Challenges and Facilitators of Dietary Diabetes Prevention Intervention for Malaysian Women with Gestational Diabetes: A Qualitative Study

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ABSTRACT

Gestational diabetes refers to a type of diabetes that can occur to pregnant women who do not otherwise have diabetes. This category of women with gestational diabetes (GDM) is at higher risk to develop diabetes. Dietary modification is essential in diabetes prevention interventions (DPI) for women with gestational diabetes (GDM) to optimise maternal glycemia and prevent future diabetes. Many studies focus on factors influencing DPI during the post-partum period. Limited information is known regarding women's experiences of diabetes prevention during pregnancy with GDM especially in Malaysia, a country with a multi-ethnic population. This study explored women's experiences of dietary modification during pregnancy for the prevention of future diabetes and factors (challenges and facilitators) that influence them. This qualitative study was conducted as the first phase of an action research study to provide women with GDM with a mobile application. Individual interviews and focus groups were conducted from September 2020 to February 2021. Participants were women in the antenatal period with GDM from three public health clinics in the Greater Klang Valley, Malaysia. A topic guide was derived following the COM-B framework that highlighted the challenges and motivation of the behaviours of women with GDM towards DPI during pregnancy. The interviews were transcribed verbatim and analysed using thematic analysis. Five focus groups and seven in-depth interviews were conducted with 20 women with GDM aged 26-41 years old. The dietary interventions that women with GDM underwent during pregnancy to prevent diabetes included: 1) healthy snacking, 2) home-cooked meals, and 3) consuming a balanced diet. Challenges that influenced the interventions for a healthy diet during pregnancy included: 1) difficulty in accessing healthier ingredients, 2) inadequate information regarding diabetes and DPI 3) resisting food norms, 4) limited time for DPI, and 5) health concern (hunger spells and concurrent illness). Meanwhile, the factors that facilitated the dietary interventions included: 1) intrinsic motivation (self-experience and personal preference), 2) knowledge and information acquisition (Asian based food and from trusted sources), 3) health concern, 4) social circle, and 5) social media and digital application. In conclusion, the experiences of women with GDM in Malaysia in

preventing future diabetes were similar to previous research conducted in other countries. However, women in this study indicated several personal limitations to dietary modification including adjusting to their typical cultural family meals and overall lack of knowledge. Factors that facilitated DPI included having information in a digitalized platform that is personalized to culture and their first language. These factors can be utilized in future diabetes prevention interventions to motivate women and increase adherence to dietary modification. This study gives an insight to the policymakers to incorporate digital tools when developing DPI tools for Malaysian women who are at risk of diabetes. A tool that is more personalized to Malaysia would be more motivating and assumingly useful.

Keywords: diabetes prevention intervention, diet, gestational diabetes