Delayed onset of lactogenesis and reduced breastfeeding frequency in mothers who give birth by caesarean section

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INTRODUCTION
Lactogenesis stage II, also known as when a mother’s milk “comes in”, is characterised by copious milk production. Delayed lactogenesis II, when onset occurs after 72 hours post-partum, has been linked to early breastfeeding cessation. It has been suggested that caesarean section is a risk factor for late onset of lactogenesis II. It is unknown why lactogenesis II may be delayed in caesarean section but there are several potential reasons such as volume of blood loss, maternal stress, delayed breastfeeding initiation and difficulties with mobility and positioning.

METHODS
Analysis of timing of lactogenesis and breastfeeding frequency was carried out on data originating from two clinical studies - PROMESA (UK – IRAS 221152) and IMPRINT (USA)1, which were looking at the supplementation of breast milk with a probiotic Bifidobacterium longum sub species infantis. IMPRINT enrolled 80 women prior to birth or before postnatal day 4. The PROMESA study recruited women who were undergoing elective caesarean section (n=80 mother-baby dyads). Mothers filled out a variety of surveys and daily logs for both studies, including a daily feeding log, along with self-reported lactogenesis. Using logistic regression, we investigated whether mode of birth (spontaneous vaginal delivery, emergency and elective caesarean section) was associated with the timing of onset of lactogenesis, and linear regression to look at the difference in breastfeeding frequency between modes of birth.

RESULTS
Mode of birth was significantly associated with delayed onset of lactogenesis >3 days (OR 3.38, 95% CI 2.48-4.61). There was also a reduced frequency of breastfeeding in the first week post-partum in mother-baby dyads who underwent an elective caesarean section.

CONCLUSIONS
These findings suggest that mothers who give birth by elective caesarean section may need additional support with breastfeeding in the early days post-partum, as well as ongoing support long-term to reduce the likelihood of early cessation of breastfeeding.

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