

## Advances in Pediatric and Neonatal Research: Impact of Networking and Collaborating

Claudine Kumba<sup>1,2\*</sup> 

<sup>1</sup>Department of Pediatric Anesthesia and Critical Care, Necker Enfants Malades University Hospital, Assistance Publique Hôpitaux de Paris, APHP, University of Paris, Paris, France

<sup>2</sup>Ecole Doctorale 563 Médicaments-Toxicologie-Chimie-Imageries (MTCI), Université de Paris, Paris, France

**\*Corresponding Author:** Claudine Kumba, Department of Pediatric Anesthesia and Critical Care, Necker Enfants Malades University Hospital, Assistance Publique Hôpitaux de Paris, APHP, University of Paris and Ecole Doctorale 563 Médicaments-Toxicologie-Chimie-Imageries (MTCI), Université de Paris, Paris, France.

**ORCID:** <https://orcid.org/0000-0002-9748-5141>

**Received:** February 18, 2020; **Published:** March 27, 2020

Three systematic reviews and meta-analyses were realized in 2019 and registered in Prospero data base [1-6]. These trials were undertaken to clarify subjects where evidence is still lacking in children [7-10]. Many trials in the pediatric population concern most of the times small samples and are retrospective or prospective observational. Prospective randomized controlled trials are rare in children compared to what has been realized in adults. Conclusions concerning a trial with a small sample can be of limited interest for evident reasons. Meta-analyses have the advantage of increasing the sample size and thus some conclusions if significative or not may have more impact than a single trial. The limits of meta-analyses can be due to the quality of studies included. Multicentric trials have advantages of increasing the size of the population to be analyzed. This has great interest in the pediatric and neonatal population where some rare diseases or interventions are managed in some referential centers. In many domains where evidence is lacking like intraoperative goal directed fluid and hemodynamic therapy in children, networking and collaborating will contribute to advance research in this field. This is possible only if one realizes the importance of networking and collaborating which has the aim to bring together ideas with the purpose of research progress. The future of research will evolve towards this trend in pediatrics and neonatology because multicentric trials with larger samples will have more results with more impact than single trials with restricted samples for evident reasons. Domains like pediatric anesthesia and critical care are particularly concerned because of restricted size of the population thus collaboration contributes to new ideas for progress in research and daily medical practice. Open minds promote advances in research.

### Bibliography

1. Kumba C., et al. "Rapid Recovery Pathways after Surgery in Children: A Systematic Review and Meta-Analysis". *Medical Journal of Clinical Trials and Case Studies* 3.3 (2019): 000211.
2. Kumba C., et al. "A Systematic Review and Meta- Analysis of Intraoperative Goal Directed Fluid and Haemodynamic Therapy in Children and Postoperative Outcome". *Journal of Emergency Medicine and Critical Care* 5.1 (2019): 1-9.
3. Kumba C., et al. "A Systematic Review and Meta-analysis of Goal Directed Intra-Operative Transfusion Protocols Guided by Viscoelastic Methods and Perioperative Outcomes in Children". *International Journal of Recent Scientific Research* 10.3 (2019): 31466-31471.

4. Kumba C. "Future evolution of intraoperative goal directed fluid and hemodynamic therapy in Children". *Advances in Pediatric Research* 6 (2019): 29.
5. Kumba C. "Future Perspectives of Enhanced Recovery after Surgery in Children". *International Journal of Anaesthesiology Research* 2.3 (2019): 89-90.
6. Kumba C and Tréluyer J. "Perspectives and Evolution of Intraoperative Transfusion Goal Directed Protocols with Viscoelastic Methods and Perioperative Outcomes in Children". *Research in Pediatrics and Neonatology* 4.2 (2020): 000582.
7. Kumba C. "Do Goal Directed Therapies Improve Postoperative Outcome in Children? (Perioperative Goal Directed Fluid and Hemodynamic Therapy Transfusion goal directed therapy using viscoelastic methods and enhanced recovery after surgery and Postoperative outcome): A Study Research Protocol". *Acta Scientific Paediatrics* 2.7 (2019): 17-19.
8. Claudine Kumba. "Innovating Applications with Trans-Thoracic Echocardiography in Goal Directed Fluid and Hemodynamic Therapy in Children". *EC Clinical and Medical Case Reports* 3.3 (2020): 1-3.
9. Kumba, C. (2020) Trans-Thoracic Echocardiographic Aortic Blood Flow Peak Velocity Variation, Distance Minute, Aortic Velocity Time Integral and Postoperative Outcome in Pediatric Surgical Patients—An Observational Pilot Study Protocol. *Open Journal of Internal Medicine*, 10, 90-95. <https://doi.org/10.4236/ojim.2020.101009>
10. Kumba C et al (2020) Goal Directed Fluid and Hemodynamic Therapy and Postoperative Outcomes in Children: Value of Trans-Thoracic Echocardiographic Aortic Blood Flow Peak Velocity Variation : A Multicentre Randomized Controlled Trial Protocol. *Adv Pediatr Res* 7:35. doi: 10.35248/2385-4529.20.7.35

**Volume 9 Issue 4 April 2020**

**© All rights reserved by Claudine Kumba.**