responsive Severe Amlodipine Toxicity In An Adolescent With COVID-19 Pandemic-Related Adjustment Disorder

Monique Louise L. Maglaqui, Ma. Esterlita V. Uy

Background: Ranked sixth in the substances associated with the largest number of fatalities in 2020, calcium channel antagonist poisoning management in the pediatric population remains limited to a number of case reports. Conversely, a rise in cases of poisoning was observed during the pandemic, during which the prevalence of clinical symptoms of depression and anxiety also had globally increasing trends, nearly double its pre-pandemic numbers.

Case Presentation: After feeling anxious about transitioning to face-to-face classes, an adolescent female, with a fifteen- month history of non-enduring depressed mood during the COVID-19 pandemic, ingested multiple Amlodipine and Losartan tablets over eleven hours, amounting to 5.4 milligrams per kilogram and 28.3 milligrams per kilogram, respectively. She experienced dizziness, blurring of vision and a globus sensation. Upon assessment at the emergency room, eleven hours post-ingestion of the last set of tablets, she was hypotensive and tachycardic. Managed as distributive shock, normal saline boluses were given and Norepinephrine drip was initiated. On high-dose insulin drip, hemodynamic stability was sustained. In addition, multiple-dose activated charcoal and intravenous calcium oluconate were administered.

**Discussion/Conclusion:** After five days of holistic and multidisciplinary inpatient care, guided by subspecialty services including cardiology, toxicology, intensive care, psychiatry, and adolescent medicine, she was discharged well with regular follow-up.

Keywords: amlodipine toxicity, adolescent mental health, poisoning





#### Effect Of Lactobacillus Reuteri Supplementation On Weight Gain Among Very Low Birthweight Preterm Neonates:

A Randomized Controlled Trial Joanna Mae T. Abalos, MD Rachelle M. Perez, MD, FPPS, FPSNbM

Background: Preterm neonates are susceptible to feeding intolerance and infection due to their immature gastrointestinal tracts, low immune function and delayed colonization of intestinal flora, which can affect their growth and quality of life. Studies have shown that probiotics such as Lactobacillus reuteri positively affects weight gain and improves both intestinal motility and immune responsiveness in preterm neonates.

**Objective:** In this study, the effect of Lactobacillus reuteri on weight gain, feeding tolerance and length of hospital stay were evaluated.

Methods: Forty-two (42) preterm very low birth weight neonates (1000g to 1499g) with stable vital signs and hemodynamic parameters, exclusively breastfed, able to tolerate at least 50% of full enteral feeding and had completed antibiotic regimen for any infection, were enrolled: the study group received expressed breastmilk with multivitamins, ferrous sulfate and Lactobacillus reuteri drops while the control group received expressed breastmilk with multivitamins and ferrous sulfate. This randomized controlled trial was conducted in the neonatal intensive care unit (NICU) of a tertiary hospital in Pangasinan from December 2023 to April 2024.

Results: The average weight gain per day (g/day) was significantly higher in the study group than that of the control group (12.2802 vs.7.967, p. c.0.5). There were no significant differences in the length gain, head growth and length of hospital stay between the two groups. There were not enough data to support if Lactobacillus reuteri has an effect on feeding tolerance. During the course of the study, only 1 patient was noted with abdominal distention among the study group. No other signs and symptoms of feeding intolerance were noted among the two groups.

Conclusion: This study highlights the potential benefits of Lactobacillus reuteri supplementation for very low birth weight preterm neonates, particularly on weight gain. To validate the efficacy of Lactobacillus reuteri, larger sample sizes, multicenter studies, and longer study durations are necessary. Future research should explore optimal dosage, duration, and underlying mechanisms to improve outcomes in this vulnerable population.

**Newborn Medicine** 



#### Level Of Knowledge About Neonatal Danger Signs Among Post-Natal Mothers And Its Association With Maternal Factors In A Tertiary Hospital In Makati

From June-August 2021
May Cathleene L. Bicomong,
Ma. Vanessa L. Cenabre, Ma. Lucila M. Perez

Introduction: Neonatal danger signs are severe and often with non-specific manifestations (fever, not being able to breastfeed, difficulty of breathing /severe chest indrawing, lethargy/ unconsciousness, hypothermia, pus discharges from the umbilicus, convulsion, eye redness/discharge, and yellow palms and soles) warranting early recognition. Majority of the morbidity and mortality can be prevented if proper care during the antenatal, perinatal, and postnatal period is done. This study aims to evaluate the level of knowledge about neonatal danger signs among post-natal mothers and its association with maternal factors.

Methods: This is a cross-sectional analytic study using convenience sampling among post-natal mothers who gave birth to a live term/preterm neonate from June-August 2021 admitted at the OB GYNE ward of Ospital ng Makati. Pretested questionnaires were given and answered. Socio demographic factors (Age, Marital Status, Religion, Maternal Educational Status, Occupation, and Average Monthly Income), and Obstetric factors (Number of Pregnancy, Number of Children Alive and Died, and Pre-natal Checkup) were analyzed. The statistical association between the different independent variables in relation to the dependent variables were measured accordingly (using OR, AOR, 95% CI and Pvalues <0.05).

Results: According to Young Infants Clinical Signs Study Group, Good maternal knowledge is classified with a score of greater than or equal to 3, and poor if the score is less than three. The result of the logistic regression predicted good maternal knowledge. The resulting p-values indicate that age and parity were the affecting factors.

Conclusions: The proportion of postnatal mothers have good knowledge about neonatal danger signs. Sixty seven percent of the respondents (126 out of 186) were able to identify three and above signs. Most of the respondents are in their peak reproductive age (25-31 years old). Parity was the only identified factor affecting maternal knowledge.

**Newborn Medicine** 



#### Clinical Profiles And Outcomes Of Neonates Born To Mothers With SARS-COV-2 Infection In A Tertiary Private Hospital In Angeles City, Pampanga

Kristynelle D. Bonifacio, MD, Francesca Mae T. Pantig, MD, Raymund Anthony L. Manuel, MD

The neonatal transmission of SARS-CoV-2 has remained controversial since there are only limited data on the epidemiological and clinical features of COVID-19 infection with neonates. This retrospective, descriptive study aimed to describe the clinical profile and outcomes of neonates whose mothers tested positive for SARS-CoV-2 upon delivery in a private tertiary hospital in Angeles City, Pampanga. Among 1,632 deliveries from March 1, 2020 to November 30, 2021, sixteen mothers (0.98%) had confirmed COVID-19 infection upon delivery. However, none of the SARS-COV-2 infected mothers had neonates with positive COVID-19 results. But still, five (31.25%) were delivered preterm, ten (62.5%) were symptomatic in which tachypnea (50%) was the most prevalent, five (31.25%) were admitted at the Nursery Septic Area, and four (25%) at the Neonatal ICU. Laboratory workups of symptomatic neonates showed (ymphocytopenia (100%), surfactant deficiency disease (44.4%) and pneumonia (22.2%). All were managed medically according to their symptoms. The neonates stayed from 2 to 40 days ( $\mu$  = 11 days) at the hospital. All 16 infants were discharged with good outcomes and with no noted mortality. Upon further analysis, it was found out that maternal COVID-19 severity was significantly associated with neonatal length of hospital stay, gestational age, admission status, and APGAR scores at 1st and 5th minute of life (p-values < 0.05). Despite the small number of subjects, the study provided local information about the general overview of the clinical characteristics and outcomes of neonates born to mothers with SARS-CoV-2 infection.

Keywords: COVID-19, SARS-CoV-2 in pregnancy, maternal outcome, neonatal outcome, neonates





#### Single Cell Atlas Of Pineal Gland **Development After Hypoxic Ischemic Brain Damage (HIBD)**

**Background:** Neonatal hypoxic-ischemia brain damage (HIBD), which might occur during fetal development, labor or in the postnatal period, often results in permanent deficits such as cerebral palsy and developmental delay. Clinical follow-up revealed that children with mild/moderate HIBD not only developed sleep-related circadian rhythm problems, but also had a significantly increased probability of pineal cysts Page. However, the molecular and cellular events that occur in the pineal gland after HIBD are not well understood.

**Objective:** To profile transcriptome changes at single cell level in the pineal gland at two time points after neonatal HIBD

**Method:** The animal room with 12-12 h dark/light cycle, temperature 25 ±2°C. Rats with mixed gender into sham or HIBD group. Obtained pineal tissues strictly at 24 and 72h post surgery. HE pathology staining was done 24 and 72 hours after HIBD to verify the brain damage induced by this model. Single cell suspensions were prepared from 15-20 rat pineal glands at each time point for 10X inches and sequencing. 10Xsingle cell sequencing

**Results:** Five cell types present in both groups at different time points: pinealocyte, astrocyte, microglia, vascular and pia mater cells (VLMCs), and endothelial cells. Based on the cellular markers, they can be further categorized into different subtypes; Compared to β - pinealocyte, α - pinealocyte significantly increases. 72hours after HIBD, γ- astrocytes were increased proportion of astrocytes, α- and β-. The proportion of microglia significantly decreased; No significant cell proliferation or apoptosis in the pineal tissue after HIBD, at 24 hours after HIBD, the expression of Tph1 and Asmt was temporarily upregulated in both of Tph1 and Asmt was temporarily upregulated in both pineal cell subtypes, followed by down regulation at 72 hours; Vimentin and S100a10 were up-regulated in  $\alpha$ -and  $\beta$ -astrocytes at 24 and 72 h post injury; Ccl4 and Ccl3 in two subtypes of microglia was upregulated to varying degrees after HIBD; Caspase-1 was up-regulated in both α- and β-microglia cells;

**Conclusion:** Changes in the composition of pineal cell subsets play an important role in HIBD, and this change is subsets play an important role in Hibb, and this change is not achieved through cell proliferation or apoptosis; After HIBD, the percentage of subtypes with higher Asmt increased significantly, may play an important role in  $\beta$ - $\alpha$ -pineal cell transformation, which will partially rescue melatonin synthesis affected by HIBD; Microglia necrosis one of the important factors in the change of cell is one of the important factors in the changes of cell subpopulations in pineal injury caused by HIBD

**Newborn Medicine** 



#### **Clinical Outcomes Of Preterm Neonates Delivered Among Mothers Given Antenatal Dexamethasone At A Tertiary Government Hospital**

**Background:** Preterm delivery represents the major cause of neonatal morbidity and mortality. The use of antenatal corticosteroid administered to women at risk of preterm birth, has reduced the incidence of infant morbidity and increased the survival rates of preterm neonates. This study aimed to determine the clinical outcomes of preterm neonates delivered among mothers given antenatal dexamethasone from January to December 2021 at Eastern Visayas Medical Center (EVMC).

#### **Objectives:**

- Determined mother's given Antenatal Dexamethasone as to the number of doses antenatal steroids given whether complete or incomplete.

  Determined the clinical profile of preterm neonates in
- terms of Sex, Age of Gestation (AOG), Birthweight, Apgar score.
- Determined the clinical outcome of preterm neonates at 32 to 36 weeks Age of Gestation in terms of Admission to NICU with a Discharge Outcome of
- either Improved or Died
  Determined the significant relationship between preterm neonates at 32 to 36 weeks AOG with mothers given Antenatal Dexamethasone doses and their Clinical outcome.

**Methods:** A retrospective cohort analytical design used that included preterm neonates at 32 to 36 weeks AOG. that included preferm neonates at 32 to 30 weeks AOCs. Chart review done for data gathering. Data processed then analyzed descriptively and statistically with chi-square test to determine significant relationship between preferm neonates at 32 to 36 weeks AOG with mothers given antenatal dexamethasone doses and their clinical outcome

Results: About 116 preterm neonates at 32 to 36 weeks AOG were included in the study. Most (82%) of the mothers has incomplete closes of antenatal dexamethasone. Majority (53%) of the preterm neonates were males. Many (30%) were delivered at 36 weeks AOG. Almost all (86%) has appropriate gestational age. Most preterm neonates with APGAR score of >7 (83%) was admitted to NICU (81%). Most (85%) of them were discharged improved with only few (16%) mortalities. Mothers given antenatal dexamethasone doses has no significant relationship to the clinical outcomes of their preterm neonates at 32 to 36 weeks AOG (pvalue=0.546).

**Conclusions:** Based on the study, data showed favorable clinical outcomes since only few mortalities were noted. However the number of antenatal dexamethasone doses given to mothers is independent to the clinical outcomes of their preterm neonates.

Keywords: Preterm Neonates. Antenatal Dexamethasone. NICU Admission, Clinical Outcome

**Newborn Medicine** 



#### **Neonatal Outcomes Of Group B Streptococcus Colonization Among Term Pregnant Mothers At A Private Tertiary Hospital In The Philippines**

ne M. Bihag-Lomik Nikki C. Chu. MD

Background: Group B streptococcus (GBS) is one of the most common causes of neonatal sepsis. This can be transmitted by aspiration of GBS-infected amniotic fluid by the fetus. Maternal GBS screening has been an effective tool to tackle neonatal sepsis. Local studies on compliance with this recommendation and consequent neonatal outcomes are limited. Objectives. This study aimed to determine the outcome of neonates born to GBS-positive mothers.

Study design: A cross-sectional descriptive research

**Methods:** The study population consisted of term mothers who had their GBS screening during 35-37 weeks of gestation. Neonatal outcomes of GBS-positive mothers were then determined. Results. A total of 301 mothers positive for GBS screening were included in the study. Average neonatal birth weight is 3026 grams (SD = 370 +/- 0.41 grams, 95% Cl), mostly with good APGAR score (96.35%). Only 39 presented with signs and symptoms of GBS-Early Onset Disease (EOD). Eighteen (5.98%) showed abnormal laboratory tests. Blood culture was extracted in 55 neonates, all of which showed no growth of any microorganisms after 5 days of incubation.

Among the symptoms noted, temperature instability (4.65%) was the most common, followed by respiratory distress (2.32%) and poor feeding or weak suck (4.65%).

Conclusion: This suggested that the hospital conforms to the risk-based protocol for GBS screening. However, there is still a broad population of term mothers eligible for GBS screening but was not screened prior to delivery. On the other hand, neonatal outcomes follow the trend of conforming to Intrapartum Antibiotic Prophylaxis such that only a few percentages presented with signs and symptoms of GBS-EOD and none had positive blood culture growth.





**A Systematic Review And Meta-Analysis On The Effectiveness Of** The Feed And Swaddle Technique For Infants Aged 6 Months And **Below Undergoing Magnetic Resonance Imaging: A Systematic Review And Meta-Analysis On The Effectiveness Of The Feed And Swaddle Technique For Infants** Aged 6 Months And Below **Undergoing Magnetic Resonance** Imaging

**Fave Antonette Evan** 

Infants typically require sedation or anesthesia during magnetic resonance imaging (MRI). To address this challenge, a technique known as Feed and Swaddle technique or Feed and Wrap technique has emerged as a means to alleviate the need for sedation or anesthesia in infants undergoing MRI. This technique involves swaddling infants after they have been fed, which promotes natural sleep and reduces motor activity, consequently minimizing motion artifacts. In this study, a comprehensive meta-analysis was done to evaluate the efficacy of the Feed and Wrap technique in infants aged 6 months or younger who were undergoing MRI. The 6 months or younger who were undergoing MRI. The assessment was based on the reported success rate in each study. A meta-analysis was performed on five articles comprising of 633 scans, of which 550 scans (86.8%) were deemed successful without the need for sedation or anesthesia. Results revealed an overall success rate of 90%. These findings provide evidence that the Feed and Swaddle technique is effective in obtaining usable MRI scans in infants aged 6 months or below. Despite some study limitations, the Feed and Wrap technique should be considered as a valuable alternative and should be initially considered in infants undergoing MRI before contemplating the use of anesthesia or sedation.

Keywords: Anesthesia, Feed and Wrap Technique, Infants, Magnetic Resonance Imaging, Sedation,

**Newborn Medicine** 



#### **Prevalence Of Retinopathy Of Prematurity Among Premature Neonates Delivered At A Tertiary Government Hospital**

Ma Gemma F Ramos MD

**Introduction:** Retinopathy of prematurity (ROP) is recognized as a leading cause of avoidable disorders that can lead to irreversible visual impairment and blindness. This study assessed the prevalence of ROP in premature neonates delivered at Eastern Visayas Medical Center (EVMC)

Methods: Utilized a retrospective case-control study design that included all premature neonates delivered at the Reproductive Health and Neonatal Care Unit (EVMC) from January 1, 2019 to December 31, 2023. Review of records was done to collect the data, then analyzed descriptively using frequency and percentages. A chi-square test was applied to determine the significant association between the management given and the result of retinopathy of prematurity.

Results: About 106 premature neonates were screened for retinopathy of prematurity over the past five years. In 2022 (34) and 2023 (34) were noted to have the highest number of premature neonates screened. More than half of premature neonates were delivered very premature (51%), with many having a birthweight of 1500–1999 g (491%), and the majority were males (519%). Upon screening, most were positive for retinopathy of prematurity (61.3%), of which 50% were of Stage 1 ROP, with the highest prevalence in 2022 (30.7%). As for the treatment, most of the premature neonates were under observation (72%) with no treatment given, and only a few (2%) received anti-vascular endothelial growth factor Upon analysis, a significant association was noted between continuous positive airway pressure and retinopathy of prematurity (p-value 0.035).

Conclusion: Based on the findings of the study, data shows there is a high prevalence of retinopathy in prematurity among premature neonates delivered in the institution. Thus, all premature neonates should undergo screening, particularly those receiving O2 supplementation via continuous positive airway pressure.

Keywords: Retinopathy of Prematurity, Preterm, Prevalence

**Newborn Medicine** 



#### **Factors Associated With Awareness** Of Mothers On Expanded Newborn **Screening Test At Perpetual Help** Medical Center - Las Piñas

Jamaica D. Prodigo, Maria Anna Morales-Tugano

**Background:** Despite the high percentage of newborns screened for the Expanded Newborn Screening (ENBS) Test in the Philippines, maternal awareness regarding this screening test is in question.

Objective: To ascertain the factors associated with mothers' awareness of the ENBS Test at Perpetual Help Medical Center - Las Piñas

**Methods:** A cross-sectional, analytic study that used a two-part survey that includes demographics and an eight-item questionnaire regarding ENBS. Questions on awareness of ENBS were answered with Yes or No. An open-ended question about NBS was also added where respondents might add free text comments about NBS. Awareness scores were qualitatively analyzed and categorized as low (scores <33rd percentile), moderate (between 34th to 66th percentiles), and high (-67th percentile) using the tercile and quartile scoring approach, and the Chi-Square Test of Homogeneity was used as statistical analysis

**Results:** One hundred fifty mothers ages 15 – 45 years old who came in for a consult, accompanied their child for a consult, were admitted at the hospital, and attended their admitted child at Perpetual Help Medical Center their admitted child at Perpetual relip Medical Center Las Piñas were included in the study. Age, parity, and monthly household income significantly influenced maternal awareness. Results also showed that the mean awareness score of the participants was 4.51 (SD=1.39). Most participants had a low awareness (44.67%), with only 42.00% and 13.33% having moderate and high awareness, respectively

Conclusion: Even if ENBS is mandated by law with a high percentage of newborns screened for NBS in the Philippines, most of the mothers included in this study have low awareness of ENBS, and age, parity, and monthly household income significantly affect maternal awareness. Improvement in the provision of ENBS information is highly recommended to the public and healthcare providers





#### Neonatal Outcomes Of COVID-19 Confirmed Mothers In Zamboanga City Medical Center

Background: World Health Organization declared Coronavirus disease (COVID-19) outbreak as a public health emergency of international concern at the early months of year 2020. In the Philippines, there were 4,127,856 million COVID cases as of December 11, 2023 with 66,779 deaths based on 2023 World Health Organization COVID-19 Situation report. In the time of pandemic, it is important to give attention to two susceptible groups. The physiologic changes in pregnant women and the immature immune system of neonates, are some of the reasons why these populations are vulnerable to infection, specially to a highly contagious virus like SARS-CoV-2. Despite several studies, there are still varried data on the effect of maternal COVID-19 on the fetus.

**Objective:** This study aimed to determine the neonatal outcomes of COVID-19 confirmed mothers in Zamboanga City Medical Center from January-December 2021.

**Methods:** This research employed a cross-sectional analytical study utilizing retrospective review of charts.

Results: The study showed that out of 283 neonates, 7 (2.47%) tested positive for COVID-19. One was critical while the rest were asymptomatic. Among the neonatal outcomes, the (a) Need for Admission (p-value: 0.034), (b) Positive Neonatal RT-PCR result (p-value: 0), (c) Neonatal Diagnoses of Small for Gestational Age (p-value: 0.016) and Sepsis (p-value: 0.024, 0.019) were proved to be significantly associated with maternal COVID-19 classification.

Conclusion: The study concluded that specific neonatal outcomes were associated with the maternal COVID-19 classification. In general, the neonatal outcomes were good however there were still possibilities for poor outcome. To generate more conclusive data, it is recommended that larger sample size, longer time frame and comparison to a control group be utilized.

**Newborn Medicine** 



#### Hospital Outcome Of Newborns Delivered Among COVID-19 Confirmed Positive Mothers At A Tertiary Government Hospital

Ma. Earlaine D. Tabiongan, MD, Angelica Joyce G. Evardone, MD, MHA, FPPS, DPSNbM

Background: A few neonates suffered relevantly from COVID-19. The "para COVID" effects were felt in many neonatal intensive care units (NICUs) and have significantly impacted their quality of care. As we gear towards living with the virus, this population should always be considered particularly with the newborn disposition: whether rooming-in with the mother or NICU admission is preferred furthermore, identifying their discharge outcome.

**Objective:** This study determined newborn outcomes delivered by COVID-infected mothers admitted at Eastern Visayas Medical Center (EVMC) from August 2020 to February 2022.

**Methods:** A retrospective cohort analytic study was employed, which included neonates born to COVID 19 confirmed positive mothers delivered at EVMC from August 2020 to February 2022. Maternal clinicodemographic profile, neonatal outcome, neonatal RTPCR result, birth and discharge disposition data were collected upon chart review. Descriptive analysis was done using frequency, distribution, rates, ratios, and significant associations. Chi-square was used to determine significant differences.

Results: About 346 COVID-confirmed mothers were included with their newborns. The majority of the mothers belonged to the age group 19-29 years old (53%), were multigravid (70%), multiparous (68%), and primarily asymptomatic (90%). Almost all symptomatic mothers had mild symptoms (91%). Among the newborns, most of them were term (92%), more than half were delivered via spontaneous vaginal delivery (53%), the majority weighed between 2000-2999g (55%), and the majority weighed between 2000-2999g (55%), and the majority had essential intrapartum newborn care done (EINC)(77%). Majority of the newborns had negative RTPCR results (84%) and were roomed in (82%). Furthermore, almost all the newborns were discharged improved (97%). Upon analysis, there is a significant difference in the newborn significant difference in the discharge disposition among COVID-positive and negative newborns (with a p-value of <0.001). Likewise, there is a significant difference in the discharge disposition among COVID-positive and negative newborns (with a p-value of <0.001).

**Conclusions:** Rooming in with the mother to encourage breastfeeding in COVID positive and negative neonates is preferred and may not depend on the newborns' COVID 19 results. Furthermore, COVID 19 results may not determine the neonate's discharge outcome.

**Newborn Medicine** 



## "Her Latency In My Infancy" A Case Of A Neonate With Congenital Syphilis Stephanie R. Villar, MD

Congenital syphilis caused by *Treponema pallidum* infection, occurs via maternal-to-fetal transmission during pregnancy. This leads to a spectrum of clinical presentations that span from asymptomatic cases to prematurity and even mortality. Despite the advent of Penicillin, there has been a resurgence in cases of congenital syphilis and a notable rise in global incidence. The goal of this case report is to highlight the importance of recognizing the early signs of this infection, which can resemble symptoms of other neonatal conditions. We report a case of congenital syphilis in a 13-day-old neonate, who displayed symptoms affecting the skin, bones, and liver. This patient was born to an asymptomatic mother with an undiagnosed case of syphilis. The patient completed a 14-day regimen of Penicillin G treatment and showed clinical improvement over time. Timely identification and management of congenital syphilis are vital for the optimal development of neonates. The prognosis for this condition significantly improves with the timely implementation of preventive measures.

Keywords: Congenital syphilis, Treponema pallidum, Nontreponemal test



**Pulmonology** 



#### Prevalence Of Pediatric Pleural Effusion In A Tertiary Government Hospital In Manila; A 3-Year Retrospective Study

Analyn P. Dizon, MD, Pia Uzelle Garvida, MD Kris lan Mendoza, MD, Jennie Wong, MD

Background: In the Philippines, a country with a considerable burden of pediatric respiratory illnesses, pleural effusion remain relatively under explored. Understanding the local epidemiology and clinical characteristics is crucial for optimizing patient care and resource allocation.

**Objective:** The purpose of this study is to determine the prevalence of pediatric pleural effusion in a tertiary government hospital in Manila from 2020-2023.

Methodology: This is a Retrospective descriptive study conducted in a tertiary government hospital in Manila, Philippines. Records from June 2020-June 2023 of pediatric patientsdiagnosed with pleural effusion were assessed. Extracted data covered demographics, clinical symptoms, causes, treatment approaches, and autoomes.

Results: The prevalence rate of pleural effusion is 0.8% based on overall number of admissions for the past three years. Most are males (63%), with 33% aged 0-5 years. Most (50.7%) stayed under two weeks. The primary symptom was a cough (23.8%), with pneumonia as the main cause (34.3%). Chest X-rays detected effusions in 67 patients, and 80% of ultrasounds confirmed this. Most effusions (80%) were exudative. Key microbes included a methicillin-resistant Staphylococcus aureus strain and others. Mortality was 22.3%, but 77.61% improved, with an average hospital stay of 20.20 days.

Conclusion & Recommendation: Pleural effusion in children, thought of low prevalence, presents multifaceted challenges in Manila. This study highlighted the utility and limits of chest radiographs and showed ultrasounds as promising tools for effusion evaluation. Manila's government hospitals, facing resource constraints and prevalent infectious diseases, must navigate pleural effusion intricacies, underscored by the microbial data and resistance patterns found in this study. Pleural effusion's varied mortality rates based on underlying conditions emphasize the need for vigilant, comprehensive care.

Keywords: Pleural Effusion, respiratory symptoms, imaging modalities.

**Pulmonology** 



#### Respiratory Panel Testing: Experience In A Tertiary Pediatric Government Hospital

Arlene Dy-Co, MD, FPPS, FPIDSP

Background/Aims: Pneumonia is a leading cause of death accounting for 17% of all under five deaths worldwide, or a loss of roughly 1.6 million lives. In infants and children older than 1 month but younger than 5 years of age, viral pathogens are the most common causes of lower respiratory tract infections. The study aims to review the most common pathogens and determine the profile and outcome of patients tested using FilmArray® Respiratory Panel in a tertiary pediatric hospital.

**Methods:** This research was a descriptive crosssectional study. The study was carried out at National Children's Hospital (NCH), a tertiary pediatric government hospital, after approval by the institutional review board of the institution. Subjects included 1 month to 18 years of age who were diagnosed with pneumonia and whose nasopharyngeal and endotracheal aspirate samples were sent for respiratory panel testing. It entailed complete enumeration of all subjects and their clinical characteristics, co-morbidities, respiratory panel testing results and outcome were summarized using frequency and proportion.

Results: A total of 89 patients aged 1 month to 18 years with pneumonia underwent respiratory panel testing from February 2019 to October 2023 was included in this study. Majority of the patients were male comprising 57.3% (n=51). Among the patients included in the study, 66.3% (n=59) had normal nutritional status and 95.5% (n=85) had 0-5 number of previous admissions for pneumonia. A total of 69.7% patients had comorbidities and majority of the comorbidities observed were congenital heart disease. 84.3% (n=75) tested positive. Among the pathogens, human rhinovirus/enterovirus were detected in majority of the samples at 54.7% (n=41) followed by respiratory syncytial virus at 32% (n=24). Both human rhinovirus/enterovirus and respiratory syncytial virus were the most common pathogens detected with other pathogens in one sample.

Conclusion: The study has identified that the most common etiology of pneumonia among those who underwent respiratory panel testing was human rhinovirus/enterovirus. The majority of multi-organism-positive patients were observed with human rhinovirus/enterovirus and respiratory syncytial virus. The respiratory panel testing, a new technology, has been available as a tool for rapidly detecting pathogens which could help clinicians in escalating or de escalating their management in patients diagnosed with pneumonia. Furthermore, it can also provide targeted therapy and promote antimicrobial stewardship.

Pulmonology



## "Cilia" Can't Walk The Talk: A Case Of Kartagener Syndrome

Kartagener's syndrome (KS) is a rare hereditary disease with an estimated incidence of 1 in 30, 000 live births. It is a triad of chronic sinusitis, bronchiectasis and situs inversus. This condition is usually underdiagnosed and the symptoms are more prevalent in children in their first decade of life. We describe a case of a 17-year-old male with recurrent cough. During his first year of life, patient has been having recurrent cough and colds with consultations to a physician and intake of antibiotics and supportive medications but there were no hospital admission or chest x rays done. The patient was diagnosed with dextrocardia at six years old. He was adequately immunized during his infancy and childhood as per the National Immunization Program. The patient had received symptomatic treatment due to recurrent sinopulmonary symptoms before developing respiratory distress requiring hospitalization when diagnosis was made. Computed tomography scan of the chest showed a cylindrical type of bronchiectasis affecting the right mid lung zone and lower lungs with some of the bronchi filled with sputtum and tree in bud opacities affecting more the right lower lobe. Sperm analysis and motility was done in which grade D or no movement was noted based on the World Health Organization criteria. He was diagnosed with Kartagener Syndrome based on his clinical symptoms, imaging characteristics and demographics. He was given antimicrobial therapy and inhaled corticosteroids. Referral to higher center was also done for a possible lobectomy of his bronchiectasis however he was advised by a thoracic cardiovascular surgeon to maximize medical management and preventive measure for progression of disease. A high index of suspicion is warranted in patients with dextrocardia with recurrent sinopulmonary symptoms to prevent further complications and improve quality of life of patients.

Keywords: Kartagener syndrome, bronchiectasis, situs inversus, chronic sinusitis, immotile cilia



**Pulmonology** 



#### A Case Report Of A 6-Year-Old Child With Loeffler's Syndrome

Daisybel Calgo Dayag, MD Mary Ruth R. Crabajal, MD, DPPS, DPAPP, FPSCCM

Background: Loeffler's syndrome is a transient respiratory illness associated with blood eosinophilia and radiographic shadowing which is a rare complication of intestinal parasitism commonly cause by Ascaris lumbricoides. This case is preventable through proper hygiene practices, sanitary disposal of human wastes, intensive health education, and mass anthelminthic treatment which is accessible and available in our health facilities, hence this case report is relevant.

Case Presentation: This is a case of a 6-year-old, male, admitted in Region 2 Trauma and Medical Center, Bayombong, Nueva Vizcaya on December 07, 2023 due to respiratory distress with initial impression of Severe Pneumonia, Bacterial with pulmonary effusion requiring chest tube insertion. Diagnostic tests were done which revealed eosinophilia, pulmonary infiltrates and massive pleural effusion and Ascaris lumbricoides and Strongyloides stercoralis larvae. The treatment of choice was initiated and completed.

**Discussion/Conclusion:** Ascaris lumbricoides is a common parasitic infestation in third world countries like the Philippines, however Loeffler's Syndrome is a rare complication. This disease is characterized by migrating pulmonary infiltrates with peripheral blood eosinophilia caused by the helminthic infection. This is our first recorded case in Region 2 Trauma and Medical Center hence, the emphasis on the intensification of deworming programs in the region.

Keywords: Child, Loeffler's Syndrome, Cough, Eosinophilia

**Pulmonology** 



#### An Unusual Case Of Haemoptysis Secondary To Congenital Bronchial-Pulmonary Artery Shunt

Dr Daryl Yeo Yuan Chong, Dr Mahesh Babu Ramamurthy, A/Prof Goh Yam Thiam Daniel, Dr Michael Lim Teik Chung, Dr Lim Chee Wen Terence

**Background:** Bronchial-pulmonary artery shunt is a rare vascular malformation involving an abnormal connection between the bronchial artery and the pulmonary artery which can lead to life threatening haemoptysis. In such cases, bronchial artery embolization is the treatment of choice.

Case Presentation: A 9-year-old girl, presented to the emergency department with intermittent haemoptysis. She had a history of a similar episode ten months earlier when an upper airway endoscopy and computer tomography (CT) thoracic angiogram were performed, which did not reveal any source of the bleed.

A chest radiograph showed right lower zone consolication and a flexible bronchoscopy done showed no active bleeding. She subsequently developed compensated haemorrhagic shock from recurrent massive haemoptysis, requiring intubation for airway protection. A CT thoracic angiogram revealed patchy areas of ground-glass opacity and consolidation in the right middle and lower lobe with no focal point of bleeding identified. Investigations for possible autoimmune cause such as pulmonary capillaritis with diffuse alveolar haemorrhage (DAH) were sent off and intravenous methylprednisolone was initiated.

Due to the lack of an identifiable cause for the persistent haemoptysis, her CT images were further scrutinised with careful attention to the bronchial arteries. A hypertrophied bronchial artery measuring 3mm with shunting into the pulmonary arteries was found to be the cause of her recurrent haemoptysis. She was successfully managed with a right bronchial artery embolization, and had no further symptoms since.

**Discussion:** Our case highlights the importance in considering the rare diagnosis of congenital bronchial artery-pulmonary artery shunt in the context of haemoptysis in children. Special attention should be made to the size of the bronchial arteries especially in children presenting with haemoptysis. In such instances, bronchial artery embolization is paramount as the primary treatment modality due to the risk of massive haemoptysis. Further research to establish a precise definition of bronchial artery hypertrophy in the paediatric population are required.

Key Words: Haemoptysis, bronchial artery, pulmonary artery, shunt, embolization

Cardiology



Clinicodemographic Profile And Outcomes Of Pediatric Patients With Acute Rheumatic Fever And Rheumatic Heart Disease And Association Of Laboratory Parameters To Mitral Regurgitation Severity In A Tertiary Hospital In Manila From 2020-2023

Selina A. Fernandez, MD, Jennie Wong, MD, MPH, FPPS, Sheila Eleonor Yap, MD, MMHoA, FPPS

Background: Acute rheumatic fever (RF) is caused by group A streptococcus (GAS). With repeated infections, rheumatic heart disease (RHD) may occur. Currently, there is no definitive treatment, hence, early diagnosis and prophylaxis is needed to avoid permanent damage to heart valves.

**Objectives:** This study aimed to describe the clinicodemographic profile and outcomes of pediatric RF and RHD patients. This study also aimed to describe the patient profile, laboratory and 2D echocardiography results. This study also aimed to correlate laboratory results to mitral regurgitation (MR) severity and to describe patient outcomes.

Materials and Methods: This is a cross-sectional analytic study which included rheumatic heart disease or acute rheumatic fever patients who underwent 2D echocardiography.

Results: The median age is 13 years old. Majority did not have comorbidities and most had hypertension in their family history. The most common chief complaint is joint pain. Most of our patients had no cardiovascular symptoms upon first consultation and most sought consult after two weeks of having symptoms. Most had carditis and fever. The majority also had a holosystolic murmur. All patients had an elevated ASO titer, ESR and CRP. Most had left ventricular hypertrophy. Majority had pathological mitral regurgitation. Half had an associated aortic regurgitation, It was found that the ratio of neutrophils to lymphocytes significantly predicts if the MR is severe or non-severe.

**Conclusion:** This study found that the patients in this hospital have a similar clinical course and demographic profile. It was also seen that the NLR may predict severity of mitral regurgitation.

Keywords: Acute Rheumatic Fever, Rheumatic Heart Disease, Mitral Regurgitation



Cardiology



# Left Atrial Myxoma As An Unusual Cause Of Near Syncope In An Early Adolescent

Kryzl L. Maranan, MD, Leah Patricia A. Plucena, MD, Carlo Martin H. Garcia. MD

Background: Cardiac myxoma is the most common primary cardiac neoplasm in the adult population, but it is a rather rare primary tumor of the heart among the pediatric age group. The clinical manifestation can range from nonspecific symptoms to serious complications such as sudden death, hence a high index of suspicion is important to promptly diagnose and treat these cases.

Case Presentation: This case report involves a 13-year old Filipino female, with unremarkable medical history, who presented with near syncopal episode, associated with occasional dizziness, pallor, chest discomfort, blurring of vision, easy fatigability and palpitations. The patient's echocardiogram showed a solitary neterogenous mobile mass attached to the atrial septum and prolapsing into the left ventricle during diastole. After the diagnosis of a left atrial myxoma, the patient immediately underwent surgical resection of the cardiac mass. She had an unremarkable postoperative course, with no recurrence of symptoms thus far. The patient was able to integrate herself back to her usual routine, including attending physical classes and dancing again without fear and limitations.

**Discussion/Conclusion:** This case report highlights the young age of our patient who was eventually diagnosed with cardiac myxoma, a case exceedingly rare in the pecliatric population. This case also emphasizes the importance of clinician's high index of suspicion on patients presenting with near syncope, as it is not a common presentation of cardiac myxoma especially in the young population, and also it underscores the excellent prognosis if timely intervention is to be done.

Keywords: myxoma, adolescent, near syncope, cardiac mass

**Cardiology** 



#### Takayasu Arteritis In An Adolescent Male Presenting With Blurring Of Vision Ena Nicole Ashlee E. Wong, MD Melissa A. Dator, MD

Melissa A. Dator, MD Lea G. Galia, MD

Background: Takayasu's arteritis is a rare type of vasculitis mainly affecting the aorta and its major branches and diagnosis is usually made via a high index of suspicion based on classic clinical findings such as headache, chest pain, or claudication and radiologic evidence of a large vessel abnormality. As such, in cases with unusual presentation of the disease, early diagnosis and initiation of management remains a challenge even with the advent of imaging modalities.

Case Presentation: A 14-year-old Filipino male presents with sudden onset blurring of vision prompting a visit to the emergency room where there was an incidental finding of elevated blood pressure. On work up for hypertension, he was found to have decreased dorsalis pedis pulse and blood pressure measurement difference of more than 10mmHg in each limb. Based on these findings, further diagnostic testing included an abdominal computed tomography scan showing abdominal aorta thickening and renal artery stenosis with blood works showing elevated acute phase reactants. These findings savisfy the Pediatric Rheumatology European Society (PRES) - European Alliance of Associations for Rheumatology (EULAR) criteria for Takayasu's Arteritis.

He was then managed with methyl prednisone pulse therapy and was sent home on oral corticosteroids and oral anti-hypertensives under a multidisciplinary management with a General Pediatrician, Pediatric Rheumatologist, Pediatric Nephrologist, Pediatric Cardiologist, Adolescent Medicine specialist, Thoracic and Cardiovascular Specialist, and an Interventional Radiologist for holistic care. The patient remained asymptomatic on subsequent visits and is undergoing monitoring of disease activity for possible renal artery stenting.

**Discussion/Conclusion:** For patients presenting with hypertension or symptoms of end-organ damage without any known comorbidities especially in the adolescent age group, it is important to consider Takayasu's Arteritis from high index of suspicion and pattern recognition. Prompt diagnosis and early initiation of intervention have proven to increase survival rates in people diagnosed with this disease.

Rheumatology



#### Gastrointestinal And Hepatic Involvement In An Adolescent With Systemic Lupus Erythematosus

Joannes Paulo V. Castro, MD Melissa A. Dator, MD, MBA Lea G. Galia, MD

Background: Systemic lupus erythematosus (SLE) is a lifelong autoimmune disease presenting as mucocutaneous, hematologic, renal, and musculoskeletal symptoms, but rarely presents with gastrointestinal symptoms like abdominal pain, hepatosplenomegaly, and gastrointestinal bleeding. Only 0.4% of pediatric SLE cases in the Philippines have presented with these symptoms, and recognition of SLE through these presentations is essential in multisystemic approach in the management of SLE.

Case Presentation: An adolescent presented with a history of recurrent hematochezia and melena, with associated hepatosplenomegaly, pallor, alopecia, anasarca, visual hallucinations and gradual weight loss, and was repeatedly admitted in different institutions for transfusion of multiple blood products. She underwent multiple diagnostic tests and imaging for tuberculosis, leukemia, lymphoma, and SLE-bone marrow aspirate and tuberculosis work-up showed unremarkable results; upper gastrointestinal endoscopy were noted unremarkable; computed tomography (CT) of the neck, chest, and abdomen showed multiple lymphadenopathies and bowel wall thickening; antinuclear antibodies (ANA) test yielded positive; and percutaneous liver biopsy showed chronic interface hepatitis with lobulitis pattern. She was then diagnosed with lupus enteritis and lupus hepatitis, and was initiated with high-dose corticosteroids, with immediate resolution of the gastrointestinal bleeding. She was also managed by different multidisciplinary care given her multisystemic manifestations like lupus nephritis. She was then sent home to prevent further nosocomial infections, and her condition eventually improved on constant follow-up in the outpatient service.

Discussion & Conclusion: Lupus enteritis, which can be diagnosed through radiologic evidence of bowel wall thickening or bowel dilatation, and clinical improvement with high-dose corticosteroids, has different clinical manifestations among patients with SLE depending on the bowel layer affected by the immune complex deposition. Similarly, lupus hepatitis responds to high-dose corticosteroids as reflected in initially elevated liver enzymes. Immediate and prompt diagnosis of SLE with gastrointestinal and hepatic involvement, as well as holistic management, is important in controlling the symptoms and preventing debilitating complications of SLE.

Keywords: Systemic lupus erythematosus, lupus enteritis, lupus hepatitis



Rheumatology



#### Navigating Challenges: Recurrent Kawasaki Disease In A Three-Year-Old Male

Kawasaki Disease (KD), a self-limited systemic vasculitis primarily affecting children aged 1-5 years, is characterized by a 2% recurrence rate. The highest incidence are seen in children less than 3 years of age who had cardiac sequelae during the first episode. Recurrences commonly occur within the first 12 months after initial episode of KD. This case report discusses a three-year-old male, who was previously diagnosed with Kawasaki disease eight months prior and was successfully treated with intravenous immunoglobulin (IVIG) and aspirin, with no coronary artery aneurysm identified on 2d echo. The patient was well until five day prior to admission, the patient developed fever and over the course has exhibited nonpurulent conjunctivitis, maculopapular rash, and mucocutaneous changes, including cracked and dry lips.

Upon admission, still with the above noted symptoms. Pertinent physical exam showed nonpurulent conjunctivitis, dry cracked red lips and strawberry tongue, cervical lymphadenopathy >1.5 cm, right, edema of the hands and feet. Pertinent laboratory tests revealed elevated inflammatory markers, including a C-reactive protein level of 155mg/L and an erythrocyte sedimentation rate of 78mm/hr. CBC with platelets showed leukocytosis (17,400 per cubic millimeter). 2d echo showed Mitral regurgitation, moderate to severe, Tricuspid regurgitation, mild, Left ventricular side enlargement, Good ventricular systolic function at 68% (+) Perivascular brightness, No coronary artery enlargement, (+)!pericardial effusion, 0.71 cm to 0.74 cm, right ventricular side. SARS CoV-2 testing and blood culture were unremarkable.

Given the fulfillment of diagnostic criteria for KD, immediate administration of IVIG at 2g/kg and acetylsalicylic acid at 80 mg/kg was initiated. Prompt administration led to the resolution of fever and gradual improvement in other manifestations. The patient was discharged in a stable and improved condition.

This case highlights the recurrence of KD in a short time frame, emphasizing the challenges in managing this condition. The prompt response to IVIG and aspirin reiterates their effectiveness in treating KD-associated symptoms. Continuous monitoring and multidisciplinary follow-up are crucial for assessing long-term cardiovascular implications. This report contributes to the growing body of literature on KD, underscoring the need for further research to comprehend its intricate nature and refine therapeutic strategies for affected pediatric populations.

Rheumatology



#### Polyarteritis Nodosa In An Adolescent: A Rare Case Report From Nueva Vizcaya, Philippines

Cherry Mae Y. Pe Benito, MI Olivia B. Bravo, MD, DPPS

Background: This case report presents a case of an adolescent female with Polyarteritis Nodosa (PAN), highlighting the clinical presentation, diagnostic challenges, and treatment strategies. It is notable for being the first documented case in Nueva Vizcaya, emphasizing the critical importance of early diagnosis and intervention in managing systemic vasculitis.

Case Presentation: An 18-year-old female presented with fever, weight loss, and multiple abdominal nodules associated with hematomas and polyarthralgia. Diagnostic workup revealed elevated inflammatory indicators and characteristic peri-lymphoplasmacytic infiltrates with the blood vessels ranging from small to medium blood vessels on biopsy. Treatment included Cyclophosphamide Pulse Therapy with a promising prognosis and absence of major organ complications during follow-up.

**Discussion/Conclusion:** This case emphasizes the critical role of early diagnosis and thorough management in rare cases of vasculitis such as Polyarteritis Nodosa (PAN). It underscores the necessity for heightened awareness among clinicians especially in areas with lower prevalence rates and limited resources, facilitating accurate diagnosis and opens opportunities for further research into treatment strategies and long-term outcomes in pediatric Polyarteritis Nodosa (PAN).

Keywords: Polyarteritis Nodosa, vasculitis, adolescent

Rheumatology



# The Peculiar Face Of A Rash: A Case Of A 10 Year Old Female With Juvenile Dermatomyositis Andrea Paninghatan Rivera, MD

**Background:** The presentation of Juvenile Dermatomyositis may be similar to other autoimmune diseases. Hence, this case report highlights the importance of timely and prompt diagnosis to prevent the progression of the disease.

Case Presentation: This is a case of a 10-year-old female who came in with 9 months history of development of erythematous rash on the bridge of the nose and cheeks, erythematous non-pruritic coalescing rashes at the back and extremities associated with violaceous changes in the color with proximal muscle weakness exhibited as difficulty in standing and combing her hair. There was also an appearance of erythematous papules and plaques over the dorsal surface of her knuckles. Ancillary procedures done revealed the following results: ANA titer <40, ESR 18mm/hr, SCL-70 antibody titer <1, CKMM 354.9U/L, CKMB 43.06U/L and an electromyography showing the presence of an inflammatory type of a symmetric, proximal and distal myopathy, likely autoimmune. Juvenile dermatomyositis was considered hence prednisone, methotrexate, folic acid, and sunblock SPF >30 was started. Marked improvement was seen as rashes regressed with resolved range of motion.

**Discussion/Conclusion:** The goal of treatment for juvenile dermatomyositis is to minimize inflammation and prevent disability, treatment should be early and requires a team approach. High dose corticosteroids in combination with steroid-sparing methotrexate is the mainstay therapy. In addition, protection against UV is important as this may trigger flares.

Prognosis is good especially when promptly initiated with corticosteroids for control of muscle inflammation and weakness. A high index of suspicion and a targeted approach is necessary to manage the patient effectively.



Rheumatology



#### A Case Report Of Antiphospholipid Syndrome In A Male With Systemic Lupus Erythematosus Lily N. Xiao, MD

**Background:** Antiphospholipid syndrome is an autoantibody mediated thrombophilia characterized by recurrent arterial or venous thrombosis. It is associated with other autoimmune diseases, most common of which is systemic lupus erythematosus.

Methods: A Case Report

Case: This is a case of a 13- year-old male, who came in due to bluish discoloration of fingertips of upper and lower extremities who had no history of previous hospitalizations, surgeries nor blood transfusions and on family history, the patient's father was diagnosed with systemic lupus erythematosus at age 41. Pertinent physical examination findings are bluish discoloration of fingertips. ANA showed positive, antiphospholipid syndrome panels showed positive results. Arteriovenous duplex scan showed acute deep thrombosis totally occluding the left internal jugular vein, and subclavian vein with partial occlusion in the axillary vein. The patient then started with DMARDs such as hydroxychloroquine for SLE and heparin as anti-thrombosis. Wound debridement of the necrosed 5th digit right hand and big toe right foot were also done.

**Conclusion:** Antiphospholipid syndrome in children with systemic lupus erythematosus had a good outcome with early recognition and adequate intervention. Early diagnosis and treatment employing multidisciplinary care play a role in good prognosis in children with this case.

Keywords: Antiphospholipid syndrome, Systemic lupus erythematosus, Arteriovenous

**Infectious Diseases** 



#### Clinical Outcomes Of Pulmonary Tuberculosis Two Years In Children Treated With Daily Regimen Of Antitubercular Drugs

Dr. Anurag Agarwal, Dr. Shivananda Hosatti

Background: In 2017, the National Tuberculosis Elimination Program in India implemented significant changes in treatment guidelines, transitioning from alternate-day drug regimens to daily dosing to improve treatment outcomes. Studies suggest minimal differences in treatment failure or recurrence rates between the regimens, however, patients receiving three times weekly dosing throughout the therapy had higher rates of acquired drug resistance.

**Objective:** This study was done to estimate the rate of recurrence of tuberculosis in pediatric patients who were on daily drug regimen.

**Methods:** Children and adolescents up to 18 years old, who completed drug-sensitive pulmonary tuberculosis treatment at least 2 years prior, were contacted via telephone for follow-up. A detailed history was asked, and old medical records and investigations were assessed. Nutritional status was assessed using weight-for-age, eight-for-age, and weight for-height/BMI measures. X-rays were done on all the patients. Pulmonary function tests were performed in children over 7 years old, excluding those with contraindications or inability to produce acceptable PFT graphs.

Results: 400 patients were tried to be contacted from the data available on Nikshay portal. A total of 165 patients, who responded, were distributed across age groups: 20.0% (33 patients) below 7 years, 37% (61 cases) between 7-12 years, and 43.0% (71 patients) between 12-18 years. The gender distribution showed 61.8% females and 38.2% males. Around 52.6% were underweight cases, dropping to 10.2% on follow-up. The recurrence rate post treatment was 7.9%. Urban areas showed higher recurrence rates (9.3%) and urban slums (6.3%). Children with failure to gain weight had a higher recurrence rate (p=0.001), indicating a bidirectional relationship between TB and undermutrition. The mortality rate due to TB was 2.42%. Pulmonary function tests showed abnormalities in 9 patients (26.47%) (19% restrictive pattern, 7.47% obstructive pattern) out of 34 cases who could perform spirometry.

**Conclusion:** Despite completing daily drug therapy successfully, the average recurrence rate was found to be 7.9%. This is similar to the recurrence rate found in the studies involving adult patients treated with the thrice-weekly/alternate days regimens. Poor nutrition and children who tested microbiologically positive had higher recurrence rates.

Keywords: Tuberculosis, Relapse, Recurrence, Daily Regimen, Antitubercular Drugs, Outcomes, Pulmonary Function Test. Infectious Diseases



#### Fulminant Meningococcal Septicemia: A Case Report Honeya S. Bato, MD

Neisseria meningitidis (Meningococcus) is a gramnegative bacteria that has the potential to lead to a severe and life-threatening bacterial infection, presenting as either meningitis, septicemia or a combination of both. The spectrum of illnesses caused by Neisseria meningiticilis spans from asymptomatic carriage to fatal outcomes due to fulminant meningococcemia. An incidence rate of 10 to 25 per 100,000 population per year is documented in developing countries. Although rare, invasive meningococcal disease has a high mortality and severe morbidity in children. This report presents a case of a one-year-old female with undocumented fever associated with petechial skin rash which rapidly progressed to hemorrhagic rash and eventually succumbed to septic shock in a span of 18 hours. In this report, we highlight the rapid progression of the disease and the importance of immunization to prevent Meningococcemia.

Key words: Neisseria meningitidis, Fulminant meningococcemia, petechial rash





Knowledge, Attitudes And Practices Of Mothers At The East Avenue Medical Center Pediatric Sick And Well Baby Outpatient Department With Children Ages 1 To 5 Years Old Regarding Childhood Immunization (National Immunization Program)

Ma. Wilhelmina Bautista, MD Grace Verzosa, MD Maria Camille Gonzalez, MD

**Background:** The National Immunization Program ensures access to routinely recommended childhood vaccines. The knowledge, attitudes and practices (KAPs) of mothers regarding vaccination greatly impacts their children's immunization status.

**Objective:** To determine the KAPs of mothers at the EAMC pediatric outpatient department regarding the National Childhood Immunization Program.

Methods: This is a prospective cross-sectional study that utilized a self-constructed survey questionnaire. STATA 13.1 was utilized for data analysis. Descriptive statistics was used to summarize the demographic and clinical characteristics of the patients. Pearson product moment correlation analysis was used to determine the correlation or level of association of the mothers' knowledge, attitudes and practices toward immunization of their children and their current health status. Shapiro-Wilk test was used to check the normality of the continuous variables.

Results: Majority of the mothers (90.32%) were in favor of having their children immunized and had knowledge that their children would be protected from diseases. The results showed that for every increase in immunization KAPs, there was a decrease in the chances of mothers bringing their children for OPD (p value=<0.001) and ER consults (p value=<0.001) and hospital admissions (p value=<0.001). Most of the mothers (n=150, 80.6%) were in favor of having their children immunized and would recommend vaccination to other mothers (n=148, 79.7%). Seventy-one percent (71%) of the mothers were informed about the free vaccinations under the National Immunization Program and most (81%) learned about this from maternity clinics. Majority of the children of the respondents (n=130, 69.89%) had complete immunizations.

**Conclusion:** Majority of mothers were aware of the importance and approved of childhood immunization. Improving KAPs may lead to decreased frequency of ER and OPD consults and hospital admissions.

Infectious Diseases



#### Creepy Crawlers, A Case Of Biliary Ascariasis Lady Jonah M. Casas-Beltran, MD

Gallbladder ascariasis is a rare case. In the Philippine Pediatric Society registry, ascariasis with intestinal complications have a total of 12 cases registered in the National Capital Region and no registered cases yet in Southern Tagalog Region for the past ten years. There is no specific category yet for gallbladder ascariasis in the Philippine Pediatric Society registry. This case report presents a 16-year-old male with epigastric pain radiating initially to the right upper abdomen with a pain scale of 5/10 associated with non-bilous and non-bloody vomiting and passage of worm. There was no fever, diarrhea, dysuria, hematuria, or back pain. Other significant findings in the past medical history and personal/social history include not being dewormed since childhood, living beside the creek, playing outside their house barefoot and picking up garbage frequently beside the creek for additional income. Upon arrival at the emergency room, he had generalized abdominal pain with a pain scale of 10/10 and on physical examination, he had anicteric sclera, hypogastric tenderness and right lower quadrant direct tenderness and rebound tenderness. He was stunted and severely wasted for age. The initial impression was acute appendicitis, intestinal parasitism and severe malnutrition, rule out urinary tract infection. During the course in the wards, the patient presented later with icteric sclera and was positive for Murphy's sign. Other differential diagnoses such as acute hepatitis, acute pancreatitis and urinary tract infection were ruled out. Whole abdominal ultrasound was done and revealed the presence of a tubular focus, demonstrating intrinsic mobility in the gallbladder and bile sludge. Patient subsequently underwent laparoscopic cholecystectomy with intraoperative findings of a non-distended gallbladder with thickened walls, with enlarged lymph node over gallbladder and a dead ascaris worm inside the gallbladder. Hence, arriving at the final diagnosis of Acute cholecystitis secondary to Intestinal parasitism with severe malnutrition, status post laparoscopic cholecystectomy. Since gallbladder ascariasis is a rare case, this case presentation aims to serve as a guide in the management of cases like this patient. The principle of treatment includes conservative treatment of cholecystitis, oral administration of anti-helminthics and endoscopic and surgical treatment. Initial management of this patient began with conservative treatment where broad-spectrum antibiotics, analgesics and intravenous fluid were given. When conservative management fails, surgical or endoscopic management is warranted. Surgical intervention is considered for cases with a dead worm inside the gallbladder as in our case, gallbladder with both stones and worms, and lack of spontaneous expulsion of worms from the gallbladder. As pediatricians, emphasis in the importance of preventive measures to avoid preventable cases like this from happening again is encouraged. Recommendations include promoting proper hygiene and strengthening programmes on deworming.

Keywords: gallbladder ascariasis, biliary ascariasis, intestinal parasitism

**Infectious Diseases** 



#### Understanding MIS-C, Before You Mis-It! A Case Report On Multisystem Inflammatory Syndrome In Children (MIS-C)

Kristynelle D. Bonifacio, MD Francesca Mae T. Pantig, MD Raymund Anthony L. Manuel, MD

The neonatal transmission of SARS-CoV-2 has remained controversial since there are only limited data on the epidemiological and clinical features of COVID-19 infection with neonates. This retrospective, descriptive study aimed to describe the clinical profile and outcomes of neonates whose mothers tested positive for SARS-CoV-2 upon delivery in a private tertiary hospital in Angeles City, Pampanga. Among 1,632 deliveries from March 1, 2020 to November 30, 2021, sixteen mothers (0.98%) had confirmed COVID-19 infection upon delivery. However, none of the SARS-COV-2 infected mothers had neonates with positive COVID-19 results. But still, five (31.25%) were delivered preterm, ten (62.5%) were symptomatic in which tachypnea (50%) was the most prevalent, five (31.25%) were admitted at the Nursery Septic Area, and four (25%) at the Neonatal ICU. Laboratory workups of symptomatic neonates showed (ymphocytopenia (100%), surfactant deficiency disease (44.4%) and pneumonia (22.2%). All were managed medically according to their symptoms. The neonates stayed from 2 to 40 days ( $\mu$  = 11 days) at the hospital. All 16 infants were discharged with good outcomes and with no noted mortality. Upon further analysis, it was found out that maternal COVID-19 severity was significantly associated with neonatal length of hospital stay, gestational age, admission status, and APGAR scores at 1st and 5th minute of life (p-values < 0.05). Despite the small number of subjects, the study provided local information about the general overview of the clinical characteristics and outcomes of neonates born to mothers with SARS-COV-2 infection.

Keywords: COVID-19, SARS-CoV-2 in pregnancy, maternal outcome, neonatal outcome, neonates





#### A Case Report On Pediatric Pulmonary Tuberculous Pseudotumor

Jaiun Patreisha D. Calacday, MD

A pseudotumor is a rare manifestation of pulmonary tuberculosis, it can simulate malignancy, both in clinical presentation and radiographic findings, and may cause significant delay in its diagnosis and treatment. The incidence rate of pulmonary tuberculous pseudotumor in the pediatric population is still unknown. This is a case report of a bronchopulmonary based tuberculous pseudotumor in a 7 year old patient who presented with a 12-month history of completed TB regimen. The radiological evaluation showed a calcified soft tissue mass with multiple coarse intralesional and pheripheral calcifications occupying the right middle lobe and extending to the right lower lobe. This paper aims to explore the clinical and pathological significance of pulmonary tuberculous pseudotumors in the course of Tuberculosis in the Pediatric population, highlighting its unique features, diagnostic challenges, and potential implications for the management of pediatric TB cases.

Keywords: Pulmonary tuberculous pseudotumor, Tuberculoma. Pulmonary Infectious Diseases



#### Clinico - Radiologic Profile And Outcome Of Covid 19 Positive Pediatric Patients Admitted In Perpetual Help Medical Center Biñan From March 2020

To December 2022
Maria P. Carteciano, MD,
Ruel M. Villanueva, RMT, MD,
Ronald Joseph P. Dionisio, MD, DPPS

Background/Introduction: The main causative agent of the disease COVID19is also known as the SARS-CoV-2 virus. It is regarded, to this writing, an on-going pandemic. The number of infections has decreased dramatically, but the danger that it imposes still lingers. This is most especially true among the vulnerable population, such as children, including the unvaccinated members of the community. Children are not exempted from acquiring infection caused by COVID 19. In fact, these children also showed significant findings on their chest Xray which had resulted them to be admitted for monitoring, management, and treatment. As of March 2023, there are 759 million reported cases globally, with 4 million cases in our country. Nearly 15.5 million pediatric cases reported positive for COVID-19 by the American Academy of Pediatrics.

**General Objective:** To determine the clinico-radiologic profile and outcome of COVID19 positive pediatric patients admitted in the Department of Pediatrics of Perpetual Help Medical Center Biñan from March 2020 to December 2022

Methodology: Retrospective research design was used in this investigation. General data from the medical charts of these patients were obtained. This included age, sex, presence of co infections, presence of co-morbidities, history of COVID 19 vaccination, and history of exposure. After these had been recorded in the data collection form please see Appendix AJ, the investigator determined the chest X ray findings of these children. Clinical outcome was then collected. In the study, parameters specifically severity, duration of hospital stay, and disposition were obtained.

Results/Conclusions: Chest X ray findings in children with COVID19 infection were mostly hazy and streaky densities, and reticulations. Lungs affected were usually central and bilateral. COVID 19 infected children with radiologic findings suffered mostly from moderate to severe forms of COVID 19 infection. The study further revealed that children with mild infection were not at risk from exhibiting significant chest X ray findings. These children were admitted for less than 5 days, where the majority of cases of hospital admission were discharged successfully.

Keywords: COVID 19, Pediatric COVID 19 Infection, Radiologic Findings, SARS-CoV-2 Infectious Diseases



#### Leptospirosis Associated With Hemophagocytic Lymphohistiocytosis And Severe Thrombocytopenia In A Child: Case Report

Dr. Gurdeep Singh Dhooria Prof. Deepak Bhat

Introduction: Secondary haemophagocytic lymphohistiocytosis is often associated with a wide array of infections, malignancies, and autoimmune diseases, is uncommonly seen with leptospirosis. We describe a child with leptospirosis complicated by SHLH with severe thrombocytopenia and responded to oral steroids.

Case description: A 6 years old child presented with fever of 3 weeks and yellow discoloration of eyes since 15 days. Child was extensively evaluated for viral hepatitis, enteric fever, auto-immune hepatitis, wilsons disease, tropical infections which came to be negative. MAT (microscopic agglutination test) for leptospirosis became to be positive. IV Cefotaxim and azithromycin were started following which resolution of fever and reduction of transaminitis was seen. In view of persistent bicytopenia and severe thrombocytopenia, workup for sHLH was done which showed elevated serum ferritin and triglyceride levels with low fibrinogen done. Bone marrow biopsy done showed evidence of hemophagocytosis confirming the diagnosis of HLH. Severe thrombocytopenia improved after 72 hours of oral dexamethasone and child was discharged on oral medicines.

Conclusion: Leptospirosis is a common zoonotic disease in the tropics with significant morbidity and mortality. There should be high index of suspicion for sHLH and low threshold for workup with specific investigations in tropical infections who have fever, and persistent transaminitis with bicytopenia.

Keywords: Leptospirosis, secondary haemophagocytic lymphohistiocytosis, thromocytopenia







#### **Recurrent Microbial Carriage And Skin And Soft Tissue Infections** In New Zealand Children: **A Cohort Study**

Dr. Thomas Ding, Dr. Mark Hobbs, Molly Grant, Dr. Owen Sinclair, Dame Dr. Teuila Percival, Dr. Emma Marks, Dr. Sarah Primhak, ssoc. Prof. Stephen Ritchie, Dr. Brett Wagne Prof. Cameron Grant, Dr. Catherine Gilchrist

**Background:** Skin and Soft Tissue Infections (SSTI) are common in New Zealand (NZ) children. Māori (NZ indigenous) and Pacific children, and those living in the most deprived households experience a disproportionately high burden of disease. Children colonised with Staphylococcus aureus have a greater risk of SSTI. It is unclear whether there is a relationship between persistent microbial carriage patterns and risk of SSTI in children.

#### Objectives:

- To describe the prevalence of SSTI in NZ children at
- eight-years.
  To describe S. aureus carriage patterns at eightyears and the relationship betwee intermittent/persistent carriage and SSTI.

  To describe other determinants of SSTI in children.

Methods: The study analyses data from Growing Up in New Zealand (GUINZ), a nationally representative cohort study. Parents reported SSTI via at face-to-face study. Parents reported SSTI via at lade-to-lade interviews using standardised questionnaires at nine-months, two-, four-, and eight-years-old. Children provided skin/nose/throat swabs at four- and eight-year interviews. Persistent carriage was **S. aureus** detected at four- and eight-years, whereas intermittent carriage was one time point. The primary outcome was any SSTI by eight-years-old with a significance value of P<0.05

Results: The study population was the 3656 children who completed all interviews to eight-years and provided biological samples at four- and eight-years. Overall, 1282/3656 (35%) children had an SSTI by 8 years of age. S. aureus colonisation was common, with persistent (1287/3656, 35%) or intermittent (1604/3656, 44%) carriage observed in 79% of the study population. A carriage observed in 79% of the study population. A disproportionally higher fraction of children with Māori (44%) or Pacific (44%) ethnicity had SSTI. Chi-square analyses suggest that persistent *S. aureus* carriage was associated with asthma (38% versus 34%, P=0.018), eczema (38% versus 33%, P=0.013) and SSTI (38% versus 34%, P=0.006), but not with other demographic and household characteristics. Results suggest a relationship between SSTI in early childhood and intermittent/persistent *S. aureus* carriage (35/38% versus 31%, P=0.006), eczema (40% verses 30%, P<0.001). 31%, P=0.006), eczema (40% verses 30%, P<0.001), asthma (42% versus 33%, P<0.001), primary healthcare access difficulty (40% versus 33%, P<0.001), and other maternal and household characteristics

Conclusion: S. aureus carriage is extremely common in Conclusion: S. aureus carriage is extremely common in NZ children (79%) and one-third of study children had an SSTI by eight-years-old. There is a large ethnic disparity with Māori and Pacific children suffering much higher rates of SSTI. Potential determinants of SSTI are intermittent/persistent S. aureus carriage, eczema, asthma, primary healthcare access, and household and maternal characteristics. Further analyses will further describe determinants of SSTI trick principles of secretarians. describe determinants of SSTI risk using regression modelling

Infectious Diseases



#### **Baby Fever:** A Case Report On Neonatal Dengue

Dengue is a hyperendemic disease in the Philippines and is mainly transmitted through mosquito bite and manifests systemically with symptoms such as fever, myalgia, headache, retro-orbital pain, flushing, rashes, petechiae and mild mucosal bleeding. This disease affects different age groups including children, pregnant women and in this case, a neonate who was infected women and, in this case, a neonate who was infected through vertical transmission. This case presents a fullterm neonate born to a mother who had dengue infection at the time of delivery who later developed fever and mottling on the 4th day of life. Patient was started on fluids, anti-pyretic and empiric antibiotics. Laboratory diagnostics were done and complete blood count trend showed leukopenia and thrombocytopenia and serology showed dengue non structural protein-1 (NS1) antigen positive on the 2nd day of illness with seroconversion on the 4th day of illness with a positive IgM antibody result hence, confirming neonatal dengue. Patient was given intravenous fluids and antibiotics were continued for 5 days until blood culture turned out negative. Complete blood count was frequently monitored until the patient eventually recovered after 6 days and subsequently discharged. Based on the Philippine Pediatric Society Newborn Registry database, there are only 2 reported cases of dengue in the newborn from 2020 to 2024 in the Philippines. Due to the rarity of occurrence of neonatal dengue through vertical transmission, there can be difficulty in initially diagnosing and managing such cases. But with further studies and wider literature available especially in the dengue endemic countries, this report aims to expand knowledge and better understand the manifestation and management of neonatal dengue.

Keywords: Dengue, Neonate, Vertical Transmission

Infectious Diseases



#### **Clinical Outcome Of Filipino** Neonates Born To Covid-19-Infected **Mothers In A Tertiary Government** Hospital In Davao City (A Two-Year Study)

-I ahasano Dr Funice Jade Dr. Ma. Delta Aquilar, Dr. Jessica Anne Dumalag

Background: With COVID-19 being a novel viral disease affecting neonates, it is crucial to understand the immunological responses of newborns and document clinical features early in life after exposure to COVID-19, either before or after birth, to address uncertainties regarding mother infant health dynamics.

Objective: This study aims to determine the clinical outcome of neonates born to COVID-19- infected mothers in a tertiary Government hospital.

**Methodology:** This study utilized a retrospective cohort and analytical design, reviewing medical records of neonates born to COVID-19-infected mothers at a neonates born to COVID-19-Infected mothers at a government hospital in Davao City. Frequency and percentages described qualitative data, while measures like mean, median, mode, and standard deviation assessed continuous variables. An Unpaired T-test determined significant differences in clinical outcomes among neonates.

Results: Out of 1,638 mothers with COVID-19 managed at SPMC from July 2020 to June 2022, 312 were randomly selected. These mothers, on average 28 years old, had at least two pregnancies and deliveries, with half having comorbidities. Most were transferred for completion of isolation. Newborns were trypically full-term, appropriate for gestational age, delivered via C section, and had good APGAR scores. More than half were admitted to the Neonatal Intensive Care Unit, with nearly half fed expressed breastmilk. Most did not require respiratory support within 48 hours, though common symptoms included tachypnea and respiratory distress. The majority of newborns were discharged home. Laboratory results generally fell within normal ranges. Most tested negative for COVID-19, but 33 out of 279 tested positive. Infected newborns showed elevated levels of LDH, CRP and Ferritin, but none had elevated procalcitonin. Only three out of the 33 had abnormal babygram results. Comparison between COVID-positive and negative newborns revealed significant differences in additionation of the section is reconstitution are delibrate next bed. and negative newborns revealed significant differences in pediatric aging, size for gestational age, delivery method, and need for early respiratory support.

**Conclusion:** The study showed that majority of newborns born to COVID-19-infected mothers, often full-term with normal size and delivered via C-section, with favorable APGAR scores, were less affected by the infection. However, those in NICU/Observational Units, showing symptoms such as rapid breathing, may face greater vulnerability and mortality. Although diagnostic measures appear normal, the importance of maternal COVID-19 vaccination should be noted. Interventions focusing on factors like pediatric age, gestational age delivery method, and respiratory support are vital for neonatal survival





#### Epidemiological Change Of Acute Respiratory Viral Infection In Children After The COVID-19 Pandemic In The Asian Region: A Systematic Review

Lowilius Wiyono, Annisa Larasati, Nina Dwi Putri

Background: Acute respiratory tract infection (ARI) is the most common health problem worldwide that has high mortality and morbidity especially in children. The COVID-19 pandemic caused by SARS-CoV-2 has a high impact on several health issues including the enforcement of non-pharmacological intervention (NPI) to control the spread. The prevalence of respiratory viral agents may have changed since the pandemic began.

**Objective:** The systematic review aims to identify the impact of the COVID-19 pandemic on the respiratory viral infection in children.

Methods: We conducted a systematic review to analyze the impact of the COVID-19 pandemic on acute viral respiratory infection in adherence to the PRISMA guideline. A search strategy was designed with specific keywords on studies evaluating virus infection in children (0-18 years old), published from 2020-2024 on the Asian population. Electronic databases were searched from PubMed (MEDLINE), Cochrane, and Scopus. Selected studies will be assessed using the Cochrane Risk of Bias Tool for Cohort Studies.

Results: Our systematic review included 39 articles, with 26 on Eastern Asia (predominantly China) population. A total sample of around 960,000 participants was included with male predominance. 24 of them compared the incidence rate before and after the pandemic. There are varieties of virus-type surveillance, with most studies conducted surveillance on the respiratory syncytial virus (RSV) (92.3%), Influenza A and B virus (71.8%), Adenovirus (hADV) (53.8%), and parainfluenza virus (PIV) (46.2%) and human metapneumovirus (hMPV) (25.6%). RSV virus was found to have the highest incidence rate after the pandemic. Most studies on RSV described increasing RSV infection after the pandemic (66.7%). A decreased incidence rate was reported by studies discussing Influenza, PIV, hMPV, and hADV (82.4%, 62.5%, 57.1%) and 71.4% of studies respectively). Only one study reported the mortality rate comparison between the after and before pandemic period with significantly increased mortality (2.6% vs.1.8%).

Conclusion: There are changes in viral etiology that caused acute respiratory infection after the COVID-19 pandemic. There has been an increase in RSV infection in most studies, despite the lower rate of infection found in most viruses. The NPI (non-pharmaceutical interventions) during the pandemic has tremendously changed peoples' mobility and daily habits. This highlights the need for further preventive strategies from strict regulation of children to the use of vaccines.

Infectious Diseases



#### Predictive Factors Of COVID-19 Vaccine Hesitancy Among Middle Adolescents In Marawi City

Harissa Lucman, MD, Sahar U. Disomangcop, M.D., DPPS

**Background:** The COVID-19 pandemic has highlighted the critical importance of vaccination. However, vaccine hesitancy remains a significant challenge. Understanding the factors contributing to vaccine hesitancy among adolescents is crucial for informed public health strategies.

**Objective:** The study aims to investigate COVID-19 vaccine hesitancy and its determinants among middle adolescents in Marawi City, Philippines. It examined their sociodemographic profile, risk perceptions, experiences of discrimination, comorbidities, and the relationships between these factors and vaccine hesitancy.

**Design:** This cross-sectional observational study was conducted from August to October 2023 in a school in Marawi City, using questionnaires to collect data on sociodemographic, risk perceptions, discrimination, comorbidities, and vaccine hesitancy.

**Subjects:** The study included 310 middle adolescents aged 14-16 in Marawi City who have not received the COVID-19 vaccine.

Methodology: Data collection began after obtaining ethical approval and school permissions. Homeroom advisers helped identify eligible, unvaccinated participants. Informed consent and assent were obtained. A questionnaire, adapted from Savoia et al. (2021), gathered data. RStudio software was used for data analysis.

**Statistical Analysis:** RStudio software analyzed the data, employing descriptive statistics for categorical variables and the Chi-square test to explore associations between variables. Statistical significance was set at p<0.05.

Results. Most participants were female, Maranao, and Muslim. Various sociodemographic factors exhibited diverse patterns. Many adolescents had low COVID-19 risk perceptions, no comorbidities, and experienced discrimination. Vaccine hesitancy varied, with many being unsure or very likely to accept the COVID-19 vaccine. Several sociodemographic factors, risk perception, discrimination, and comorbidities were associated with vaccine hesitancy.

importance c Conclusion and Recommendation: This emphasizes the of considering sociodemographic perceptions, discrimination experiences, and comorbidities in addressing COVID-19 vaccine hesitancy among middle adolescents. These findings hold implications for public health strategies and policymaking to enhance vaccination coverage and combat hesitancy. Understanding these factors is essential for promoting vaccine acceptance and achieving comprehensive immunization. Furthermore, conducting larger, multicenter, and longitudinal studies with more diverse population can provide more comprehensive understanding of vaccine hesitancy among adolescents.

Keywords: COVID-19, vaccine hesitancy, adolescents, risk perception, discrimination

**Infectious Diseases** 



# Factors Influencing Vaccine Hesitancy Among Families With Less Than One Year Old In An Urban Community In Cotabato City

Background: Vaccination saves millions of lives every year and is continuously a successful strategy in primary health care. However, the vaccination coverage for the past three decades has been unstable and fluctuating. Vaccine hesitancy is a global challenge as it hampers efforts to eliminate diseases. However, there is a paucity of studies on vaccine hesitancy in the Philippines and evidence on its factors are scarce. This study aims to determine factors influencing hesitancy in order to formulate strategies on how to best minimize hesitancy and increase vaccine coverage.

**Objective:** To determine the factors influencing vaccine hesitancy in an urban community

**Methodology:** A survey was conducted in the barangay with the least vaccine turnout using a modified questionnaire based on the WHO-SAGE Working Group on vaccine hesitancy. Purposive and random sampling were used.

**Statistical analysis:** Frequencies, percentages, chisquare test, logistic regression

Results: A total of 121 respondents participated in the study, with vaccine hesitancy rate of 64%. Majority were female muslims, aged 26 to 40 years, did not finish college, unemployed, with a family income less than Php5000 and more than 5 family members. Low educational level, unemployment, and low income were associated with hesitancy as well as numerous factors such as media, sickness and death due to vaccination, culture, head of the family, distance and waiting time, pandemic-related issues, past experiences, influence of family, friends, and neighbors, efficacy, side effects, perceived harm, fear of needles and inexperienced vaccinators, and perceived cost of immunization.

**Conclusion:** Vaccine hesitancy is multifactorial. The decision towards hesitancy is a result of a complex interplay of different factors, which improving vaccine coverage challenging.





#### Clinical Profile And Immediate Outcome Of Patients With Multisystem Inflammatory Syndrome In Children (MIS-C) In A Tertiary Pediatric Hospital Kyla Grace D. Magno, MD

**Background:** COVID19 pandemic brought unprecedented medical conditions. Multisystem Inflammatory Syndrome in Children is a novel complication of COVID 19 in children. Locally, there are limited data on the clinical profile and outcomes of patients with MIS-C.

**Objective:** This study aimed to describe the clinical profile and immediate outcome of patients with MIS-C.

**Methods:** Chart review of 24 patients with MIS-C who fulfilled the eligibility criteria at the National Children's Hospital from May 2020 to November 2022 was done.

Results: Majority (62.5%) of patients were males belonging to the 5–11 year age group (58.3%). Most cases had normal nutritional status (91.6%). Fever (87.5%) was the most common chief complaint. The mean count for hemoglobin, WBC, and platelet were 104.67±22.12 mg/dl\_19.49±10.09 x109/L\_, and 438.32±194.39 x109/L\_, respectively. Most cases (95.8%) had elevated CRP. All inflammatory markers were elevated, with mean values of 2.01±1.29 mg/L for D dimer, ESR of 80.26±46.93 mm/h, LDH of 1458.91±2457.32 U/L, ferritin of 683.13±530.65 mg/L\_, and procalcitonin 20.81±37.38 ng/mL. Majority (70.8%) of patients tested negative for COVID RT-PCR. Among those who tested negative for RT PCR, the majority (73%) tested positive for IgG. Majority (87.5%) were discharged improved and 12.5% died.

**Conclusion:** MIS-C is a rare but serious post infectious sequela of COVID 19 in children characterized by a hyperinflammatory state. Knowledge on the profile and outcome of patients affected by this novel condition may be used to anticipate this complication among those affected

Infectious Diseases



#### The Silent Threat: Missed Maternal Syphilis And Early Congenital Manifestations

Debbie Denise Racho Martinez, MD, Charlotte Bañes MD, Genelynne Beley MD, Kristine Marie del Rosario, MD

Background: Syphilis, caused by *Treponema pallidum* (TP), can be transmitted vertically at any stage of pregnancy resulting in early fetal loss, preterm delivery, low birth weight, stillbirths, neonatal deaths, or congenital disease. Early presentations of congenital syphilis include hepatomegaly, nasal discharge, rash, and bone deformities. Without adequate treatment, early congenital syphilis may lead to long term complications characterized as gumma formation in various tissues.

Case Presentation: A neonate was born to a 22-year-old GfIPI with high-risk sexual behavior. At delivery she was screened for syphilis which was positive using the anti-TP test, and RPR (≥1:1). A preterm baby girl was then delivered at 35 weeks with facial asymmetry, violaceous macular rashes, and desquamation and vesicular lesions on extremities noted at birth. Initial workup showed anemia, leukocytosis, thrombocytopenia, and periostitis. During the first week, she developed jaundice and seizures. Cerebrospinal fluid analysis revealed elevated protein, and syphilis serology showed positive anti-TP test and reactive RPR (≥1:1), leading to a diagnosis of confirmed or highly probable congenital syphilis with neurosyphilis. She received aqueous Penicillin G for 10 days, and was discharged, with no recurrence of seizures and improvement of skin lesions, but with persistence of facial asymmetry. At 4 months old, repeat RPR remained reactive (≥1:1).

**Discussion/Conclusion:** Due to its high rates of vertical transmission, adequate maternal treatment is crucial to reduce congenital transmission. Hence, syphilis screening during first prenatal checkup, at 28 weeks and at delivery is recommended for all pregnant women, to diminish transplacental transmission.

Keyword: Syphilis, congenital, neonate, vertical transmission

Infectious Diseases



#### Clinical Outcome Among Confirmed COVID-19 Pediatric Patients Admitted At A Tertiary Government Hospital

Akemi E. Ohata, MD, Susana N. Tizon, MD, FPPS

**Background:** Coronaviruses cause respiratory illnesses that rapidly spread worldwide, hence causing the coronavirus disease 2019 (COVID-19) pandemic.

**Objective:** This study assesses the clinical outcome of COVID-19 pediatric patients admitted to a tertiary hospital.

**Methods:** Applied a retrospective cohort design that included all admitted patients less than 19 years of age who confirmed COVID-19 from January 1-December 31, 2021. Charts were reviewed to collect data, which was then analyzed using frequency and percentages, with the chi-square test used to determine association.

Results: About 128 confirmed patients, many of whom were 0-1 years old (37.5%), were equally distributed by sexes. Few had hematology-oncology diseases (17.19%) as comorbidities. The majority were symptomatic (69.53%). Fever was the most common symptom (41.41%). Based on disease severity, the majority had moderate risk (46.09%). The Chest x-rays showed abnormal findings (56.25%). For the complete blood count, leukocytosis (37.50%) was noted with lymphocyte predominance (74.22%) and thrombocytosis (29.69%). Inflammatory markers were elevated as follows: C reactive protein (21.88%), ferritin (31.25%), d-dimer (24.22%), and erythrocyte sedimentation rate (10.12%). Lung diseases and their clinical outcome as expired showed significant results (p-value = 0.025). Likewise, kidney and heart diseases were significantly associated with an improved clinical outcome (p-values of 0.027 and 0.025, respectively). Patients with no comorbidities showed significant results in all different outcomes. Moreover, a significant association was observed between disease severity (mild, moderate, and critical) and clinical outcome (expired), with p-values of 0.004, 0.002, and 0.001, respectively.

**Conclusion:** In this study, severity and comorbidities affect the clinical outcome of children with COVID-19.





Innocence Under Threat:
Understanding Dengue's Impact On
The Developing Brain:
A Case Of Acute Hemorrhagic
Encephalopathy (AHEM)
In Dengue Infection

Merthyll Gail V. Ontal, Susan Suzitte Acosta, Elizabeth Villano

**Background:** Dengue virus can have varied clinical picture and may cause multisystemic complications and segualae from a simple self-limited viral illness. Here, we report a case of a 4-year-old, female who was diagnosed with dengue infection and unexpectedly developed an acute hemorrhagic encephalomyelitis (AHEM).

Case Presentation: This is a case of a 4-year-old female who presented with a fever, body malaise & sore throat; work-up revealed Dengue infection, where, the patient is Dengue NS1 positive and has a decreasing white blood cell and platelet trend; hence, complete blood count monitoring and intravenous fluids were started. While admitted, she suddenly had onset of decreased sensorium, seizure, motor weakness, cranial nerve involvement and central visual impairment on the 4th day of illness. Magnetic Resonance Imaging (MRI) showed multiple linear and punctate lesions showing hyperintense T1, iso- to hyperintense T2/FLAIR signal intensities in the subcortical white matter of both precentral gyri, right centrum semiovale, left postcentral gyrus, left occipital lobe and both thalami; punctate foci of signal drop on SWAN are likewise seen in the right occipital lobe; there is sparing of the overlying cortical gray matter. Unfortunately, cerebrospinal fluid studies were not performed due to thrombocytopenia; empiric treatment with Cefepime 150mg/kg/day was started and Methylpredhisolone therapy at 30mg/kg was given for 5 days; thereafter, the Glasgow coma scale improved to 11(EAV1MO), no more seizure recurrence, no verbal output and no visual tracking, still with drooling; the patient has active movement of both upper and lower extremities, yet, still cannot roll over and has poor head and trunk control. Hence, 2nd line intravenous immunoglobulin (IVIG) therapy 2g/kg for 5 days was administered. The patient then regained vision, verbal output, swallowing, head control, was able to achieve rolling and sitting, and motor strength improved to 4/5. Because of the adequate response after IVIG treatment, the patient was sent home and advised for an extended follow-up.

Conclusion: This case illustrates the potential of Dengue infection to cause AHEM. Although AHEM is uncommon, recognition of this condition with high index of suspicion is crucial in arriving to a timely and appropriate medical management and to prevent long-term complication.

Keywords: Dengue, Acute hemorrhagic encephalopathy, encephalopathy, ADEM

Infectious Diseases



Prevalence Of Healthcare-Associated Infections Among Pediatric Patients With Neoplastic Diseases Admitted At Perpetual Help Medical Center – Las Piñas From 2017 To 2021

Kate Sante Peremne, Domiline C. Arca, Rosemarie L. Bueno

Background: Healthcare-associated infections (HAI) are not present and without evidence of incubation at the time of admission to a healthcare setting. Most infections that become clinically evident after 48 hours of hospitalization are considered healthcare-associated.

**Objective:** To determine the prevalence of healthcareassociated infections among pediatric patients with neoplastic diseases admitted from 2017 to 2021.

**Methods:** A descriptive study that involved a review of medical records of pediatric patients ages 0-18 years old with neoplastic diseases who had healthcare-associated infections admitted at Perpetual Help Medical Center-Las Piñas from 2017-2021

Results: Thirty- six pediatric patients with neoplastic disease were admitted between 2017 - 2021. Fourteen patients with neoplastic diseases had healthcare-associated infections. These patients presented with fever or difficulty breathing, with white blood cell count of >11,000/ml and had an absolute neutrophilic count of >1500. The most common causative organism found in blood culture belongs to gram-negative bacteria, which are highly infectious since they mainly colonize the respiratory tract infection of patients. Prolonged hospitalization of >29 days had higher chances of acquiring recurrent episodes of infection. The infection rate was 44.4%, and mortality rate was 25%. The most common cause of death in this study was septic shock.

**Conclusion:** Due to the immunocompromised state and prolonged hospital stay, there was a high chance of healthcare-associated infection as well as recurrent infection for pediatric patients with neoplastic diseases. Both infection rate (44.4%) and mortality rate (25%) were high.

**Infectious Diseases** 



#### Factors Associated With Severity, Mortality And Survival Among Covid-19 Pediatric Patients In Southern Philippines Medical Center

Genevieve D. Tupas, MD, FPPS, MMCE

Background: Coronavirus disease (COVID-19), caused by the SARS-CoV-2 virus, rapidly became a global pandemic by early 2020. While generally associated with adults, the disease also significantly impacts pediatric populations. In low- and middle-income countries, pediatric COVID-19 mortality rates are notably high. This study aims to investigate the factors associated with severity, mortality, and survival among pediatric COVID-19 patients in SPMC.

**Objective:** The primary objective is to determine the factors associated with the severity, mortality, and survival of pediatric patients with COVID-19. Specific objectives include analyzing sociodemographic profiles, clinical profiles, and identifying significant risk factors contributing to severe outcomes and mortality, as well as protective factors associated with improved survival.

**Methods:** This retrospective observational study reviewed hospital records of 1,208 pediatric patients aged 0-18 years diagnosed with COVID-19 at Southern Phillippines Medical Center from April 2020 to October 2021. Data collection included demographic and clinical characteristics. Statistical analyses, including Cox Proportional Hazard models, were used to identify significant risk and protective factors influencing severity and mortality outcomes.

Results: The average age of participants was 8.75 years, with 53.05% being male. Severe cases accounted for 4.82% of the total, while the mortality rate was 3.13%. Severe cases were associated with dyspnea (HR=30.16, p<0.001), altered mental status (HR=34.10, p<0.001), and obesity (HR=14.51, p=0.042). Additional significant risk factors included sore throat (HR=15.89, p=0.017), coryza (HR=7.45, p=0.039), and nausea/vomiting (HR=5.76, p=0.002). Protective factors included higher lymphocyte (HR=0.97, p=0.020) and platelet counts (HR=0.99, p<0.001) upon admission, which were associated with reduced mortality risk. Comorbidities were present in 13.87% of patients, but no significant correlation was found between comorbidities and mortality. The presence of pneumonia on initial X-ray did not significantly correlate with disease severity or mortality. Mean length of hospital stay was 13.94 days, with severe cases averaging 16.14 days.

Conclusion: This study highlights critical risk factors for mortality in peciatric COVID-19 patients, including obesity, dyspnea, and altered mental status, while also identifying protective factors like higher lymphocyte and platelet counts. These findings suggest that specific clinical and hematological parameters should be closely monitored to predict disease progression in pediatric COVID-19 cases. Early intervention and tailored treatment strategies are essential for managing severe cases and reducing mortality in this population.





#### Congenital Neurosyphilis, The "Other" Great Imitator

Joana Pamela Calimlim Pua, MD

Neurosyphilis is a rare severe consequence of congenital syphilis that occurs when the causative agent, Treponema pallidum, infects the central nervous system. This is a report of a one-month-old male, who was born to a syphilis reactive mother. Both parents were sexually active. They appeared to be healthy, non-consanguineous, and asymptomatic. The patient presented with multiple circumscribed erythematous maculopapular rashes with desquamation on the soles, legs and arms in a caudo- cephalic manner. It was described to be non-pruritic with no associated systemic symptoms such as cough, colds, fever nor poor appetite. Neurological physical examination was unremarkable.

Cerebrospinal fluid (CSF) analysis revealed pleocytosis and was reactive to Venereal Disease Research Laboratory (VDRL). There was also a four-fold increase in the Rapid Plasma Reagin (RPR) titers compared with maternal titers. Other laboratory tests leukocytosis, thrombocytopenia and elevated liver enzymes. Darkfield microscopy was not done due to its unavailability in the clinical setting. Skeletal survey and ophthalmologic examination were unremarkable.

Treatment with penicillin G was started once diagnosis was confirmed. Congenital syphilis is a preventable infection. This is easily eliminated, provided that screening and treatment is provided to pregnant mothers early in their antenatal care. This case highlights the need for increased awareness, maternal screening, and early diagnosis to prevent missed prevention opportunities. Timely and evidence-based management are associated with improved outcomes, however continued vigilance for possible reinfection is required, highlighting the necessity of continued follow-up evaluations for infected neonates and children.

Keywords: Congenital neurosyphilis, venereal disease research laboratory test, penicillin G, awareness

**Infectious Diseases** 



#### Lingual Pseudomembranes In A Probable Case Of Diphtheria: A Case Report

Klareza Klen U. Quiñanola, MD

Background: There has been 64 reported cases of pharyngeal diphtheria in the Philippines since 2006, with seven of these cases coming from Regions VII and VIII. Pharyngeal diphtheria presents with illness related to pharyngitis or tonsillitis with visualization of the typical graywhite adherent membrane with confirmation done via culture with selective medium. Pseudomonas aeruginosa rarely causes disease in non-immunocompromised hosts, and when present, cause vascular necrosis secondary to elaboration of toxins and invasive factors. Pseudomembrane formation on the tongue is a rare manifestation of diphtheria, and unreported in Pseudomonas aeruginosa infections. The aim of this paper is to present an unusual presentation of probable diphtheria presenting with lingual pseudomembranes.

Case: A previously healthy 9-year-old female presented with a 4-day history of undocumented fever associated with vomiting of previously ingested food and green watery stools. Patient initially sought consult 2 days prior to a private physician for persistence of fever, loose stools, now with decreased activity; prescribed with Amoxcillin/Clauvulanic acid. Persistence of fever, vomiting, watery stools, and now with blank stares prompted consult to the emergency complex. Patient was seen awake but unresponsive to voice and touch, febrile at 40.2C, tachycardic at 145bpm, tachypneic at 32cpm with generalized maculopapular rash and cold extremities with weak pulses. Adherent pseumomebranes at the sides of the tongue and at the back of the pharynx were noted, patient was transferred for isolation and was managed as a case of Diphtheria. Rapid improvement of sensorium, fever, rash, and membranes noted with Penicillin G. Membranes detached with note of minimal bleeding after 4 doses of Penicillin G. Membrane culture on blood sheep agr showed moderately heavy growth of Pseudomonas aeruginosa, thus patient was also treated with Ceftazidime. Patient was discharged improved with the diagnosis of Sepsis secondary to *P. aeuruginosa* on membrane culture, and Diphtheria – probable.

**Conclusion:** Respiratory diphtheria may present with lingual pseuodomembranes on top of the characteristic tonsillar pseudomembranes. A high index of suspicion is required to give the recommended treatment promptly.

Keywords: diphtheria, lingual pseudomembrane,

**Infectious Diseases** 



#### Childhood Tuberculosis: Treatment Outcomes And Associated Factors Among Patients Enrolled In Tb-Dots Program In Negros Oriental From January 2018

To January 2022 Pearl Angelie T. Rada, MD, Pamela M. Mosqueda, MD

Background: Although numerous international scholars have explored childhood tuberculosis, their focus has primarily revolved around the circumstances in their respective regions. There are limited local studies on treatment outcomes and predictive factors affecting Filipino children enrolled in the Directly Observed Treatment Short-Course for Tuberculosis (TB-DOTS).

**Objective:** To identify the sociodemographic and clinical diagnostic profile of children enrolled in the TB-DOTS program in Negros Oriental and establish possible correlations with the treatment outcomes.

Methods: A retrospective cohort study was conducted in the Province of Negros Oriental TB DOTS Center from January 2018 to 2022. A sample of 680 medical records was accessed for analysis. Patient records were examined to acquire information on treatment outcomes; linked aspects such as sociodemographic characteristics and clinical diagnostic profiles were collected and analyzed.

**Results:** The findings revealed that majority of children enrolled in the TB-DOTS Program were 5–9 years old (30.6%), male (51.8%), and residing outside Dumaguete City (91.85%). Clinically diagnosed cases accounted for a significant proportion (88.2%), with pulmonary TB being the most common type (93.8%), mostly new cases (98.5%), and without drug resistance (98.7%). Treatment outcomes showed a high percentage of completed treatment regimens (87.7%). Strong associations were found between TB treatment outcomes and the mode of diagnosis/bacteriological status (p = 0.00, v = 0.830), while weak correlations were observed with the type of TB/ragistration group (p = 0.03, v = 0.124), category of TB/registration group (p = 0.02, v = 0.135), and drug resistance (p = 0.00, v = 0.244).

Conclusion: This study provides important insights into childhood tuberculosis treatment outcomes, emphasizing the role of sociodemographic variables, clinical diagnostic criteria, and treatment adherence. The study recommends the implementation of targeted interventions addressing sociodemographic characteristics, promotion of treatment adherence through education and support systems, community engagement, and further research on childhood tuberculosis.





#### Typhoid Fever In Children In Goroka, Papua New Guinea

Whitney Ato Ruape, Casparia Mond, Villa Watch, Watson Toroi, Becky Max, Josephine Chanoan, Trevor Duke

Typhoid is endemic in many low-income countries, including in Papua New Guinea. This study aimed to describe the burden and clinical features of typhoid in children in a provincial hospital, to describe environmental conditions that lead to typhoid, and to document the antibiotic sensitivity of Salmonella species in the Eastern Highlands Province. A combined retrospective and prospective study of children admitted to with clinical features of typhoid to the Goroka Hospital throughout 2022. The study included 98 children, of which 54% were female. The median age was 8 (IQR 5–10.6) years. Over 60% of the patients were from Goroka District, the periurban area encompassing the town and surrounds. Ninety-four percent (92) of the patients used a pit latrine as a toilet and only 28% had access to treated water. Neuropsychiatric symptoms were common (60%), as was leukopenia (48%), thrombocytopenia (52%) and anaemia (42%). Thirty-seven patients had positive blood cultures for Salmonella typhi; all isolates were sensitive to third-generation cephalosporins, pefloxacin, ampicillin, trimethoprim and sulfamethoxazole, and only 54% sensitive to chloramphenicol. The median duration of hospitalisation was 6 days (IQR). There were no deaths. In conclusion prompt public health actions are needed to reduce the burden of typhoid infection in Papua New Guinea. The conjugate typhoid vaccine should be considered in the highlands region, where typhoid is most

#### **Infectious Diseases**



#### Clinical Profile And Outcome Of Covid-19 Infection In Pediatric Cancer From A Limited Resource Setting: A Single-Center Experience

Hannah Grace B. Segocio, Cheryl Lyn Diez, Ma. Delta Aguilar, Mae Concepcion Dolendo

Background: The coronavirus 2019 (COVID-19) was declared a global pandemic by the World Health Organization on March 2020. Majority of studies done were obtained from adults and in high income countries. Some of the adapted policies or modified protocols for pediatric cancer are based on populations with different ethnicity and better resources that do not necessarily apply in low income setting.

**Objective:** To describe the clinical profile and outcome of pediatric cancer patients with COVID 19 from March 2020 to December 2022.

Methods: This was an analytic, retrospective, cohort study. Hospital records of patients with oncologic diagnosis and confirmed COVID-19 infection from 2020-2022 were reviewed. Main outcome measures were overall survival rate and status of disease after 1 year followurp.

Results: A total of 163 patients were included with mean age of 8.4 years old (median: 8, range 2 months-18 years), mostly (91/163, 55.8%) belonging to 1-9 years age group, with male predominance (96/163, 58.9%), and from non-Davao areas(112/163, 68.7%). The top 3 cases were acute lymphoblastic leukemia (40.5%), rhabdomyosarcoma (8%), Wilms tumor (7.4%). Most have stable disease (75.7%), in late stage (25.8%) and abdomen was the most common site (37.7%). Treatment was mostly curative (96.3%) with chemotherapy (96.9%) in consolidation phase (29.1%). Most cases were asymptomatic (46.6%). Fever was the most common symptom (30.8%). Most patients (95.1%) were unvaccinated, first infection (81.6%), hospitalized (89.8%) with normal chest radiograph and no hematologic problem. Chemotherapy was withheld for most patients (129/163, 79.1%). All patients with severe and critical COVID-19 died within 1 year. The overall chance of survival is 69.94%, while 31.9% (52/163) patients died and 47.2% patients had progressive disease after 1 year. There is a significant association between cancer stage, baseline disease status, treatment type, COVID severity, treatment modification, and quarantine setting with mortality and disease status after 1 year

**Conclusion:** The COVID pandemic has affected pediatric cancer care that could lead to significant mortality and disease progression. Policies should be adapted based on existing local data on who is at greater risk of developing severe COVID and cancer treatment may be modified accordingly.

Infectious Diseases



# All Eyes And Ears: An Atypical Case Of Congenital Cytomegalovirus Infection

This is a case report on an atypical presentation of cytomegalovirus (CMV) infection. CMV is the most common congenitally acquired infection that leads to sensorineural hearing loss, visual impairments and neurodevelopmental delay. An understanding of its uncommon clinical manifestations is necessary to facilitate early screening and prevent long term complications. This is a case of interest because of the diagnosis of CMV in an otherwise previously healthy infant not aligned to the usual clinical prototype.

A 3-month-old male presented with a 2-day history of moderate grade fever (38.7oC), irritability, poor suck, and generalized tonic-clonic seizure. He was born term at 37 weeks AOG to a 39-year-old G6P6 (6006) via noninstitutional normal spontaneous delivery, appropriate for gestational age with the following anthropometrics: BW 2630g, BL 50 cm, HC 37 cm (z – 3), CC 32 and AC 30. On neurologic examination, patient was awake and alert, with a 3x3 cm, tense, and bulging anterior fontanelle, microcephaly, intact cranial nerves, no nuchal rigidity but with spastic extremities. Initially, this patient was managed as bacterial meningitis and treated with ceftriaxone for 14 days since cerebrospinal fluid analysis showed elevated protein, low glucose and hypoglycorrhachia on CSF/serum ratio. On cranial ultrasound, findings include subcortical and periventricular leukomalacia. On baseline ophthalmologic evaluation, findings of retinal whitening and vessel tortuosity at the posterior pole obscuring the optic nerve and macula were suggestive of CMV retinitis, hence, additional workup was done which showed elevated CMV IgG and IgM (CMV IgG 12.40 AU/mL and CMV IgM 6.380 AU/mL). Intravitreal injection of ganciclovir was facilitated and was advised close follow up for hearing assessment and regular eye examination. Cytomegalovirus infection was considered despite not presenting with the classic manifestations such as diffuse petechiae, blueberry muffin rash, hepatosplenomegaly, and intrauterine growth restriction.

Not all congenital viral infections will classically present with the clinical manifestations described in most literature. The majority of CMV infections are asymptomatic, and with the absence of a straightforward symptomatology, its diagnosis from the outset can easily be missed. Hence, in any infant presenting with a first episode of febrile seizure, congenital viral infections should be included in the differentials. A high index of suspicion can provide early interventions and prevent long term complications.

Keywords: Cytomegalovirus infection, febrile seizures, TORCH infection, congenital infections





#### Clinical Profile And Outcome Of Patients Diagnosed With Central Nervous System Infection Admitted In A Tertiary Hospital In Bataan

Rendz Mark M. Tuazon, MD James Albert Edward L. Benitez MD, DPPS, FCNSP, FPNA Lorraine Marie S. Item, MD, FPPS, DPSHBT, DPSPH, FPSPO

Background: Meningitis is a leading cause of mortality and morbidity in the pediatric population hence, Central Nervous System Infection (CNSI) must be entertained on patients who presents signs and symptoms of infections. Currently, there are no available studies that focuses in determining the clinical profile and outcome of patients diagnosed with CNSI in Bataan and nearby provinces.

**Objective:** Determine the clinical profile and outcome of pediatric patients diagnosed with CNSI admitted in a tertiary government hospital in Bataan.

**Methodology:** This retrospective study reviewed data on patients age 1 month to 18 years with a final diagnosis of viral, bacterial, TB meningitis, fungal, parasitic and brain abscess admitted and treated at a Tertiary Hospital in Bataan from January 2017 to December 2021.

Results: A total of 186 children included in the retrospective study and findings were majority of patients with CNSI came from the age group of 5 years old (37.53%). Majority came from Mariveles (18.82%), Majority or 92.47% have no comorbidities. Statistically significant clinical features were the presence of seizures (p 0.023), decrease in sensorium (p <0.001), motor abnormalities or weakness in motor strength (p <0.001) and bulging fontanels (p 0.004). Diagnostic results suggestive of CNSI were leukocytosis with neutrophilic predominance, lymphocytic pleocytosis, increased cerebrospinal fluid (CSF) protein, low CSF glucose, and an abnormal CT scan. The most common etiologic agents identified were viral and bacterial. Majority of the immunization status of the patients were complete and the acuteness of symptoms were less than 7 days.

The outcome, as per the modified Rankin Scale, revealed that the presence of specific factors increases the risk for patients to develop moderate to severe disability. These factors encompass, decrease in sensorium, motor abnormalities, bulging fontanels, elevated C reactive protein (CRP) levels, abnormal cerebrospinal fluid (CSF) studies, abnormal computed tomography (CT) scans, and diagnoses of tuberculous meningitis or brain abscess.

Conclusion: This study had shown that Mariveles had the highest incidence of CNSI and is more common for the age group of less than 5 years old. Clinical features to look out for CNSI are the presence of seizures, decrease in sensorium, weakness and bulging fontanels. CSF analysis and CT scan should also be done and the the most common etiologic agents identified were viral and bacterial. Early recognition of the symptoms and identification of the risk factors like age, area of residence, and duration of symptoms could help in the overall management of the patients.

**Infectious Diseases** 



#### Congenital Dengue In A Three-Day-Old Newborn First Reported In The Philippines: Case Report

Stephannie Gay Fuscablo-Valdez, MD, Charlotte Bañes, MD, Genelynne Beley, MD

Background: Dengue, one of the most common viral infections affecting the general population in endemic areas, is transmitted by infected Aedes aegypti mosquitoes. Vertical transmission of dengue is uncommonly reported. This case documents the vertical transmission of the dengue virus from an infected mother to her infant.

Case Presentation: This is a case of a neonate born to primigravid who had onset of high-grade fever and body malaise three days before delivery. Three days after an uneventful delivery, the baby developed jaundice and poor suck. CBC showed leukopenia and thrombocytopenia, while the sepsis screen and metabolic profile were all normal. Additional workups include a dengue serologic test, which showed dengue NS1 antigen and IgG positive for both mother and baby. Vital signs were normal, and no signs of shock or bleeding were noted. On the 5th day of life, petechial rashes were noted, while WBC and platelet started to increase. The neonate recovered gradually and was discharged on the 10th of life. This case documented a baby born to a mother with previous and ongoing dengue infection during delivery. Hence, the neonate may have acquired both NS1 antigen and IgG antibodies in utero.

Discussion/Conclusion: Congenital dengue, although rare, can occur when there is insufficient time to transfer maternal antibodies to the fetus. It is often underdiagnosed since its presentation mimics neonatal sepsis. Dengue serology of both mother and baby can help with the diagnosis and management. A high index of suspicion coupled with timely diagnostics helped in the early diagnosis and management, preventing morbidity and mortality.

Keywords: Dengue, newborn, vertical transmission

Infectious Diseases



#### Generalized Tetanus, Fatal But Preventable

Tetanus, a vaccine preventable disease, continues to affect children due to low immunization rate, inadequate wound care and limited healthcare services.

This report presents two cases of generalized tetanus composed of a 4-year-old male child who presented with an acute history of pain in mouth and trismus and a 7-year-old-female who presented with an acute history of undocumented fever and sudden onset of generalized tonic colonic seizure. The 4-year-old has unrecalled vaccinations since birth along with a traumatic right foot injury a week prior to consultation while the latter received vaccinations in lieu of the expanded program on immunizations in the country. Based on the signs and symptoms along with 4-year-old's history, a clinical diagnosis of tetanus infection was considered while the 7-year-old was initially managed as a case of complex febrile seizure secondary to pediatric community acquired pneumonia. The 4-year-old patient was promptly treated with human tetanus immunoglobulin (TIG), Tetanus toxoid (TT) and Metronidazole along with Ceftriaxone. For supportive care, the patient was placed in a dark, secluded, isolation room to avoid any minor stimulation that may cause spasms. The family was apprised of tracheostomy and enototracheal intubation in the case of persistent spasms. After completion of Metronidazole, the patient was noted to have decreased to no spasms recorded. The patient department in which patient was compliant. For the 7-year-old, the patient was initially treated with Ceftriaxone and was placed in ward. Standard seizure precautions were taken. The patient continued to have seizure recurrence at ward now associated with opisthotonus and positive meningeal signs which warranted additional medication of Levetiracetam. Consideration of tetanus infection was then made which prompted immediate orders for administration of TIG, TT and Metronidazole. With the complications arising from dysautonomia and spasms, the patient eventually succumbed.

The cases illustrate the need for prompt recognition and administration of medications along with proper history taking. Education on the benefit of getting appropriate vaccinations as prevention for morbidity and mortality should be emphasized.

Keywords: Generalized tetanus, seizure, spasm, immunization



Gastroenterology/ Hepatology/Nutrition



#### A Case Report On Boerhaave Syndrome: Effort Rupture Of The Esophagus

Boerhaave syndrome, first described in 1724 by a Dutch physician, is caused by a sudden increase in intraesophageal pressure, leading to a complete transmural tear through the esophagus. Most common point of rupture involves the left posterolateral wall of the distal third of the esophagus. Although Boerhaave syndrome frequently presents to older patients, its features may also be evident in the pediatric population. This is a case report of Boerhaave syndrome in a 10-year old female who presented with a chief complaint of facial swelling precedented with multiple episodes of vomiting. This resulted to onset of chest pain associated with subcutaneous emphysema. Imaging was done which showed subcutaneous emphysema, pneumomediastinum, pneumoperitoneum, and pneumothorax probably secondary to spontaneous esophageal perforation hence broad-spectrum antibiotics and supportive management was done. This case report's goal is to highlight this rare disease entity in this age group and to investigate its unique presentation or readily seen from previous cases. It may be prudent to employ a high index of suspicion in order to have early intervention and hence spare a patient from further comolication

Keywords: Boerhaave syndrome, esophageal rupture, pediatric age group

Gastroenterology/ Hepatology/Nutrition



#### Nutrition Status And Some Factors Associated With Malnutrition Of Children From 0 To 24 Months At The Department Of General Pediatrics And Medicine, The E Hospital, Vietnam

Nguyên Thị Ngọc Ánh, Trương Văn Quý, Nguyên Thị Diệu Thúy, Nguyên Quang Dũng

**Background:** Malnutrition has been a long-term issue among Vietnamese children. Early-life malnutrition may affect growth and have irreversible consequences. Study in this field may contribute positively to the community.

**Objective:** To evaluate the nutrition status and some factors associated with malnutrition in children from 0 to 24 months old.

Method: In this research, the nutrition status and some factors associated with malnutrition in 121 child-mother pairs visiting the Department of General Pediatrics and Medicine, E Hospital, Vietnam were assessed. They were from newborn to 24 months old. A descriptive cross-sectional study was conducted based on WHO's anthropometric Z score system, with parameters: heightfor-age Z-scores (HAZ), weight-for-age Z scores (WAZ), and weight-for-height Z-scores (WHZ). Data has been collected using the software Anthro (WHO, 2006) and was analyzed using the software SPSS Statistics 22 (ISM)

Results: The malnutrition rates were 7.4%, 9.1%, and 9.9% for WAZ, HAZ and WHZ, respectively. Preemies and children with low birth weight (lower than 2500 g) have more risks of stunting and underweight malnutrition than full-term infants and children with normal birth weight. Pregnancy at an advanced age increases the children's malnutrition risks by more than 4 times. Having two or more children in the family also contributes significantly to malnutrition. On the other hand, mothers' occupation, economy, education level, and child-rearing practices do not improve the situation.

**Conclusion:** Family planning is an essential key to reducing the malnutrition rate in children. It is also essential to strengthen care for children during acute illness or infection.

Gastroenterology/ Hepatology/Nutrition



#### Blue's Clues: A Case Report On Blue Rubber Bleb Nevus Syndrome

Blue rubber bleb nevus syndrome (BRBNS) is a rare condition that is characterized by numerous vascular malformations that significantly involve the skin and visceral organs, especially the gastrointestinal (GI) tract, resulting in intestinal hemorrhage and anemia. A 7 year old male from Makati, Philippines, initially presenting with right thigh mass and well-defined soft bluish bleb-like lesions, and eventually developed anemia to which he underwent multiple blood transfusions. Few years after, he then noted to have recurrent abdominal pain due to multiple intussusception episodes which initially reduces spontaneously, and eventually developed seizures. On exploratory laparotomy, there were noted multiple mulberry like formation on the antimesenteric border of the small bowels. On cranial CT scan, subarachnoid hemorrhage was observed. BRBNS has a propensity for severe life-threatening bleeding. Although cutaneous and GI tract involvement are most common, other organs such as central nervous system, liver, and muscle can be involved as well. Locally, diagnosis of other specified congenital malformations of peripheral vascular system has an incidence of 0.0000804 or 40 out of 4,976,678 cases reported to the Philippine Pediatric Society from 2006 to the present. The estimated incidence of BRBNS worldwide is 1:14000 births. The treatment is based on pharmacological or surgical therapy. Overall, the most important step is the follow-up to the presence and the evolution of GI lesions and the possible bleeding.

Keywords: blue rubber bleb nevus syndrome, bean syndrome, cutaneous lesions, venous malformation



Gastroenterology/ Hepatology/Nutrition



#### Determinants Of Exclusive Breastfeeding Among Covid-19 Confirmed Mothers At A Tertiary Hospital In Quezon City: A Retrospective Study

Jacqueline D. Bernabe, MD Jedidiah T. Bolivar, MD, Cherrie Lou N. Duque, MD

Background: The COVID-19 pandemic has challenged every aspect of life. Recommendations on proper care of patients have emerged, including guideline on care of newborns of COVID-19 suspect or confirmed mothers. Breastfeeding is still encouraged especially its benefits outweigh the risks of COVID-19 infection. However, despite the recommendation, safety of breastfeeding is still being questioned and rate of breastfeeding has declined.

**Objectives:** This study investigated the determinants of exclusive breastfeeding among COVID 19 confirmed mothers.

Methodology: This study used a descriptive phenomenological design. The sample was composed of 9 mother-infant dyad whom during delivery the mother was infected with COVID-19. Participants were interviewed during their outpatient follow-up after their discharge. From the data collected, rate of exclusive breastfeeding to newborns of COVID-19 confirmed mothers was determined. Relationship of different breastfeeding factors to exclusive breastfeeding was evaluated

Results: Among the infants of COVID-19 confirmed mothers, 56% were exclusively breastfed for at least 6 months of life. Among those who were exclusively breastfed, 60% were not separated at birth and early initiation of breastfeeding were done. Other factors that positively influenced exclusivity of breastfeeding includes multiparity and availability of support from family.

**Summary/Conclusion:** The study identified the separation of dyad as the main barrier in establishing exclusive breastfeeding. The findings of the study may be referenced in establishing future policies and guidelines that are designed to increase exclusive breastfeeding rates and lower healthcare economic costs.

Keywords: COVID-19, exclusive breastfeeding, early breastfeeding, rooming-in, mother-infant dyad

#### Gastroenterology/ Hepatology/Nutrition



#### Brilliant Yellow Child- A Case Of Probable Wilson's Disease

Lizlie Anne D. Calar, MD Maria Imelda Belen Vitug-Sales MD, FPPS, FPSPGHAN, Melissa M. Montoya MD, FPPS, DPSHBT, Maria Cielo B. Barcelon MD, FPPS

Background: Wilson's disease is a rare, autosomal recessive disorder that affects the intracellular copper transporter ATP7B, which leads to reduced biliary copper excretion and a wide range of clinical manifestations. This report aims to present an algorithm for arriving at a probable Wilson's disease diagnosis in a child who presented with nonspecific signs and symptoms and encourage vigilance in considering evaluation and assessment as early detection results in a better prognosis.

Case presentation: An 8-year-old male Filipino with Autism Spectrum Disorder presented with nonspecific symptoms of yellowish discoloration of the eyes, accompanied by vague, intermittent periumbilical pain. Anorexia, nausea, vomiting, and fever were also present. He was born to nonconsanguineous parents.

Physical examination findings include jaundice, pallor, icteric sclerae with pale palpebral conjunctiva, ophthalmologic findings of copper deposits in the superior cornea at the limbal area of both eyes, abdominal distention, enlarged spleen, and grade 1 bipedal edema. Diagnostic work ups revealed elevated aminotransferase levels, prolonged prothrombin and partial thromboplastin time, normochromic, normocytic anemia with thrombocytopenia, conjugated hyperbilirubinemia, low serum ceruloplasmin, normal serum copper, elevated 24-hour urine copper, and an abdominal ultrasound showing hepatic parenchymal disease, probably steatosis, a distended gallbladder with bile sludge and enlarged spleen. Treatment given were Vitamin K, fresh frozen plasma, albumin, intravenous N-Acetylcysteine, oral Zinc, Vitamin D, and E, while oral chelating drug Trientine hydrochloride was also given but not tolerated. No improvement in blood chemistries; hence, transfer to a specialized tertiary hospital for possible plasmapheresis was contemplated, and subsequent liver biopsy. Parents decided to be discharged with assurance of close follow-up. However, patient succumbed to death after six weeks.

**Discussion/Conclusion:** Wilson's disease is highly considered based on the presence of low serum ceruloplasmin, high urine copper, and Kayser-Fleischer ring. Children with clinical signs resembling acute hepatitis should undergo testing to identify the cause and receive necessary treatment because early detection is crucial, and prognosis is excellent, provided compliance with therapy is adequate.

Keywords: Jaundice, Kayser-Fleischer ring, Ceruloplasmin, 24-hour urine copper, Trientine

#### Gastroenterology/ Hepatology/Nutrition



#### Insides Out: A Case Report Of Gastroschisis With The Application Of Spring-Loaded Silo Bag

Background: Gastroschisis, an anterior abdominal wall defect, is one of the rare congenital anomalies, managed through the closure of the abdominal wall defect. This paper aims to report one of the Philippines' few cases of Gastroschisis with the application of a spring-loaded silo bag for the delayed primary closure of the abdominal wall defect

Case Presentation: This is a case of a live preterm male born to a 35-year-old Gravida 5 Para 5 (0505) mother. During the congenital anomaly scan in the second trimester, a finding of an abdominal wall defect, located to the right of the cord insertion was noted. After the prenatal diagnosis, a medical team composing a pediatric surgeon, anesthesiologist, pediatrician, and neonatologist was formed. The patient was then delivered on the 34th week Age of Gestation via cesarean section and was subsequently admitted to the Neonatal Intensive Care Unit where decompression of bowels and the application of a spring-loaded silo bag were done. After successfully reducing the bowel through the utilization of a spring-loaded silo bag, the patient underwent repair of Gastroschisis with umbilicoplasty. The patient was discharged well and came for a follow-up in the 2nd postoperative month, with good health outcomes.

**Discussion/Conclusion:** Infants with Gastroschisis show an improved prognosis, parallel to the new advances in medicine and surgery. This report highlighted the benefits of utilizing the ideal treatment modality, which is the application of a spring-loaded silo bag for the delayed primary closure of Gastroschisis.

Keywords: Gastroschisis, Silo Bag, Delayed Primary Closure





#### **Parental Confidence And** Perception Of Infant Sleep In A Community-Based Screen -Findings From The Sleep Easy Program (SLEEP), Singapore

**Background:** Sleep in infancy is driven by biological factors as well as environmental influences. This includes parents' (or caregivers') confidence and emotions, and the interactions with their infant during bedtime routines. This transactional model, as a theoretical underpinning for our Sleep Easy Program (SleEP), contributes to the sleep habits and practices for the infants especially in their first

**Objective:** The study examines the relationships between the self-reported parental confidence with managing and the perception of their infant's sleep from the SleEP. This is the first community-based infant sleep screening and early intervention program in Singapore. We report findings from the first six months of the program (December 2023 to May 2024)

Methods: A total of 2177 infants were screened at ages 1, 2, 4 and 6 months by parents completing the SIeEP form online. It comprises of 13 questions focused on parental behaviours, maternal bother, parental perception and infant sleep. Questions are adapted using the validated Brief Infant Sleep Questionnaire – Revised (BISQ-R) and the Sleep and Settle Questionnaire (SSQ). We examine the sleep and settle duestion matrix (SSQ). We examine associations between the parents'self reported confidence and perception, and parents' perceived concerns for their infant's sleep. We also examined how infants are put to bed and the ease of doing so at bedtime, their self-soothing ability during night wakings, and the frequency of picts twelving. and the frequency of night wakings

Results: Results show that up to 14.4% of parents lack confidence in managing their infants' sleep. This is highest in the first month of life and gradually decreased (improved) over time. Difficulties putting their infants to sleep was reported in up to 23.4% of parents, again highest in the first month and reduced over time. Parental perception of their infant's sleep problem was also highest in the first month (18.1%) and reduced subsequently.

There is a close association between difficulties with both sleep onset and self soothing during night wakings. This is consistent when analyzed in correlation with parental confidence, difficulty putting infant to sleep and parental perception of sleep as a problem. Self-reported difficulties putting their infant to sleep at bedtime is also associated with a higher rate of both infant sleep onset problem and self-soothing difficulty during night wakings, across all the age ranges in this study. Sleep problems in infants are least reported with less confident parents. The observed dip in numbers at the infants' 4th month may be temporarily related to the effects of the end of the maternity leave. Further studies are needed to better understand the factors and reasons relationships.

Conclusion: Future studies can look at the intervention outcomes on both parental report of their infant's sleep problems and their confidence and perception. Interventions can also include providing more support for mothers returning to work.

Community Pediatrics 🕖 Back to Program



#### **Findings Of A Community-Based** Infant Sleep Programme: The Sleep Easy Programme (Sleep), Singapore

Background: The Sleep Easy Programme (SleEP) is a community-based community-based screening and intervention programme. It has been implemented in the seven intervention National University Polyclinics (NUP), where NUP is one of three public primary healthcare clusters in Singapore.

Parents are requested to complete a questionnaire to assess their child's sleep habits and parameters. Anticipatory guidance and education on sleep are then provided to parents to equip them with knowledge of healthy sleep habits and routines to inculcate in their children as part of the Tier 1 intervention. This is pertinent given the far-reaching impact good sleep quality and quantity has on the child's learning and behavioural development in their early developing years. Additionally, the questionnaire screens the infants for sleep problems or at-risk of a sleep problem; these are referred for the Tier 2 intervention, which involves a teleconsultation with a trained sleep nurse or psychologist. The aim of the teleconsultation is to address these identified sleep problems and provide individualised interventions and further follow-up.

Objective: To determine the demographic trends of infants with sleep problems in SleEP.

**Method:** A 22-item questionnaire, which was adapted from the Brief Infant Sleep Questionnaire, was administered on parents of infants who attended the routine well-baby visits at NUP

**Results:** This abstract outlines the interim data of infants in SIeEP from 1 December 2023 to 23 May 2024. During this period 2113 infants were screened. The time points are at ages 1, 2, 4 and 6 months. 575 (27.2%) of the 2113 infants were referred to Tier 2

The patients' primary caregivers at night were mainly the parents, grandparents, helper and confinement nanny, with some reporting having more than one primary caregiver. Majority of the infants (76.4%) had their mother as the primary caregiver or one of the primary caregivers at night. A cultural influence is seen in the employment of act light. A cultural influence is seen in the employment of confinement nannies as the primary caregiver for the infant's first month of life. The percentage of patients referred to Tier 2 is higher for those whose primary caregivers at night are the confinement nanny, helper and grandparents (53.6%, 38% and 37.4% respectively) than those whose exercisivers are the method and father (25.8%). those whose caregivers are the mother and father (25.8% and 28.8% respectively)

Conclusion: The preliminary data shows that sleep problems are prevalent across the ages of 1, 2, 4 and 6 months, with the percentage of referrals to Tier 2 ranging from 20 to 31%. The data suggests that there is a difference in caregiver and sleep problems in infancy. Further data analyses would be needed to understand and explain the correlation between different primary caregivers and infants' sleep habits and consequently, their referral rates to Tier 2.

**Dermatology** 



#### Born With A Tint Of Purple, A Mark Of Royalty Or A Trace Of Mystery? **Cutis Marmorata Telangiectatica** Congenita, A Case Report

**Background:** This case report presents a rare cutaneous vascular disorder, Cutis marmorata telangiectatica congenita. Globally, few cases are reported, and it has never been documented in the Philippines due to underreporting and nonrecognition of its signs and symptoms.

Case presentation: A newborn male presented with multiple ill-defined erythematous to violaceous reticulated patches on the right upper extremity, right hemiabdomen, gluteal area, and inguinal areas, which persisted even after rewarming. He was evaluated by a Pediatric Dermatologist, Neonatologist, and Ophthalmologist. Work-ups for neonatal sepsis were normal, and cranial ultrasound revealed suspicious low-level echoes in the lateral ventricles, with fundoscopy showing Grade 1 lateral vertificies, with full doscopy showing crade in papilledema of the right eye, prompting a referral to a pediatric ophthalmologist to rule out glaucoma. No arm or leg length discrepancies were noted. The primary consideration was Cutis marmorata telangiectatica congenita, but the parents refused thorough work-ups. On outpatient follow-up, at one month of age, there was neither progression nor new lesions.

Discussion/Conclusion: A high index of suspicion and multidisciplinary referrals must be emphasized. The prognosis for this condition is good, and management will depend on an overall assessment of the patient, close follow-up, and the recognition of complications such as body asymmetry, ulceration of the skin, and limb length differences, which, fortunately, were not present in our

Kevwords: Newborn, cutaneous, vascular, lesions



**Dermatology** 



#### Skin-Deep Connection: A Case Of Mycoplasma-Induced Rash And Mucositis

Jennifer Gianan-Cortez, MD DPPS

Background: Rashes on the skin serve as significant indicators of potential underlying infections and may also signal a contagious disease, or potentially denote an early stage of a life-threatening infection or a serious non-infectious condition. Mycoplasma pneumoniae-Induced Rash and Mucositis (MIRM) represents a clinical entity characterized by pneumonia resulting from Mycoplasma pneumoniae, frequently accompanied by distinctive cutaneous lesions and associated mucositis.

Case: This case concerns a 6-year-old boy with a one-week history of fever, cough, and cold, who developed maculopapular lesions on his face, trunk, and limbs, along with oral ulcers and cracked lips. These rashes progressed to target-like lesions. Comprehensive evaluation, including serology, revealed elevated Mycoplasma IgM. He was treated with a macrolide antibiotic for five days and intravenous immunoglobulin, resulting in significant symptom improvement and resolution of the rashes, mucositis, and pneumonia.

**Discussion:** In the Philippines, there have been 67 reported cases of Mycoplasma infections since 2015. About 10% of children with Mycoplasma pneumoniae develop a maculopapular rash, usually 3 to 21 days after initial symptoms like cough and cold. Treatment involves hospital evaluation and referrals to Dermatology and Infectious Disease Services. Macrolides are preferred due to Mycoplasma's resistance to beta-lactam antibiotics. Clarithromycin is prescribed at 15 mg/kg/day in two doses for 10 days, while azithromycin is given at 10 mg/kg on day 1, then 5 mg/kg daily for the next four days.

Conclusion: Mycoplasma pneumoniae can present with extrapulmonary manifestations, including mucocutaneous reactions like Mycoplasma pneumoniae-Induced Rash and Mucositis (MIRM). A high index of suspicion for MIRM should be maintained, particularly in previously healthy children with a preceding history of respiratory infection. Clinical evaluation, combined with serology testing, can help refine the differential diagnosis and facilitate prompt initiation of appropriate treatment.

Keywords: Rash, Mucositis, Mycoplasma pneumoniae, MIRM

**Dermatology** 



#### Toxic Epidermal Necrolysis In Coronavirus Disease 2019 A Rare Association

**Background:** Toxic epidermal necrolysis (TEN) is rare but is a potentially life-threatening acute mucocutaneous syndrome that usually occurs because of inappropriate immune reactions to certain drugs and/or a viral infection. This is a case of a 6- year old, female child who developed TEN in association with COVID-19.

Case Presentation: A 6-year old, female, child was admitted for fever, skin rash and exfoliation that eventually became generalized ill-defined vesiculobullous lesions with epidermal sloughing in less than 24 hours. Her SARSCOV2 RAT and RTPCR results were positive. She was admitted at the ICU with the diagnoses of TEN and COVID-19 infection. A skin punch biopsy was taken with histopathologic findings consistent with TEN. A significant improvement on the skin lesions were noted after hydrocortisone and IV immunoglobulin (IVIG) were started. The bullae then decreased in size, the sloughed off epidermal layer became dry exposing the dermal layer of the skin but new skin lesions were not noted. She was discharged markedly improved after 10 days in the ward with generalized scarring, hypo and hyperpigmentation of her skin; absence of eyelashes and nails. She was able to walk without assistance. Her appetite improved.

**Discussion/Conclusion:** Since the start of the pandemic, various case studies on mucocutaneous manifestations in COVID-19 have been conducted. It has been shown that there are similar immunopathological mechanisms between SJS/TEN spectrum and COVID-19 infection. This rare association between TEN and COVID-19 infection may have triggered the development of TEN. However, considerations on this case initially presenting as an overwhelming mucocutaneous manifestation of multisystem inflammatory syndrome in children (MIS-C) secondary to COVID-19 infection cannot be totally ruled

**Mental Health** 



#### Levels Of Depression And Anxiety Among Students Of Leyte National High School After Reopening Of In-Person Classes

Jenelyn P. Cadion, Katrina Faith San Gabriel, Antonio E. Lim Jr.

Background: Depression and anxiety remain the most common mental health problems in adolescents, notably in high school students. Even so, there are still limited studies globally, especially during the pandemic. Henceforth, this research was undertaken to address the gaps in the limited knowledge about depression and anxiety among high school students in our locale.

**Objectives:** The study aims to determine the levels of depression and anxiety of high school students in association to the socio-demographic profiles.

Methods: This research is a descriptive cross-sectional study. Eligible participants were 18 years old and below from Grades 7-12, and not diagnosed with neuropsychiatric disorders or chronic debilitating conditions. A three-part questionnaire was administered to the respondents selected via proportionate stratified sampling and fishbowl method. Data on socio-demographic profiles, Patient Health Questionnaire-9 (PHQ-9), and General Anxiety Disorder-7 (GAD-7) were expressed using mean, rates, ratio, and percentages. The Chi-square test, using the Statistical Package for the Social Sciences (SPSS), was used to determine the significance of association with the significance level set at 5% (0.05).

Results: There were 392 students included in the data analysis. They were middle adolescents with a mean age of 14.8, and 64% were females. Severe levels of depression and anxiety were about 7.4% and 8.9%, respectively. These students were in late adolescence, females, in Grade 12, and had widowed parents. Results showed a significant association between depression and age, sex, and grade level. Anxiety was significantly associated with age, sex, and parents' marital status.

**Conclusion:** The overall level of depression among students was mild to moderate, whereas the level of anxiety was moderate. Approximately 1 in every 10 students are at risk for depression and anxiety symptoms. These are students in middle adolescents, females, in Grade 12, and with widowed parents.



Mental Health



#### Prevalence Of Burnout Syndrome And Its Risk Factors Among Pediatric Resident Physicians From Training Institutions In Manila, Philippines

Charis Joyce B. Cauyao, MD, Kris Ian B. Mendoza, MD, Jennie A. Wong, MD

Background: Burnout Syndrome is characterized by mental and emotional exhaustion, depersonalization, and a low sense of personal accomplishment. It is defined as a response to chronic emotional and interpersonal stressors in the workplace. Burnout may be experienced by medical healthcare professionals as early as medical school, peaks during residency training, and remain high when physicians face challenges related to their clinical practice. The Maslach Burnout Inventory (MBI), a short questionnaire based tool, was designed to measure the symptoms and severity of burnout on three subscales – high emotional exhaustion, high depersonalization, and a low sense of personal accomplishment.

**Objective:** To determine the prevalence of burnout syndrome and its risk factors among pediatric resident physicians from training institutions in Manila, Philippines

Methods: Pediatric resident physicians were included in the study. Demographic information and factors contributing to burnout among respondents were collected. The questionnaire has 2 sections. The first section included demographic data and work-related factors. The second section is the MBI, which is a 22-item questionnaire comprising of 3 subscales. Data was analyzed using SPSS Statistics. Demographic and work-related characteristics were summarized by absolute numbers and percentages. Mann-Whitney U Test and Spearman's Rho Test were performed to assess the association between the demographic and work related factors

Results: The overall prevalence of burnout syndrome among the 36 participants was 30.56%, most had high emotional exhaustion with a prevalence of 25% and 8.33% had high depersonalization. No participant had a low sense of personal accomplishment. From the three subscales, the prevalence of burnout in one subscale was 27.78% and the prevalence of burnout in two subscales was 2.78%. Comparison of the sociodemographic and work-related factors to burnout showed a marginally significant difference in personal accomplishment among female participants and those who had medicine-related

Conclusion: Prevalence of burnout syndrome among pediatric resident physicians in both public and private hospitals in Manila, Philippines is 30.56% and most of which had high emotional exhaustion (25%). It is a common problem encountered during pediatric residency training with a high occurrence of emotional exhaustion which was similar with the data gathered from this study. The high emotional exhaustion may be attributed multiple socio-demographic and work-related factors

**Mental Health** 



A Qualitative Study On The Lived Experiences Of Pediatric Resident Physicians Handling Confirmed Covid-19 Patients In Vicente Sotto Memorial Medical Center Severe Acute Respiratory Unit (SARI) And Emerging Re-Emerging Infectious Disease (EREID) Unit

Paul Gibson S. Reyes, MD Shanida L. Camomot, MD

Background: The COVID-19 pandemic imposed a multitude of challenges to health care workers. Pediatric resident physicians were among those who were mobilized to address the challenges brought about by the pandemic. No qualitative studies of the experiences of these pediatric residents in VSMMC and Cebu province have been published.

**Objective:** This study aimed to determine the lived experiences of pediatric resident physicians handling confirmed COVID19 cases in the Severe Acute Respiratory (SARI) and Emerging Re emerging Infectious Disease (EREID) units of VSMMC.

Methods: This is a qualitative study using an empirical phenomenological approach. Pediatric resident physicians were recruited using purposive approach. They participated in a semi structured, in-depth interviews via online platform. Interviews were transcribed and analyzed using Colaizzi's phenomenological method.

Results: Eleven physicians were interviewed. Five domains were explored and different themes emerged under those domains. The first domain was call of duty wherein themes related to shorted rotation during the pandemic and unpredictable workloads emerged. The second domain of challenges at work during the COVID-19 pandemic explored issues such as demanding workhours and shifts, diverse interpersonal challenges, stress and exhaustion and challenges related to working conditions. The third theme explored resilience among the respondents and themes that emerged include digital detoxification, diversion, self-care, reframing mindset and faith in God. The fourth theme explored safety and support during the pandemic and it was found out the support for these health care workers came from friends, family and co-workers. Finally the fifth theme explored the insights of the respondents as to their sense of fulfillment, personal growth, the effects of the vaccine and the pandemic as an opportunity for learning.

Conclusion: Pediatric resident physicians who handled COVID positive patients had varying lived experiences during duty hours and ward rotation. These resident physicians experienced constant fear of infection due to the contagious nature of the virus, close contact with patients, and transmission of infection in their colleagues. Different challenges were encountered while handling COVID patients such as personal challenges, challenges in dealing with patients, challenges with the use of personal protective equipment, and challenges associate with other physicians. Despite the stress experienced by these pediatric residents, they still strive to cope during the pandemic by tapping internal resources such as doing self-care activities and external resources such as support from their colleagues, the department and from friends and family.

**Mental Health** 



Stress Level Of Filipino Primary Caregivers Of Young Children With Autism Using The Filipino Version Of Friedrich Short Form Questionnaire On Resources And Stress (QRS-F)

**Background:** Highly stressed primary caregivers of children with autism negatively affect their role leading to inefficient intervention and resulting to poorer child outcomes. Identifying them will be the first step in addressing these problems.

**Objective:** The research aims to determine the stress level of Filipino primary caregivers of young children with autism. Their stress level were also compared when they are grouped according to their demographics and of their child to see if certain factors will induce higher level of stress

Methods: A validated and cross-culturally adapted Friedrich Short Form Questionnaire on Resources and Stress (QRS-F) was used to determine the stress levels of the respondents within the seven (7) therapy centers in Laguna, Philippines from July 2023 to November 2023. Sample size of 145 respondents were acquired from the actual total population of 231 which was computed using Raosoft calculator with a confidence level of 95% and margin of error of 5%. Frequency and percentage distribution were used to describe the demographic profiles and stress levels, while chi-square test was used to determine the significant difference in the stress level of the respondents when grouped according to their demographics and of their child. All analyses were performed using SPSS version 25.

Results: The majority of the respondents were Millennial mothers (26-41 years old), married, college graduates who opted to care for their child with autism since birth. The children were mostly males between the ages of 6 and 9 years old, with no child doing intervention below 3, and availing of center-based, government-funded therapy centers for at least one year. Almost 72% of the caregivers were experiencing moderate stress, and 18.6% experienced severe stress, with a stress level mean score of 16.1. There was statistically no significant difference on the stress level of primary caregivers when they are group according to their demographics and of their child both with p-values greater than 0.05.

**Conclusion:** Majority of the respondents were experiencing moderate level of stress, and experience the same level of stress regardless of their demographics. Those found with high level of stress were referred to a specialist for further evaluation and intervention. It is recommended that caregivers answer the stress questionnaire prior the start of school year for early detection and interventions.



Others



#### Health Care Transition Knowledge And Attitudes Of Pediatric And Internal Medicine Residents, Fellows And Consultants At The

East Avenue Medical Center Patricia Grace S. Bautista, MD, Michelle Anne Noblejas-Mangubat, MD

**Background:** Health Care Transition improves quality of life, maximizes independence and minimizes interruption in patient care. Adequate knowledge and careful preparation of the adolescent is essential for a successful health care transition process.

**Objective:** To determine the health care transition knowledge and attitudes of Pediatric and Internal Medicine residents, fellows and consultants at the East Avenue Medical Center

**Methods:** This study utilized a prospective crosssectional analytic research design. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 27. Descriptive statistics was used to describe the socio-demographic characteristics of the study participants. Chi square test of association was used to determine the association of the health care transition knowledge and attitudes of the consultants, fellows and residents with their socio-demographic profile.

Results: A total of 176 physicians participated in the study. More than eighty five percent (85.7%) of the respondents were aware of health care transition, 94.3% were knowledgeable on the transition program components, 96.1% were aware of the advantages of the transition program and 95.6% were aware of the barriers to a successful program. Almost all (97.9%) of the respondents believed that the transition program was important; 93.6% were willing to learn more about the transition program; 95.5% were willing to enroll patients to the transition program; 95.5% were willing to be actively involved in the transition program and 95.2% had a positive attitude toward the need to prepare adolescent patients for transition. There was no significant difference noted in the level of awareness and knowledge as well as attitudes toward health care transition among internists and pediatricians. A moderate to strong association (revalue=0.22) was noted between the physicians' sociodemographic profile and their knowledge and attitudes regarding health care transition.

**Conclusion:** Internal Medicine and Pediatric specialists had a comparable level of awareness and knowledge and had similar attitudes regarding health care transition. Knowledge and attitudes toward health care transition were associated with their socio-demographic characteristics.

**Others** 



#### A Cross-Sectional Study On Patterns Of Internet Use Among Adolescents Enrolled In Government High Schools In Makati

Josephine Angela D. Canasa, MD, Ann D. Paningbatan, MD, FPPS

**Background:** Approximately 9.6% of internet users are between 13-17 years of age. Problematic internet use and internet addiction are new clinical entities that emerged with growing use of the internet, which share features with psychiatric conditions. Philippine prevalence data on internet use patterns and risk factors are lacking.

**Objective:** To investigate patterns of internet use among adolescents enrolled in government high schools in Makati

**Methodology:** A cross-sectional analytic study conducted among high school students in Makati aged 12-18 years old from September to October 2023 by use of questionnaires.

**Data analysis:** Data were summarized using frequencies and percentages. Analysis was done using of hi-square test and odds ratios computed to describe association. All calculations were performed using SPSS software.

Results: Among 366 respondents, 60.4% showed Problematic Internet Use (PIU) while 16.0% had Internet Addiction (IA). None of the demographics are associated with risk for PIU and IA. Among the internet use habits included in the study, daily length of internet use (p-value=0.003), nature of internet applications (online gaming p-value=0.036, e-mail p-value=0.041, online radio p-value=0.048) and most frequently accessed applications (Facebook Messenger p-value=0.009, TikTok p-value=0.037) exhibited statistical significance. Internet addiction is associated to more than 10 hours of internet use (OR 10.3, p-value=0.037), online gaming (OR 4.4, p-value=0.016), Online radio (OR 9.1, p-value=0.034) and TikTok use (OR 3.5, p-value=0.041).

Conclusion and Recommendation: Among adolescents, prevalence of PIU and IA were 60.4% and 16.0%, respectively. Demographics is not linked to development of PIU and IA. Significant association was found between internet use duration more than 10 hours, online gaming, use of online radio, use of Tiktok and risk for both PIU and IA. These findings highlight the importance of regulating time spent online and examining what internet applications are being used by adolescents to prevent internet misuse and ultimately, internet addiction

Others



#### The Role Of Filipino Parents On Their Preschoolers' Screen-Based Media Use During The COVID-19 Pandemic

Angeli-Tristel C. Saquitan, MD, Stella G. Manalo, MD

Background: The Philippine pandemic response was one of the longest and strictest lockdowns internationally especially during its height in 2020. Excessive digital media use is associated with various health and developmental risks. Children's excessive media use has been a major public concern even prior to the pandemic. There has been significant rising trend in excessive screentime among children during the pandemic. Parents' role is very crucial in honing young children's behaviors which include screentime.

**Objectives:** To determine the association of parental, home, and child factors—as well as parental knowledge, attitudes, and habits on screen-based media use—with preschooler's screentime during the pandemic lockdown (2020).

**Methodology:** It is a cross-sectional study employing purposive sampling. Filipino adult parents (n=328) with children ages 3 to 5 were recruited through snowballing. Relevant data were gathered through survey. Logistic regression analysis was applied to examine which of the aforementioned factors determine the probability that preschoolers' screentime will exceed one hour/day.

Results: During the lockdown, most parents' (86%) and preschoolers' (82%) screentime exceeded one hour/day. Children with parents working on-site (0.134, p<0.01) or from households with more devices (0.596, p<0.001) are more likely to exceed one hour/day screentime. The screentime of children whose parents graduated college are less likely to exceed one hour (-0.115, p<0.05). Excessive preschoolers' screentime is more likely observed when parental screentime exceeds one hour/day (0.411, p<0.001).

**Conclusion:** Child, parental, and home factors were found with statistically significant relationship with preschoolers' screentime. Parental screen-based media habits showed strong impact on preschoolers' screentime.



**Others** 



#### **Risk Factors Of Digital Eye Strain Among Filipino School Age Children** On E-Learning During The **COVID-19 Pandemic**

Nikki Cotoco-Chu MD

Background: The COVID-19 pandemic brought about a shift to online schooling in order to continue teaching, leading to additional hours of screen time use. Prolonged screen time use can produce physical discomfort known as digital eye strain or computer vision syndrome.

**Objective:** This study aims to determine the risk factors of digital eye strain (DES) among school age Filipino children attending online classes during the COVID-19

Methods: This is a cross sectional analytical research study identifying DES among Filipino children aged 6-12 years old in Metro Manila who started attending online classes during the COVID-19 pandemic. A self-administered online survey was used via Google form, identifying the patient's demography, digital device use information and presence of digital eye strain symptoms using the Computer Vicion Syndroma Questionaging. using the Computer Vision Syndrome Questionnaire

Results: 154 students completed the online survey, majority were aged 6-9 years old, female participants and were in Grades 4-6. Digital device use hours increased during the pandemic, spending >5 hours/day. Majority of students spent 2 hours and more on online classes, using a laptop the most, with a distance of 10-18 inches from the screen. Eye itchiness and watering/tearing of eyes were the most common symptoms of DES. The prevalence of DES during the pandemic in this study was prevalence of DES during the pandemic in this study was 50.6%. Univariate analysis showed younger age of 6-9 years old (p=0.002, OR=0.37), spending only 1-2 hours of online classes per day (p=0.026, OR=0.34) and use digital devices for 1-2 hours a day only (p=0.054, OR=0.44) had lower risk for developing DES. On the other hand, multivariate analysis of the current study showed age of 6.9 years although a 12 being attending online of these 6-9 years old, spending 1-2 hours attending online classes and smartphone use for online classes were found to be independent risk factors for developing DES.

**Conclusion:** The number of hours of digital device use increased during the COVID-19 pandemic. 50% of children had digital eye strain whose identified risk factor, including hours of online learning, should be adjusted to decrease the risk of developing this illness

Keywords: Digital eye strain, online classes, children, COVID pandemic, CVS-Q

Others



#### The Effect Of Virtual Reality On **Pediatric Needle-Related Procedural Pain, A Meta Analysis**

Background: Even when giving utmost care to patients, pain may still be inevitable in the healthcare setting. Needle-related procedures, for instance, may cause pain, especially in children who are more sensitive to it than adults. With the fast-evolving technology comes modern advancements in pain control, such as the use of virtual

**Objective:** This study aimed to determine the effect of virtual reality on needle-related procedural pain in children 18 years and below

Methods: A meta-analysis was performed by searching through five databases for randomized controlled trials whose independent variable was virtual reality and the primary outcome was needle-related pain in children 18

Results: From the 547 studies generated, qualitative and quantitative synthesis was done for 12 and 3 studies, respectively. All studies initially included in the quantitative analysis had substantial heterogeneity hence a sub-group analysis of two studies involving solely venipuncture was done. These had a heterogeneity of 0%, a mean difference of -2.91, with a range of -3.53 to -229 and p-value of less than 0.0001 using a confidence interval of 95%. Conclusion: Virtual reality decreases needle-related procedural pain in children aged 2-18 vears old.

Others



The Clinical Diagnostic Accuracy Of **Zero-Shot Prompt Vs. Structured Prompt Vs. Iterative Prompt In Chat Generative Pre-Trained** Transformer Version 3.5 **Among Admitted Patients In The Pediatric Emergency Room** Of Zamboanga City Medical Center Edward Ariel M. Tadea, MD, Cesar Jeffrey G. Masilungan, MD,

**Engr. Gabriel Soong** 

Background: Artificial intelligence (AI) creates machines, and one of its branches is natural language processing (NLP), which allows computers to analyze human language. Chat generative pre-trained transformer (ChatGPT) is a form of NLP that uses prompt engineering to improve its performance. The comparison of three (3) types of manual prompting in pediatrics for diagnostic accuracy remains unexplored.

Objective: To determine the clinical diagnostic accuracy of ChatGPT version 3.5 compared to the diagnoses made by ZCMC senior pediatric resident and pediatric consultants among admitted patients in the pediatric

Methods: This was a cross-sectional analytical study. The computed sample size for the study was 28

Results: A total of 95 respondents were analyzed in the study. Zero-shot prompt had the highest rate of exactly correct diagnoses, with 20% for admitting diagnoses and 16% for final diagnoses. Zero-shot prompt also exhibited the highest concordance rate, 20% for admitting diagnoses and 15% for final diagnoses. The concordance rate of zero-shot prompt was significantly higher compared to iterative prompt (20% vs. 7%, p= 0.11) in determining admitting diagnoses but not in determining the final diagnoses.

Conclusion: ChatGPT version 3.5 may function only as Conclusion: ChatGPT Version 3.5 may function only as an adjunct but not as a primary means of generating clinical diagnosis. Future studies should focus on the application of newer versions of ChatGPT and other types of Al models in the clinical practice.



**Others** 



A Drought Brought About By The Pandemic: A Cross-Sectional Study To Compare The Pediatric Emergency Room Census In UERM Memorial Medical Center From March 2019- February 2020 and March 2020- February 2021

**Background:** The COVID-19 pandemic led to multiple adjustments in healthcare delivery. Outpatient clinics were closed, hospital bed capacity was reduced and elective surgeries were suspended. Telemedicine was utilized by patients in order to avoid going to the emergency room due to fear of contracting COVID-19.

lae G. Tan. MD. Jose B.

**Objectives:** The study aimed to determine the difference in the number of pediatric emergency room consults in University of the East Ramon Magsaysay Memorial Medical Center (UERMMMC) from March 2019- February 2020 and March 2020- February 2021.

**Methodology:** A chart review of all pediatric emergency room consults within the study period was done.

Statistical Analysis: Frequencies were encoded to Microsoft Office Excel 2013. Categorical data were summarized as counts and percentages. Tables and figures were used to present the data.

Results: There was an overall reduction rate of 79% in pediatric consultations but the proportion of admission, transfers and discharges against medical advice did not vary substantially over both study periods. There was a marked reduction in the percentage of patients being seen for Infectious (from 31.3% to 19.5%) and Pulmonology service (from 19.6% to 9.1%). There was also an increase in the percentage of patients being sean under Surgery service (5.2% to 13.8%). Acute viral illness and acute gastroenteritis remain to be the top 2 diseases during both periods. However, the third most common disease during the pandemic period changed from community acquired pneumonia to laceration. Another disease which made it to the top 10 was animal bite. There was a noted increase in injury-related diagnoses (head injury, lacerations, abrasions, dislocations, fractures, burns, animal bites, and wounds) during the pandemic as well comprising 139 cases (18%) during the pandemic from 212 cases (5.8%) during the pre-pandemic period.

**Conclusion:** The study revealed a 79% reduction in the number of pediatric patients seen in the UERMMMC prepandemic and during the pandemic. There was no difference in terms of admission rates. However, there was a marked reduction in the percentage of patients being seen for Infectious and Pulmonology services. There was also an increase in the percentage of patients being seen under Surgery.

Others



The Association Of Gadget Screen Time On The Quality Of Sleep Of Senior And Junior High School Students In A Public School In Makati

Celestine S. Tating, MD, Geraldine V. Alcantara, MD, FPPS

**Background:** Since the declaration of COVID-19 pandemic, there had been a far greater avenue for technological use not just for work and leisure but it also imposed a great contribution for education. In which, during the pandemic, generally, most individuals including students had a far greater screen time as opposed to pre-pandemic time

**Objective:** To correlate the duration of Gadget Screen Time with Quality of Sleep of High School Students in a Public School in Makati City

**Design:** A cross-sectional analytic survey by Junior and Senior High School students Setting: Fort Bonifacio High School, a Public School in Makati City

**Results:** This study showed that most students who have a poor sleep quality has a longer gadget screen time use and a shorter duration of sleep. Most students use their smart phones to use a social media applications such as Facebook, TikTok and Instagram. These students have a mean duration of 7.7 hours of sleeping time but with a mean duration of 8.9 hours of gadget use which directly correlates to quality of sleep.

**Conclusion:** This study reflects that students have a longer screen time than hours of sleep. And most of the students have a poor sleep quality which may affect daytime function, performance and overall quality of life.



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