INDIAN ASSOCIATION OF PAEDIATRIC ANAESTHESIOLOGISTS

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Editorial

“Life is about accepting the challenges along the way, choosing to keep moving forward and savoring the journey.”

Roy. T. Bennett

Dr Neerja Bhardwaj
President

In the beginning of this year, I took the challenge of filing my nomination papers for the prestigious post of the President of the Indian Association of Paediatric Anaesthesiologists (IAPA).I was initially reluctant to contest for Presidentship and felt incapable as well as fearful of taking this responsibility since I was intimidated by my predecessors who had done enviable work for the organization. However, Dr. Elsa Varghese outgoing President as well as Dr. Nandini and Dr. Ekta pushed me to go ahead assuring me that I was capable of fulfilling this responsibility. For me, taking over the post of the President of IAPA has been a bitter sweet experience till now.

IAPA as an association is relatively young but has continued to grow rapidly under the previous presidents and its executive members. Their hard work as well as commitment to improve the peri-operative care of children has enabled the society to grow manifold. During my tenure as President of IAPA my main focus will be towards giving an international presence to our society, developing research pertaining to paediatrics and modifying guidelines according to the Indian context.

As the new President of IAPA my vision is to take the association to even greater heights as well as envisaging an international presence for our association by developing research collaborations with other societies like Association of Paediatric Anaesthetists of Great Britain and Ireland (APAGBI) and Society of paediatric anaesthesia (SPA). The creation of a research committee as a part of the new executive is a small step in this direction and I am convinced that Dr. Rakhee Goyal, the lead of this committee will make efforts to reach this goal.

IAPA has been regularly creating management guidelines for the most commonly practiced paediatric anaesthesia scenarios which are uploaded on the IAPA website. However, these need to be formulated keeping in view that the Indian perspective is very different from the western one. It is my endeavor that I steer the Guidelines Committee to aim and update guidelines by conducting surveys/randomized research studies targeting anaesthetists from hospitals undertaking common paediatric surgeries and then upload them on the IAPA website. This will enable the guidelines to be more attuned to the Indian context rather than merely being a modification of international guidelines.

IAPA accredited fellowship programs are running pan India in eleven institutes. Dr. Elsa Varghese is credited with streamlining the fellowship program by formulating the framework of fellowship course, formulating guidelines for institutes desirous of running this course, and setting up a curriculum. Based on IAPA regulation, the hospitals running this course need to be re-accredited after 3 years. However, the emergence of COVID-19 prevented IAPA from carrying out the re-accreditation process. My focus is therefore to activate the re-accreditation process of these hospitals at the earliest.

Under the current editorship of Dr. Ekta Rai, the IAPA Newsletter has taken a fresh turn. I'm sure the new Newsletter Committee will keep providing us with insightful material. I have high hopes that, in the future, we'll develop to the point where we can launch a journal solely devoted to paediatric anaesthesia.

Taking IAPA to new heights would only be possible with active collaboration and new ideas from the young paediatric anaesthesiologists. I solicit active participation and invite my executive team to come up with innovative ideas so that we as a society are able to reach great heights in excellence.

INSIDE THIS ISSUE

My Journey in Paediatric Anaesthesiology

Prof Dr Elsa Varghese,
Past President IAPA

My four-year-term as President of the Indian Association of Paediatric Anaesthesiologists came to an end in March 2022 (an additional year, thanks to COVID 19). It is a pleasure to pass on the baton to Prof Dr Neerja Bhardwaj who has contributed greatly over the years to the cause of our association and she will lead us forward to greater heights. I thank you all for giving me the privilege to serve you over the past many years and look forward to continuing to contribute to the best of my ability. My journey through the art and science of paediatric anaesthesia has been an exciting one.

A bit about my background is called for. My interest in anaesthesia began as an undergraduate in Christian Medical College, Ludhiana, Punjab. Prof Frank Prior (trained in Oxford, England) was the Head of the Department of Anaesthesia and Medical Superintendent at that time. He had tremendous foresight and sparked an interest in us undergraduates, to entice us into the field. By the end of my MBBS, I had decided to become an anaesthetist. Christian Medical College, Vellore beckoned me, and during my four-year anaesthesia training, I was fortunate to work under the guidance of my Guru, Prof Valerie Major. Prof. Major was from Wales, UK and had trained in Cardiff under Prof Mushin (a student of Prof MacIntosh of Oxford). I therefore claim an exceptional anaesthesia lineage!

Prof Major was an outstanding clinician, her passion for teaching was infectious. She trained us to be safe anaesthetists regardless of whether we would later work in a rural or urban setting. She popped into each operating room several times a day to keep an eye on what we were doing (considering we were independently running operating room lists and doing second call duties after a year of training). She hauled us up privately if we dared to cut corners or compromise our patients' safety and yet always supported us. Prof Major was exceptional when it came to anaesthetizing children. She engaged with them in an age-appropriate manner, gained their trust and love and they followed her into the operating room readily and happily. Her story telling abilities were amazing. Her attention to detail, technical and teaching abilities were awe inspiring. I worked with her closely and learnt the tricks she had up her sleeve, her professionalism, and the importance of keeping constantly updated. On leaving Vellore, her advice to me was, 'Elsa, let your work speak for itself and keep your eyes open and constantly learn'. That has been my motto ever since.

The Department of Anaesthesiology at Kasturba Medical College, Manipal, was my next stop in 1984. I ended up spending almost three decades there. I look back at that time, as a period when all the right stars and planets aligned for me. My colleagues were brilliant, had trained in India's premier institutions, were young and passionate about raising the bar of excellence. As a team we were able to improve the quality of anaesthesia services. International minimum monitoring standards were introduced in all operating rooms by 1990. Working as a team in that atmosphere was special, faculty were passionate about improving the lot of the anaesthesiologist and raising standards of patient care and post graduate training. Mandatory CPR training of all anaesthesiologists and other medical personnel in the institution was initiated in 1984. In addition, three-day anaesthesia postgraduate academic programs(APGAP) were organised by the department for postgraduates across India, which were non-existent then. The APGAP lecture notes were meticulously edited and became a popular source of educational material at a time when anaesthesia textbooks were expensive and not readily available. APGAP also included hands-on workshops which were very popular. These programs were a great learning experience for me and helped to improve my writing and editing skills, as well as sharpen my teaching and oratory abilities.

I had read the text book of paediatric anaesthesia by Hatch and Sumner during my training days and was quite in awe of the authors, so in 1986 when we were in London, UK for a year, I contacted Dr Edward Sumner at the Great Ormond Street Hospital for Children (GOSH), and he kindly allowed me to be an Observer in the anaesthesia Department. GOSH is an ancient London children's hospital of international repute to which children from all over the world flock for treatment. Walking through the wards of GOSH was like taking a trip through the Nelson textbook of paediatrics. I trailed Dr Sumner around for a couple of months, observed complex syndromic children being anaesthetised (including Siamese twins), saw a pulse oximeter in action for the first time, watched airway laser surgery and major craniofacial surgical procedures. Dr Sumner was kind enough to give me an introduction to several London anaesthesia stalwarts, like Dr Leon Kaufman of University College Hospital, from whom I picked up the art of fibreoptic intubation under neurolept anaesthesia and paediatric dental chair side anaesthesia, Dr Doreen Jewkes of The National Hospital for *Neurology* and Neurosurgery Queens Square, where I saw my first MRIs and complex microscopic neurosurgical procedures.

Under the mentorship of Prof. A.P Adams at Guy's Hospital, I was able to get a ring side view of cutting-edge cardio-thoracic, paediatric anaesthesia and surgery as well as chronic pain management. Propofol was being introduced for the first time as well as neuromuscular monitoring and it was exciting to see these newer drugs and techniques. Prof Adams organised the first international meeting on 'Safety in Anaesthesia' which he kindly allowed me to attend free of cost. Dr Jeffrey Cooper, a pioneer in initiating minimum monitoring standards in anaesthesia was a speaker. I attended a 'Symposium on Pain' at the Royal Society of Medicine, at which Dame Cicely Saunders(founder of the hospice movement in the UK) and Prof PD Ward (of Melzach and Ward'sgate control theory of pain fame), were the eminent speakers. My stint in the UK gave me an impetus to pursue my interest in paediatric anaesthesia.

I was fortunate to be offered in 1994 to pursuea fellowship in paediatric anaesthesiology at the Children's Hospital of Michigan, in Detroit USA. It took me a couple of weeks to get used to the new systems, technology, language, aggressive management, the litigatory atmosphere and more. I found a mentor in Dr Charles Cauld well, who also appreciated my work ethic and abilities. The time spent in Detroit was educational though stressful, as we had two young children and juggling professional and private responsibilities in a strange country with little help wasn't easy. Looking back, I wonder how I managed, leaving home every day at 0430 hours and returning after dark, often not seeing my children awake for days on end.

On my return to India in the mid-90s,I joined as faculty at Kasturba Medical College Manipal, which is now part of Manipal University. We were given full support by the management in terms of acquiring equipment and were encouraged to undertake clinical research, attend conferences and publish. The surgical subspecialties of paediatric urology, ENT, orthopedics, and general paediatric surgery were well recognized national and internationally. We worked well togetheras a team and our paediatric anaesthesia services were certainly appreciated. I was therefore able to undertake and complete several prospective research projects, and presented them at national and international meetings. These were subsequently accepted for publication by the journal paediatric anaesthesia over these years. Gradually I was recognised for my work in paediatric anaesthesianationally. In fact, I was pleasantly surprised when my students who presented our research at the annual national conferences of The Research Society of Anaesthesiology and Clinical Pharmacology (RSACP) and the Indian Society of Anaesthesiologists (ISA) consistently won prizes every year.

My passion for training anaesthesiologists to be safe with handling children was very focused and I feel a tremendous sense of pride when I meet my students and hear about their high standards of work here in India and abroad, their leadership abilities and that they are passing on the torch of safe paediatric anaesthesia.

Over the years, the friendships I have made and fostered with fellow paediatric anaesthesiologists after the formation of the Indian Association of Paediatric Anaesthesiologists (IAPA), have been such a blessing to me. In addition, my friendship circle has expended worldwide after attending international meeting of the World Federation of Anaesthesiologists (WFSA), the America Society of anaesthesiologists (ASA), Society of paediatric anaesthesiology (SPA) and the Asian Society of Anaesthesiologists (ASPA). This network of paediatric anaesthesiology friendshipshas resulted in collaboration at various levels, and have been a great source of satisfaction. We have been able to teach and train anaesthesiologists across the globe to provide safer paediatric anaesthesia.

I believe that our youth hold the torch for our future. Over the past few years, I have had the opportunity to work with amazing younger anaesthesiologists in India and abroad. We all have a common passion to promote excellence. I realise that I still have a role to play as a mentor, cheer leader and supporter of my younger colleagues. It has been a pleasure to work with our enthusiastic and energetic IAPA members and I hope we can continue to work together to continuously raise the bar for providing safe and quality paediatric anaesthesia care in India. After all it is with our precious children that our future lies.

ANSWERS TO PICTURE QUIZ FOR IAPA ON SAFETY AND QUALITY IN paediaTRIC anaestHESIA

1. B – The image depicts the 10-N principles for safe conduct of paediatric anaesthesia by Safetots.org. Maintaining physiological homeostasis is essential in both major as well as minor surgeries. This image is available as free resource to download. Courtesy: https://www.safetots.org/resources/
2. A – The image is fish bone diagram of root cause analysis of a critical event by Wake Up Safe initiative. Citation: Tjia, Imelda M. et al. "Wake Up Safe and Root Cause Analysis: Quality Improvement in paediatric anaesthesia." anaesthesia & Analgesia 119 (2014): 122–136.
3. D - Broselow tape is a standardized, color coded, paediatric emergency measuring tape, that provides details of the appropriate equipment size and medication dosages based on the child's length.
4. C – anaesthetists' Non-technical Skills (ANTS) framework for training and assessment includes these components
5. A- Hazard(A); morbidity/mortality(tip of arrow); Cheese (safety barriers)
6. B- PLAN – DO – STUDY-ACT
7. B-Quality of care in world and in India
8. D- All of the above
9. A- Avedis Donabedian
10. B - It is the icon for the app 'PediCrisis critical events checklist' made by the Society of paediatric anaesthesia

Our experience with the online elections

Dr MSRC Murthy

Secretary

Covid changed the world that nobody had imagined. Everything had to be done online including academics, education, examinations, meetings, and even elections.

The task of conducting online elections was difficult. It was our responsibility to hold the elections for the new executive, which we thought of holding in Coimbatore during our offline conference in February 2022. We had previously prolonged the time of the IAPA executive last year without conducting elections due to covid. However, the Third Wave of Covid forced us to postpone the conference. Therefore, we chose to hold the elections online.

I took the initiative to sort out the process with our website specialists. We had a database of our members, and we had given them login information and a deadline to visit the website, log in, and reset their password. Only 30% of members changed their passwords as instructed, while the other 70% chose not to log in. Here is when things became tricky. The allotted time has passed, therefore members were unable to check in. But every member who approached us to log into their ID and change their password received time-consuming assistance from our skilled crew, especially our office secretary, Mr.Veeru. Mock elections were held one week prior to the actual election, and while they were successful, there were some difficulties with new members who had never logged in before. Once more, we have resolved the problem.

Members have voiced concerns about the voting process's security and cross-voting. To over come the security concern, we designed an OTP-based voting system, wherein the member receives an OTP to their registered mobile before submitting their vote preference, to address this problem. Some members were unable to get the OTP since they were registered to the “Do not disturb” registry. With the help of our expert staff, we figured out a way to be accessible and give OTPs to people who were having trouble doing so. All four election days, our experienced crew worked incredibly hard to assist any voter who had trouble logging in or voting.

We all felt a great deal of anxiety during the elections because we want the procedure to be effective. We must accept the criticism that came from a variety of sources.

We were thankful to almighty God as the electoral process progressed effectively toward its conclusion. Most importantly, none of the participants had any complaints about the procedure, and they had successfully received votes from all eligible voters. Cross-voting or unsuccessful voting was not the subject of any complaints. For all of this, I'm grateful to my skilled crew. Additionally, I want to thank the candidates and my IAPA leadership for having faith in me and supporting me throughout the election process.

When I learned that the members wanted online elections in the future as well, I was extremely thrilled. We wanted to make changes for the upcoming elections to ensure a more organised and seamless process.

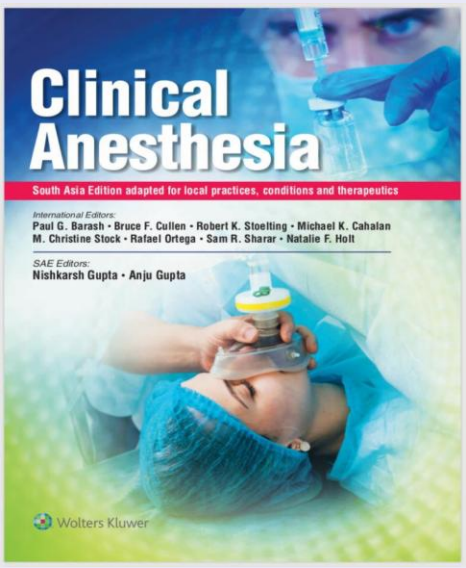
Achievement Section

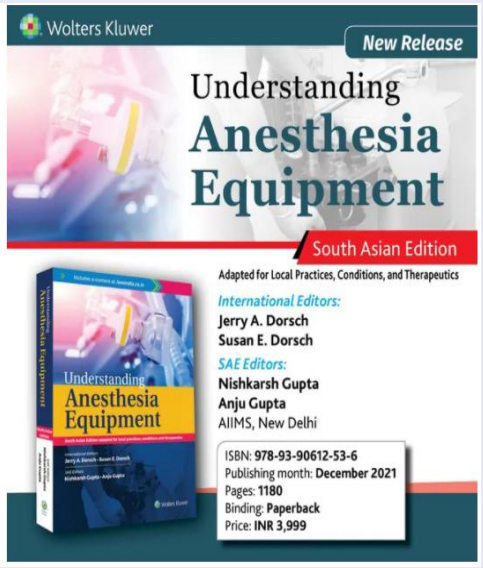
Congratulations to our achievers

A Journey No Less Than a Dream!

Dr Anju Gupta
Assistant Professor
AIIMS, Delhi

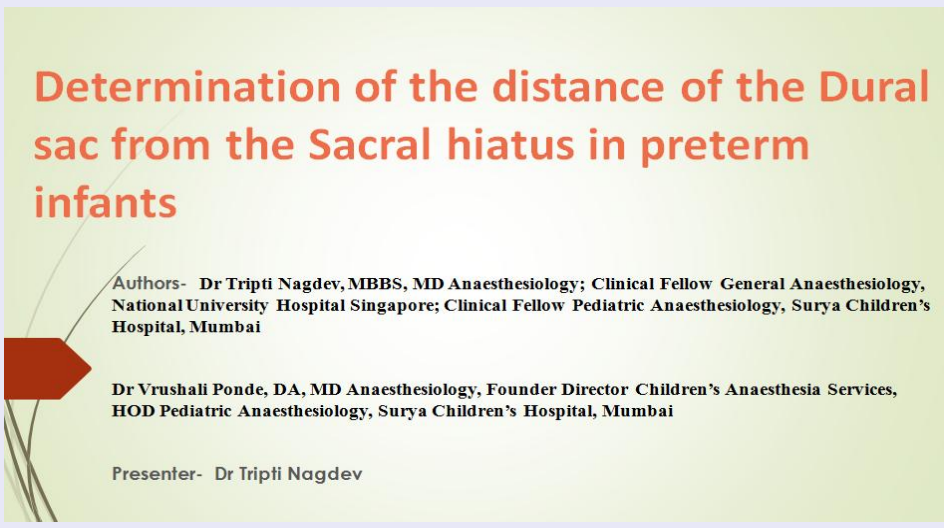
The field of anaesthesia is ever expanding, and it has become essential to keep pace with the emerging literature. Nonetheless, it is difficult to find a single reliable and complete source of knowledge. The “Clinical Anaesthesia by Barash” and “Understanding Anaesthesia Equipment by Dorsh and Dorsh” are considered the ultimate resource for clinical anaesthesia practice as they provide comprehensive knowledge on every relevant topic and enjoy a worldwide popularity. However, some of the contents are less suited in resource-limited settings due to variation in prevailing health conditions, practices, and therapeutics. As chief editors of the first South Asian (SA) edition of these textbooks, me and Dr Nishkarsh Gupta have put-up a sincere effort to bridge this gap and enrich these books while retaining their rich legacy. The update features many new chapters, additions in practically all the chapters covering newer concepts, several illustrations for better comprehension along with a bundled library of online videos. We hope that our effort will prove to be valuable for both budding and practicing anaesthesiologists.





Winners of IAPA midterm 2021 paper presentation:

First Prize: Dr Tripti Nagdev, Surya Children’s Hospital, Mumbai



Safety in Paediatric Anaesthesia

Rebecca Jacob

Bangalore
Member, Medical Advisory Council, Smile Train India
Chair Paediatric committee, WFSA

Access to safe anaesthesia and surgery for patients of all ages should be considered a basic human right but this is not available to a large segment of the world's population.[1]The last 30 years have seen a vast improvement in anaesthesia safety attributable to a number of factors including an increasing awareness of safety issues among anaesthetists, the advances in technology and the availability of newer and safer drugs. Computers and web-based learning has helped a wider dissemination of and easy access to knowledge and training.

Many developing and underdeveloped countries, including India, spend a very small portion of their GDP on health care and this is the greatest barrier to providing good and safe anaesthesia and surgical care.[2]Providing a uniform standard of quality and safety for children undergoing surgery under anaesthesia is challenging in a vast country like India with its varied health care systems. It requires improvement in the structure and process of providing quality anaesthesia services. This requires skilled anaesthesia providers with well-trained support staff, appropriate infrastructure, reliable supply of medications and equipment with timely maintenance. Interestingly, increased awareness among the patient population, implementation of strict medico-legal laws, and professional competitiveness has necessitated the need for quality anaesthesia services delivery and checks on all processes related to the same[3].

We need a structured and systematic approach to Quality Improvement (QI) and a culture that supports its implementation. Caregivers should be open to credentialling and accreditation processes with periodic audits and reviews. The auditing process should cover the institution, departments, individuals and processes. The quality of anaesthesia services under the accreditation program of the NABH (National Accreditation Board for Hospitals and Health Care Providers) is monitored by quality indicators. All hospitals across India are now striving for NABH accreditation[4]

The WHO acknowledging the fact that the global volume of surgery is significant and adverse events from surgery constitute a significant public health concern launched the Patient Safety Initiative in 2004 and the Safe Surgery Saves Lives initiative in 2008. They have set a core set of safety standards that can be applied to all countries in all settings. The Surgical Safety Check List helps implement these guidelines. Local modifications to suit each hospital and paediatric practice are encouraged. The check list sounds simplistic and repetitive at first but over time it has proved to improve and reiterate safety.

Protocols and checklists are available for operating rooms, recovery areas and ICU's. These must be standardized for each institution and each area with 'dry runs', simulation and surprise checks as to effectiveness of implementation. Policy development should be based on data analysis i.e., evidence based. Insights into need for application of the evidential approach may be by using case studies as illustrations

Audits and incident reporting, whether done on a national scale (National Confidential Enquiry into Perioperative Deaths – NCEPOD, Australian Incident Monitoring System - AIMS) or in a particular institution or department, helps to assess, errors, violations, omissions and avoidable events and place them in context. They help to identify areas of risk and put in place preventive or corrective measures. They also help in allocating resources where they may be best utilized. An outcome of these audits and incidents reported has led to the formation of widely used guidelines, protocols, safety algorithms and flow charts. Therefore, critical incident reporting, follow up and review of cases with special attention paid to feedback from parents and children should be mandatory along with regular morbidity and mortality reviews.

The Committee on Quality of Health Care in America, Institute of Medicine provides 6 aims of health care.[5]

1. *Safe:* No patient should be harmed by health care
2. *Effective:* Evidence-based treatment should be used when available
3. *Patient centered:* There should be a respectful approach to patient preferences, needs, and values
4. *Timely:* Delays should be reduced because these may affect satisfaction, diagnosis, and treatment
5. *Efficient:* Waste should be reduced or value increased
6. *Equitable:* The same care should be provided regardless of personal characteristics

I would now like to highlight a few areas where we can make a difference to management. Let us first consider the preoperative visit and assessment of children. We need to examine them thoroughly and then evaluate and stratify the perioperative risk perhaps with the help of the American College of Surgeons NSQIP Risk Calculator and ASA grading (modified in 2020).

We now have to decide;

Whether the risks are modifiable or do we need to wait or get expert advice?

Whether delaying the procedure could add to the perioperative morbidity?

What interventions during the preoperative period, if implemented, would reduce the risk?

Check whether the patient and parents been provided enough information to make an informed decision?

Ensure that both the child and the parents have support and encouragement.

The Society of paediatric anaesthesiologists of the USA created the WakeUpSafe (WUS) program which created a data base for 19 paediatric institutions. The aim was to develop a data base and to embed QI and safety analytics into paediatric anaesthesia departments and to decrease serious adverse events in children undergoing surgery. [6]The WakeUpSafe database shows that there are main areas where problems occur during paediatric surgery;

- Respiratory problems with laryngospasm and bronchospasm being common
- Cardiac with bradycardia, hypotension and cardiac arrest
- Medication Errors

Experience, education, care in assessment and management with repeated simulation exercises can help in reducing respiratory and cardiac complications.[7] However, medication errorsare found to be a common threat to patient safety especially as children are at particular risk due to size related individual drug dose calculations, and lack of a “standard familiar dose” like in adults. anaesthesia is perhaps the only area where medications are typically prescribed, administered, recorded and outcome measured by a single individual - the anaesthesiologist. Chances of error, violations of the norms, practices and protocols of the institution and misuse are high in this situation. In the interest of patient safety both the system and the mindset of the individual practitioner should be addressed.

The objectives of medication administration are often summarized in the ‘5 rights’: the right patient, medication, dose, time and route of administration. Merry and Andersen[8] suggest a sixth right, a right record of medications administered and medications wasted (notably any unused portions of ampoules of controlled drugs). To these I would like to add a seventh right, ‘the right to query or call for help if in doubt’

Medication errorsmay be due to:

*System error***:** When there is a reduced conscious effort(carelessness)such as prescribing a drug without detail, for example stating 1/3ampule pf glycopyrrolate,without realizing that it may be available as a 1mL or 5mL ampoule. Repeating this error as the norm makes matters worse.

*Wrong drug***:** Sometimes similar looking drugs, with completely different actions are stored together. Organization of workspaces and drug drawers should be uniform in similar work areas, e.g., in all the operating rooms of a given institution. Measures that have been shown (evidence based) to reduce medication errors include; standards labeling of ampoules and syringes and labels to always be legible and color coded. This color coding improves safety by decreasing between class errors but does not eliminate within class errors. It is worth advocating the retention of all ampoules and vials used in each case, beginning afresh for the next case. This will help track medications given in case of an adverse event.

*Wrong prescription***:** Short forms and abbreviations like writing‘Dex’(is it dexamethasone or dexmedetomidine?) can lead to confusion.

Wrong dose: may be due to a preparation error, administration error or even a wrong prescription

More than one person administering drug without a ‘shout out’ or documentation

Here again it is important to have checklists and departmental meetings to highlight safety procedures and the value of documentation. Standardization of treatment procedures in all areas of patient care is vital.Sedation drug regimens that comprise three or more drugs increase morbidity and should be eliminated. The routine use of drugs with a long half-life should be reviewed.Drug delivery systems should be mutually exclusive with special attention given to color coding and labeling of lines. Wrong route errors like epidural bupivacaine being given into an intravenous line can prove fatal.On an individual level labels should always be read before drawing up the drug and drugs like narcotics and blood and blood products should be counter checked by another individual, signed and documented.

Many countries lack the availability of paediatric formulations as in the case of intravenous fluids. This should be taken up with the pharmaceutical companies and pressure brought on them to manufacture and provide paediatric specific formulations as has been done with intravenous fluids in some European countries.[9]

Technology in paediatric anaesthesia is constantly evolving. We should not accept all of it as necessary for our practice of safe paediatric anaesthesia. The solution lies in a clear understanding of its necessity, it’s limitations as well as the limitations of resources available. This coupled with a good basic knowledge of physiology and pharmacology with appropriate training and continuing education is what is required to improve safety and reduce morbidity and mortality.[10]

Guidelines on the ‘minimum standard of care’ are provided by international bodies like the World Health Organization (WHO) and World Federation of Anaesthesiologists (WFSA), and regional bodies like Asian Society of Paediatric Anaesthesiologists (ASPA) and IAPA. These guidelines should be adhered to and it is *unacceptable* not to do so.Maintaining minimum safety standards should follow best practice guidelines enunciated by the national society of each country. To monitor whether this is implemented should be a matter for local bodies, hospitals and institutions. anaesthetic outcomes improved dramatically with the introduction of the pulse oximeter in the 1980’s. Fiftyeight countries in the world have made pulse oximetry part of their minimum monitoring standards.The Life Box Project (Global Oximetry Project), a collaborative partnership of the WFSA, the WHO, Harvard School of Public Health (HSPH), the Association of Anaesthetists of Great Briton & Ireland (AAGBI) and Smile Train are hoping to correct this deficit over time with the provision of a small robust, easy to use pulse oximeter along with teaching material as to its use. Ideally, capnography ($EtCO_2$), temperature monitoring, electrocardiography (ECG) and non-invasive blood pressure (NIBP) monitoring should also be considered as standard of care for all children undergoing anaesthesia or deep sedation. But finding resources for these is still a problem.

Hand over of patient care is a critical time when miscommunication can occur leading to medical errors. Standardized checklists for handoffs of care in the operating room and PACU have proven to improve safety while minimizing errors.

Recovery and post operative care: It is important to improve staff education, engagement and awareness, a knowledge of drugs and dosages, scoring systems to recognize the deteriorating child early and providing them with calling criteria to obviate fear of reprimand or ambiguity. In short, empowering the staff.

To ensure the safety of children under anaesthesia we have to do a better job of examining all children and doing a thorough preoperative assessment. We should not allow busy surgeons; insurance companies or hospital administrators make us change our practice for convenience or cost reduction. We need to do what is right for our children even if it means less money in our pockets.[1] On an institutional level there is a strong case to limit working hours as exhaustion of the caregiver is known to lead to erroneous judgment.[8] It is time for anaesthetists to take stock of the changes that have occurred in the delivery of anaesthesia around the world and to introspect as to whether our practices are safe. We can learn from others and implement safe practices in our own practice, our institution and in our country.

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Accredited Institutions

1. Rainbow Hospitals, Hyderabad.

Contact: Dr. M. Subrahmanyam Email: msubrah@gmail.com

2. GKNM Hospital, Coimbatore.

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3. Rainbow Hospitals, Marathahalli, Bangalore.

Contact: Dr. Mohanty, Email: drskmohanty123@gmail.com

4. Chacha Nehru Bal Chikitsalaya, New Delhi.

Contact: Geeta Kamal, Email: kmlgeeta@rediffmail.com

5. Amrita Institute of Medical Sciences, Kochi.

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6. Kasturba Medical College, Manipal.

Contact: Dr Anita Shenoy Email: anitharshenoy@gmail.com

7. K.G.P Children Hospital ,Vadodara

Contact: Dr Falguni A. Naregal Email: falguninaregal@gmail.com

8. Sri Ramachandra Institute of Higher Education and Research, Chennai.

Contact: Dr Aruna Parameswari, Email: reetharun@gmail.com

9. Super speciality Paediatric hospital and Postgraduate Teaching Institute, Noida.

Contact: Prof (Dr) Mukul Kumar Jain, Email: jainmukul2004@yahoo.com

10. NH SRCC Children's Hospital, Mumbai.

Contact: Dr Nandini Dave, Email: nandinidave@gmail.com

11. Madukar Rainbow Childrens Hospitals, Delhi.

Contact: Dr Rakhee Goyal, Email: rakheegoyalkumar@gmail.com

Best wishes and congratulations on taking up new Responsibilities

President

Vice President

Challenges for Providing Safe Anaesthesia in Children in a Far-Off Place, My Journey

Dr. Diganta Saikia,

Assam

I earned my MD degree in Anaesthesiology from Assam Medical College and Hospital, Dibrugarh, located at the extreme eastern part of the state of Assam. As a post graduate trainee, I had little opportunity to handle paediatric surgical cases due to infrequent and irregular postings in paediatric surgery operation theatres. Due to lack of resources of regular monitoring equipment, life-saving defibrillators, mechanical ventilators and trained personal to handle sick children undergoing surgery. To add to it, we had a high turnover of patients and frequent late referrals which always stressed me. Those were the days of ether, halothane, thiopentone, succinylcholine and pancuronium etc. Procuring blood (let alone blood products) for transfusion during major procedures was very difficult. During the procedure observing dark blood in the surgical site, a cold and bluish baby underneath the draping and cardiac arrests unresponsive to CPR (customised from adult version!) were not uncommon! Thus, our team had to be extra vigilant, to ensure safety for the children.

I took up the challenge! I would examine every patient thoroughly preoperatively, become familiar with the available equipment and staff of the operating theatre; whenever I had a paediatric patient, I made sure that my instructions were being followed meticulously by everyone including the parents of the child undergoing surgery. I used to reach the theatre long before the scheduled time so that I could check that the theatre is warm, ensure appropriate- sized equipment were functional and fasting orders followed. In the initial days, I avoided sedative premedication and preferred intravenous induction with thiopentone which I found less cumbersome, faster, smoother and safer. Frequently, I took help from the surgeons for putting intravenous catheters in difficult cases which made me a good team player. As atracurium became available I abandoned using pancuronium which helped me reverse neuromuscular blockade earlier and save a lot of time. As there were no patient monitoring devices, I regularly used a precordial stethoscope, frequently checked peripheral tissue perfusion and body temperature of children under the draping. This helped me prevent many critical incidents. Following surgery, I waited until the child is fully awake and handed over to his/her parental care as there was no recovery room! Uneventful postoperative recovery and pain relief were my serious concerns. To gain confidence, I started carrying out more and more cases independently in my institute and executed common regional nerve blocks even without any guidance or supervision.

In the meantime, I got an opportunity to work with a team of German anaesthetists and plastic surgeons (members of Interplast-Germany) who camped in a nearby town and carried out plastic surgical procedures in children for free, two weeks a year, for three consecutive years. I took the opportunity to learn about the patient monitoring devices and equipment like RAE and other tubes, LMA etc. they had bought along, all of which were new to me. They taught me the art of sevoflurane induction, the use of isoflurane, calculation of fluid requirements beforehand and the technique of infusion of measured volumes of fluid and blood by slow push technique with the help of a large syringe via IV catheter in neonates, infants and young children when a syringe pump is not available.

Availability of internet helped me look for newer information. I regularly attended paediatric sessions in various conferences and purchased paediatric anaesthesia equipment like transparent facemasks, tracheal tubes, and laryngoscope blades for neonates and infants etc. on my own and used to carry them to places where I worked. These aided me to refine my work and produce a safer zone for children in my hands. A reputation built up in my locality and I got an opportunity to work with a plastic surgeon in the Smile Train Centre of Dibrugarh.

In the meantime, anaesthesia in children became safer as workstations, patient monitoring devices, ventilators, isoflurane and sevoflurane etc. became available in my place. Even then, I was not happy myself and had some reservations regarding safety of children in my hands in our resource limited environment. I looked for a course in paediatric anaesthesia but in vain. Soon, I came to know about the fourth national conference of IAPA in Bengaluru and happily attended. My real journey began! I met Prof. Dilip Pawer in Bengaluru whom I met twice in Dibrugarh earlier and expressed my interest in paediatric anaesthesia. He referred me to Dr Pradnya Sawant, one of the pioneers in the field, in Mumbai. Three months later, I flew to Mumbai and met her in B. J. Wadia Hospital for Children. She talked to me for a while and advised me to stay in there just for a few weeks, instead of a year, as in her opinion I already knew most of the things of paediatric anaesthesia. Few weeks in Wadia Hospital changed my perception of paediatric anaesthesia and helped build my confidence. After I returned, I started performing different regional blocks frequently, procured some fentanyl, purchased newer equipment like RAE tubes, LMA, i-gel, stylets and bougies at my own expense and started using propofol as the primary inducing agent in almost every case. These helped carrying out smoother anaesthesia and increase perioperative safety of children.

After six months I organised a live workshop in my institute on regional nerve blocks in children which was conducted by Dr Pradnya and Dr Dilip Chavan, then secretary and treasurer of IAPA. It was the first of its kind and a landmark development in the practice of paediatric anaesthesia in general and paediatric regional anaesthesia in particular, in the entire northeast India and was highly appreciated. My interest in adult anaesthesia practice lessened and my institute's administration offered me permanent posting in paediatric surgery theatre. I became satisfied being a fulltime paediatric anaesthesiologist!

In 2011, I was honoured a star of Smile Train Southeast Asia Region on the recommendation of respected Prof. Rebecca Jacob, the then medical director of Smile Train India. Later in that year, I received a sponsorship from the Society of Paediatric Anaesthesia in New Zeeland and Australia to attend their joint annual conference held in Coolum, Brisbane and an Observership in Mater Children's Hospital of Queensland (Australia). Apart from being exposed to a world class environment of modern paediatric anaesthesia in different settings such as in the MRI suit, cardiac catheter lab etc, my being in Mater Hospital taught me the humanitarian touch needed while handling paediatric anaesthesia cases. I had also had the experience of seeing simulation in anaesthesia and surgery in the Queensland Health Centre in Brisbane, Australia.

I began enjoying paediatric anaesthesia. Soon, I started anaesthetising neonates, infants and younger children in the CT and MRI suit, for the first time in my institute, using propofol and dexmedetomidine as primary drugs. Following basic principles like adequate preanaesthetic fasting, appropriate drug dosing, maintenance of adequate body temperature and oxygenation and constant monitoring of SpO_2 and heart rate until the child was fully awake, we were able to continue our endeavour even in the sickest and youngest of children, avoiding any critical incident.

In 2013, I organised another scientific program including two different workshops, one on paediatric regional anaesthesia and the other on basic and advanced airway management in children and adults, in my parent institute. Well respected academicians from mainland India and abroad assembled as resource persons in the distinctly organised program to benefit mainly post graduate trainees and infrequent paediatric anaesthesia practitioners in and around the city. It was a grand success!

In between, over a period of few years, I got the opportunity to anaesthetise children for three brilliant paediatric surgeons of India namely Prof. D. K. Gupta, AIIMS, New Delhi, Dr Rasik Shah, Mumbai and Dr VVS. Chandrasekhar of Bengaluru, while they were conducting paediatric surgery workshops in my institute. My honest conviction is that I learnt many valuable tips on paediatric anaesthesia from the paediatric surgeons, supporting nursing staff and theatre technicians and even post graduate trainees I had worked with. An efficient surgeon, a dedicated team, mutual trust and clear understanding among its members pays off at the time of real crisis.

Maintaining these principles, I carried out enumerable number of anaesthetics in children including neonates and infants. Apart from elective and acute surgical cases I anaesthetised children undergoing procedures for almost all kinds of congenital anomalies except children with congenital cardiac anomalies. Anaesthesia in remote locations for even neonates and infants became a regular affair in my institute.

In 2016, I coordinated the Paediatric Perioperative Life Support workshop organised in Tezpur Medical College in Assam under auspices of Asian Society of Paediatric Anaesthesiologists of which I've been a life member. Dr. Agnes Ng from K. K. Women's and Children's Hospital, Singapore and her team which included Dr Rebecca Jacob and Dr Vrushali Ponde put in tremendous efforts and successfully trained more than forty participating delegates, from all over Assam, the ways to make children safer during perioperative period.

I continued my journey, mostly learning by attending scientific sessions in conferences regularly either as a delegate or as a presenter. Teaching post graduate trainees alongside became my passion and guided a few in carrying out research projects and writing thesis on paediatric anaesthesia topics.

Finally, I got recognition and received my most prized possession, the Honorary Fellowship in Paediatric Anaesthesiology, from the IAPA in 2018. However, I was then transferred to a different newly established medical college in our state while, simultaneously COVID-19 made our life incapacitating and miserable. Even then, I'm continuing my learning process and completed the basic course in biomedical research, the online course for medical postgraduates and teachers in medical institutions, offered by ICMR-National Institute of Epidemiology (ICMR-NIE), Chennai.

However, all this happened only because of a few people who have inspired me to be my best, and guided me when I needed help. Without the open minds and warm hearts of Prof. H.K. Dutta, MCh (my surgeon), Prof. Dilip Pawar, Dr Pradnya, Dr Rebecca, Dr Snehlata Dhayagude and Dr Elsa Varghese, to name a few, my journey wouldn't have been possible. I will forever be grateful for the role that they have played in my life. Long live IAPA!

Activities

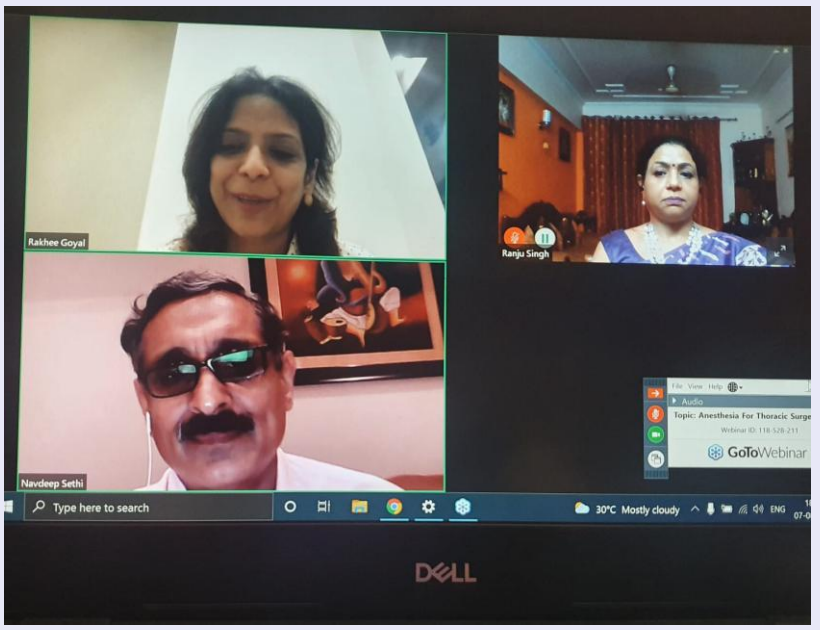
IAPA Mid-Term CME Organized by the Delhi IAPA State Chapter

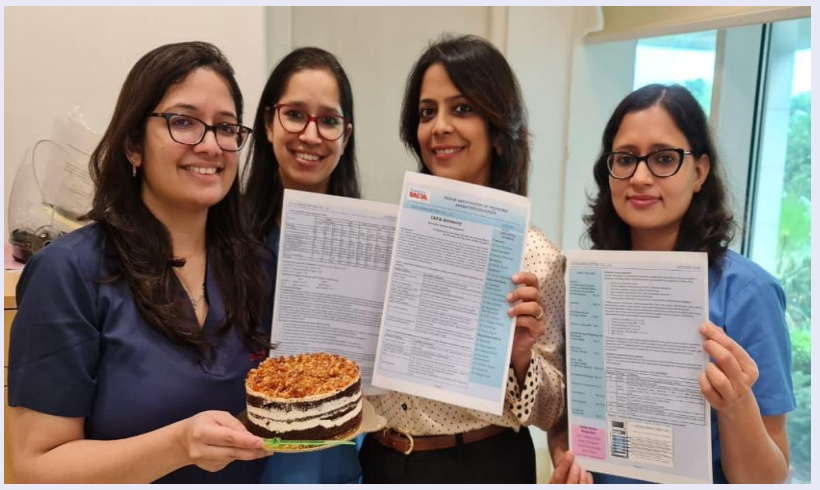
The IAPA DelhiStateChapter Rainbow Children's Hospital, New Delhi organized the virtual IAPA Mid-Term CME from August 5th to 7th 2021 and Dr (Col) Rakhee Goyal, Secretary IAPA Delhi was the Organizing Secretary. An e-poster competition was organized on5th and 6th August from 5-8 pm. The CME on 'anaesthesia for Thoracic Surgery in Children' was held on 7thAugustfrom 4-8 pm**.** Around 200 people attended the CME online.

There were 35 entries for the poster competition, submitted mainly by anaesthesia postgraduates and paediatric anaesthesia fellows. The judges were Dr Navdeep Sethi (Yashoda Multispecialty Hospital, Delhi), Dr Deepanjali Pant (Sir Ganga Ram Hospital), and Dr Kavita Rani Sharma (VMMC, Delhi). There was a wide variety of presentations including original studies, case reports, case series, narratives, and image-based discussion. The participants showed great enthusiasm and answered the judges' questions well. Dr Rashmi Bhatt moderated the poster session on both the days.

The CME started with a welcome note by Dr Rakhee Goyal and an address by the IAPA President Dr Elsa Varghese, and IAPA Secretary Dr MSRC Murthy. The biannual IAPA newsletter was officially released and made available on the IAPA website. There were two main sessions, the first with four talks on paediatric thoracic anaesthesia and the second session called "Beyond the scope" had four talks on topics related to the non-academic side of our profession. Dr Rajeshwari Subramanium, Dr Navdeep Sethi, Dr Syed Sannaulla, and Dr Ranju Singh spoke on physiology of one-lung ventilation, lung separation techniques, case-based discussion, and post-operative pain management respectively. Dr Rakhee Goyal, Dr Badal Parikh, Dr Pooja Singh, and Dr Anshu Gupta spoke in the second session.

Dr TriptiNagdev (Mumbai)won the first prize for the poster presentations, the second prize went to Dr SunaakshiPuri (Chandigarh) and the third prize to Dr Santosh Kumar (Delhi). Dr Deepali Chandra (Lucknow) and Dr Bhavana K (Delhi) were announced as the judges' appreciation winners. Dr Tripti Nagdev presented her poster again on the final day, and it was well appreciated. The CME ended with a vote of thanks by Dr Rakhee Goyal.





E-PPLS, A Journey of Virtual Training in Paediatric Anaesthesia

Drs Vibhavari Naik, Elsa Varghese

Prologue

The paediatric perioperative life support (PPLS) course was initiated by a team of academic members of the Asian Society of Paediatric anaesthesiologists (ASPA) in 2015. The aim being to conduct a one-day course whose content included the recognition and management of perioperative crisis situations in the setting of paediatric anaesthesia. The aim was to keep the course content basic and simple by using a combination of short lectures, small group interactive discussions and hands on simulation skill stations. This was tailored to enhance knowledge as well as impart skills that would impact safety. In addition, non-technical skills needed to handle the crisis situation like how to work as a team and break bad news were also included. The course was supported with a manual that covered the components of the course. The PPLS course was conducted in many Asian countries over the past 5 years and had gained popularity. In India, the PPLS was first conducted in Mumbai during the ASPA meeting held in 2017. The first PPLS Train the Trainer (TTT) course was organised in January 2019 following which three PPLS courses were conducted in Bangalore, Kolkata and Varanasi till February 2020. Then the COVID-19 pandemic brought everything to a halt.

The Need

As the COVID pandemic progressed, and no physical meetings could be conducted, the education committee of ASPA recognised the urgent need to restart the course on a virtual platform. The core group of ASPA IAPA PPLS committee; Drs Rebecca Jacob, Elsa Varghese and Vibhavari Naik took the lead to modify the content to suit the virtual platform. Dr Teddy Fabila (IT in-charge of ASPA activities)helped address the technical aspects and trained Dr Vibhavari Naik. The course content was tweaked and involved editing of lectures, creating new videos for the skill stations and presentations for the small group discussions. The need to train more trainers to run the ePPLS course was recognised and the TTT course had to be modified accordingly.

The Alterations

Many aspects required considerations while modifying the course content for the virtual course. The difficulty for participants to stay focused for a long period of time virtually, required the course to be conductedover two half-day morning sessions. The small group discussions were conducted in breakout rooms ensuring that the facilitator and participants had their videos on to allow eye-to-eye contact with a feeling of being involved, sitting together for a discussion in a small room. The skill stations were the most challenging to replicate. Video demonstrations of skills for conducting cardiopulmonary resuscitation techniques, defibrillation, intraosseous access and team work were created by Drs Sandhya Y, A Muralidhar and Vibhavari Naik. The first virtual PPLS took place on 23rd and 24th January 2021. Faculty for this included; Drs Anisha De, Chandrika Y, Ekta Rai, A Muralidhar, Nandini Dave,Ruchi Gupta, Sandhya Y, Vibhavari Naik, Rebecca Jacob and Elsa Varghese. Drs Agnes Ng and Teddy Fabila were invited as observers to give constructive feedback.

Selected faculty were trained to run the course in an efficient manner and to ensure involvement of all participants in the small group discussions and skill stations. Several practice sessions were conducted to ensure all faculty were comfortable with this new teaching platform. Faculty familiarized themselves with the online pattern of breakout rooms during the practice sessions. The pre-test, post-test and feedback forms were converted to google forms.

Appropriate modification of the Train the Trainer (TTT)course content to suit the virtual platform proved quite a challenge. Potential faculty had to be trained and assessed for their teaching skills. This required creating groups with mentors and observers who would give genuine feedback. Additional short lectures were included on online etiquettes for trainers, how to conduct breakout rooms, how to handle a difficult student. The faculty for the first ePPLS- e-TTT course included: Drs Chandrika Y, Ekta Rai, Jayanthi, Lakshmi Kumar, Nandini Dave, Vibhavari Naik, along with Drs Rebecca Jacob and Elsa Varghese.

The Conduct

Between January 2021 and December 2021,four e-PPLS and one e-TTT courses have been conducted. The details of training are depicted in Table 1. These five courses have been successful and the feedback highly encouraging. The secret recipe has been the tremendous enthusiasm and passion with which the faculty have involved themselves in this programs. In addition, their willingness to accept feedback and suggestions during the several practice sessions has been remarkable. Senior faculty mentors have helped orient those new to this teaching module during these sessions. Forming a faculty Whats App group for each course has helped ease communication. The e-PPLS and e-TTT are conducted on the Zoom platform with breakout rooms. This allows for the strict time keeping. Each course has had senior observers who give valuable feedback. The PPLS manual is mailed to the participants ahead of time for ready reference and they are expected to go through this prior to the course.

***Table 1.*Details of ePPLS and eTTT courses**

	1st ePPLS	2nd ePPLS	3rd ePPLS	4th ePPLS	1st e-TTT
Dates	23- 24January 2021	10- 11 April 2021	31July- 1August 2021	4- 5December 2021	20th June 2021
Numbers trained	22	22	24	22	16
Average Pre-test scores out of 20	14.14	13.76	14.16	12.44	NA
Average Post-test scores out of 20	17.82	18.21	18.66	17.36	NA

The Evolvement

The conduct of each course has been a learning experience for the core team, and with each course and the feedback from observers and participants, the program continues to evolve and improve. Videos have been improved, and skill stations discussions have improved. This has been possible as each course is followed by a dedicated debrief meeting at the end of each day's session. Drs Agnes Ng, Teddy Fabila and other ASPA education committee members have given their time and valuable feedback which have been incorporated into subsequent sessions. The e-TTT has enabled us to increase the number of trainers in the trainer pool for the upcoming demand of this e-course. The IT team has been reinforced with new additions and include Drs Chandrika Y, Ekta Rai, Anisha De, Gayatri Sasikumar, Smruthi Iyengar along with the support and mentoring of Dr Vibhavari Naik.

The Future

The e-PPLS team intends to continue both these courses, e-PPLS and e-TTT, especially as there is a crying need to train more anaesthesiologists in these basic skills and will continue to disseminate the knowledge and safety in paediatric anaesthesia. The physical conduct of these courses could resume as things return to normal after the COVID-19 pandemic. But the ease with which the faculty can participate from all over the country during a virtual session will definitely be missed. And this effort to continue teaching and training despite the odds of pandemic will always be remembered and appreciated.

E-workshop on “Introduction to design and conduct of an RCT”

Stats Initiative by IAPA-

Dr Sandhya

IAPA organised an online workshop on “Introduction to design and conduct of an RCT” on 2nd October 2021. The facilitators for the workshop were Prof. Anju Grewal, DMC, Ludhiana; Prof. Sandhya Yaddanapudi and Prof. Narayana Yaddanapudi, PGIMER, Chandigarh. Sixteen Consultants and Fellows from across India providing specialty training in Paediatric Anaesthesia were selected as the participants. Three observers from IAPA also attended the workshop.

The Workshop was restricted to RCTs with superiority hypothesis, involving two groups. A paediatric anaesthesia research question was formulated and simulated data was produced for the study. These were used throughout the Workshop for illustrative purposes. There were nine sessions covering Research Question, Bias Reduction, Data Types, Sample Size, Data Collection, Statistical Significance, Data Exploration, Data Analysis, and Writing the Methods Section of the Manuscript. Each session included a preliminary interaction to elicit the state of knowledge of the participants, followed by a Lecture/Live Demonstration. In addition, there was a Q&A session after every two lectures for clarification of doubts. Questions were directed to the participants in a round-robin fashion, to mitigate the problems of online workshops, and most of the participants engaged well in discussion.

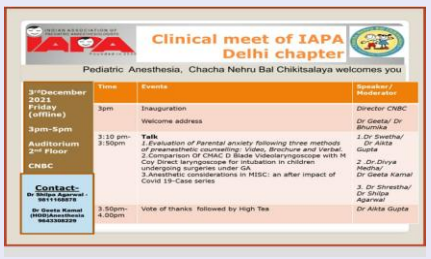
A pretest of 15 Single Select MCQs was sent on the Google Forms platform the day before the Workshop which the participants answered and submitted before the start of the Workshop. Similarly, post-test Google forms were completed within 2 hours after the workshop. Almost all participants improved, with an average increase of 24.2% correct answers. Feedback forms were also filled by the participants. The main suggestions for improvement were provision of reading materials beforehand, and more examples.

The overall impression of facilitators was that there is a large unmet need for training in research methodology.

Events Report IAPA Delhi Aug 21- Aug 22

Clinical Meet IAPA Delhi, 3rd Dec 2021

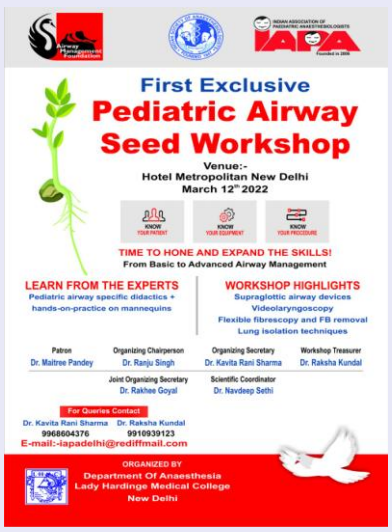
A Clinical meet of IAPA Delhi was organised by Department of anaesthesiology, Chacha Nehru Bal Chikitsalaya on 3rd Dec 2021. Dr. Geeta Kamal, head of department, Anaesthesiology and Dr Urmila Jhamb, Director CNBC, inaugurated the meet. Dr Ranju Singh, President, Dr Navdeep Sethi, Vice-president, Dr Kavita Sharma, Secretary and Dr Sapna Bathla, Executive member from IAPA Delhi were present along with many other senior faculty members. A comparative study on parental anxiety following different methods on counselling, comparison of C-Mac D blade with Mc-Coy laryngoscope in children and anaesthetic considerations in MISC were presented and discussed in detail. The academic session was appreciated and attended by around 100 doctors from specialties of anaesthesia and paediatrics.

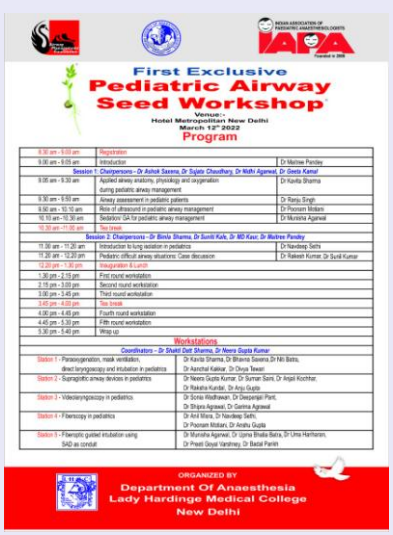


Paediatric Airway Seed Workshop, 12th Mar 2022

The first exclusive paediatric Airway Seed Workshop of Indian Association of paediatric anaesthesiologists, Delhi branch was conducted by Lady Hardinge Medical College in collaboration with Airway Management Foundation on 12th March 2022 at Hotel Metropolitan, New Delhi. The event was a great success with more than eighty delegates and thirty-seven faculty members participating. The overwhelming response to this innovative skill-based workshop compelled us to close registrations within ten days of the first flyer going online. The Honorable Director General Health Services Dr. Sunil Kumar graced the occasion by his presence.

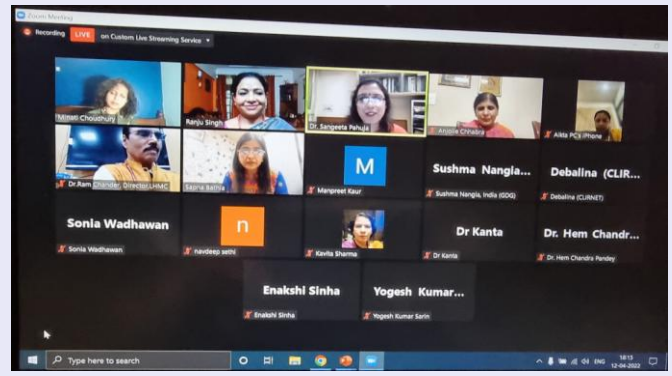
The event had paediatric airway specific didactics and case discussions followed by hands on training with experienced faculty instructors facilitating skill empowerment and knowledge transfer at ten simultaneous running workstations working on specific neonatal and infant airway manikins. The basics of airway management, including optimum positioning, oxygenation, mask ventilation, direct laryngoscopy and intubation using different blades and supraglottic airway devices placement were an integral part of the skill stations. A wide range of advanced paediatric airway equipment including fiberscopes and video laryngoscopes were also available for practice by the delegates. The workshop was very well appreciated by all participating delegates and faculty alike.





Perioperative Blood Transfusion Practices in Paediatric Patients, on 12thApril 2022

IAPA Delhi and Dept. of Immunohematology and Blood Transfusion, LHMC, in association with ISA Delhi Chapter organized an online multidisciplinary webinar on 'Perioperative Blood Transfusion Practices in Paediatric Patients, on 12th April, 2022. Webinar was conducted by senior faculty from Dept of Anaesthesia, Neonatology, Paediatric Surgery and Immunohaematology & Blood Transfusion LHMC. The Director, Dr Ram Chander, inaugurated the webinar and highlighted the significance of appropriate and rational paediatric surgical transfusion practices. Webinar covered important topics including when, how and what to transfuse in the perioperative scenario in paediatric patients, and how to monitor blood transfusion in children. It also highlighted the traditional practices and controversial issues regarding the same. Webinar was much appreciated and well attended by more than 120 postgraduates and doctors of related specialties.



IAPA Delhi CME Capsule: Multimodal Analgesia in Paediatric Patients, 13th April 2022

A 2 hrs CME capsule was organized by the Department of Anaesthesia & Critical Care at Yashoda Superspeciality & Cancer Hospital Ghaziabad under the aegis of IAPA Delhi on 13th April 2022. The topic was 'Multimodal Analgesia in Paediatric Patients'. The CME was attended by 30 delegates viz 6 doctors and 24 paramedical staff of OT & ICU.

The lecture cum demonstration was delivered by Dr Sunny Kumar Jr Consultant (Anaesthesiologist) under the guidance of Dr (Maj Gen) Navdeep Sethi Sr Consultant & Head (Anaesthesiologist). The initial power point presentation of 60 minutes was held in 2 batches, explaining the different modalities used to provide peri-operative analgesia in paediatric patients. Various regional analgesia techniques like caudal, subarachnoid block and epidural analgesia were explained in brief along with their advantages and possible complications. The optimal use and dosage of narcotic and non-narcotic drugs with routes of administration was explained, following which later demonstrated various regional analgesia equipment and common drug formulations

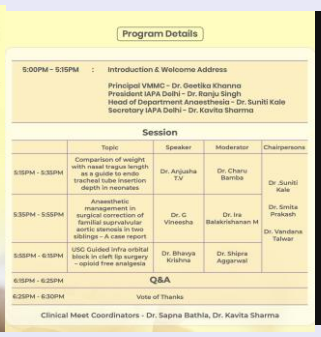
Hands-on workshop on Ultrasound in Paediatric Anaesthesia and Critical Care, 22nd May 2022

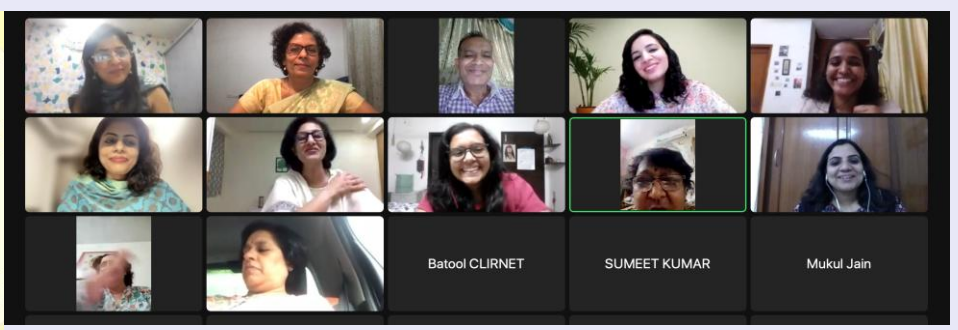
A Hands-on workshop on ultrasound in paediatric anaesthesia and critical care was held at Madhukars Rainbow children hospital on 22nd May 2022. Dr Jayashree Sood, Dr Ranju Singh, Dr Mukul Kapoor, Dr Rakhee Goyal, Dr Aikta Gupta, Dr Sapna Bathla and many other senior faculty members from various institutes conducted the hands-on sessions for the participants. The event was attended by many doctors from various specialties. The role of ultrasound in airway assessment and management, assessing gastric emptying, performing central neuraxial and peripheral nerve blocks was well discussed. A lamp lighting ceremony with felicitation of faculty was followed by further knowledge sharing on lung scans, echocardiography, and vascular access. The hands-on experience was much appreciated by the participants.

Time	Program	Faculty
0900-0930	Welcome kit, breakfast	
0930-1000	Introduction	Dr Rakhee Goyal
	Ultrasound guidance in Pediatric Anesthesia and Critical Care	Dr Mukul Chandra Kapoor
1000-1250	Airway	Dr Anudeep Jafra, Dr Parul Gupta
	Gastric emptying	Dr Mukul Kapoor, Dr Divya Tewari
	Regional 1 (central neuraxial)	Dr Anju Gupta, Dr Swati Mehta, Dr Ranju Singh, Dr Sakshi Mahajan
	Regional 2 (peripheral)	Dr Niti Batra, Dr Sapna Bathla, Dr Arindam
1250-1320	Lamp lighting and Felicitation of faculty	
1320-1400	Lunch	
1400-1600	Echo	Dr Naveen Gupta
	Lung scan	Dr Praveen Khilnani, Dr Chandrashekhar
	Vascular access	Dr Badal Parikh, Dr Sakshi Mahajan
	Practice on blue phantoms	All faculty
1600-1630	Certificates and break off	

Paediatric Anaesthesia Clinical Meet, 16 July 2022

An online paediatric anaesthesia Clinical Meet was organized by IAPA Delhi and department of anaesthesiology and Intensive Care, Vardhman Mahavir Medical College on 16th July 2022. Dr Geetika Khanna along with Dr Suniti Kale welcomed the delegates to the academic event. Around 130 delegates attended the meeting. Dr Navdeep Sethi, Vice-President, IAPA Delhi and Dr Kavita Sharma, Secretary IAPA Delhi, updated the participants regarding IAPA proceedings. Using naso-tragal length as a guide to depth of endotracheal tube insertion, anaesthesia in siblings with supra-valvular aortic stenosis and opioid free anaesthesia in cleft lip surgeries were presented by residents. The presentations led to interesting discussions on various aspects of paediatric anaesthesia. The meeting concluded by vote of thanks by Dr Kavita Sharma.





IAPA Maharashtra

IAPA Delhi

Answers Crossword IAPA	
Across	Down
1- Salbutamol	1- Sevoflurane
3- IM	3- Lignocaine
6- Caudal	6(a)- TOF
8- Wilms	6(b)- Downs
10- SCH	8- Magill
11- Midazolam	10- Laryngospasm

IAPA Paediatric Anaesthesia Fellowship Training Experience at Kasturba Medical College, Manipal

Dr Malavika

The Paediatric anaesthesia fellowship program at Kasturba Medical College, Manipal was started in the year 2019. I was privileged to be the first to take up the Fellowship course at our institution. Although I was a senior anaesthesiologist by this time, my clinical work involved a case mix from different specialties and age groups, including children and neonates. I still felt enrolling myself in this fellowship program would help me focus on one area that interests me. Indeed, this one-year program (2019-2020) helped me to hone my clinical skills in paediatric anaesthesia and enhanced my confidence in handling difficult airway cases in young and high-risk children. I gained experience in the placement of central neuraxial blocks and peripheral nerve blocks in small children. Various classes held on paediatric anaesthesia related topics were extremely useful in incorporating evidence based clinical practice. We were given a lot of encouragement and guidance in pursuing research. We were able to report anaesthetic management of rare cases at national conferences and CMEs. I would like to express my sincere thanks to Indian Association of Paediatric Anaesthesiologists and the Department of Anaesthesia, KMC, Manipal for helping us to improve our knowledge, skills and develop as better health care professionals.

Dr Shiyad

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In our department, the fellowship program in paediatric anaesthesia was still in its infancy when I joined as a fellow. Being selected for the fellowship program's second round made me feel more than privileged. From the first day of the fellowship program to the last day, there were challenging moments interspersed with happy and satisfying ones.

Our tertiary care hospital handles a variety of cases, from simple hernia repairs to cardiothoracic procedures. We have a robust orthopedic department which performs complex surgeries in children with significant medical history. Clinical rotations during fellowship tenure included paediatric general surgery, orthopedic, dental procedure, ophthalmic surgery, urological procedures, ICU and NORA. One month of critical care posting included both neonatal and paediatric ICU.I was posted along with a postgraduate trainee, medical student and an allied health student, which enhanced my teaching abilities and made me aware of the value of knowledge sharing.

There were significant number of paediatric emergency cases such as foreign body bronchus removal, tracheo-esophageal fistula repair, congenital diaphragmatic repair, omphalocele repair which gave us confidence in managing these challenging situations. I was able to learn ultrasound guided regional blocks including axillary block, interscalene, supraclavicular block and popliteal block. Ultrasound guided neonatal and infant central line and arterial line insertion was a good learning opportunity. During the training session, I became more confident managing the difficult airway using challenging airway devices including the C-MAC, Air Traq, fiberoptic bronchoscope, and gum elastic bougie.

Academic curriculum consisted of case presentation, seminars, monthly journal clubs, problem-based discussion which helped to gain knowledge and confidence in the subject. I was encouraged to conduct a research project and participate in national and international conferences.

As the department is involved in voluntary services for operational smile, I was encouraged to participate in volunteer work for cleft lip and cleft palate surgery.

During the posting in NICU and PICU, I was able to gain in depth clinical exposure to neonatology and paediatric critical care medicine. This posting helped me improve my concepts in neonatal and paediatric resuscitation, mechanical ventilation, non-invasive ventilation, surfactant therapy, umbilical artery and venous cannulation, thanks to Dr Leslie Lewis, Head of the department and NICU In-charge, for his immense support and encouragement.

In addition to the knowledge and skill, the fellowship program helped in inculcating professionalism and empathy. The importance of managing complex cases as a team and the significance of ‘call for help’ at the right time was clearly stressed upon during the course period. The course helped me to master multi-disciplinary leadership, communication and team-working skills necessary to ensure a safe and comfort working environment.

I would like to thank the major pillars of our department – Dr Anita Shenoy, Dr Manjunath Prabhu and Dr H M Krishna for inspiring, caring, listening and guiding the fellows during the fellowship program.

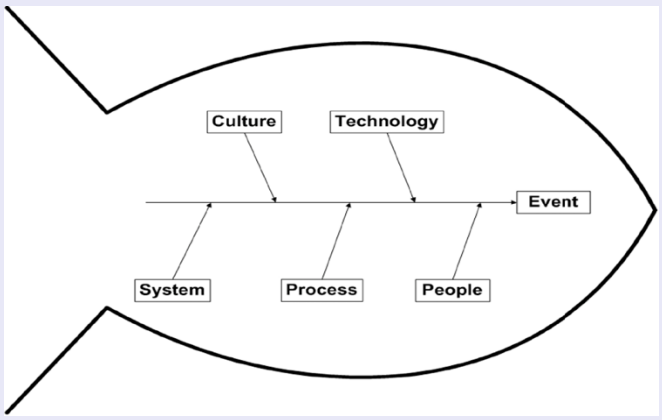
PICTURE QUIZ FOR IAPA NEWSLETTER

TOPIC: SAFETY AND QUALITY IN PAEDIATRICTRIC ANAESTHESIA

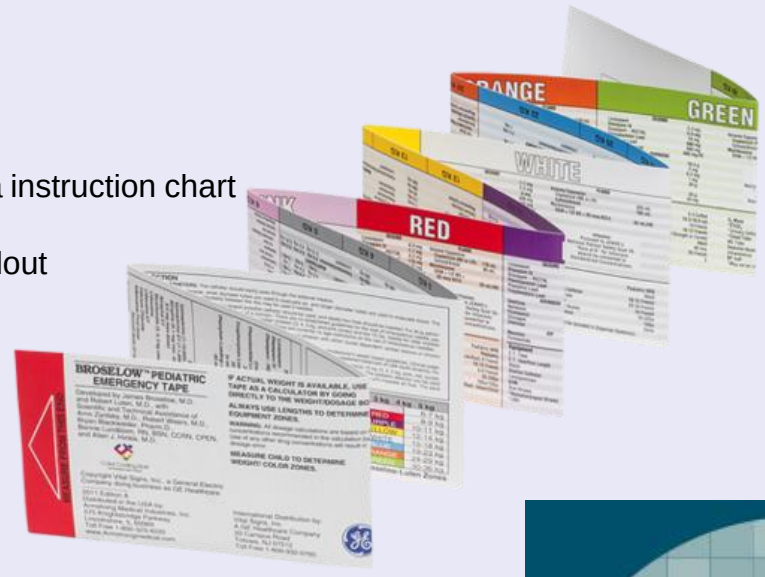
Dr Vibhavari Naik,
Dr Ekta Rai

1. What does this picture depict?
   a) The principles of paediatric anaesthesia practice by Society of Paediatric anaesthesia
   b) The 10-N principles for the safe conduct of anaesthesia in children by Safetots.org
   c) The 2021 conference brochure of Association of paediatric Anaesthesiologists
   d) Part of the safety guidelines by Indian Association of Paediatric Anaesthesiologists

2. Which of the following statements best describes the image?
   a) Fish-bone diagram of root cause analysis by Wake Up Safe initiative
   b) The leaf model of sequential steps to a critical incident from Society of Paediatric anaesthesia guidelines
   c) Swiss cheese model of medical error algorithm
   d) Essential components that together contribute to quality care – from Quality Standards Initiative



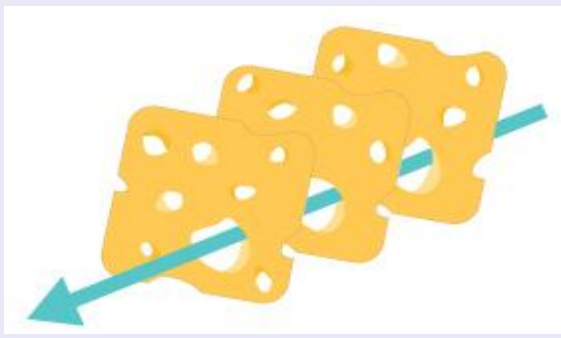
3. What is this image?
   a) paediatric anaesthesia instruction chart
   b) Checklist template
   c) GE colour-coded handout
   d) Broselow Tape



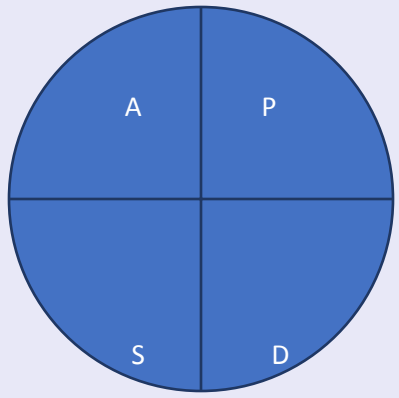
4. The following components belong to which of the following –
   a) Essential leadership qualities by NICE guidelines
   b) Performance indicators by NHS for promotions
   c) anaesthetists' Non-technical Skills (ANTS)
   d) paediatric ICU nursing motivational course

5. Based on Swiss Cheese Model, what does A, tip of arrow and cheese mean?

   a) A stands for Hazard; Tip of Arrow stands for Morbidity/mortality and Cheese is Layer of safety
   b) A stands for Outcome; Tip of Arrow stands for Hazards and Cheese is Defective system
   c) A stands for No of attempts towards safety; Tip of Arrow stands for Success and Cheese is Journey planning
   d) A stands for Accuracy; Tip of Arrow stands for Good outcome and Cheese is Layer of system



6. What does PDSA stand for?
   a) Prepare- Do– Supervise-Action
   b) Plan– Do– Study-Act
   c) Postponed – Differ– Strict- Act
   d) Plan– Document– Stop- Audit



7. What do these logos stands for
   a) Quality of care in India
   b) Quality of care in world(A) and India(B)
   c) Quality of care in world(B) and India(A)
   d) Golden rule in quality care (A) and hospital standardization in SE Asia (B)

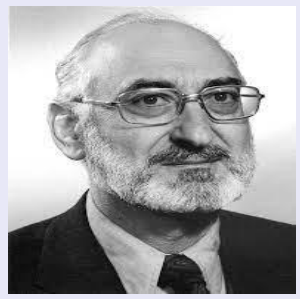
A

B

8. What does this logo stands for
   a) Six sigma strategy
   b) DMAIC problem solving road
   c) Define-Measure – Analyse-Improve-Control
   d) All of the above

9. Identify the figure in the picture

   a) Avedis Donabedian
   b) Ernest Codman
   c) W. Edwards Deming
   d) Jo



10. The above icon depicts -
   a) Red cross symbol for paediatric emergency care
   b) PediCrisis critical events checklist
   c) Paedicalc - Paediatric calculator
   d) Association of paediatric Anaesthetists of Great Britain and Ireland

OBITUARY

Dr Usha Panse
(1939-2022)

On March 29, 2022, Dr. Usha Panse, a seasoned paediatric anaesthetist who was native of Mumbai, departed for her heavenly home.
She began working for the JJ Group of Hospitals and GMC Mumbai. She was regarded as a strict but kind educator. She holds a special place in her students' hearts and will always be fondly remembered by both pupils and coworkers.
May her soul find salvation.
Shanti Om

IAPA State Branches

IAPA Maharashtra

IAPA Telangana

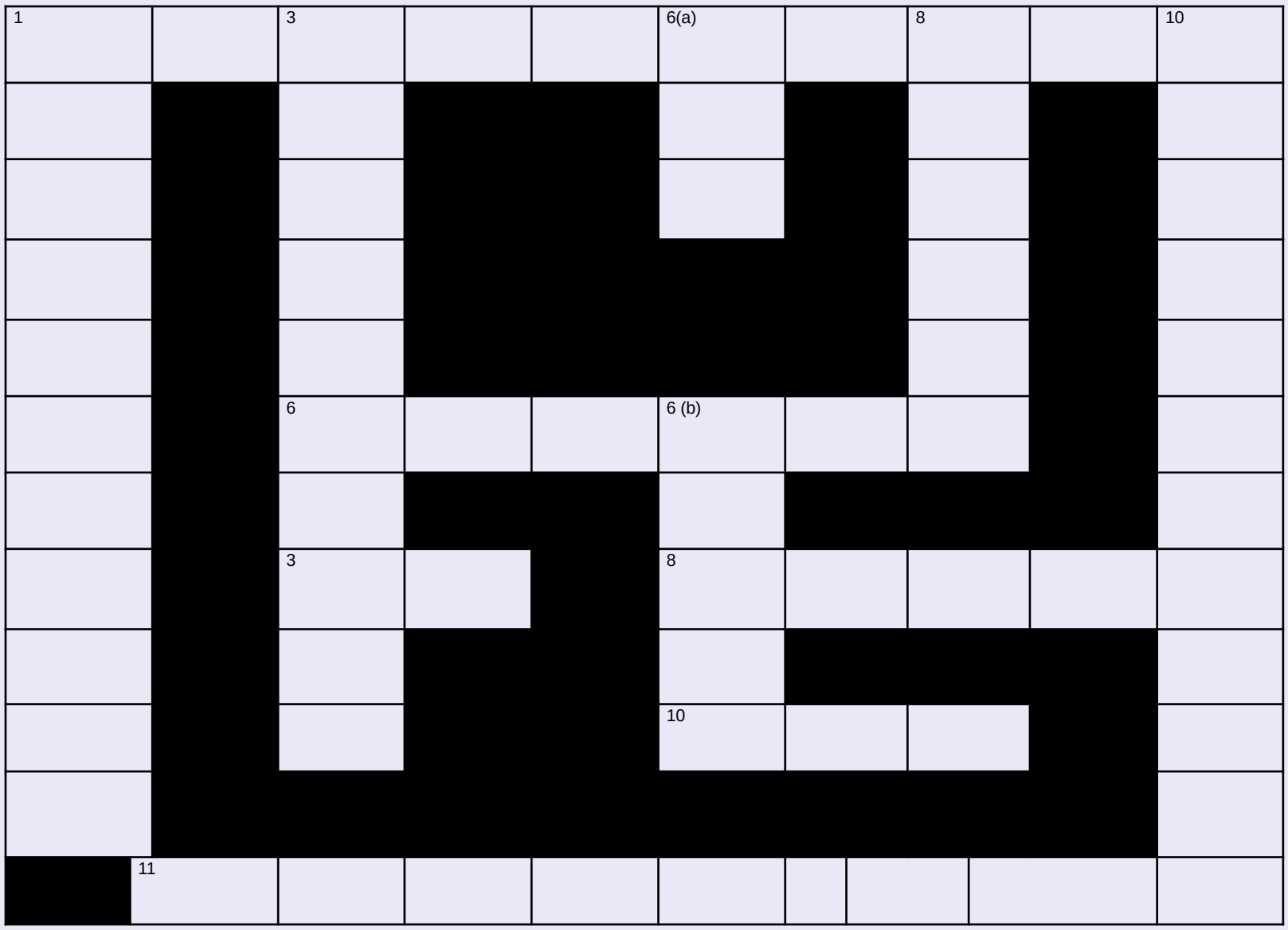
IAPA West Bengal

IAPA Delhi

IAPA TN - Puducherry

Crossword

Dr Mahima Gupta, Dr Rakesh Garg



KEY

Across	Down
1- Beta – 2 agonist for immediate management of bronchospasm (10)	1- Inhalational agent of choice in paediatics (10)
3- Access for drugs not preferred in paediatrics (2)	3- Short acting local anaesthetic agent (10)
6- Regional anaesthesia in pediatrics (6)	6(a) Congential cardiac condition (3)
8- Tumor in paediatrics with WAGER syndrome (5)	6(b)- Common syndrome in paediatrics with difficult airway (5)
10- Abbreviated short acting muscle relaxant (3)	8- Laryngoscope blade for infants (6)
11.Premedication in paediatrics (9)	10- Respiratory complication specifically in paediatrics (11)