

COMMENTS AND  
RESPONSES

**Comment on: Tran et al. Early Prediction of Gestational Diabetes Mellitus in Vietnam: Clinical Impact of Currently Recommended Diagnostic Criteria. Diabetes Care 2013;36:618-624**

**W**e read with great interest the article by Tran et al. (1), in which the authors compared the discriminative power of prognostic models for early prediction of women at risk for the development of gestational diabetes mellitus (GDM). The research group found 5.9% prevalence of GDM by American Diabetes Association (ADA) criteria. The selective screening of women for GDM using the ADA model with a risk threshold of 3% gave 93% sensitivity for identification of women with GDM, with a 27% reduction in the number of oral glucose tolerance tests required.

If we simplify the results, it means missing 4 out of 59 cases of GDM in a cohort of 1,000 pregnant women by doing 272 fewer oral glucose tolerance tests. The strategy seems reasonable, especially in resource-poor settings. The debate on cost-effective screening methods has continued for a long time. The health care personnel have on one hand the responsibility of developing effective programs for prevention of diabetes and on the other hand the concern of escalating costs of delivering health care.

India, home to 61.3 million patients with diabetes in 2011, and with an estimate of 101.2 million for 2030, is the largest contributor to regional mortality attributable to diabetes (2). So, any cost-effective strategy that helps our country to curtail the epidemic of diabetes is a welcome step.

The prevalence of GDM in India is 14.3% (3), and approximately 28 million women are pregnant every year. This translates into 4 million women who may have GDM. Missing 7% of these cases translates into missing 0.3 million women with GDM annually. Fifty percent of women with GDM are expected to develop type 2 diabetes within 5 years of the index pregnancy (3). This will add to an already existing huge burden of diabetes in our country and will constitute a large burden to health care systems in terms of both direct and indirect costs.

A recent study estimated that screening and treating GDM has an incremental cost-effectiveness of \$1,626 per disability-adjusted life-year averted for a general hospital in India considering adverse perinatal events and future diabetes. The study computed the costs of screening tests for GDM, antenatal management, and postpartum diabetes prevention interventions and found them to be highly cost-effective in India (4).

Furthermore, we should not forget that intrauterine exposure to a hyperglycemic environment has been demonstrated to increase the offspring's risk of developing obesity, type 2 diabetes, and metabolic syndrome later in life (5). A study suggests that GDM may be responsible for 19–30% of all type 2 diabetes seen among Saskatchewan First Nations people in Canada (6). GDM thus creates a vicious cycle in which diabetes begets diabetes.

The main goal during pregnancy should be not to miss any woman with GDM and any opportunity of screening a woman for gestational or overt diabetes. It is especially important in countries that are facing an uphill task of curtailing

the rapidly rising prevalence of diabetes, like India.

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