Alternative screening protocols may miss most cases of gestational diabetes mellitus during the COVID-19 pandemic

To the Editor: Siru and colleagues have raised potential concerns about the strategy recommended by the Australian Diabetes Society (ADS) and other peak bodies to diagnose gestational diabetes (GDM) during the coronavirus disease 2019 (COVID-19) pandemic.[1] In their study, 46% of subjects diagnosed with GDM had a fasting blood glucose level (BGL) < 4.7 mmol/L but elevated post-load blood glucose levels, and would be missed by the ADS-recommended strategy. The authors suggested that this exposes women and their newborns to significant risks with the potential for significant harm. No outcome data were provided to justify these assertions.

Evidence from the Hyperglycemia and Adverse Pregnancy Outcome (HAPO) study suggests that such women do not have increased rates of pregnancy-associated complications.[2-5] The subgroups with the highest odds ratios for newborns who were large for gestational age had an elevated fasting BGL and any elevation of post-load BGL (odds ratio > 3), whereas subgroups having only elevated fasting or post-load BGL had a considerably lower odds ratio, equivalent to the diagnostic threshold for GDM of 1.75.[2] Further, women with a fasting BGL < 4.5 mmol/L had low rates of some complications irrespective of their post-load BGL.[3] A subsequent analysis of 6128 patients from five centres involved in the HAPO study did not observe any increase in pregnancy-associated complications in women with a fasting BGL below the 75th centile (4.6 mmol/L).[4] A recent analysis of 5974 women in the HAPO study assessed the ADS-recommended COVID-19 GDM strategy and reported no increase in any complication.[5] There were fewer cases of pregnancy-associated hypertension and caesarean delivery, with similar rates of large-for-gestational-age newborns and neonatal hypoglycaemia.

These data provide reassurance. There is no evidence of harm. When this strategy is used, women with a fasting BGL < 4.7 mmol/L are spared being labelled with GDM and do not require education, monitoring, more frequent follow-up or transfer to specialist services, freeing up valuable health care resources. Importantly, they will not be advised to inappropriately restrict their dietary intake or commence therapy with insulin or metformin with the potential for harm. An initial fasting BGL test would eliminate the need for a pregnancy oral glucose tolerance test in the majority of women, identifying a smaller group of women at risk of pregnancy-associated complications where management can be more appropriately targeted.

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Competing interests: No relevant disclosures.

The unedited version of this article was published as a preprint on mja.com.au on 26 October 2020.

doi: 10.5694/mja2.50974

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1 Siru R, Conradie JH, Gillett MJ, et al. Alternative screening protocols may miss most cases of gestational diabetes mellitus during the COVID-19 pandemic. *Med J Aust* 2020; 213: 335. https://www.mja.com.au/journal/2020/213/7/risk-undetected-cases-gestational-diabetes-mellitus-during-covid-19-pandemic

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