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Research Summary

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Category (clinical/public health):	Both
Data focus:	SHEFA

Title A RETROSPECTIVE STUDY OF DIABETES IN PREGNANCY AT VILA CENTRAL HOSPITAL, VANUATU FROM JANUARY 1ST 2014 TO DECEMBER 31ST 2018

Abstract

Introduction: Gestational Diabetes is defined as carbohydrate intolerance of varying degree of severity with onset or first recognition during pregnancy. Diabetes in Pregnancy includes both GDM and Pre-existing diabetes. DIP is associated with adverse maternal and fetal/neonatal outcomes hence screening, early diagnosis and timely management is crucial. The aim of this study is to conduct an audit to determine the prevalence, modes of diagnosis and maternal and fetal outcomes of DIP in women who delivered at Vila Central Hospital, Vanuatu from January 1st 2014 to December 31st 2018.

Method(s): This is a retrospective descriptive study using data from medical records of women diagnosed with DIP during the study period.

Results: The total number of deliveries over the 5year study period was 15,590 of which 14,137 folders were retrieved (90.7% retrieval rate) to discover 54 diagnosed cases of DIP. The prevalence rate of DIP was 0.38%. Of these 56% were gestational diabetes (GDM) and 44% were pre-existing diabetes. All cases had risk factors for DIP and only fasting blood glucose was used for diagnosis. Unfortunately, 4.8% of medical records reviewed had high risk factors for DIP but were unscreened. The mean age of women with DIP was 31.4 years; 91% booked for care in the second or third trimester; 28% required insulin as well as metformin and 11% required insulin for glycemic control. Women with DIP had a significantly higher risk of a caesarean section (RR 4, CI 3.4-6.6, P value < 0.0001) and post partum hemorrhage (RR 2.6, CI 1.1-6, P value 0.02) and babies of DIP women had significantly higher risk of stillbirth (RR 7.4, CI 3.1-17.2, P value < 0.001), macrosomia (RR 136, CI 103-180, P value < 0.001) and shoulder dystocia (RR 20, CI 6.4-62, P value < 0.001).

Conclusion: There was poor coverage of screening for DIP at VCH, Vanuatu, with an underestimated prevalence of 0.38%.. There are significant maternal morbidity and fetal/neonatal adverse outcomes of DIP in these women. There is urgent need to improve practices in screening and diagnosis of DIP at VCH.