**INDRISK: A TYPE 2 DIABETES SCREENING TOOL FOR PRIMARY HEALTH CARE PROVIDERS IN RURAL INDIA**

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Objectives: To develop a diabetes risk score for the primary health care providers in rural India and to compare its performance with 16 existing screening tools for detection of type 2 diabetes.

Background:In India, half to two-thirds of diabetics are undetected and many have complications at diagnosis. The primary health care settings in rural India face severe shortage of workforce. Therefore, a screening tool with less number of variables that are simple, easy to measure, less time consuming and less expensive is preferred.

Methods:We used the baseline data of 451 participants (15-64 years) of a cohort study (2003-2010) in a rural area of Kerala, India. Logistic regression analysis was used to derive the risk factors of diabetes (fasting plasma glucose ≥ 126 mg/dl and/or on anti-diabetic medication). The area under the receiver operating characteristic curve (AROC) was used as the discrimination statistic.

Results: The new risk score with age, family history of diabetes and waist circumference identified 40.8% for confirmatory testing, had a sensitivity of 81.0%, specificity of 68.4%, positive predictive value of 37.0%, and negative predictive value of 94.0% for an optimal cut off ≥ 4. Other screening tools with three to 10 variables had lower or similar AROCs as compared with the new risk score of 0.812

(95% confidence interval, 0.765-0.860).

Conclusions: The new risk score with three simple, easy to measure, less time consuming and less expensive variables could be suitable for use in primary health care settings of rural India.