COMMENTS AND RESPONSES

Gestational Diabetes Mellitus: NICE for the U.S.? A Comparison of the American Diabetes Association and the American College of Obstetricians and Gynecologists Guidelines With the U.K. National Institute for Health and Clinical Excellence Guidelines

Response to Simmons et al.

Simmons et al. (1) have compared the National Institute for Health and Clinical Excellence (NICE), American Diabetes Association (ADA), and American College of Obstetricians and Gynecologists (ACOG) guidelines and conclude that the NICE guidelines reduce access to proven cost-effective management of gestational diabetes mellitus (GDM).

Although the current NICE guidance represents a substantial increase in screening compared with previous NICE recommendations, the authors suggest that the guidelines remain too limited (2). The crucial questions are *1*) how many women with GDM are missed by removing the age and tighter BMI criteria present in the ADA guidelines and *2*) what are the additional costs of identifying these women?

The NICE model found that the ADA criteria had borderline cost-effectiveness but could not undertake incremental cost analysis because of a lack of data on the pretest probability of disease in Caucasian women aged ≥25 years and with BMI <30 kg/m^2, which is crucial when comparing the cost-effectiveness of NICE and ADA recommendations.

The logic underpinning the conclusion about the benefits of screening is flawed without consideration of how NICE calculated the quality-adjusted life year loss of serious perinatal complications. Although the cited omissions may bias the model against screening, this is counterbalanced by the large weight given to neonatal mortality driven by the Australian Carbohydrate Intolerance Study in Pregnant Women (3).

We acknowledge that GDM rates are increasing, but so are its risk factors. Consequently, more women will receive screening with time by following the NICE guidance. The timing of screening is criticized because it fails to identify women with preexisting diabetes until too late in pregnancy. The authors have overlooked the recommendation for early screening in women with a prior history of GDM. There is, however, no evidence that routine screening at the first antenatal clinic visit is either clinically effective or cost-effective for the wider population; it is also not clear whether this approach is acceptable to pregnant women.

The purpose of postnatal testing is to identify women with preexisting undiagnosed diabetes. In the U.K. study on which NICE based its recommendation, the prevalence of postnatal diabetes was only 2.4%, which raises questions about the value of the oral glucose tolerance test for all postnatal women (4). Missing cases of impaired glucose tolerance should not affect postnatal management because all are at risk of diabetes in later life and, therefore, all should be encouraged to adopt appropriate lifestyle changes to reduce subsequent risk.

The decision to recommend obtaining a fasting glucose test was partly taken on the basis of acceptability. In the U.K. study, 20% of women failed to attend a postnatal oral glucose tolerance test (4). By adopting a practice of obtaining postnatal fasting blood glucose from patients in Southampton, all women were screened in 2009.

Although fasting glucose is endorsed by the ADA for population screening, this issue may become less pressing if the World Health Organization includes glycated hemoglobin in its diagnostic criteria. Although further research is needed to determine the most appropriate method, timing, and patient group for screening for GDM, the NICE guidelines remain clinically effective and cost-effective for the residents of England and Wales, for whom they were designed. They should also have resonance in the U.S., where a recent study showed that active treatment of mild GDM did not improve a composite of fetal death and neonatal complications (5).

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DOI: 10.2337/dc09-2234

Acknowledgments— The authors of this letter were members of the Diabetes in Pregnancy (R.I.G.H., P.B.J., and M.A.M.) and Antenatal Care Guideline development groups (J.A.R. and R.G.H.) convened by the National Collaborating Centre for Women's and Children's Health on behalf of NICE. Some of the work for the original guideline was undertaken by the National Collaborating Centre for Women's and Children's Health, which received funding from NICE. The views expressed in this letter are those of the authors, and not necessarily those of the institute.

No potential conflicts of interest relevant to this article were reported.

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