## **conferenceseries**

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## Early readmission of exclusively breast-milk fed infants born via normal birth or caesarean is multifactorial and associated with perinatal maternal mental health concerns

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**Background:** Late preterm and full-term infants comprise the majority of births in our hospital serving a multicultural lower socioeconomic community, mostly normal birth (NB) or Caesarean Section (CB) with the majority exclusively breastmilk fed until discharge. We were interested to know what factors within these two common birth modes and ideal feeding regimes of exclusive breast-milk are associated with early post-natal readmission. We hoped the findings will aid initiatives to decrease readmission rates.

**Methods:** A retrospective cohort study was performed on maternal-infant pairs. All neonates from 2016-2018, exclusively breast-milk fed at discharge, born by NB (n=4245) or CB (n=1691), were grouped as non-readmitted (Reference) or Readmitted within 30-days of discharge. Readmission reason was determined and potential associations were identified using univariate analysis and multivariable logistic regression.

**Results:** Rates of readmission were similar for both NB and CB infants (6.8% vs 7.3%). In order, NB concerns were jaundice, infection and feeding – this was reversed for the CB group. NB readmission bilirubin levels were higher (293±75vs236±112, µmol/L, NB:CB, p<0.001). Factors associated with readmission for both groups were similar to previously published studies.

Edinburgh indicated that both CB and NB mothers were more likely to have depression.

**Conclusion:** Early readmission of exclusively breastmilk fed infants born via the common birth modes of NB or CB is multifactorial. Early pregnancy mental health issues are associated with readmission, highlighting potential effects of perinatal depression on neonatal health.

## Biography

Wei Qi Fan (MBBS Hons., PhD, FRACP) is a Melbourne dual trained consultant neonatologist and paediatrician. She trained in the NICUs of MMC, MHW, RWH and paediatrics at RCH. Her PhD in neonatal medicine at Monash Medical Research Institute addressed the clinical problem of necrotising enterocolitis with findings published in the American J Physiology and Paediatric Research. She is an associate professor in paediatrics and a Fellow of the Academy of Clinical Teachers at Melbourne University.

A/Prof Fan has worked at the Northern Hospital (TNH) for 19 years at consultant level and as head of the Neonatal Unit. Additionally, she is actively involved in clinical research, designing and completing 3 RCTs at TNH. She and her neonatal team have participated in 5 state and national multi-centres RCTs. A/Prof Fan actively supports young doctors research training and has supervised many MD students' and FRACP trainees' research projects. Barbara Rischitelli is Neonatal unit Manager at Northern Health.

