Christopher Harrison Clare Bayram Helena Britt

Gestational diabetes

Keywords

diabetes, gestational

Several studies have described an increasing prevalence of gestational diabetes mellitus (GDM), in line with the known increased prevalence of Type 2 diabetes.¹ The risk of GDM is greater for pregnant women from selected ethnic groups (such as Indigenous,² Asian and Indian³) and for older pregnant women.¹

We sought to investigate whether similar patterns of GDM existed in Australian general practice using the BEACH data. Between April 1998 and March 2013, 14 770 GPs collected information on 419 785 encounters with female patients aged 15-54 years. During this period there were 24 392 pregnancy-related encounters and GDM was managed at 321 of these encounters. The average age of women who had GDM managed was significantly higher (32.8 years, 95% CI: 32.1-33.5) than women at all pregnancy-related encounters (29.3 years, 95% CI: 29.2-29.4).

The management rate of GDM almost doubled between the periods April 1998-March 2003 and April 2008-March 2013, however the rate of pregnancy-related encounters changed little over this period (Table 1). While patients from non-English-speaking backgrounds (NESB) and English-speaking backgrounds had similar rates of pregnancy-related encounters, NESB patients were twice as likely to have GDM managed. Indigenous patients were almost twice as likely to have a pregnancyrelated encounter than non-Indigenous patients. However, Indigenous patients were about four times as likely to have GDM managed than non-Indigenous patients.

This study demonstrates that GDM management has increased over time in Australian general practice. It also shows that patients with GDM were older on average than those at all pregnancy-related encounters

and the management rate of GDM was higher among patients who are NESB or Indigenous.

Authors

Christopher Harrison, Clare Bayram and Helena Britt, Family Medicine Research Centre, University of Sydney, NSW

Competing interests: None. Provenance and peer review: Commissioned; not peer reviewed.

Acknowledgements

The authors thank the GP participants in BEACH and all members of the BEACH team. Financial contributors to BEACH between 1998 and 2013: Abbott Australasia; AstraZeneca Pty Ltd (Australia); Australian Government Department of Health and Ageing: Australian Government Department of Veterans' Affairs; Australian Institute of Health and Welfare; Aventis Pharma Pty Ltd; Bayer Australia Ltd; CSL Biotherapies Australia Pty Ltd; GlaxoSmithKline Australia Pty Ltd; Janssen-Cilag Pty Ltd; Merck, Sharpe and Dohme (Australia) Pty Ltd; National Occupational Health and Safety Commission; National Prescribing Service; Novartis Pharmaceuticals Australia Pty Ltd; Pfizer Australia; Roche Products Pty Ltd; Sanofi-Aventis Australia Pty Ltd; Wyeth Australia Pty Ltd.

References

- 1. Ferrara A. Increasing prevalence of gestational diabetes mellitus: a public health perspective. Diabetes Care 2007;30(Suppl 2):S141-46.
- 2 Ishak M, Petocz P. Gestational diabetes among Aboriginal Australians: prevalence, time trend, and comparisons with non-Aboriginal Australians. Ethn Dis 2003;13:55-60.
- 3. Beischer NA, Oats JN, Henry OA, Sheedy MT, Walstab JE. Incidence and severity of gestational diabetes mellitus according to country of birth in women living in Australia. Diabetes 1991;40(Suppl 2):35-38.

correspondence afp@racgp.org.au

15–54 years, April 1998–March 2013 (95% confidence interval)			
	Pregnancy-related encounters	GDM encounters	Percentage of pregnancy- related encounters that had GDM managed
April 1998–March 2003	5 378 (5 100–5 657)	5.5 (4.2–6.8)	0.10
April 2003–March 2008	5 369 (5 116–5 622)	7.2 (5.5–8.9)	0.13
April 2008–March 2013	5 535 (5 276–5 794)	10.5 (8.6–12.4)	0.19
Non-English-speaking background	5 515 (5 150–5 880)	15.7 (11.2–20.2)	0.28
English-speaking background	5 463 (5 295–5 631)	7.0 (6.0–8.0)	0.13
Indigenous	9 319 (8 310–10 328)	31.2 (12.9–49.4)	0.33
Non-Indigenous	5 396 (5 237–5 555)	7.3 (6.4–8.2)	0.14
Total	5 425 (5 272–5 578)	7.6 (6.7–8.6)	0.14

Table 1. Pregnancy-related encounters and GDM managed per 100,000 encounters with women aged