

The effects of a local dairy food supplement on pregnancy outcomes in Indonesia: A feasibility trial

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Introduction:

Approximately 20.1% of Indonesian pregnant women are underweight (BMI<18.5kg/m²) and over 50% of women have inadequate gestational weight gain (GWG) [1]. Maternal nutrition is a modifiable factor influencing child health. This project aims to assess the feasibility of a randomised controlled trial (RCT) using a traditional Indonesian yogurt from buffalo milk (Dadiah), to improve outcomes for pregnant mothers and their babies.

Methods:

This is a two armed feasibility RCT (1:1) in which 200 women with body mass index<27.5kg/m² (Asian BMI classifications) were planned to randomly be allocated to routine care or the intervention group, who will be supplemented with four weekly servings of Dadiah.

Results:

A total of 107 women were recruited to the trial in the first wave from Dec 2018-March 2019 (recruitment rate of ~25/month). Of these 81 have been followed up to delivery and will be followed up to 6 months postpartum. Local Dadiah production reached its full capacity in one region and recruitment had to be extended to other regions. Comparative trends on study outcomes including GWG, mode of birth, postpartum depression, postpartum haemorrhage, maternal nutritional status, anaemia, birthweight, gestational age, admission to neonatal care unit, breastfeeding, neonatal health status will be reported.

Conclusions:

Early results show that the supplementation is acceptable to women and protocol implementation is feasible. In order for this feasibility project to be developed to a full scale RCT, improvements to the infrastructure of supply are required. Such projects may have positive economic impact and provide sustainable solutions to local maternal and neonatal health challenges.

Reference

1. Soltani H, Lipoeto NI, Fair FJ, Kilner K, Yusrawati Y. (2017) Pre-pregnancy body mass index and gestational weight gain and their effects on pregnancy and birth outcomes: a cohort study in West Sumatra, Indonesia. BMC Women's Health.

Key messages:

- Nutritional supplementation using a traditional Indonesian yogurt (Dadiah) made from buffalo milk during pregnancy has been received positively by women.
- Depending on the observed comparative trends from the study outcomes, infrastructure investment is required to enable the feasibility study to be expanded to a full scale randomised controlled trial.