



# Reducing Type 2 Diabetes Mellitus risk in women post Gestational Diabetes Mellitus through telephone motivational interviewing



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Of women accessing NCAHS services for type 2 diabetes mellitus (T2DM) 19% have had gestational diabetes mellitus (GDM). Women with past GDM are at risk of T2DM. Lifestyle modification can reduce this risk. NCAHS is a rural service covering 25,570 square kms.

The study aim was to determine if motivational interviewing (MI) by phone increased lifestyle change in rural women post GDM. MI is a cognitive behavioural technique helping people identify and change behaviours they would like to adopt.

Forty two rural based women who attended GDM services were recruited in this randomised control trial, 21 in each of the control and intervention groups. The intervention group received six months of education and MI, from six weeks post natal. All women completed baseline questionnaires six weeks post natal (prior to intervention commencement), and six months later at follow up. Data collection occurred between November 2007 and May 2009.

### Intervention group results:

- physical activity (PA) increased ( $p < 0.05$ );
- metabolic equivalent score (MET) of PA intensity increased ( $p = 0.06$ );
- sedentary behaviour decreased ( $p < 0.05$ );
- energy, carbohydrate, and fat intake decreased ( $p = 0.05$ );
- body mass index (BMI) and weight decreased; waist circumference decreased four cms.

### Control group results:

- PA and MET scores decreased 43% and 46% respectively.
- Eating patterns remained constant
- Body weight increased three kgs, BMI increased one  $\text{kg/m}^2$ .

Unlike the unaltered control group result, a strong positive trend across lifestyle change variables occurred in the intervention group which will lead to reduced diabetes risk if continued. Diabetes educators are now promoting client access to phone based lifestyle counselling.

*For the full report on this project visit our website, follow the link to the Rural Research Capacity Building Program and click on 'view completed projects'*

Judy is the Area-based Diabetes Clinical Nurse Consultant at NCAHS; working in the field of diabetes education and management since 1986. Health promotion and disease prevention are key areas of interest for Judy. This project provided the opportunity to develop and implement a rural health promotion strategy suitable for women post gestational diabetes at risk of developing diabetes mellitus.



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