

Glycaemic control and folic acid prescription before and during pregnancy in women with diabetes: The Royal College of General Practitioners Research and Surveillance Centre Network Database 2004–2017 Study

M Gaudio^{1,2}, M Feher¹, N Dozio^{2,3}, M Scavini^{2,3} and S de Lusignan^{1,4}

¹*Department of Clinical and Experimental Medicine, University of Surrey, Guildford, UK,*

²*International MD Program, Vita Salute San Raffaele University, Milan, Italy,* ³*Diabetes Research Institute, San Raffaele, Milan, Italy,* ⁴*Royal College of General Practitioners Research and Surveillance Centre, London, UK*

Aim: To describe glycaemic control (HbA1c) and folic acid use in women with diabetes before and during pregnancy from a national primary care database.

Methods: From the database (2004–2017) women with pre-gestational diabetes with one or more pregnancies and folic acid 5mg prescription were identified. Descriptive statistics were used to analyse HbA1c and folic acid prescription before and during pregnancy. Treatment target HbA1c was considered <6.5% (48mmol/mol).

Results: From the cohort (n = 1,869), 55.5% had Type 2 diabetes and 44.5% Type 1. A second pregnancy occurred in 64.8% and 82%, and a third in 34% and 45%, respectively, in Type 1 and Type 2 diabetes. Rates of pregnancy proceeding to term were 80% for the first, second and third pregnancy in both types. In their first pregnancy, women with Type 1 were more likely to have HbA1c recorded in the preceding six months before pregnancy than those with Type 2 (44.0% vs 29.8%). Only 15.8% with Type 1 and 30.7% with Type 2 diabetes achieved target HbA1c. During pregnancy, target HbA1c was reached by half of Type 2 but in only one-third of Type 1 diabetes. Preconception folic acid was prescribed to one-fourth of women with Type 1 and one-tenth of women with Type 2 diabetes, increasing to 60% and 40%, respectively, during pregnancy.

Conclusions: Many women with diabetes had no recorded HbA1c before the start of pregnancy and often had no folic acid prescription. There is an important educational need to target treatable risk factors for safer pregnancy in diabetes.