

Schizophrenia and education in Chinese metropolises: A population based study

Xiaoying Zheng and Yanan Luo

Peking University, China

Objective: Schizophrenia is a public concern in metropolises. Early intervention could significantly prevent schizophrenia and decrease its disease burden. To investigate the high-risk population of schizophrenia, this study investigated the relationship between education and schizophrenia of adults aged 18 years old and above in Chinese metropolises, and its differences between inner city areas and outer suburbs.

Methods: Data was obtained from the Second China National Sample Survey on Disability in 2006, and restricted our analysis to 175,832 participants aged 18 years or older in Beijing, Shanghai and Tianjin, which covered all counties (districts) in these three metropolises. Schizophrenia was ascertained according to the International Statistical Classification of Diseases, Tenth Revision. Logistics regression models was fitted to examine the associations between education and schizophrenia.

Results: The inverse U-shaped relationship between education and schizophrenia was found in inner city areas

of Chinese metropolises, with an odds ratio of 2.83(1.96, 4.08), 1.99(1.32, 3.00), and 0.51(0.30, 0.89) for junior high school, senior high school and college school and above, respectively. In outer suburbs, lower risk of schizophrenia was related to higher educational attainment, with odds ratios of 0.50(95%CI: 0.38, 0.66), 0.45(95%CI: 0.31, 0.64) and 0.17(95%CI: 0.08, 0.35) for junior high school, senior high school and college school and above.

Conclusions: This study showed an association between education and schizophrenia in Chinese metropolises. In inner city areas, there was an inverse U-shaped pattern of education and schizophrenia. While in suburb areas, that association was a linear decreased pattern. Our findings can help to detect the high-risk populations of schizophrenia in metropolises, especially in China with the incomplete medical treatment system. Action to prevent and early intervene schizophrenia will require attention to the socioeconomic disparities in metropolises and their difference between inner city areas and outer suburbs.

xzheng@pku.edu.cn