

Editorial



What Regional Disparity Trends of Cardiovascular Mortality Have Changed in 2019 Compared to the 1980s?

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In 2019, the death rate from all causes after age-standardization in Korea was 595.1 per 100,000 persons. This is the ninth lowest among the Organization for Economic Cooperation and Development (OECD) countries, and the country with the largest mortality rate decrease was Korea, which decreased from 1075.6 per 100,000 persons to 44.7% in 2001.¹⁾

Cardiovascular disease (CVD) is the leading cause of death worldwide, accounting for nearly one-third of all deaths.²⁾ The same is true of South Korea, where heart disease has been the leading cause of death for nearly a decade.³⁾ Since a significant portion of CVD is preventable, the importance of adequate prevention strategies has long been emphasized.⁴⁾ To implement these strategies and consequently reduce the burden of CVD, the magnitude and temporal trends of mortality, morbidity, and risk factors for CVD must be clearly identified.⁵⁾ However, it is encouraging that in developed countries including the West, CVD mortality is decreasing due to the improvement of CVD treatment and prevention and related risk factors. In Korea, population-level cardiovascular risk factors significantly decreased, and even after acute myocardial infarction, the mortality rate significantly decreased due to the rapid development of therapeutics for CVDs.⁵⁾ Previous studies also have reported that factors related to mortality reduction include the establishment of the national health insurance system on public health centers in Korea.^{3,6)} Insurance coverage has been continuously expanding since 1989, when the national insurance system was started for all people in Korea. The policy is in the direction of reducing the burden of personal medical expenses due to non-reimbursable services and severe illness, which improves the approach to medical care and reduces cardiovascular mortality.⁷⁾ Key drivers of this change include improving quality of primary care, strengthening provider capacity, strengthening tobacco control policies, and active use of essential drugs for treatment and prevention.⁸⁾

However, geographic disparities in cardiovascular health are longstanding and pervasive in the world.⁹⁾ Current data on national and regional trends in cardiovascular risk factors, health behaviors and other risk factors in Korea are limited. It is also unclear how these geographic trends in cardiovascular risk factors and disease are related to cardiovascular mortality at the regional level. When combined with existing geographic differences in CVD and

Data Sharing Statement

The data generated in this study are available from the corresponding author upon reasonable request.

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cardiovascular care delivery, cardiovascular mortality may be more affected in some regions than in others. Thus, assessment of these important trends in cardiovascular health can guide resource utilization, public health planning, and risk factor control.

The issue that Kim et al.¹⁰⁾ reported is a valuable study. In this issue, the authors found that a decline in cardiovascular mortality was experienced across all regions in Korea for 36 years. The regional disparity had substantially decreased compared to the 1980s. These changes may reflect improvements in emergency services, the expansion of referral networks, the development of CVD care centers, and the implementation of time-to-procedure metric. However, the relatively high burden of Busan, Ulsan, and Gyeongnam has not been resolved so far in this study.

In Korea, several studies have been conducted on the regional distribution or disparity in the avoidable mortality rate.⁴⁾⁵⁾ And previous study reported that Korea, which experienced rapid growth, experienced disproportionate regional development, particularly between the metropolitan and non-metropolitan areas for decades, and reported an unbalanced distribution of medical resources between the metropolitan area and non-metropolitan areas with no improvement. In addition, the level of health behaviors such as smoking rate and the risk of chronic diseases such as obesity were high in non-metropolitan areas.¹⁾ To address these issues, universal health coverage has been established and local public health policies have been strengthened over the past 30 years.³⁾ However, despite policy efforts to alleviate regional imbalances, its effectiveness is still unclear.

Despite several studies, there are insufficient research results that can be used as a basis for health policy to evaluate regional disparities by measuring the mortality rate that health policy can have a direct impact on. Therefore, studies such as Kim et al.¹⁰⁾ on health inequality between regions of cardiovascular death can be used as a valuable basis for establishing and implementing intervention policies to address regional health inequalities.

Furthermore, larger and more comprehensive studies are needed to clarify the scope of a reliable strategy and technique for which health care system in Korea can be improved without regional disparity.

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