

Authors: Souza, ACRLS, Sousa, AMS, Paganoti, CF, Rodrigues, AS, Costa, RA, Francisco, RPV
Departamento de Obstetrícia e Ginecologia
Hospital das Clínicas - Faculdade de Medicina da Universidade de São Paulo

Introduction: In our antenatal care, all pregnant women diagnosed with gestational diabetes (GDM) are referred to orientation group, composed by a doctor, a nurse and a nutritionist, where they receive information about the disease and the treatment. Since 2014, besides this first approach, a nurse performs telephone contacts and appointments to supervise and to advise pregnant women with difficulty in achieving glycemic control.

Objective: To evaluate the impact of multiprofessional care during the antenatal care visits on the requirement of insulin for glycemic control in pregnant women with GDM.

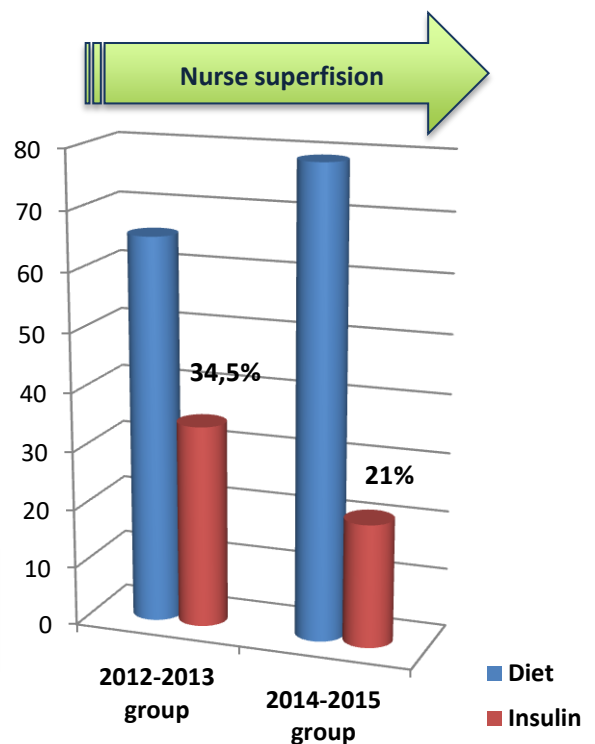
Materials and Methods: Materials and methods:

Observational, retrospective cohort study with evaluated the requirement of insulin for glycemic control in pregnant women who attended antenatal care visits at a tertiary teaching hospital in Sao Paulo city (Brazil) from January 2012 to December 2015. Patients were divided into two groups according to the period in which they underwent antenatal care, for analysis of clinical variables: 2012-213 group and 2014-2015 group.

Table 1. Clinical and sociodemographic data of pregnant women with gestational diabetes, according to multiprofessional therapeutic approaches (São Paulo, 2012-2015) ¹Student's t test; ²Chi-square test; FBG: fasting blood glucose; GTT: oral glucose tolerance test

| | 2012-2013 (n=470) | 2014-2015 (n=392) | P-value |
|---|----------------------|----------------------|---------------------|
| Test used for diagnosis | | | 0.376 ² |
| abnormal FBG, n (%) | 216 (46.0) | 192 (49.0) | |
| abnormal OGTT, n (%) | 254 (54.0) | 200 (51.0) | |
| Maternal age (years), mean ± SD | 32.5 ± 6.2 | 32.7 ± 6.0 | 0.530 ¹ |
| Primigravida, n(%) | 137 (29.1) | 105 (26.8) | 0.442 ² |
| Pre-pregnancy BMI (kg/m ²), mean ± SD | 29.4 ± 6.2 | 29.4 ± 6.5 | 0.964 ¹ |
| Educational level | | | 0.361 ² |
| Elementary school, n (%) | 117 (25.1) | 89 (23.6) | |
| High school, n (%) | 261 (55.9) | 201 (53.3) | |
| Higher education, n (%) | 89 (19.1) | 87 (23.1) | |
| Family history of diabetes, n (%) | 267 (56.8) | 230 (58.7) | 0.694 ² |
| Prior GDM, n (%) | 40 (8.6) | 38 (9.8) | 0.556 ² |
| Prior fetal macrosomia, n (%) | 35 (7.5) | 36 (9.2) | 0.356 ² |
| Chronic Arterial hypertension, n (%) | 128 (27.2) | 93 (23.7) | 0.242 ² |
| Treatment with insulin, n(%) | 162 (34.5) | 82 (21.0) | <0.001 ² |

Figure 1. Comparison of insulin need for GDM treatment according to the period of antenatal care. São Paulo, 2012 - 2015, n= 862



Results: 862 pregnant women were included in the study. The requirement of insulin for glycemic control reduced from 34% in 2012-2013 group to 21% in 2014-2015 group ($p < 0.001$) between pregnant women who received individualized nurse care. There was no difference between the groups regarding age, educational level, pre-pregnancy body mass index (BMI), family history of diabetes mellitus (DM), prior GDM or prior fetal macrosomia

Conclusions: In women with GDM, an individualized and a multiprofessional care are important to improve glycemic control and to prevent the requirement of insulin during pregnancy