

Retrospective study on maternal and perinatal outcomes of pregnancy with diabetes mellitus

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ABSTRACT

Introduction: Many literatures showed diabetes mellitus (DM) during pregnancy has significant impact on both mother and child. DM during pregnancy is categorized as pre-gestational diabetes mellitus (PGDM) either type 1 or type 2 DM, or gestational diabetes mellitus (GDM). This study aims to determine the maternal and neonatal outcomes of women with DM during pregnancy. **Methods:** Women with DM during pregnancy under follow-up and delivered in a Women Children Hospital (Hospital Tunku Azizah, HTA) between 1st September 2019 until 29th February 2020 were included. Exclusion criteria were foreigners, termination of pregnancy before 25 weeks and obstetric deliveries/ termination of pregnancies due to other underlying maternal medical illness and un-booked pregnancies. DM classified as uncontrolled (UCDM) and controlled DM (CDM) based on their HbA1c level. **Results:** A total of 173 pregnant women with DM were included, PGDM (39, 22.5%) and GDM (134, 77.5%). The median age was 33 years (19, 45). UCDM is more common in PGDM (63.4%) than in GDM. UCDM had higher occurrence of maternal obesity (29, 74.4%), pregnancy-induced hypertension (12, 29.3%), pre-term delivery (9, 22.0%), neonatal macrosomia (5, 12.2%), neonates with ventilator support (9, 22%), neonatal sepsis (3, 7.5%), neonatal respiratory distress (13, 31.7%) and neonatal hypoglycaemia (4, 9.8%) compared to CDM. Neonatal mortality was higher in UCDM (4.9%) compared to CDM (4.5%). Neonates not discharged from hospital by 28 days higher in UCDM (4.9%) compared to CDM (0) mothers. **Conclusion:** Uncontrolled DM during pregnancy leads to many adverse outcomes for mother and neonate including prematurity, neonatal mortality and increase healthcare expenditure from prolonged stay.