



**International
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Newsletter

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International Pediatric Association Newsletter

Editor-in-Chief

Deepak Kamat, US

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Message from the President

The Role of Pediatricians in Achieving Global Goals for Children



It is an honor to serve as the President of the International Pediatric Association.

The IPA represents over one million Pediatricians responsible for over one billion children. Our leadership has placed special emphasis in three areas.

1. Children in Disaster
Over one quarter of the world's Children are presently displaced.
2. Immunization Hesitancy
We are presently in the midst of measles epidemics in many areas of the world.
3. The sustainable development Goals and Non-Communicable Disease.

Children ARE the future, but pediatricians, who have devoted their lives to helping children survive and thrive, cannot alone guarantee children's futures.

I would like to bring to your attention the current global efforts to improve the lives of children. It is our responsibility and privilege to ensure the future of our next generation, but in

order to do this we have to be well acquainted with the global, national, local goals as well as the targets set for children's health.

Children's health has been a global priority for generations. An early example where countries came together to create a universal understanding to ensure children's futures was the Convention on the Rights of the Child in 1989. The purpose of the convention was to define the five objectives of children's rights:

1. To Survive and Thrive
2. To Learn
3. To be Protected from Violence
4. To live in a Safe and Clean Environment
5. To have an equal opportunity to succeed

These five basic rights for every child are at the core of all we do as pediatricians. We attempt to achieve these rights through direct practice and advocacy. These rights are being used as the standard on which to build targets at national and global levels.

Adopted in 2000, the Millennium Development Goals were designed primarily for developing countries to achieve eight specific targets by 2015. The Goal most related to Pediatrics was Goal 4: Reduce Under-five mortality by two-thirds from 1990 to 2015. During this period, major progress was achieved with the development of the Neonatal Resuscitation Program. Immunization rates increased, nearly eradicating Polio and reducing the global incidence of Measles and Rubella by 85-90%. During this period, however, new challenges arose, such as vaccine refusal and a sharp increase in Non-Communicable Disease, which required new global initiatives to be developed.



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To expand on the Millennium Development Goals and address the ever-changing landscape of challenges, the Sustainable Development Goals were formed, with a baseline in 2015. These Sustainable Development Goals include 17 goals and 169 targets, ranging from Poverty Reduction and Health and Well being to Peace, Climate, and Reduction of Inequality. Health, and particularly Children's Health, is represented by Goal 3: Good Health and Well being, but in reality, all these goals speak to those Rights of the Child established 30 years ago.

The Sustainable Development Goals differ from the Millennium Development Goals as a result of lessons learned in the course of implementing programs to achieve the MDGs. One difference is that every country in the world has signed on to the SDGs. This is crucial in a world that is mobile and dynamic, especially when considering things like Climate, Peace, and Energy, where the actions of one country can have huge lasting impacts felt around the world. There was also a more rapid improvement in achieving the Millennium Development Goals once they were more regularly measured, so the Sustainable Development Goals have a focus on measurement and accountability. Annual updates are compared with the targets so decision makers can monitor progress and adjust policies and programs.

Non-Communicable Diseases are an ever-increasing problem for children worldwide. The SDGs include several related targets. Goal 3 directly targets Non-Communicable Diseases: To reduce mortality from NCDs by 33% through prevention and treatment. Targets will be achieved through the promotion of mental health, the strengthening of prevention and treatment of substance abuse, reducing traffic accident deaths and injury, and achieving universal health coverage with access to quality essential health care, medicines, and vaccines. We must make sure to include Non-Communicable Diseases when considering children's health because 1.2 million deaths due to Non-Communicable Diseases (13%) occur in those under 20. The risk factors adopted in childhood result in over half of all Non-Communicable Disease-related deaths.

According to the Institute of Medicine in 2014, health is "the extent to which children are able (or enabled) to develop and realize their full potential." Because the Sustainable Development Goals incorporate not only small focused aspects of health, but include the entire experience of children and their environments, we will be better able to ensure that all children can fully achieve this definition of health.

As pediatricians and pediatric societies, it is our role to advocate for our children at all levels. The first step is to know about the Rights of the Child and the



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current global goals related to children's health. The next step is to become aware of the individual goals set within your country, and to understand those policies that have been adopted and those that have not, to better achieve those goals.

The final step is to keep governments accountable for achieving the goals set at the national and global levels. To do this, we must:

1. Remain up to date on progress reports
2. Be aware of policies that promote children's health as well as those that are detrimental to children's health.
3. Use our collective voices as experts to ensure the right policies and programs are being enacted.

As pediatricians, it is our responsibility to promote every effort to ensure the rights and the future of children in our respective countries and around the world. By being

informed of the current global and national commitments, we pediatricians can be effective advocates for children, hold our governments accountable, and secure a brighter future for every child.

i The United Nations Convention on the Rights of the Child. 1989 www.unicef.org.uk/wp

ii United Nations. Sustainable Development Goals. Retrieved Feb 2, 2019 from sustainabledevelopment.un.org

iii World Health Organization. Measles and Rubella Surveillance Data. Retrieved Feb 5, 2019 from

https://www.who.int/immunization/monitoring_surveillance/burden/vpd/surveillance_type/active/measles_monthlydata/en/

Errol Alden

President

International Pediatric Association



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Words from the Editor-in-Chief



I hope you will enjoy reading this issue of Newsletter and please feel free to provide feedback/suggestions for the improvement

With Warm Regards

Deepak Kamat MD, PhD, FAAP

Editor-in-chief

IPA News letter

Professor of Pediatrics

Vice Chair for Academic Affairs

Department of Pediatrics

University of Texas Health Sciences Center

San Antonio, Texas, US

I wish to thank Dr. Errol Alden and members of the International Pediatric Association Executive Committee for providing me the opportunity to serve as the Editor-in-Chief for the IPA newsletter. I also express my gratitude to Dr. Manuel Moya for having allowed me to serve as the Assistant Editor for the newsletter in the past. I know taking over the role as the editor-in-chief I have some very big shoes to fill.

It is my pleasure to present to you the 2019 Volume 13 issue 2 of IPA newsletter. This newsletter includes a message from our new President, Dr. Errol Alden; a report from Dr. Naveen Thacker, our new Executive Director; a message from Dr. Enver Hasanoğlu, President Elect of IPA, a commentary on the Environment Influences Children's Health by Dr. Ruth Etzel and reports on numerous activities of IPA member societies. In "what's new" I have taken liberty to write about "Cell Free DNA" which is a new laboratory test which has potential to be utilized in any field of clinical medicine.



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Message from the Executive Director



Dear Colleagues!

Greetings from IPA Admin Office,

It is a great honor and great pleasure for me to have the opportunity to work as an Executive Director for International Pediatric Association. An organization which is 109 years old representing 169 Member Societies from 149 Countries taking care of more than 1 Billion Children.

Three months back when I took over, my first step was to develop an efficient administrative team to support member societies and to manage the day to day work of IPA. In the last three months we have progressed well we have regular EC and SC calls whose minutes are shared within four weeks and action items are followed up immediately.

To serve needs of our member societies, it gives me pleasure to inform that, we have started the '**Online Payment**' feature on our website www.ipa-world.org for the member societies to make their membership payment

through Credit or Debit Card.

It is important that our communication reaches out to each and every member society which are backbone of IPA network. The major issue we faced was due to lack of their contact details or wrong contact addresses. We have contacted the member societies with the help of our EC and SC members. We would also request you to share the contact details of your respective societies with us.

We would be happy to welcome new member societies to join IPA and work with us as we seek pediatric associations who willingly want to add their strengths to reach every child, every age, everywhere.

As an organisation, we are continually evaluating and re-evaluating what we can do, how we do those things and why we do those things. A major exercise is being undertaken by Standing committee members who are now working in different SC sub committees. Based on the necessity, committees were formed on (i) Governance, Finance, Policies and procedures, (ii) Ethics, Evaluation, Awards, (iii) Membership, Alumni, Communication, (iv) Education & Advocacy, and (v) Strategic Planning and Development.

All of us with IPA should take pride in what our organization has achieved and the reputation that we have earned around the world which I personally experienced during the WHO World Health Assembly 72 this year.

We have a great team led by Dr. Errol Alden. I am happy to welcome Dr. Deepak Kamat as our new Editor -in- Chief for IPA newsletter and



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Message from the Executive Director

Dr. Jonathan Klein as coordinator who is a value addition to IPA team. He looks after the strategic advisory groups and strategic communication with WHO. I'm extremely grateful and pleased to work with supportive Standing and Executive Committee members and Member societies office bearers whose efforts make IPA proud .

It is important that we hear from our member societies, partners and others with their

impressions about our functioning. So please feel free to approach us with your critical views, ideas and thoughts.

With Warm Regards

Naveen Thacker

Executive Director

International Pediatric Association

Email. adminoffice@ipa-world.org

Cell- +91-9426217314



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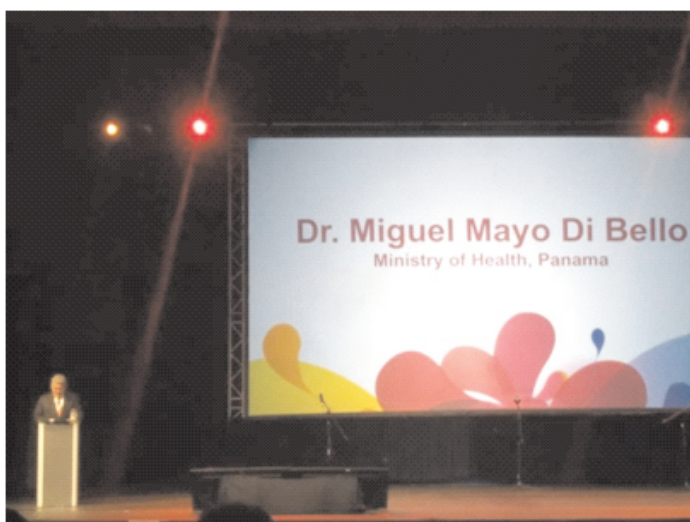
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IPA Activity Recap

29th International Pediatric Congress – Panama (17-21 March 2019)

The IPA 2019 Congress was held in Panama where over 2200 delegates, from 97 countries came together to discuss “Partnerships for Children”. In addition to that, 131 speakers from 42 countries participated at global platform, to discuss pediatric care. Below are some memories from the congress.





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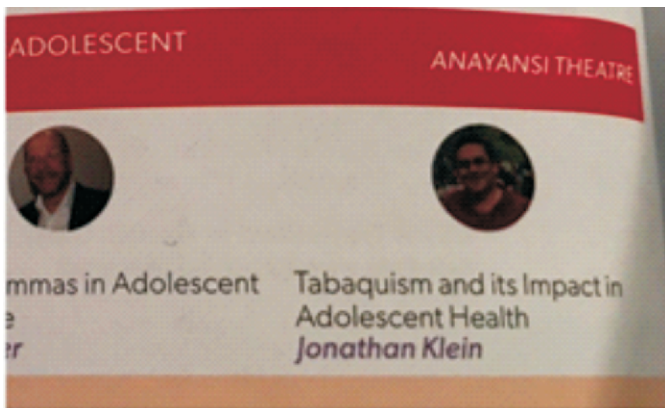
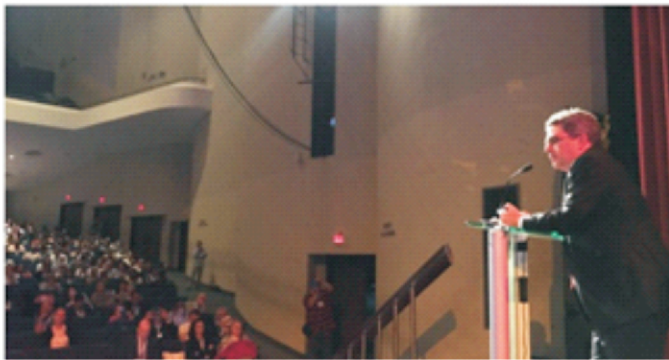


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IPA Activity Recap



Also, during IPA Congress, IPA in partnership with Johnson & Johnson launched **IPA Lead: "Child Health Emerging Leaders Program"**, a formal mentored leadership development program designed to build engagement and leadership capacity among paediatricians within IPA member societies. Dr. Linda Arnold is the Director of IPA Lead program.





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IPA Activity Recap

During the IPA Congress, IPA also conducted the 2nd Training of Trainers workshop of "Vaccine Hesitancy Project "





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IPA Activity Recap



United Arab Pediatric Society conducted a workshop on Infant Nutrition on 28th March 2019





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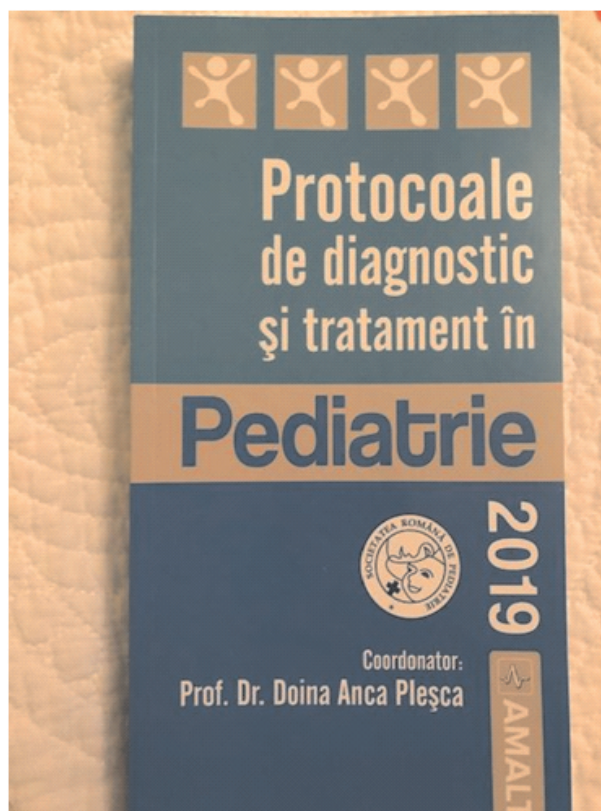
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IPA Activity Recap

United Arab Pediatric Society and Turkish Pediatric Association workshop conducted on General Pediatrics on 05th April 2019



National Pediatric Conference on Protocols in Pediatrics supported by Romanian Pediatric Society at Bucharest, Romania on 3-6 April 2019



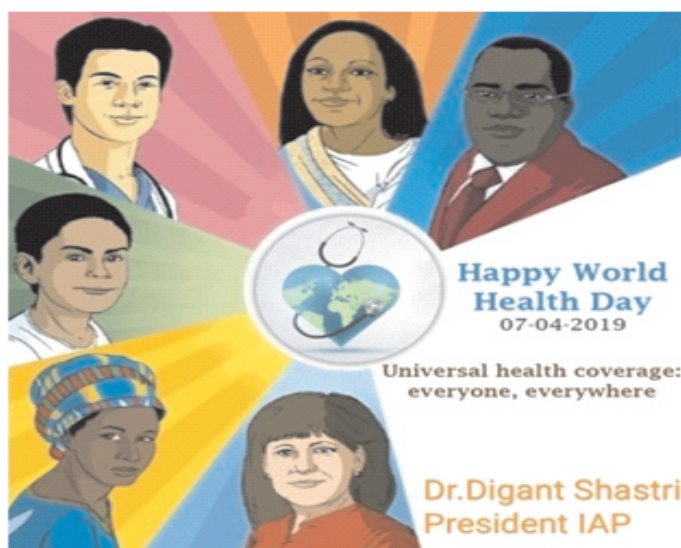


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IPA Activity Recap

World Health Day- 7th April 2019 celebrated by IPA Member Societies





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IPA Activity Recap

World Immunization Week (24-30 April 2019) celebrated by IPA EC/SC Members, Member Societies and by the leaders of IPA Lead Program





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IPA Activity Recap

 **WORLD IMMUNIZATION WEEK**

#IPATrustsVaccines

I have seen children dying from diseases which are vaccine preventable. Let's protect them.



Adamos Hadjipanayis
(Standing Committee Member, IPA)

#VaccinesWork #ProtectedTogether

 **WORLD IMMUNIZATION WEEK**


#IPATrustsVaccines

Healthy children are the nation's assets and resilience. Make sure they are completely immunized




Aman Pulungan
(Executive Committee Member, IPA)

#VaccinesWork #ProtectedTogether

 **WORLD IMMUNIZATION WEEK**

#IPATrustsVaccines

For healthier generation say YES to vaccination



Joseph Haddad
(Executive Committee Member, IPA)

#VaccinesWork #ProtectedTogether

 **WORLD IMMUNIZATION WEEK**

#IPATrustsVaccines

Let your vaccines be your safest protectors



Mostafa El-Shabrawi
(Standing Committee Member, IPA)

#VaccinesWork #ProtectedTogether

 **WORLD IMMUNIZATION WEEK**


#IPATrustsVaccines

A vaccinated family is a protected family. Activate your power: Vaccinate!




Oswaldo Revelo Castro
(Standing Committee Member, IPA)

#VaccinesWork #ProtectedTogether

 **WORLD IMMUNIZATION WEEK**

#IPATrustsVaccines

Immunizations respond to the best interest of the child. Vaccines allow the right to health, and as such should be guaranteed by families, health systems and States. Ensuring a good coverage of immunizations allows children's "Immune equity" and well-being to be achieved.



Raúl Mercer
(Standing Committee Member, IPA)

#VaccinesWork #ProtectedTogether

 **WORLD IMMUNIZATION WEEK**

#IPATrustsVaccines

Let us all come-together to build trust in vaccines



Jay Berkelhamer (Treasurer, IPA)

#VaccinesWork #ProtectedTogether



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IPA Activity Recap

IPA Executives attended 72nd World Health Assembly (WHA) in Geneva, Switzerland (20-28 May 2019)

Dr. Errol Alden (President IPA), Dr. Zulfiqar Bhutta (Past President), Dr. Naveen Thacker (Executive Director) and Dr. William Keenan (Past Executive Director) attended the 72nd World Health Assembly.

Dr. Alden and Dr. Bhutta attended the Partnership for Maternal, Newborn and Child Health (PMNCH) meeting whereas Dr. Thacker was a panellist in a WHA 72nd forum on quality of medicines and diagnostics and Dr. Keenan was panellist in a forum on maternal & newborn care.



Putting Quality Medicines & Diagnostics at the Heart of Quality Care

Friday, 24 May 2019 | 9:00 - 11:00 AM | Intercontinental Geneva

Featured speakers:

- Pape Amadou Gaye, CEO, IntraHealth International
- Haileyesus Getahun, Director, Interagency Coordination & Partnership on AMR, WHO
- Jenifer Healy, Deputy Chief of Staff for Policy, USAID
- Ronald T. Piervincenzi, CEO, USP
- Mariângela Simão, Assistant Director-General, Prequalification & Technology Assessment, WHO
- Naveen Thacker, Executive Director, International Pediatric Association

Moderated by:

Vivek Muthu, Adviser, The Economist Intelligence Unit (The EIU)



#WHA72 Please RSVP at bit.ly/QualityMedsQualityCare





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IPA Activity Recap



IPA at Women Deliver 2019 Conference (1st week of June)

Judith Hall, former member of IPA EC, is based in Vancouver, represented IPA at Women's Deliver Meeting

Call to Action

There is clear evidence that midwives, educated to ICM standards, licensed, regulated, working in inter-professional teams and fully integrated into the health system and practicing within an enabling environment will provide high quality care that transforms maternal and newborn health outcomes. To reach this goal, we call for continued advocacy for policies that increase the midwifery workforce but with increased focus on providing an educational, regulatory and practice infrastructure that is consistent with a midwifery model of care. We call for increased support to the development of regulatory structures that ensure that midwives have a scope of practice (SOP) consistent with ICM competencies and the needs of women in their communities. We call for prioritized implementation of the action plan to strengthen quality midwifery education outlined in the recently released Framework for Action- Strengthening Quality Midwifery Education for Universal Health Coverage 2030.

Every midwife must have the opportunity to work in an enabling environment. This environment must include a) ability to practice to her or his full SOP; b) ability to make and be accountable for independent decisions within the regulated SOP; c) a functional health infrastructure with adequate human resources, equipment and supplies; d) access to timely and respectful consultation, collaboration and referral; e) safety from physical and emotional harm; and f) equitable compensation.

We call for active and respectful collaboration between midwives and their nursing and medical colleagues in pursuit of the shared goal of accessible, high quality women's health and maternity care. This includes acknowledgement of and respect for their respective and essential roles around the pregnant and birthing woman. This acknowledgement and collaboration must occur between professional associations as well as within local and national health systems and agencies that regulate midwifery practice and on the "floor" of the facility. Midwives must be fully engaged in all local, national, regional and global policy decisions that affect their professional practice and the needs of women and their newborns in their communities.





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IPA Activity Recap

XLV National Congress of Pediatrics, VII Mesoamerican Congress and of the Caribbean Pediatrics IV International Course on Vaccines on 08th June 2019 at Dominican Republic





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IPA Activity Recap

9th Europaediatrics Congress organized by the European Paediatric Association and the Union of National European Paediatric Societies and Associations (EPA/UNEPSA) from June 13-15, 2019 at Dublin , Ireland





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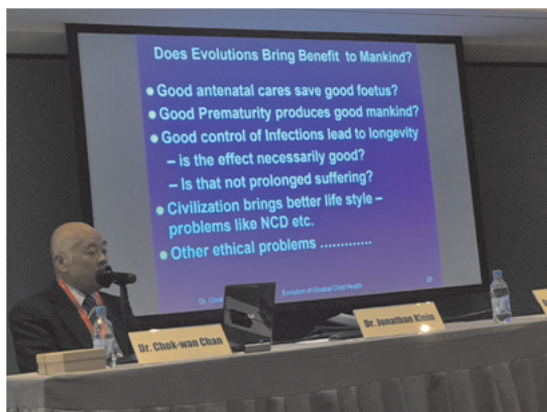
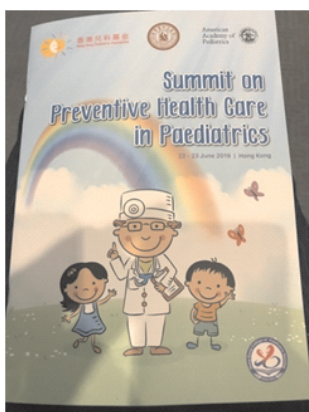
65th anniversary of Indonesia Pediatric Society

On 19th June, 65th anniversary of Indonesia Pediatric Society, IPS held a media seminar with the theme "Together Protecting the Rights of the Child". IPS encourages the formation of various partnerships to protect the rights of children and youth in Indonesia.



The Summit on Preventive Health Care in Paediatrics 2019 at Hong Kong (22-23 June 2019)

This summit was jointly organized by Hong Kong Paediatric Society, Hong Kong Paediatric Foundation and American Academy of Pediatrics





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IPA Activity Recap

7th Mecedonia Pediatric Congress at Strumica

President Elect of IPA - Dr. Enver Hasanoglu representing IPA in 7th Mecedonia Pediatric Congress - Strumica on 25th-28th June, 2019.



June, 26th Confederación Nacional de Pediatra de México Conapeme was invited to the National Palace in order to work with the Federal Education Secretary on a National Strategy to Promote Reading especially among children.



State Secretary Olga Sánchez Cordero, Jesus Villalobos, Chairman National Council of Human Communication, Prof. Marisol Millán.



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IPA Activity Recap

Congratulations Dr. Douglas McMillan for the Board Award of Distinction given at this year's annual general meeting of IWK Health Centre

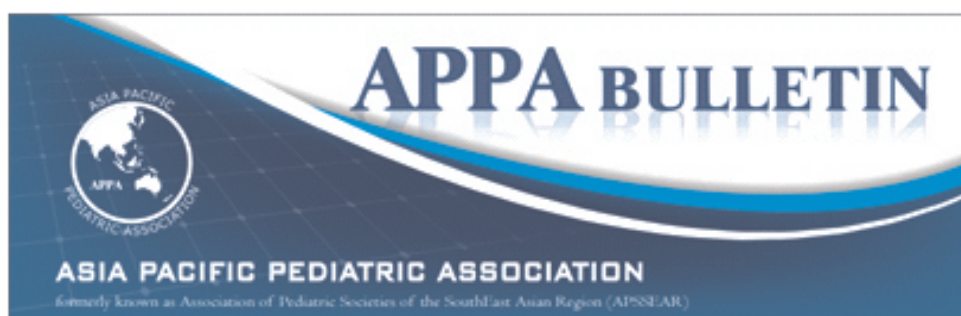


Read the ISSOP E Bulletin No – 39 for May 2019. Here is the link:
https://ip_GoBack_GoBacka-world.org/uploadedbyfck/tA45wEL8uDXI-May-e-bulletin-Final-16062019.pdf

ISSOP e-Bulletin N^o 39
May 2019



Read the APPA E Bulletin- Volume 75. Here is the link <https://ipa-world.org/society-resources/code/images/8axdwKhHfGpg.pdf>





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Errol Alden, USA
Executive Director
Naveen Thacker, India
President-Elect
Enver Hasanoglu, Turkey
Treasurer
Jay E. Berkelhamer, USA
Coordinator of Development
Jonathan Klein, USA
IPA Executive Committee
(also members of Standing Committee)

Errol Alden, USA
Enver Hasanoglu, Turkey
Naveen Thacker, India
Zulfiqar Bhutta, Pakistan
Jay E. Berkelhamer, USA
Jonathan Klein, USA
Russell Viner, UK
Joseph Haddad, Lebanon
Aman Pulungan, Indonesia

IPA Standing Committee

Digant Shastri, India (APPA)
Zulkifli Ismail, Malaysia (APPA)
Yasuhide Nakamura, Japan (APPA)
Linda Arnold, USA (AAP)
Douglas Donald McMillan, Canada (CPS)
Oswaldo Revelo Castro, El Salvador (ALAPE)
Carlos G Alonso, Mexico (ALAPE)
Amah Madeleine AmorissaniFolquet, Ivory Coast (UNAPSA)
Ousmane Ndiaye, Senegal (UNAPSA)
Douagi Mohamed, Tunisia (UAPS)
Leyla Namazova, Russia (EPA/UNEPSA)
Adamos Hadjipanayis, Cyprus (EPA/UNEPSA)
Raul Mercer, Argentina (ISSOP)
Mortada El-Shabrawi, Egypt (ISTP)
Kevin Forsyth, Australia (IPALA)
Berthold Koletzko, Germany (FISPGHAN)
David Sigalet, Qatar (WOFAPS)

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IPA Statement on Migrant Children at Borders



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The International Pediatric Association, devoted to the well-being of children across the globe and composed of 169 national, regional and subspecialty pediatric societies representing over one million pediatricians, caring for more than one billion children, issues the following declaration:

Declaration of the international pediatric association on the conditions of child detention facilities at the borders of the United States Of America
All countries have a moral and legal obligation to protect children, both within their country as well as those immigrants fleeing danger elsewhere. The future of the world rests on this obligation.

Therefore:

The International Pediatric Association (IPA), representing over one million pediatricians in 149 nations, hereby expresses our strong opposition to the practices employed by the government of the United States of America that result in the detention of children at United States borders. The detention and separation of children from their families, and the deplorable and inhumane conditions these children are subjected to, are immoral, and ignore basic human rights.

The failure to provide basic care, health care, medicine, adequate nutrition, supervision, access to necessary hygiene, translators, and legal assistance brings irreparable harm to these children. Such conditions will cause profound and long-lasting emotional and physical damage to children and adolescents.

The IPA calls on the United States of America to take immediate action to protect child's rights and cease detention of children under such conditions. We call on all of our members to urge the US Government to end these abusive practices, and to urge their governments to promote and advocate for the protection of all children, including immigrant children seeking to enter other countries.

Dr. Errol Alden

President
International Pediatric Association

Dr. Naveen Thacker

Executive Director
International Pediatric Association

On behalf of Executive and Standing Committee



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The Environment Influences Children's Health

The World Health Organization estimates that approximately one third of the disease burden in developing countries is attributed to modifiable environmental factors. Children's exposure to pollutants in the air, water, food and soil is a major contributor to increased morbidity and mortality, especially in low and middle income countries.

The following specific areas of focus have been identified as very important for children:

1. Household Air Pollution

People who use solid fuels (biofuels or coal) for cooking breathe air that is heavily polluted from burning these fuels. The levels of particulate and pollutant gas mixtures in their homes are much higher than permitted under typical regulatory limits. Behavioral interventions such as keeping children away from the stove during cooking, using dry wood, and cooking outdoors, whenever possible, can be recommended by pediatricians.

2. Tobacco

Worldwide, almost 16,000 people are killed by tobacco every day. This is more than killed by any other agent. Almost half of the world's children breathe air polluted by secondhand smoke. The World Health Organization has urged all countries to pass laws requiring all indoor public

places to be 100% smoke-free. Pediatricians can take an active role in supporting and educating parents about smoke-free public policies.

3. Unsafe water, poor sanitation, and hygiene

The provision of safe drinking water is just as important as safe air to breathe. With proper sanitation, proper hygiene, and safe drinking water, diarrhea can be decreased 22% and deaths resulting from diarrhea can be decreased 65%. Because diarrhea accounts for 12% of the deaths of children younger than 5 years, improvements in water and sanitation are critical to the child health agenda.

4. Climate change and its impacts

Climate change is one of the major health challenges of the future. Climate change affects water resources, food production, desertification, air pollution and, therefore, human health. Children are likely to be particularly affected through increases in diarrhea, malnutrition and vector-borne diseases.

What is IPA doing?

To better prepare the world's pediatricians to address these issues, the International Pediatric Association established an International Pediatric Environmental Health Leadership Institute in 2005.



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The Environment Influences Children's Health

IPA sponsored Environmental Health Workshops in 2005, 2007, 2010, 2013 and 2016. The objective is to prepare each participating pediatrician to understand the influence of environmental agents on children's health and to recognize signs, symptoms, diseases and sources of exposure relating to common environmental agents

and conditions. Participants learn how to prevent health effects from hazards in children's environment. Anyone interested in participating in the next workshop in Scotland, please contact Dr. Ruth Etzel at RETZEL@EARTHLINK.NET.

Ruth A. Etzel
MD, PhD



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What's New

Cell Free DNA

A new revolution in the field of molecular diagnosis is the utilization of Cell Free DNA for the diagnosis of infections, prenatal diagnosis of fetal abnormalities, detecting organ rejections after transplant and in the management of malignancies.

After infections with bacteria, DNA viruses, fungi and parasites, a pathogen free DNA is released as the pathogens multiply and die. The pathogen free DNA can be recovered from plasma and analyzed to identify infecting organisms responsible for infection anywhere in the body. (1) The basic technique is that after obtaining an anticoagulated blood sample, the sample is spun down to remove the host cells and cell free plasma is obtained. The cell free DNA is sequenced and run through the library to see if the DNA sequences match with any of the clinically relevant pathogens. A commercial test known as "Karius Test" claims to identify more than 1000 clinically relevant bacteria, DNA viruses, fungi and parasites. The results are available within 24 hours. (2) However, it is expensive, costing about US \$ 2,000.00 per sample.

Similarly, fetal Cell Free DNA can be collected from mother's plasma and sequenced to see if there are any known abnormalities such as Down syndrome present in this DNA. (3) This technology can also be used to detect organ rejection after transplant. There are differences between donor and recipient DNA. When there is rejection of transplanted organ, DNA from the

transplanted organ is released and this Cell Free DNA can be identified from the recipient's plasma. Thus, rejection can be recognized early so that anti-rejection therapy can be adjusted before it is too late and it also obviates a need for an invasive procedure for tissue diagnosis. (4) Cell free circulating tumor DNA (ctDNA) can be used as "liquid biopsy" where for technical and safety reasons the tumor cannot be reached for tissue biopsy. DNA from the rapidly multiplying and dying cells are released in the circulation and these cell free DNA can also be used for early detection of localized tumor, monitoring for the relapse of the cancer and for tracking resistance in tumor cells. (5)

References

1. Blauwkamp TA, Thair S, Rosen MJ, et al. Analytical and clinical validation of a microbial cell-free DNA sequencing test for infectious disease. *Nat Microbiol.* 2019 Apr;4(4):663-674. doi: 10.1038/s41564-018-0349-6. Epub 2019 Feb 11
2. Blauwkamp TA, et al. Karius test identifies pathogens more quickly than standard tests. *Nat Microbiol.* 2019;doi:10.1038/s41564-018-0349-6. February 27, 2019
3. Fairbrother G, Burigo J, Sharon T, Song K. Prenatal screening for fetal aneuploidies with cell-free DNA in the general pregnancy population: a cost-effectiveness analysis. *J Matern Fetal Neonatal Med.* 2016;29(7):1160-4. doi: 10.3109/14767058.2015.1038703. Epub 2015 May 22



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4. Snyder TM, Khush KK, Valantine HA, Quake SRU. Universal noninvasive detection of solid organ transplant rejection.. Proc Natl AcadSci U S A. 2011 Apr 12;108(15):6229-34. doi: 10.1073/ pnas.1013924108. Epub 2011 Mar 28
5. Bettgowda C, Sausen M, Leary RJ, et al. Detection of circulating tumor DNA

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