The Indian Council of Medical Research–India Diabetes (ICMR–INDIAB) Study: Methodological Details

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Abstract

Background:

Currently available estimates of diabetes prevalence in India are based on published data derived from very few studies. The Indian Council of Medical Research–India Diabetes (ICMR–INDIAB) study is a community-based survey conceived with the aim of obtaining the prevalence rates of diabetes in India as a whole, covering all 28 states, the National Capital Territory of Delhi, and two of the union territories in the mainland of India, with a total sample size of 124,000 individuals.

Methods:

A stratified multistage sampling design has been used. In all study subjects, a structured questionnaire was administered and anthropometric parameters and blood pressure were measured. Fasting capillary blood glucose was first determined using a glucose meter. An oral glucose load was then administered to all subjects except those with self-reported diabetes, and the 2 h post-load capillary blood glucose was estimated. In every fifth subject, a fasting venous sample was collected for measurement of lipids and creatinine, a resting 12-lead electrocardiogram was performed, and dietary assessment questionnaire was administered. In all diabetic subjects, an additional diabetes questionnaire was used and a fasting venous sample drawn for glycated hemoglobin.

Abstract cont.

Results:

All biological samples collected were analyzed in a central laboratory. All data collected were stored electronically. Quality control was achieved through multiple tiers of checks.

Conclusions:

The ICMR–INDIAB study is the first of its kind attempting to provide accurate and comprehensive state- and national-level data on diabetes prevalence in India.

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