COMMENTS AND RESPONSES

Response to Comment on: Zhu et al. Fasting Plasma Glucose at 24–28 Weeks to Screen for Gestational Diabetes Mellitus: New Evidence From China. Diabetes Care 2013; 36:2038–2040

As mentioned in the letter by Savona-Ventura et al. (1), the results of fasting plasma glucose (FPG) screening protocol followed by an oral glucose tolerance test (OGTT) in the pregnant women whose FPG level was 4.4–5.0 mmol/L show a similar trend in the rate of missed diagnosis (12.2 vs. 10.1%) between our study (2) and their study (3), but substantially diverse rate in requiring a formal OGTT (49.7 vs. 31.1%). This variation is probably linked to ethnic factors. FPG alone fails to identify a significant proportion of individuals with diabetes both in the nonpregnant state as well as during pregnancy, as was also shown in the Hyperglycemia and Adverse Pregnancy Outcome (HAPO) study (4) in which the two centers in Asia had a higher incidence of gestational diabetes mellitus (GDM) diagnosed by 2-h OGTT compared with other HAPO centers. Therefore, the approach described by Savona-Ventura et al. maybe more suitable to the circum-Mediterranean population that "women with a FPG >5.1 mmol/L are considered as suffering from GDM in line with the International Association of the Diabetes and Pregnancy Study Groups (IADPSG) criteria of diagnosis (accounting for 73.9% of GDM cases and 9.8% of NGT women)" (3).

We agree with Savona-Ventura et al. that using composite risk criteria could be more sensitive and specific and could avoid more cumbersome 75-g OGTTs, but ethnic factors and feasibility must be carefully considered in each region. Apart from BMI, as mentioned in the letter, age, family history, previous obstetric history etc. are also known risk factors, and some of them such as family history of diabetes may be as relevant as BMI in the Asian setting. The HAPO study recommends universal 75-g OGTT as diagnostic criteria without considering other factors that make it simple and feasible. In deciding whether to adopt composite factors and which factors to choose, one must keep in mind the applicability and feasibility. Pregnancy outcomes in women with missed GDM diagnosis who will remain untreated must be scientifically evaluated for any screening strategy to avoid serious health consequences both for mother and offspring.

The authors of the letter mentioned GDM was defined by the American Diabetes Association criteria in the first paragraph and IADPSG criteria in the second paragraph. It is unclear which version of American Diabetes Association criteria was adopted and whether it is the same as the IADPSG criteria.

Wei-wei Zhu, md[1]
Hui-xia Yang, md[1]
Jie Yan, md[1]
Anil Kapur, md[2]

From the [1]Department of Obstetrics and Gynecology, Peking University First Hospital, Beijing, China; and the [2]World Diabetes Foundation, Gentofte, Denmark.

Corresponding author: Hui-xia Yang, yanghuixia@bjmu.edu.cn.

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