

OGTT Bias? Short Suffer, Tall Triumph

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Background

- The gold standard for diagnosis of gestational diabetes mellitus (GDM) is the 75g oral glucose tolerance test (OGTT).
- The RANZCOG guidelines suggest “that there is a benefit of reduced perinatal morbidity with the use of screening programs for GDM and treating women who are diagnosed with it”.
- However, there is emerging evidence which suggests that a diagnosis of GDM increases detrimental interventions, without evidence for improved outcomes unless diabetes is overt or macrosomia extreme.
- Sensible diagnosis of GDM is therefore paramount, given the test is undertaken by a majority of pregnant women.

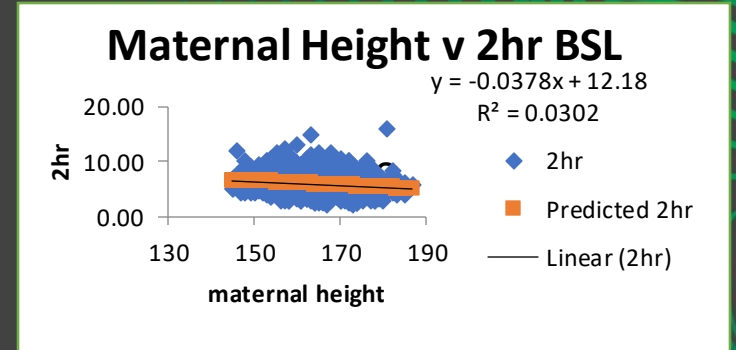
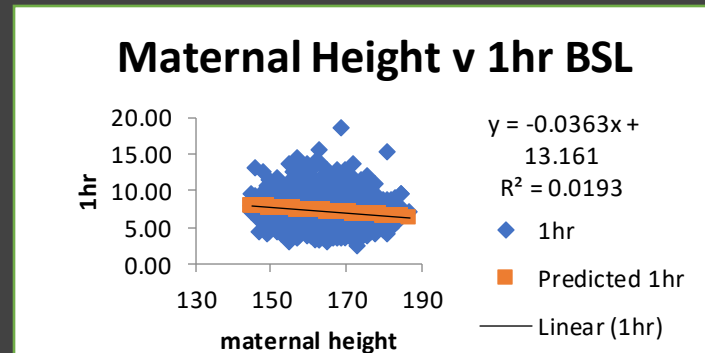
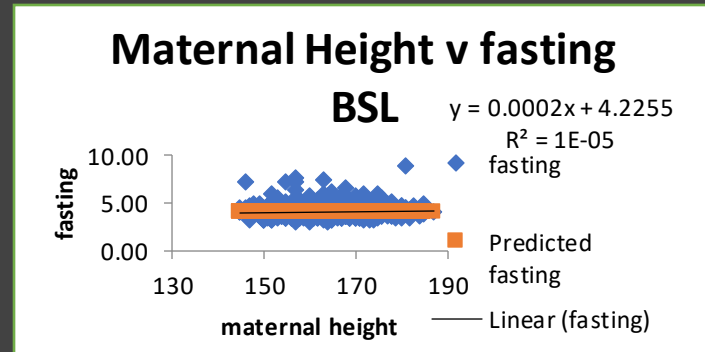
Aims

- This research assesses whether a standard 75g glucose load for women of all statures presents an unfair metabolic burden to shorter women and makes a positive OGTT more likely.

Methodology

- A retrospective cohort analysis was performed at a single center in Perth, Western Australia. All women who delivered in 2019 (n=2557) were considered.
- Exclusion criteria: no OGTT performed or pre-pregnancy diagnosis of diabetes mellitus (n=2011).
- Results were analysed against maternal height.

Results



Discussion

- Data suggests there is a relationship between maternal height and blood sugar response to OGTT in pregnancy
- Shorter women were more likely to have higher BSL with the two hour relationship stronger than the one hour
- GDM diagnosis leads to medicalization of pregnancy and increased intervention
- Fairer test? Alter glucose dose or change diagnostic criteria
- Further research required
- Limitations to study: single non-tertiary center, patients with BMI>40 and GDM transferred to nearest tertiary centre

References

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