



Distribution of socioeconomic status and its association with type 2 diabetes mellitus in rural China: Henan Rural Cohort study

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Abstract

Background: The association between socioeconomic status (SES) and type 2 diabetes mellitus (T2DM) differed across researches. Thus, this research aimed to provide a comprehensive description of SES and further to explore its association with T2DM in rural areas.

Methods: Participants were farmer and enrolled from the Henan Rural Cohort study. SES of individual was assessed by SES-score, a composite index derived from three SES-related indicators (education level, average monthly income, and marital status). Age was divided into six groups to detect the changes of SES-score. Binary logistic regression was employed to assess the association between SES-score and T2DM.

Results: Among 39259 rural participants, the means (SDs) SES-score of total population 3.47 (1.54). The SES-score decreased with age and men always had a

higher score than women. The prevalence of T2DM decreased with increasing SES-score among women (14.87% to 4.47%), while an inverse trend was observed among men (6.59% to 9.87%). Adjusted ORs (95% CIs) for prevalent T2DM, per unit increase, were 1.07 (1.03, 1.12) in men and 0.96 (0.93, 0.99) in women.

Conclusion: Men had a higher SES-score than women in rural areas, and this gap increased with age. The association between SES and T2DM was differed by gender.

Trial Registration: The Henan Rural Cohort Study has been registered at Chinese Clinical Trial Register (Registration number: ChiCTR-OOC-15006699). Date of registration: 06 July, 2015.

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Keywords: Socioeconomic status; Type 2 diabetes mellitus; Rural population; Gender-difference association