Association between commuting and mental health: a cross-sectional study in China

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Abstract

There is a controversy on the issue of whether there exists association between commuting and mental health. Hence, the aim of the study is to explore the mental health of Chinese occupational population and its association with commuting by cross-sectional study. Methods: 14195 participants were randomly recruited from 81 workplaces of seven industries (Manufacturing, Real Estate/Architecture, FMCG/Retail, Services, Computer/Internet, Finance, and Pharmacy/Medicine) in Beijing, Shanghai, Jiangsu Province, and Guangdong Province between August and September of 2018. E-questionnaires were sent to participants covering demographic information, time of daily commuting, and mental health. The World Health Organization Five-item Well-Being Index (WHO-5) was used to assess the mental health. The ANOVA, χ^2 test, univariate and multivariate linear regression were adopted to analyze the association. Results: The average score of WHO-5 was 14.6±5.9, and the overall rate of depression tendency was 34.8%. Male, young (30-39), low-educated, single/divorce/widowed, and low-income employees of Manufacturing, FMCG /Retail and Pharmacy/Medicine industries had lower WHO-5 score. 7.8% of commuters who spent more than 120 min/day had the lowest WHO-5 average score 13.4±6.0, and the rates of depression tendency for the commuters was more than the average rate of that by 26.4%, that is 44.0%. There was a strong association between commuting and mental health (P < 0.01). However, the adjusted R^2 for commuting was merely 0.006. Conclusions: The situation of mental health of Chinese employees was serious, so that workplace health promotion programs are needed to improve mental health of employees. The longer the time of commuting spent, the worse the mental health of commuters would be. However, the negative impact of commuting was limited. Treat commuting reasonably, less than an hour for one-way journey to work would be less harmful to mental health.

Image

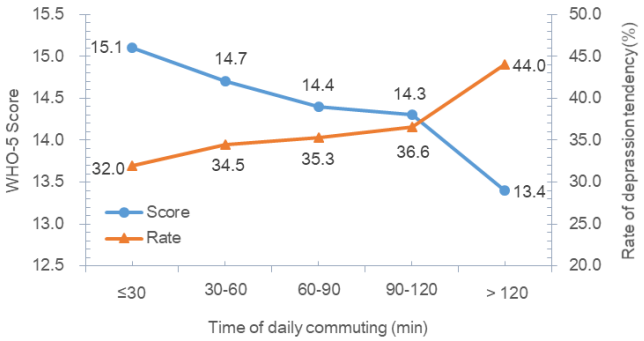


Figure.1 WHO-5 Score and rate of depression tendency by time of daily commuting

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