

Report for ASPA flex series webinar 8 by Suneerat Kongsayreepong lead for webinar 8

“Advances in Paediatric Perioperative Fluid Therapy” held on 21st February, 2021 17:00 h, Singapore time

Introduction:

The focus of this webinar was on the *paediatric perioperative fluid management*. With the advances in paediatric perioperative fluid management such as intraoperative glucose management, the use of balance electrolyte solution instead of hypotonic solution, reports side effect from 6% 130/0.4 Hydroxyethyl Starch and 4% gelatin solution, the European and German guideline of pediatric perioperative fluid management, evaluation of fluid responsiveness in the paediatric population and the emerging knowledge of endothelial glycocalyx which is the key controller of microvascular membrane in the process of fluid resuscitation, these brought this fluid webinar into attention. With the aim of this webinar was to provide current information of paediatric perioperative fluid management for outcome improving. This webinar included 4 speakers to share their perspective and experiences on different aspects of perioperative fluid management in pediatric patient including the sciences of pediatric perioperative fluid resuscitation, intraoperative fluid management, evaluation of fluid status and fluid responsiveness and 2 moderators as per the attached poster.

The poster is for the 8th ASPA FLEX webinar series, focusing on learning, education, and experience. The main title is "Advanced in Paediatric Perioperative Fluid Therapy" in large yellow letters. The date is 21 February 2021, with times for various regions: UCT (09:00h), SGP (17:00h), IND (14:30h), JPN (18:00h), THA (16:00h), and TUR (12:00h). A QR code is provided for registration, which is free. The speakers and moderators are listed below.

Speakers

	Science of Paediatric Fluid Resuscitation Suneerat Kongsayreepong Professor, President of ASPA Paediatric Anaesthesiologist & Intensivist, THAILAND		Paediatric Perioperative Fluid Management: Principle & Current Consensus Ruenroung Leelanukrom Professor, Paediatric Anaesthesiologist, THAILAND
	Fluid Responsiveness in the Paediatric Population Eun-hee Kim Assistant Professor Paediatric Anaesthesiologist KOREA		What we have in hand for monitoring during Perioperative Paediatric Fluid Therapy Duygu Kara Associate Professor, Paediatric Anaesthesiologist, TURKEY

Moderators

	Z Serpil Ustalar Ozgen Paediatric Anaesthesiologist University of Acidabem TURKEY		Felicia Lim Paediatric Anaesthesiologist National University of Malaysia Medical Center MALAYSIA
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Speakers in order of appearance:

1. **Prof. Suneerat Kongsayreepong, MD**, a consultant anaesthesiologist and intensivist from the Department of Anesthesiology, Siriraj Hospital, Mahidol University, Bangkok, Thailand. She is also a current president of ASPA and a board committee of the WFSA Perioperative Intensive Care session. She is a recognized speaker and researcher on perioperative fluid management both in paediatric and adult patient. She had broadened our knowledge on **“Science of paediatric perioperative fluid resuscitation”** start from the information of endothelial glycocalyx on fluid resuscitation, rational and technique of paediatric perioperative fluid resuscitation, type of fluid and side effect of each fluid esp. synthetic colloid with the conclusion that synthetic colloid (ie. 6%HES, 4% gelatin and dextran should not be used as resuscitation fluid in paediatric patient.
2. **Prof. Ruenrong Leelanukrom, MD**, a consultant pediatric anesthesiologist from the Department of Anesthesiology, Chulalongkorn University, Bangkok, Thailand. He is a president elected, the Royal College of Anesthesiologists of Thailand and president of Thai Board of Paediatric Anaesthesia training, Thai Medical Council. His talk about **“Pediatric perioperative fluid management: principle and current consensus”** had broadened our knowledge about the type of intraoperative crystalloid fluid and glucose management.
3. **Assistant Professor Eun-hee Kim, MD** a consultant pediatric anaesthesiologist from the Department of Anaesthesiology and Pain medicine, Seoul National University Hospital, KOREA. Her interests in paediatric perioperative hemodynamic management, her article and her talk about **“Fluid responsiveness in the pediatric population”** had broadened our knowledge about how to test the fluid responsiveness in the pediatric population. As almost half of the patients who had fluid resuscitation are fluid unresponsiveness and continue giving fluid in fluid-non responsiveness patients will result in poor outcome especially in small pediatric patients and neonates who have immature hearts.
4. **Associate Professor Duygu Kara, MD**, a consultant paediatric anesthesiologist from Aydin Adnan Menderes University, School of Medicine, Anesthesiology and Reanimation Department, Aydin, TURKEY. Her talk about **“What we have in hand for monitoring during pediatric fluid resuscitation & therapy?”** had broadened our knowledge about clinical assessment of fluid status during perioperative fluid resuscitation to prevent complication from fluid therapy both under and over resuscitation.

Moderators

1. **Dr. Z Serpil Ustalar Ozgen, MD**, consultant paediatric anaesthesiologist from university of Acidabem, Turkey.
2. **Dr. Felicia Lim, MD, consultant** paediatric anaesthesiologist from National University of Malaysia Medical Center, Malaysia.

IT support:

Dr Vivian Yuen, MD, Chief and consultant paediatric anesthetist, Hong Kong Children’s Hospital, Hong Kong.

Registration and participation:

Registered no. 1176

Unique viewers 806

Max concurrent users: 667

The actual duration of the webinar was 181 minutes including question and answer.

All questions in the Q&A were answered either live or via text

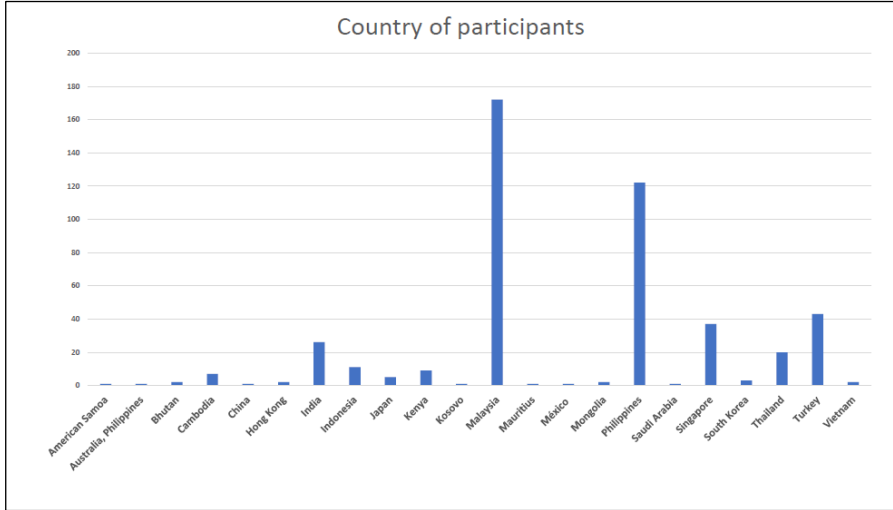
Learning points from this webinar

1. All speakers were provided the instruction to keep the talk not exceeded 20 minutes. Because of the time strain, we have only 2 practice sessions that on the second practice session we found the quality of Prof. Leelanukrom and Doctor Kim's pre-record video especially the sound quality needed to be corrected. Finally, only the video record of Dr. Kim could be used for the final presentation.
2. From the speakers and audiences commended a lot about sound quality that needed to be improved.
3. On the second practice session, we also found that the content of Doctor Kim's was closed to the content of Doctor Kara. As we had only one week until the final presentation, so the decision was to have Doctor Kim concentrated on the theory of fluid responsiveness and Doctor Kara concentrated on the clinical assessment.
4. With many questions, we have to thank the moderators who helped guide the important questions to the speakers and the speakers who answered the question during the meeting and after the meeting.
5. Leeson learn and the improvement.
 - a. Practice sessions are important (at least 2-3 sessions)
 - b. IT esp. sound quality are important.
 - c. Need to check content of the talk carefully to prevent repeated contents.
 - d. Could we provide more time for questions and answers during webinar?
 - e. Audiences like clinical case presentation

Results of the post ASPA flex webinar 8 survey

This survey received 460 responses

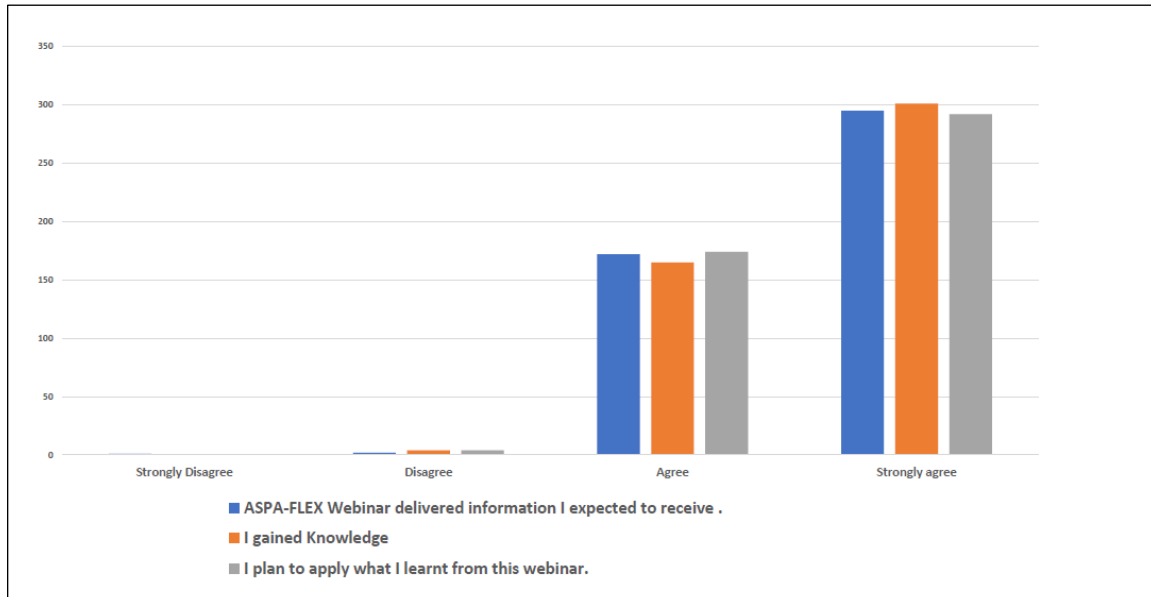
1. Most of the respondents came from Malaysia, Philippines, Turkey and India.



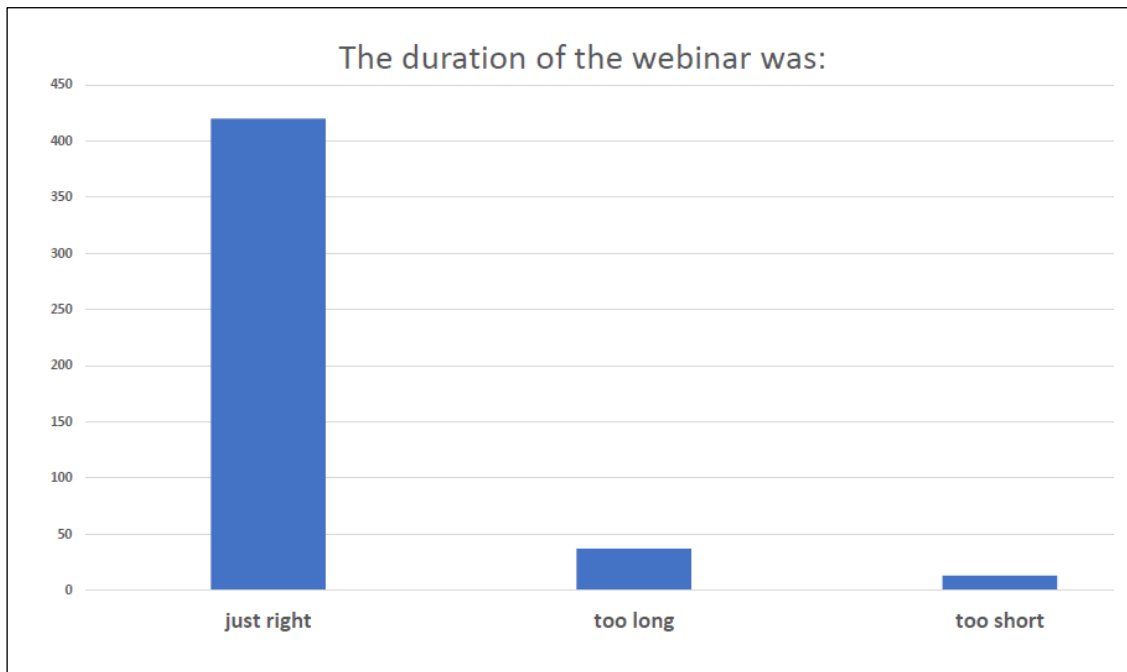
2. Most respondents were general anaesthetists followed by paediatric anaesthetists



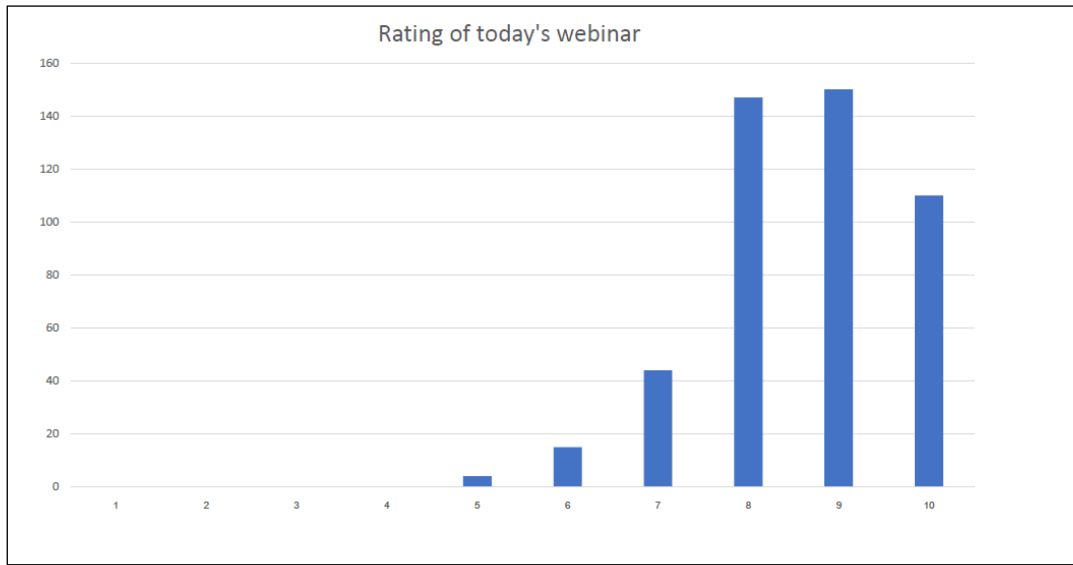
3. Audiences expectation



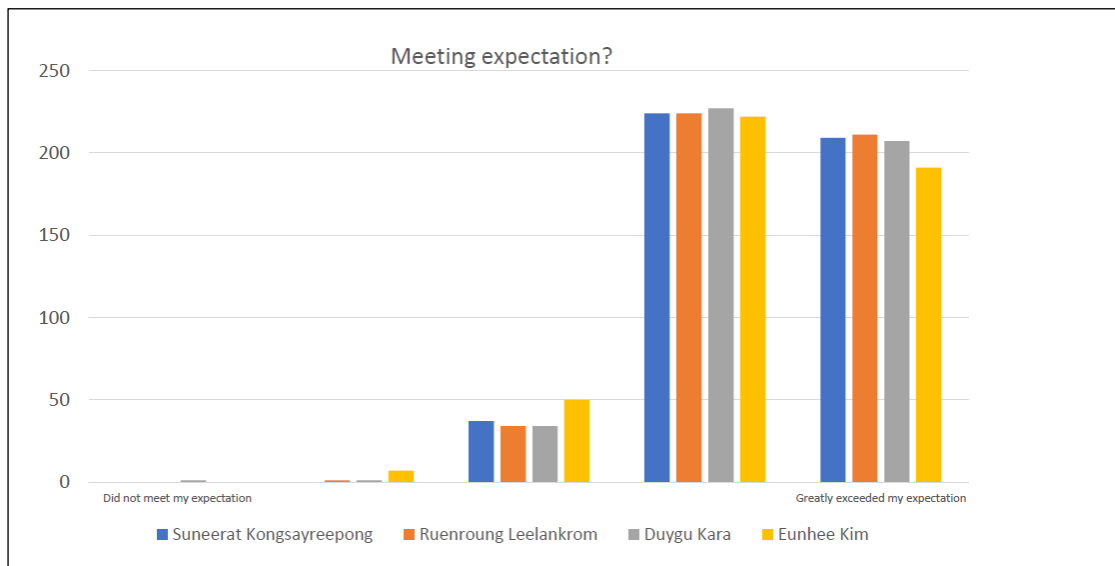
4. Duration of the webinar



5. Rating of today webinar



6. Meeting expectation



What the audience liked about the webinar (summarized)

The audiences like most of the topics which were new, knowledgeable and practicable including science of pediatric fluid resuscitation, perioperative fluid management (esp. intraoperative glucose management), technique of testing fluid responsiveness and clinical evaluation of fluid status. They also like the questions and answers.

How to improve the webinar? (summarized)

The audiences would like to have

- more time for questions and answers
- more clinical example and more practicable approach
- would like to access all the slide at the time of presentation
- better sound and internet quality
- Less speaker because of the fatigue at the end of the webinar
- Fluid replacement in different situation

What other topics to be discussed at future webinars?

- ACLS
- Pediatric pain management
- Complication during pediatric anesthesia
- Anesthesia for pediatric day care surgery
- Anesthesia for pediatric trauma and transplant surgery
- Airway management in pediatric patient
- Neonatal resuscitation guideline
- Anesthesia for preterm infant
- Vascular access
- Pediatric anesthesia for general anesthetist
- Difficult pediatric airway
- Pediatric ERAS
- Pediatric neuroanaesthesia
- NORA
- Pediatric regional anesthesia