

Changes in the health inequalities for diabetes among middle-aged and elderly people in China from 2011 to 2015

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BMC Health Services Research  BMC Series

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DOI:

10.21203/rs.2.16796/v1

SUBJECT AREAS

Health Policy

KEYWORDS

Diabetes, Concentration index, Decomposition, Income-related inequality

Abstract

Objective The purpose of this paper is to measure income-related health inequality among middle-aged and elderly patients with diabetes in China from 2011 to 2015 and to determine its causes.

Methods The data for this study were obtained from the China Health and Retirement Longitudinal Study that was carried out in 2011, 2013 and 2015. In total, 48519 Chinese middle-aged and elderly patients were included (15457 in 2011, 16576 in 2013 and 16486 in 2015). A principal component analysis was performed to measure asset-based economic status. The concentration index was used to measure income-related inequality in patients with diabetes. Additionally, we decomposed the concentration index to identify factors that explained wealth-related inequality in patients with diabetes.

Results The prevalence of self-reported diabetes among middle-aged and elderly Chinese adults was 5.61%, 7.49% and 8.99% in 2011, 2013 and 2015, respectively. The concentration indices and 95% confidence intervals for diabetes were 0.1359 (0.0525-0.0597), 0.1207 (0.0709-0.0789), 0.1021 (0.0855-0.0942) in 2011, 2013, and 2015, respectively, which are indicative of inequality that favors the rich. The decomposition of the concentration index showed that urban location (39.38%), BMI (31.16%), education level (7.28%), and region (6.09%) had positive contributions to the measured inequality in diabetes in China in 2015. Age (-29.93%) had a negative contribution to inequality.

Conclusions The findings confirm a health inequality in diabetes that favor the rich. Furthermore, the inequality declined from 2011 to 2015. We suggest that policy and intervention strategies should be developed to alleviate this health inequality, such as establishing an integrated urban-rural medical insurance scheme and promoting health education programs.

Full-text

Due to technical limitations, full-text HTML conversion of this manuscript could not be completed.

However, the manuscript can be downloaded and accessed as a PDF.

Figures

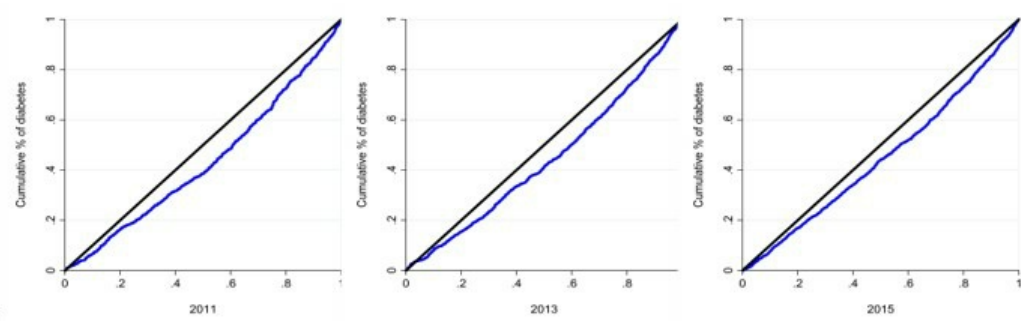


Figure 1 Concentration curves, 2011–2015.

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Concentration curves, 2011-2015.