

RISK OF DEVELOPING DIABETES MELLITUS AFTER GESTATIONAL DIABETES MELLITUS (GDM)

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Introduction: Previous GDM confers an increased risk of subsequent diabetes mellitus. **Aims:** To determine the risk of developing type 2 diabetes 10 - 11 years after GDM **Methods:** A community based retrospective cohort study was conducted in 4 Medical Officer of Health areas in the Colombo district. Almost 3000 women who delivered a child in 2005 were identified through Public Health Midwives and women with antenatal records were interviewed and relevant information were extracted from medical records to identify potential participants. Fifty one women who had GDM (exposed) and 164 women who did not have GDM (non exposed) were recruited. Current diagnosis of diabetes was based on history, relevant medical records and blood reports within the past 1 year. **Results:** Mean duration of follow up was 10.85 (SD= 0.35) years in the GDM group and 10.76 (SD=0.29) years in the non-GDM group. Women with GDM had an increased risk of developing type 2 diabetes compared with those who had a normoglycaemic pregnancy (RR 10.36; 95% CI 5.25 – 20.42). Within 11 years after the index pregnancy, diabetes developed in 57% (n=29) of women with previous gestational diabetes compared to 5.5% (n=9) among women without gestational diabetes. Maternal age, birth weight of child and family history of diabetes were significantly associated with development of diabetes. **Conclusion:** There is a 10-fold higher risk of diabetes in women with a history of gestational diabetes. These women will benefit from both preventive interventions and regular screening.