

Comparing the mortality from respiratory disease between urban and rural areas in China: A retrospective study

Tao Li, MD Li-Wu Chen, MHSA, Ph.D.

Department of Health Services Research & Administration, College of Public Health, University of Nebraska Medical Center

Background

Respiratory disease is the fourth leading cause of death in urban China (mortality rate of 80 per 100,000 population). It remains the first leading cause of death in rural China (mortality rate of 150 per 100,000 population).

The study discuses the significant healthcare disparities between urban and rural areas and between males and females by analyzing the mortality of respiratory disease from 1990 to 2008.

Methods

Aggregate mortality rate data from 1990 to 2008 was obtained from public database of the Ministry of Health of China. Paired t-test was used for statistical comparisons. PASW Statistics 18 software was used for all statistical analysis.

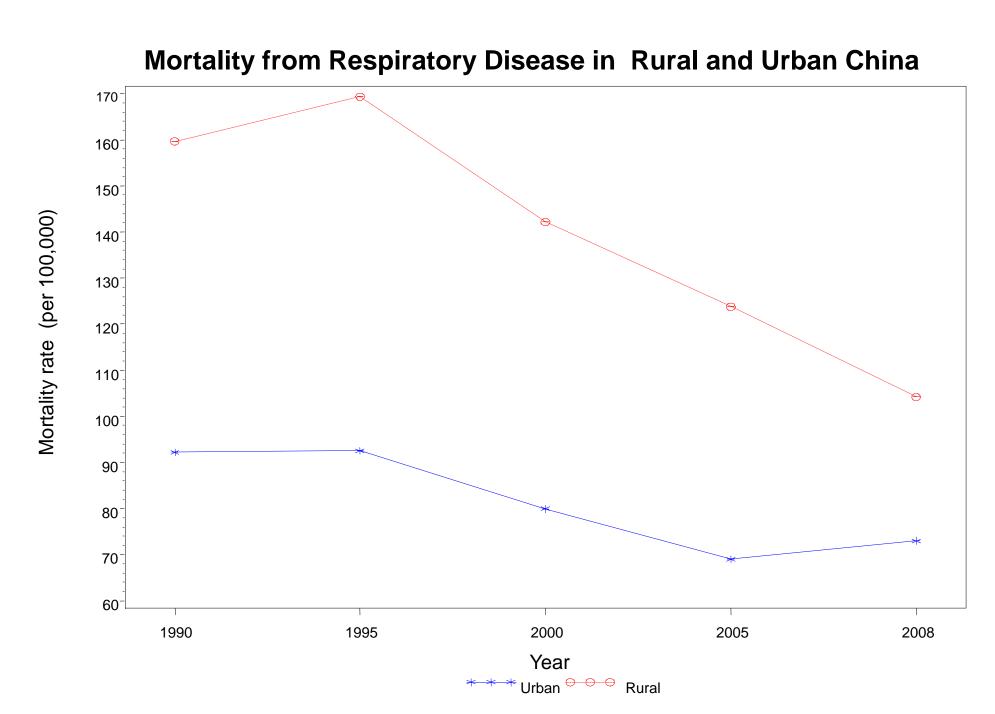
Results

The total mortality rate from respiratory disease significantly differs between urban and rural areas (p=.0016). There is no significant difference in mortality for male and female residents (p=0.078).

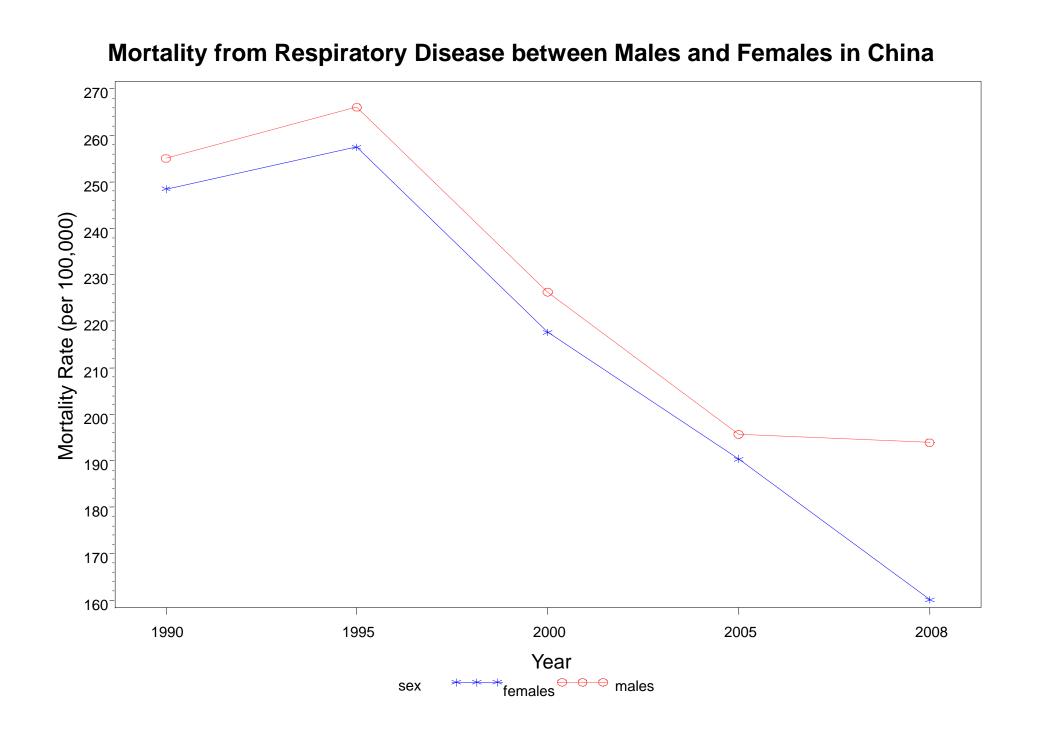
The difference is marginally significant between males and females in urban areas (p=.046), while it is not significant in rural areas (p=.45).

The mortality among males differs between urban and rural (p = 0.003). There is also a significant difference in mortality for females in rural versus urban areas (p<0.001).

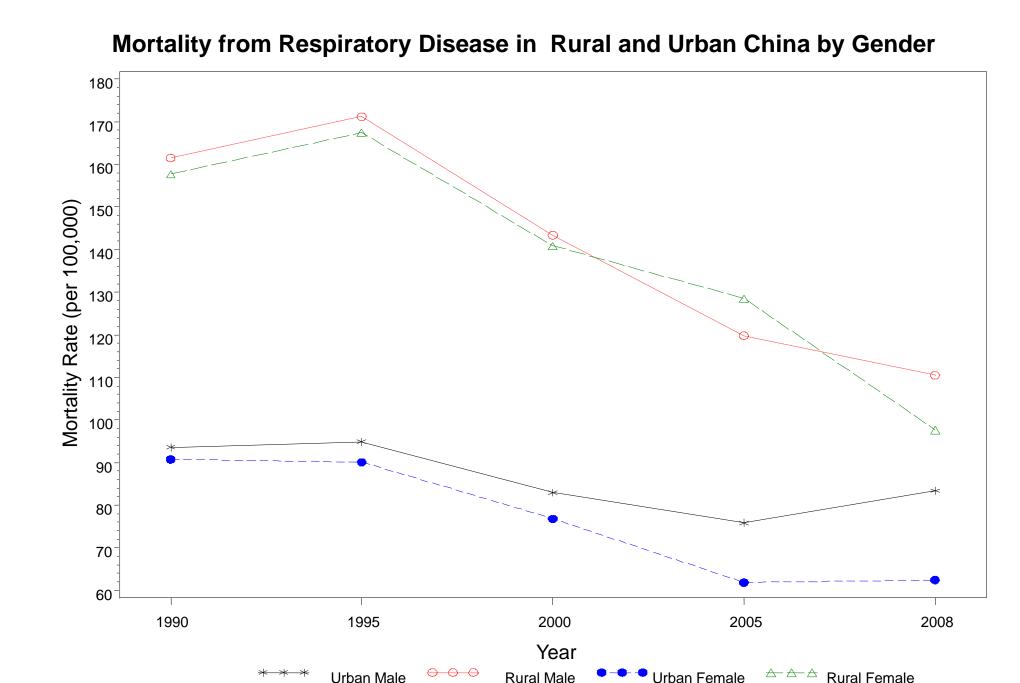
Respiratory Disease Mortality in Rural and Urban China



Respiratory Disease Mortality in China by Gender



Respiratory Disease Mortality in Rural and Urban China by Gender



Conclusion & Policy Implication

There is a significant health disparity between urban and rural areas in China. The mortality of respiratory disease for males and females in rural areas are significantly different from those in urban areas. A marginally significant disparity also exists between males and females in urban area. Efforts should still be made to narrow these disparities.

Mortality of Pulmonary Tuberculosis was not included in this study. It will be interesting to take it into account in future study.

Acknowledgements: I wish to thank Dr.Li-Wu Chen, Dr. Audrey Paulman, Dr.Paul Paulman, and Bettye Apenteng, for their great help.

Contact: Tao Li, M.D.

Email: tli@unmc.edu Phone: (402)619-8593

PUBLIC HEALTH