

“Elevated body mass index during pregnancy and gestational weight gain in HIV-infected and -uninfected women in Cape Town”

¹Hlengiwe P. Madlala-Department of Physiotherapy, University of Cape Town, South Africa

Abstract:

Objectives-

To examine whether adverse birth outcomes are associated with maternal body mass index (BMI) and gestational weight gain (GWG) among HIV-infected and -uninfected women.

Methods-

In an urban South African community, 2828 consecutive HIV-infected and -uninfected pregnant women attending primary health care services were assessed at their first antenatal visit, with a subset enrolled in a longitudinal study assessed three times during pregnancy. All women had birth outcome data from medical records and study questionnaires. In analysis, the associations between BMI, GWG, maternal factors and adverse birth outcomes were assessed with logistic regression models.

Results-

Overall, 36% and 64% of HIV-infected and -uninfected women, respectively, had the same median BMI of 30 kg/m² (IQR, 26-35) at their first antenatal visit. Increased BMI was positively associated with age, haemoglobin, parity and gestational age at first antenatal visit. In adjusted models, maternal obesity was associated with a range of adverse outcomes, including preterm delivery (aOR 1.55, 95% CI 1.05- 2.27), high birthweight (aOR 2.29, 95% CI 1.13-4.65), large size for gestational age (aOR 1.88, 95% CI 1.27-2.79), low birthweight (aOR 0.46, 95% CI 0.31-0.68) and small size for gestational age (aOR 0.52, 95% CI 0.36-0.73). Associations involving GWG were in similar directions but did not achieve statistical significance consistently.

Conclusion-

High BMI during pregnancy is prevalent in this setting and appears associated with increased risk of adverse birth outcomes in both HIVinfected and -uninfected women. Weight management interventions targeting women of child-bearing age are needed to promote healthy pregnancies and reduce adverse birth outcomes.effects which decrease quality of life

Biography :

Dr Hlengiwe Madlala is a Research Officer in the Division of Epidemiology and Biostatistics at the University of Cape Town. She is a PhD Physiologist who recently completed her MPH in Epidemiology and Biostatistics from UCT and now manages research studies on maternal and child health in the Centre for Infectious Disease Epidemiology Research in the School of Public Health at UCT. She is a member of the Public Health Association of South Africa.

Email: h.madlala@gmail.com

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