



The Urban-Rural Gap in Under-5 Mortality Rate Narrowed in China, 1991-2019

Lu Chen, *Zengwu Wang

Division of Prevention and Community Health, Fuwai Hospital, Peking Union Medical College & Chinese Academy of Medical Sciences, Beijing 102308, China

*Corresponding Author: Email: wangzengwu@foxmail.com

(Received 14 Feb 2021; accepted 25 Feb 2021)

Dear Editor-in-Chief

Child mortality is an important indicator to evaluate the health and economic level of a country. The United Nations Sustainable Development Goal 3 proposed eliminating preventable deaths in newborns and children under five by 2030 (1). By now, China has achieved Millennium Development Goal 4, which aimed to reduce under-5

mortality rate by two-thirds between 1990 and 2015 (2).

With a steadily decreasing trend in under-5 mortality rate in China from 1991 to 2019 (Fig. 1) it was also observed that the under-5 mortality rate in rural areas was 3.4 times ($71.1/20.9=3.4$) that in urban areas in 1991, and it was 2.3 times ($9.4/4.1=2.3$) in 2019.

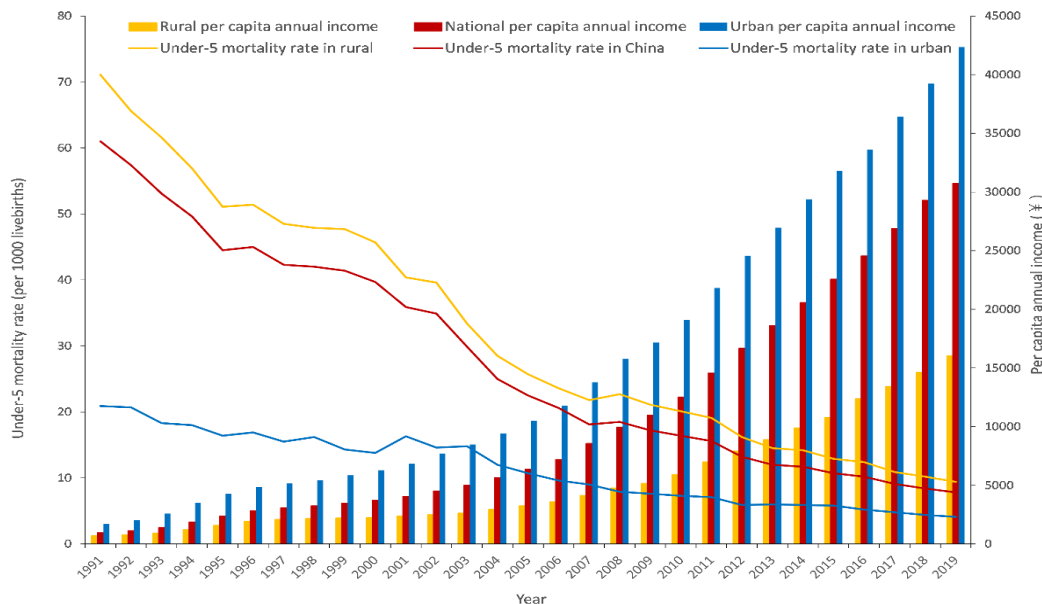


Fig. 1: Mortality rate in children younger than 5 years and per capita annual income in China. Data source: China Health Statistics Yearbook, 2020; China Statistical Yearbook, 2020



Copyright © 2021 Chen et al. Published by Tehran University of Medical Sciences. This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International license (<https://creativecommons.org/licenses/by-nc/4.0/>). Non-commercial uses of the work are permitted, provided the original work is properly cited.

The gap of the mortality between urban and rural is gradually reducing, although during this period, the disparity between urban and rural per capita annual income has become larger. The per capita annual income of urban residents was 2.3 times (1,701/709=2.3) that in rural areas in 1991, and 2.6 times (42,359/16,021=2.6) in 2019 (Fig. 1). Over the past three decades, the Chinese government has implemented many measures to improve the health of children. The Chinese Birth Defects Monitoring Network and National Death Surveillance Network for Under-5 Children were established in 1986 and 1991, respectively. The Basic Public Health Service Equalization project was launched in 1999, which aimed to achieve the equalization of public health services and improve the quality of life of all urban and rural residents(3). In 2009, the Reducing Maternal Mortality and Eliminating Neonatal Tetanus program was launched to improve hospital delivery rates, eliminate tetanus in children, and train pediatricians(4). Meantime, China has established the basic medical insurance care system covering both urban and rural populations, including the Urban Employees Basic Medical Insurance launched in 1999, the New Cooperative Medical Scheme launched in 2003, and the Urban Residents Basic Medical Insurance launched in 2007(5). By the end of 2019, the coverage rate of basic medical insurance in China has reached more than 95%. The 2019 China Health Statistics Yearbook reported that the percentage of out-of-pocket health expenditure in total health expenditure was 37.5% in 1991, and decreased to 28.4% in 2019. All above is helpful to reduce the mortality of under 5 children, as well as the disparity between urban and rural, during the past three decades.

In order to further reduce the urban-rural gap in under-5 mortality rate, accelerate the reduction of under-5 mortality rate, and achieve the Sustainable Development Goal 3, the Chinese Govern-

ment should adopt more effective interventions to reduce premature birth, low birth weight, pneumonia, birth asphyxia, congenital heart disease, and drowning. Enough attention should be paid to children's health in rural areas. The public health system, the skills of medical personnel, and the health awareness of the population should continue to be improved. It is necessary to promote the rational allocation of resources to improve further children's health care.

Competing interests

The authors of this paper indicated no competing interest.

References

1. Nabyonga-Orem J (2017). Monitoring Sustainable Development Goal 3: how ready are the health information systems in low-income and middle-income countries? *BMJ Glob Health*, 2:e000433.
2. You D, Hug L, Ejdemyr S, et al (2015). Global, regional, and national levels and trends in under-5 mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Inter-agency Group for Child Mortality Estimation. *Lancet*, 386:2275-86.
3. Yang L, Sun L, Wen L, Zhang H, Li C, Hanson K, Fang H (2016). Financing strategies to improve essential public health equalization and its effects in China. *Int J Equity Health*, 15:194.
4. Chen P, Li M, Zhu J, et al (2020). Provincial-level outcomes of China's 'Reducing maternal mortality and eliminating neonatal tetanus' program. *Sci Rep*, 10:13328.
5. Sun Y, Gregersen H, Yuan W (2017). Chinese health care system and clinical epidemiology. *Clin Epidemiol*, 9:167-178.