Screening for diabetes in high risk a passé

Sir,

Approximately, 50-70% of people with diabetes remain undiagnosed in both developed[1] and developing countries[2] and these individuals often present with diabetes complications.[3] Undiagnosed diabetes and pre diabetes, therefore, need to be detected and treated early through community-based screening.[4] Unless appropriate action is taken, it is predicted that there will be at least 592 million people in the world with type 2 diabetes by the year 2035. Indeed, India with 65.1 million people with diabetes leads the world with the maximum number in any country, and this number is set to increase by the year 2025.[5]

Early detection significance considering that diabetes is frequently not diagnosed until complications appear, and approximately half of all subjects with diabetes remain undiagnosed.[6,7]

Definition of diabetes is usually based on fasting or postprandial glucose. However, random capillary blood glucose (RCBG) is the most convenient way to reach large number of people.[8]

To cost-effectively screen for diabetes at the community level, involves the use of blood test, such as RCBG to further narrow down for individuals with undiagnosed diabetes.

To the same context, an RCBG checkup camp was organized on world labor day (May 1, 2014) for the daily wedges worker by our institute in Indore, irrespective of their age and gender. Approximately, 870 individuals underwent an RCBG test using one touch ultra (Accu check, Abbott and Johnson and Johnson). Our teams were deployed at their respective site of gathering, from where they are picked up for daily jobs.

After the statistical analysis we found that 24% (213) people had random blood sugar (RBS) >110 mg/dl, out of them 9% (78) people had RBS between 140 and 199 mg/dl and 3.5% (31) had RBS > 200 mg/dl.

In a paper published in diabetes care Somannavar *et al.* propose an RCBG value of >110 mg/dl should receive more definitive tests for diabetes and prediabetes.[8]

This underscores the need for mass awareness and screening program to detect undiagnosed diabetes and thus reduce the burden of diabetes in India. Mass screening program using blood sugar estimations to cover the whole population are not feasible in a large country like ours with a population of over 1 billion people due to logistic, socioeconomic and other constraints. Hence, cost-effective tools to selectively screen population, which may often see low risk for diabetes are urgently needed in order to make diabetes screening cost-effective in India.

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