

## Variations in cardiovascular disease outcomes across Europe

### Tackling cardiovascular health inequalities in European countries

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Data on life expectancy at birth for both men and women show substantial differences between European countries. Countries in Eastern Europe have a much lower life expectancy compared with the rest of Europe. Considering the 2008–2017 averages, there was a difference of almost 9 years between the countries with the lowest and highest life expectancy: 73.9 years in Latvia compared to 82.7 years in Spain.<sup>1</sup> Cardiovascular disease (CVD) is one of the leading causes of death in Europe where it is responsible for approximately 4 million deaths yearly (about 45% of the total deaths). Reducing the rates of CVD means increasing overall survival in Europe. Reducing cardiovascular health inequalities fundamentally means “increasing the power among people with the most limited possibilities of controlling and influencing their own life and society”.<sup>2</sup>

No country in the world can yet say they have achieved cardiovascular health equality among their citizens. In response to the increased recognition of disadvantaged and marginalized care in many CVD populations, a number of international agencies, such as the United Nations and the World Health Organization (WHO) outlined the vision of a “one-size-fits-all” approach to promote cardiovascular health and reduce the burden of cardiovascular disease.<sup>3</sup> Sadly, many of the disparities they wanted to tackle are still a reality today. Large gaps in the knowledge of and care for CVD in disadvantaged communities persist. So, the central question still remains: what can be done about these inequalities in health?

The Lancet Regional Europe has convened a Series of four articles that surveyed the available data on the prevalence of cardiovascular health inequalities at regional levels, providing an overview of gaps in the data and identifying the most attainable goals for achieving a

significant reduction in mortality from CVD.<sup>4–7</sup> With this work, the vision of cardiovascular health and its inequalities turns to a more pragmatic approach, which includes local realities and specific population-based approaches. Conducting regional health equity assessments can help identify the root causes of inequalities in specific geographical areas, such as socioeconomic factors, access to healthcare, and environmental conditions. This information can guide the development of targeted interventions.

Standardized mortality rates for CVD range from approximately 200 deaths per 100,000 inhabitants in France, to around 1100 per 100,000 in Bulgaria.<sup>8</sup> There is a 13-fold difference in female death rates from heart disease (32 deaths versus 429 per 100,000 women) and a 9-fold difference in male death rates from heart disease (77 deaths versus 700 per 100,000 men) between France and Lithuania. The factors that give rise to, and exacerbate, disparities in cardiovascular health among different geographic areas or even within different regions in a well-defined geographic area are complex and interlinked. Studies that explored socioeconomic differentials in cardiovascular mortality in Europe showed substantial differences among various European regions. In the 1990s, a number of studies reported a North–South gradient for CVD mortality with larger relative inequalities in Northern than in Southern European countries.<sup>9</sup> This North–South gap was mainly driven by differences in mortality from ischemic heart disease (IHD), whereas the remaining causes of CVD did not show clear geographical patterns. More recent studies added to the evidence on geographic differences and confirmed that countries differ vastly in the burden and in the magnitude of cardiovascular mortality with Southern Europe having the smallest rates and Central-Eastern and Baltic European countries having the largest ones. The reasons of such disparities are largely unknown.

The role of deficiencies in access to health care leading to inequalities in survival may not completely explain the above reported disparities. For example, the countries of Southern Europe have welfare policies that are less costly and less universal than those of northern Europe, but they appear to have substantially smaller inequalities in mortality, which, perhaps may be partly due to behavioral factors such as healthy eating (the Mediterranean diet) or the reluctance of women to initiate smoking. There is also

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evidence for inequalities in cardiovascular health in the northern European countries. This is surprising, because these countries have long histories of welfare policies providing a high level of social-security protection. These data, therefore, suggest that a high level of social protection and affordable access to health care is a necessary, but not a sufficient condition to combat discrimination. Lifestyle-related risk factors appear to contribute to the persistence of inequalities also in high-income countries.

The Series on Variations in Cardiovascular Disease Outcomes across Europe provides new analysis and insights on the most feasible actions to reduce the risk for CVD in disadvantaged, vulnerable and marginalized social groups, with a specific emphasis on people living in low-income and middle-income geographic areas who are at highest risk of adverse outcomes. Strategies that European countries should consider to tackle cardiovascular health inequalities may quantitatively differ, but may necessarily include: data collection and surveillance, promotion of healthy lifestyles, improving access to healthcare, early detection and screening of CVD, community engagement in the design of health interventions, and research and innovation. This requires not only setting targets and benchmarks but also ensuring robust mechanisms for monitoring, evaluation, and accountability to track progress and identify areas that need further attention. This requires also ensuring enhanced representation and voice for low- and middle-income countries in decision-making in global international economic and financial institutions

according to the 2030 Agenda for Sustainable Development and the Universal Health Coverage.

#### Declaration of interests

Nothing to declare.

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