



Medical cost related to diabetes among middle-aged and elderly individuals living in China

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OBJECTIVES



The aim of this study was to determine the diabetes-related medical cost among middle-aged and elderly individuals living with diabetes in China.

CONCLUSIONS



Study findings suggested that the out-of-pocket payment for diabetes treatment and care remained high among middle-aged and elderly patients in China.

Addressing financial burden among middle-aged and elderly adults in China still warrants further research in the context of an aging population

METHODS



Date source

- This study used data from The China Health and Retirement Longitudinal Study (CHARLS) database, including baseline survey data in 2011, and follow-up data in 2013, 2015 and 2018. In 2011, 2013, 2015, and 2018, CHARLS successfully interviewed 17705, 18605, 21095 and 19816 people who met the age criterion of middle-aged and elderly people (≥ 45 years old).
- Study participants included middle-aged and elderly diabetic patients in CHARLS database. Diabetes was measured by self-reporting ever being "diagnosed by a doctor as having diabetes disease".

Measures & Analysis

- By this criterion, a total of 974, 822, 623, and 992 patients were identified from the database in 2011, 2013, 2015 and 2018 respectively. This led to prevalence rates of diabetes among middle-aged and elderly as 5.69%, 4.61%, 4.38%, and 5.24% in those four years.
- We performed descriptive analyses to assess the medical cost related to diabetes among middle-aged and elderly participants and characterized the cost before and after medicinal insurance reimbursement, respectively. Analyses were conducted using descriptive using Stata 16.

RESULTS



The average annual medical costs related to diabetes before insurance reimbursement were 1854.0 USD in 2011, 3143.7 USD in 2013, 2758.4 USD in 2015 and 2124.8 USD in 2018 (converted from Chinese Yuan using conversion rate of 1:6.37).

The average annual medical costs related to diabetes after insurance reimbursement were 1177.3 USD, 1697.4 USD, 2093.7 USD, and 1540.0 USD which were paid out-of-pocket by patients.

REFERENCES



1. Guo, J., Wu, Y., Deng, X., Liu, Z., Chen, L., & Huang, Y. (2021). Association between social determinants of health and direct economic burden on middle-aged and elderly individuals living with diabetes in China. *Plos One*, 16(4). doi:10.1371/journal.pone.0250200
2. Hu, H., Sawhney, M., Shi, L., Duan, S., Yu, Y., Wu, Z., . . . Dong, H. (2015). A Systematic Review of the Direct Economic Burden of Type 2 Diabetes in China. *Diabetes Therapy*, 6(1), 7-16. doi:10.1007/s13300-015-0096-0