Unintended harm involved in the detection of fetal growth restriction

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BACKGROUND

Undetected fetal growth restriction (FGR) is the strongest risk factor for stillbirth. Increasing antenatal detection of FGR would be expected to reduce late pregnancy stillbirth.

FGR is tracked and reported

In 2012, Safer Care Victoria started publicly reporting individual hospital rates of severe FGR (birthweight <3rd centile) management in the annual Victorian Perinatal Services Performance Indicators (PSPI) report.

Specifically, it is the percentage of all severe FGR singleton babies born at or after 40 weeks' gestation. This was intended to encourage timely delivery for these pregnancies prior to 40 weeks'.

AIM

To assess the impact of publicly reporting the severe FGR indicator, including improvements in care and possible unintended harm

METHOD

Retrospective population-based study using the Victorian Perinatal Data Collection.

- **Study population:** all singleton births delivered at ≥32 weeks' gestation in Victoria from 2012 to 2016.
- **Outcomes of interest:** gestation at delivery, type of labour and birthweight centile.

We performed descriptive statistics (frequencies and cross tabulations) to analyse data.

RESULTS

Since publicly reporting the severe FGR indicator, severe FGR pregnancies delivered ≥40 weeks' gestation have fallen:

In 2012	In 2017
39.7%	**28.2%**

of severe FGR singleton pregnancies were born ≥40 weeks' (29.0% relative risk reduction)

However, intervention for pregnancies suspected of FGR is becoming less specific to pregnancies affected by severe FGR:

Birthweight	In 2012	In 2017
<3rd centile	**324** (22.0%)	**431** (14.4%)
≥10th centile	**674** (45.9%)	**159** (53.3%)

Number and percentage of babies iatrogenically delivered for suspected FGR prior to 40 weeks' by birthweight centile

CONCLUSION

The improved detection and management of pregnancies complicated by severe FGR in Victoria has come at the cost of increasing rates of intervention in non-FGR pregnancies.

Short term (special care nursery and neonatal intensive care unit admissions) and long term (school performance) outcomes of normally grown babies incorrectly delivered for suspected FGR need to be considered.

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