

ABHAY KUMAR LODHA, MBBS, MD, DM, MSc (Clinical Epidemiology and Biostatistics)

Associate Professor, Department of Pediatrics & Community Health Sciences,

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Staff Neonatologist, Alberta Health Services,

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RESEARCH INTERESTS AND ACTIVITIES

Key Words: Perinatal epidemiology, prematurity, bronchopulmonary dysplasia, developmental outcomes, necrotizing enterocolitis, Caffeine, Health outcomes, NICU

Dr. Lodha's research include long term neurodevelopmental outcomes at 3 and 5 years of age for extremely premature infants with Bronchopulmonary Dysplasia. Dr. Lodha is also studying role of parents in the care of premature infants in neonatal intensive care unit and its impact on their outcomes.

RESEARCH IN PROGRESS

ROLE	FUNDING AGENCY	TITLE OF PROJECT	ALLOCATION 2016 onwards
Principal Investigator	Alberta Innovative Health Solution	Family Integrated Care (FICare) in Level II NICUs: An Innovative Program for Alberta	\$750,000 for three years
Co-Principal Investigator	Canadian Institute of Health Research	Lactoferrin Infant Feeding Trial (LIFT)	\$1,185,750.00 for 5 years
Co-investigator	Canadian Institute of Health Research	Improving outcomes for preterm infants and their Families: A Canadian Collaborative Network	\$4.25 million for 5 years
Principal Investigator	ACHRI	Long term growth and neurodevelopmental outcomes of newborns with gastroschisis at 3 years of corrected age: a cohort study	\$24,453

PUBLICATIONS (2015-2017)

1. Stritzke A, Mohammad K, Shah PS, Ye XY, Bhandari V, Akierman A, Harrison A, Bertelle V, **Lodha A**. Use and timing of surfactant administration: impact on neonatal outcomes in extremely low gestational age infants born in Canadian Neonatal Intensive Care Units. *J Matern Fetal Neonatal Med*. 2017 Jul 31:1-8.
2. Asztalos EV, Campbell-Yeo M, da Silva OP, Ito S, Kiss A, Knoppert D; EMPOWER Study Collaborative Group- **Lodha A**. Enhancing Human Milk Production With Domperidone in Mothers of Preterm Infants, *J Hum Lact*. 2017 Jan 20.
3. **A. Lodha**, N. Brown, A. Soraisham, H. Amin, S. Tang, N. Singhal. Twenty-four-hour in-house neonatologist coverage and long-term neurodevelopmental outcomes of preterm infants, *Paediatric & Child Health Journal*. 2017 May 05
4. **A Lodha**, A Howlett, T Ahmed, AM Moore. The role of interleukin-6 and interleukin-8 cytokines in differentiating between feeding intolerance and necrotizing enterocolitis in preterm infants, *Am J Perinatol*. 2017 May 15.
5. A Dosani, J Hemraj, SS Premji, G Currie, SM Reilly, **AK Lodha**, M Young, M Hall. Breastfeeding the late preterm infant: experiences of mothers and perceptions of public health nurses, *Int Breastfeed J*. 2017 May 08.
6. AS Soraisham, Y Rabi, PS Shah, A Synnes, J Yang, SK Lee, **AK Lodha**. Neurodevelopmental outcomes of preterm infants resuscitated with different oxygen concentration at birth, *J Perinatol*. 2017 Jun 08.
7. B Alshaikh, S Buddhavarapu, A Akierman, **A Lodha**, R Sauve and A Soraisham. Impact of Calorie Intakes on the Risk of Bronchopulmonary Dysplasia in Extremely Preterm Infants, *Archives of Pulmonology and Respiratory Care*. 2017 Apr 11
8. Venkataraman R, Kamaluddeen M, Hasan SU, Robertson HL, **Lodha A**. Intratracheal administration of budesonide-surfactant in prevention of bronchopulmonary dysplasia in very low birth weight infants: a systematic review and meta-analysis. *Pediatr Pulmonol*. 2017 Feb 6.
9. *Diwakar K, Hader WJ, Soraisham A, Amin H, Tang S, Bullivant K, Kamaluddeen M, **Lodha A**. Long-term neurodevelopmental and growth outcomes of premature infants

born at <29 week gestational age with post-hemorrhagic hydrocephalus treated with ventriculo-peritoneal shunt. *Indian J Pediatr.* 2017 Apr 3.

10. *Goswami I, **Lodha A**, Dagleish S, Mohammad K. Early onset Escherichia coli sepsis and severe intraventricular hemorrhage in extremely premature infants: cases series and literature review. *Acad J Ped Neonatol.*2017; 3(3):555612. (Non-Index)
11. Premji SS, Currie G, Reilly S, Dosani A, Oliver LM, **Lodha AK**, Young M. A qualitative study: Mothers of late preterm infants relate their experiences of community-based care. *PLoS One.*2017 Mar 23; 12(3):e0174419.
12. Stritzke A, Thomas S, Amin H, Fusch C, **Lodha A**. Renal consequences of preterm birth. *Mol Cell Pediatr.*2017 Dec; 4(1):2.
13. Oluyomi-Obi T, Kuret V, Puligandla P, **Lodha A**, Lee-Robertson H, Lee K, Somerset D, Johnson J, Ryan G. Antenatal predictors of outcome in prenatally diagnosed congenital diaphragmatic hernia (CDH). *J Pediatr Surg.*2016 Dec 21.
14. *Vayaltrikkovil S, Bashir RA, Rabi Y, Amin H, Spence JM, Robertson HL, **Lodha A**. Parenteral Fish-Oil Emulsions in the prevention of severe retinopathy of prematurity. A systematic review and meta-analysis. *Am J Perinatol.*2016 Dec 19.
15. *Bashir RA, Bhandari V, Vayaltrikkovil S, Rabi Y, Soraisham A, Tang S, Al Awad E, **Lodha A**. Chorioamnionitis at birth does not increase the risk of neurodevelopmental disability in premature infants with bronchopulmonary dysplasia. *Acta Paediatr.*2016 Nov; 105(11):e506-e512.
16. *Al-Mouqdad M, Al-Abdi S, Scott JN, Hurley A, Tang S, Creighton D, Mohammad K, Kamaluddeen M, **Lodha A**. A new scoring system based on laterality enhances prediction of neurodevelopmental outcomes at 3 years age in premature infants. *Am J Perinatol.*2017 Jan; 34(1):44-50.
17. *Yamamoto JM, Kallas-Koeman MM, Butalia S, **Lodha AK**, Donovan LE. Large-for-Gestational-Age Neonate Predicts a 2.5-Fold Increased Odds of Neonatal Hypoglycemia in Women with Type 1 Diabetes. **Diabetes Metab Res Rev.** 2017 Jan; 33(1).
18. **Butalia S, Gutierrez L, **Lodha A**, Aitken E, Zakariasen A, Donovan L. Short- and long-term outcomes of metformin compared with insulin alone in pregnancy: a systematic review and meta-analysis. **Diabet Med.** 2017 Jan;34(1):27-36.

19. *Buddhavarapu S, Manickaraj S, **Lodha A**, Soraisham AS. Does High Protein Intake During First Week of Life Improve Growth and Neurodevelopmental Outcome at 18 Months Corrected Age in Extremely Preterm Infants? *Indian J Pediatr.* 2016 Sep; 83(9):915-21.
20. *Jantzen C, **Lodha A**, Lucia M, Lee SK, Ye XY, Sankaran K. Effects of nosocomial infection trends on neonatal outcomes in preterm infants <33 weeks of gestational age in Canadian NICUs. *Zhongguo Dang Dai Er Ke Za Zhi.* 2015 Oct;17(10):1019-27.
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23. **Lodha A**, Ediger K, Rabi Y, Lodha S, Tang S, Bhandari A, Suave R, Bhandari V. Does chronic oxygen dependency in preterm infants with bronchopulmonary dysplasia at NICU discharge predict respiratory outcomes at 3 years of age? *J Perinatol.* 2015 Feb 26 (Epub ahead of print)
24. **Lodha A**, Seshia M, McMillan DD, Barrington K, Yang J, Lee SK, Shah PS,; Canadian Neonatal Network. Association of early caffeine administration and neonatal outcomes in very preterm neonates. ***JAMA Pediatr.*** 2015 Jan; 169 (1):33-8

GRADUATE STUDENT SUPERVISION

Belal Al Shaikh, MSc student, Department of Pediatrics (Co-Supervisor)

Thesis Topic: Coagulase-negative staphylococcus sepsis in preterm infants and long-term neurodevelopmental outcome