Develop of Gestational Diabetes Mellitus clinic in Queen Elizabeth Hospital

Ng WH, Shum KS, Kou KO, Ma WLT, Leung KY
Queen Elizabeth Hospital

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Develop of Gestational Diabetes Mellitus clinic

Introduction
Gestational diabetes mellitus (GDM) is one of the most common medical condition complicated pregnancy with adverse outcome. There is evidence that the prevalence of GDM is in increasing trend especially in Asian countries. It is also evidence that the GDM women have higher chance of developing diabetes mellitus after pregnancy compared to the general population.

Objectives
To minimize hospital admission through patient empowerment on home blood glucose monitoring and blood sugar level can be more effectively monitored.

Methodology
GDM clinic was developed in 15 October 2013. It is run by maternal and fetal medicine (MFM) team composed of subspecialists and advanced practice nurse. Protocol was derived by MFM subspecialist. Flow chat was formulated according to the protocol. Educational program was designed for GDM women. Routine third trimester growth scan will be offered to all GDM cases to estimate fetal weight. Sugar profile (SP) will be arranged as day case in hospital to all newly diagnosed GDM women. On the day of SP, except blood sugar monitoring, education talk on GDM will be given and techniques on operation of glucometer will be demonstrated. Family members are welcomed to attend the education talk. All GDM women will be encouraged to have home blood glucose monitoring (HBGM) with rationales. They can opt for HBGM or subsequent SP in hospital every 4 week till delivery. Blood for HbA1c will be checked every 4 week for both groups.

Result
From 1st January 2014 to 31st December 2014, the total booking of pregnant women in antenatal clinic was 8274. 4914 cases were screened to have oral glucose tolerance test (OGTT). According to WHO criteria (fasting plasma glucose $\geq 7.0$mmol/L or 2-h $\geq 7.8$mmol/L), there were 1033 (~12.5%) cases with abnormal
OGTT. Among these 1033 newly diagnosed GDM cases, there 988 (95.7%) cases opted for HBGM. There only 7 (<1%) cases opted subsequent SP in hospital. The other 38 cases opted not for both HBGM and SP as 1 confirmed miscarriage, 8 cases delivered soon after OGTT, 24 cases with maturity near term and opted not for neither HBGM nor SP in hospital, 4 defaulted FU, 1 in-patient for rest. The rate of HBGM is encouraging. The women can have more effective blood glucose monitoring as HBGM can reflect the blood sugar level more close to their life style. FU can be done promptly. Hospitalization rate is also highly reduced.