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Improving the Management of Hyperbilirubinemia in a Limited-Resource Area

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Acknowledgement

Alhamdulillah, By saying Gratitude to Allah, finally our Thesis book entitled "Improving The Management of Hyperbilirubinemia in Limited Resource Area" has been completed. This book is a collection of our 6 papers as a requirement of graduating PhD at The University Medical Centre Groningen, Groningen the Netherlands. I cannot say how I got to my Ph.D. and write my thesis book here. What a very long journey to get here. I sincerely thank Prof. Pieter J.J Sauer for motivating and understanding me and my abilities, bridging all my problems and communications, as well as becoming my mentor and father. Thank you very much once again to him.

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Dear Prof. Arend F Bos who also pleased to be not only a patient mentor but also pleased to be a Visiting Professor at Airlangga University. He helps me in funding my Ph.D. research. All Dutch Teams help us not only in research but also in improving the quality of patient care at our hospital. Thank you very much to Dr. Setyadewi Lusyati, who has bridged the

relationship between our University and Netherlands so that I probably should not have had the opportunity to do a PhD here, finally he can connect with the Dutch Team.

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My Neonatal Research Office Team started from Kinanti Ayu Ratnasari, Lutfi, dr. Abyan Rizaldi, dr. Annisa, dr. Zahra Irawan, the twins dr. Dika, dr. Diki, dr. Danny, and Ivan Angelo, who may be with us already bleeding proposals, taking data to make reports, manuscripts, submitting to journals, rejected, and revising are beverages that we routinely drink. Hopefully, our happy moment on vacation will also treat our tiredness a little.

To my family, who have sacrificed a lot and received less attention. To my wife, who probably often cries because of how often I leave her. To my son Xavier Ramadhan and Adam Habibie, who I had often left to the Netherlands since he was 3 months old. Hadden Geffe Ramadhan and Muhammad Dzikri Al-Fatih, who may not get enough attention from me. I am sorry, sons.

To my mother H. Suhermin and my late father H. Sutrisno, I dedicate my Ph.D. to you. Even though my father and mother only graduated from junior high school, they were able to raise me until I got to the doctoral level. My late father and mother-in-law, Dr. Agus Harianto, for their physical and mental support to support this journey. I am so sorry that you can not see our achievement. I hope you can see the ceremony of this PhD in heaven.

Hopefully, these findings can be more useful in improving the quality of baby jaundice services in Indonesia and the world. Further research and innovation will continue to be carried out for the sake of improving people's welfare.

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Expertise

Neonatal Intensive Care Unit

Biography

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Born : January, 25th 1983 in Jombang
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Mahendra Tri Arif Sampurna is a member of the Neonatology staff in the Department of Paediatrics and Child Health, Soetomo Hospital, Faculty of Medicine Airlangga University. He qualified from University Airlangga as a Pediatrician in 2013, trained in the Women Children Hospital Harapan Kita, Jakarta, Indonesia in 2015, he continued subspecialty training in the Neonatology field in Beatrix Children Hospital University Medical Centrum Groningen (UMCG) the Netherlands (2015-2016). He returned to Indonesia and worked as a lecturer in the Neonatology Division of Pediatric Department, Faculty of Medicine Airlangga University. Current position : Deputy of Innovation and Incubation Business Airlangga University

Publications

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4. Desy Nurrosalia Wisnuwardani, Mahendra Tri Arif Sampurna, Martono Tri Utomo, Risa Etika. Neonatal Therapeutic Intervention Scoring System (NTISS) in Rural Country: Mortality and Length of Stay (LOS) Predictive Score in Preterm Infant. *Indian Journal of Forensic Medicine & Toxicology*, October-December 2020, Vol. 14, No. 4
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8. Rahmawati D, Sampurna MTA, Etika R *et al.* Transcutaneous bilirubin level to predict hyperbilirubinemia in preterm neonates [version 3; peer review: 2 approved]. *F1000Research* 2020, 9:300 (<https://doi.org/10.12688/f1000research.22264.3>)
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 18. Sampurna, M. T. A., Mapindra, M. P., Mahindra, M. P., Efendi, F., Etika, R., Utomo, M. T., ... & Harianto, A. (2021). A population-based study of neonatal deaths in Indonesia based on the Indonesian demographic health survey: what determinants play an essential role?.

Key Areas of Interest

1. Neonatal Resuscitation
Manual ventilation, the effectiveness of resuscitation training programs, NRP instructor
2. Stabilization and Transportation
Stabilization in the limited resources area and instructor of S.T.A.B.L.E program and Neonatal Emergency Transport Service (NETS) trained by Ministry of the health of Indonesia
3. Neonatal Nutrition
Researcher and winner of World Bank Competition foundation for neonatal nutrition research with title "Gaining weight pattern of low birth weight infants supplemented with various dose glutamine enriched enteral nutrition"
4. Pain Management in Neonate
The practitioner who introduced neonatal infant pain scale (NIPS) and sucrose as management pain in Soetomo Hospital.
5. Neonatal Hyperbilirubinemia
Conduct research as a Ph.D. trajectory Program which is supervised by University Medisch Centrum Groningen the Netherlands. Role as principal investigator.

Book :

1. Teaching Book: Neonatal Hyperbilirubinemia Management
2. COVID -19 in Indonesia
3. Neonatal Ventilation Mechanic
4. Neonatal Stabilization

Grant:

1. Ministry of Health of Indonesia 2019 : IDR. 250.000.000
2. Ministry of Health of Indonesia 2020 : IDR. 250.000.000
3. Airlangga University 2016-2020 : IDR. 400.000.000