

MORTALITY AND HEALTH CARE UTILIZATION TRENDS OF CARDIOVASCULAR DISEASES:

COMPARING HUNGARY TO OECD AVERAGE

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OBJECTIVES

Incidence and prevalence of chronic diseases are ever-increasing, responsible for QoL deterioration, disability, and even premature mortality. Cardiovascular diseases (CVDs) are among the leading causes of mortality in Hungary. Our aim was to assess mortality and health care utilization trends related to CVDs in Hungary and comparing them to OECD average.

METHODS

We conducted a quantitative, retrospective study using data derived from OECD Health Statistics database. The following indicators were selected for analysis: cardiovascular deaths between 2000-2019, and related hospital discharges between 2004-2019 (standardised, per 100,000 population). OECD average was calculated based on countries who reported data in each year. Besides descriptive statistics, joinpoint regression method was used. Changes in trend were assessed with the annual percent change (APC) ($p < 0.05$). JoinPoint 4.9.0.0 software was used for calculating results.

RESULTS

CVD mortality in Hungary (803.50/100,000) was 1,71 times higher than OECD average (467.89/100,000) in 2000. By 2019, it decreased to 543.40/100,000 in Hungary, which was still above OECD average in that year (340.92/100,000). Hungary showed a continuous decreasing trend in mortality, but of different slopes; however, it became significant after 2008 (APC₂₀₀₈₋₂₀₁₉: -1.25; $p < 0.05$). The OECD average decreased as well, but it has started to increase after 2017 (APC₂₀₁₇₋₂₀₁₉: 10.42; $p < 0.05$). Discharges linked to CVDs in Hungary (4,472.20/100,000) were more than double of the OECD average (2,082.11/100,000) in 2004. By 2019, it decreased to 3,049.90/100,000 in Hungary, which was still higher than OECD average (1,829.02/100,000). Similarly, the number of discharged patients showed a continuous decreasing trend in Hungary (APC₂₀₀₄₋₂₀₀₇: -5,04; $p < 0.05$), APC₂₀₀₇₋₂₀₁₉: -2,17; $p < 0.05$).

CONCLUSIONS

We found great differences between Hungary and OECD average regarding the above-mentioned indicators. Reducing the occurrence of preventable diseases is of great importance for health policy, as CVD treatment results in a significant surplus of expenditure and burden for the society.

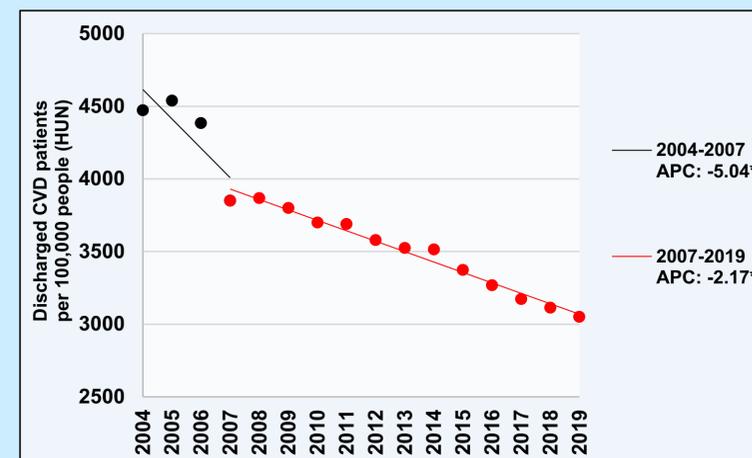


Figure 1. Number of discharged CVD patients per 100,000 people between 2004-2019 (Hungary)

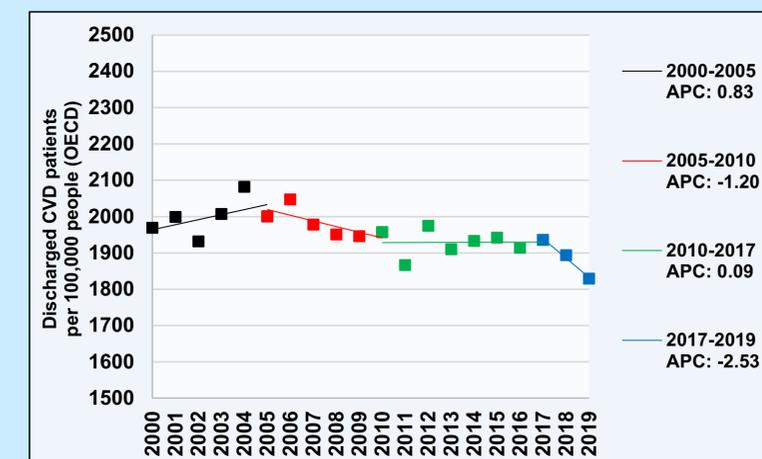


Figure 2. Number of discharged CVD patients per 100,000 people between 2000-2019 (OECD average)

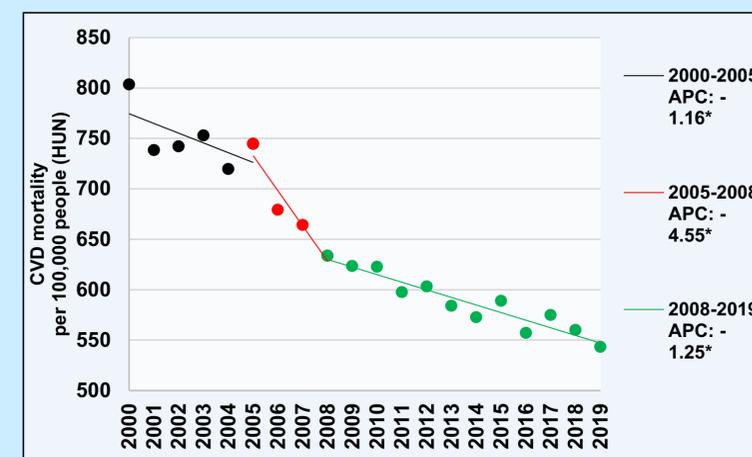


Figure 3. CVD mortality per 100,000 people between 2000-2019 (Hungary)

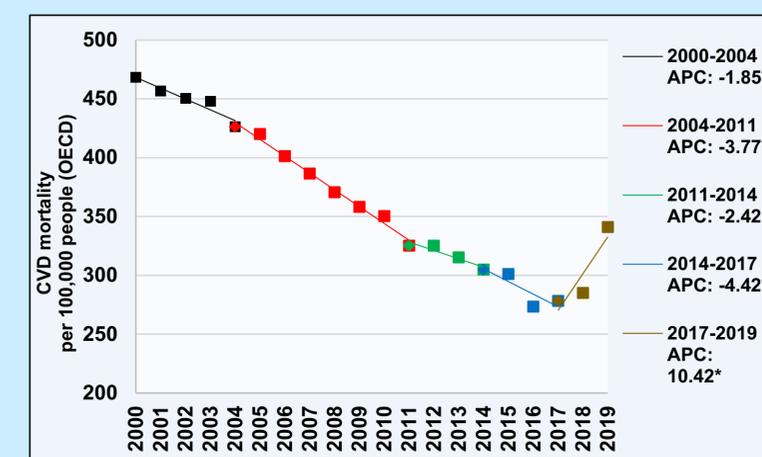


Figure 4. CVD mortality per 100,000 people between 2000-2019 (OECD average)

* Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

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