

Analysis of the Indian Council of Medical Research–India Diabetes (ICMR–INDIAB) Study

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Abstract

The Indian Council of Medical Research–India Diabetes (ICMR–INDIAB) study is the first nationally representative survey of diabetes in India. It aims to provide national and regional counts of diabetes and prediabetes and also of cardiovascular risk factors. This ambitious and complex survey uses robust sampling techniques, standardized methods, appropriate quality assurance, and a three-phase data collection. However, the survey should be completed within a reasonable time span to avoid a differential effect of secular trends on regional estimates. A high response rate and low missing values must also be ensured.

Reliance on capillary whole blood glucose (CBG) for the diagnosis of hyperglycemic states is a limitation of the survey. However, this is a reasonable compromise given the practical challenges of such a large study. Despite a good correlation between CBG and venous plasma glucose (VPG), the use of CBG may misclassify glycemic status. A better characterization of the CBG–VPG relationship, and the performance of CBG for detecting hyperglycemia, using a much larger sample, seems therefore advisable. This should be possible given that venous blood has been collected on a sizeable subset of participants.

The Indian Council of Medical Research and the Madras Diabetes Research Foundation deserve praise for this massive undertaking, which will highlight areas for policy action and establish a national framework for noncommunicable disease (NCD) surveillance. The ICMR–INDIAB survey lays the foundation for effective NCD prevention and control and for applied public health research.

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Abbreviations: (CBG) capillary whole blood glucose, (ICMR–INDIAB) Indian Council of Medical Research–India Diabetes, (NCD) noncommunicable disease, (VPG) venous plasma glucose

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