

# Nutrition and Health Education

## Feasibility of a 1-year lifestyle intervention among women with a history of gestational diabetes

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**Introduction:** Gestational diabetes mellitus (GDM) affects 13% of pregnancies worldwide and is associated with a high risk of developing type 2 diabetes. Although lifestyle habits among women with a history of GDM are suboptimal, there is currently no systematic follow-up lifestyle program after childbirth.

**Objectives:** To assess, within a pilot randomized controlled trial, the feasibility and acceptability of a lifestyle intervention initiated early after childbirth and continuing until 12 months postpartum in women with a history of GDM.

**Methods:** Women diagnosed with GDM were recruited and randomized to either the intervention (n=16) or control group (n=16). Participants were invited to attend 7 visits between 2 and 12 months postpartum in order to complete various clinical tests and questionnaires. At each visit, participants in the intervention group received a personalized intervention based on the Theory of planned behavior, which focused on breastfeeding, nutrition and physical activity and received written educational material within a toolbox. Participants in the control group received only the lifestyle education toolbox. Attendance at each session was recorded in order to measure completion and retention rate at 12 months postpartum. Participants' satisfaction regarding the intervention was analyzed using an appreciation questionnaire of 18 items with a 5-point Likert scale.

**Results:** A total of 72% of participants completed the intervention, 50% of women in the control group and 94% of women in the intervention group. Women who remained in the study completed all of the program visits for a completion rate of 100%. The mean appreciation score was  $4.17 \pm 0.55$ . The average score was  $4.23 \pm 0.50$  among participants in the intervention group and was  $4.00 \pm 0.71$  in the control group. 89% of women were satisfied overall with the intervention and the aspects less appreciated by participants, mostly in the control group, were related to the acquired knowledge and skills regarding breastfeeding and physical activity, the time commitment of the program as well as the support received from the facilitator.

Conclusion and Significance: The intervention is considered feasible and was appreciated by the participants with some elements that need to be improved before being used by clinicians.

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