Heart failure in low-income and middle-income countries: failing REPORT card grades

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Heart failure is an important global health problem, and the associated public health and economic effect is increasing across all societies and geographies. Epidemiological studies[1] have estimated that there are more than 25 million patients with heart failure globally, and population-based studies[2] from North America and Europe have estimated that 1–2% of people are living with heart failure. Factors such as ageing and expanding populations have contributed to increasing hospital admissions for heart failure.

Over the past few years, numerous registries have increased our understanding of heart failure epidemiology, practise patterns, and outcomes from across the globe. The study by Jasper Tromp and colleagues from REPORT-HF registry, published in *The Lancet Global Health*,[3] fills a gap in the epidemiological data on long-term outcomes for patients admitted to hospital for heart failure. This registry of 18 102 patients from 358 centres in 44 countries recruited patients between 2014 and 2017, represents a more contemporary cohort.

The authors report a significant interaction between heart failure mortality and geography as well as income inequality among patients with heart failure with reduced ejection fraction (HFrEF). Despite being younger and having fewer comorbidities, patients in low-income and middle-income countries (LMICs) had a higher mortality and were more likely to fail to be prescribed guideline-directed medical therapy (GDMT). Even among patients with heart failure with preserved ejection fraction (HFpEF), patients in LMICs had mortality rates that were similar to high-income countries in spite of a favourable risk factor profile. Mortality rates in real-world practice in these countries could be potentially worse, as has been documented in some studies.[4]

Although these differences in clinical outcomes and practice patterns in LMICs might not be surprising, the authors also report a lower mortality in some countries with low GDP than would be expected. Even though this study documents the problem of poor clinical outcomes in LMICs, it leaves open the potential reasons for this disparity. Many LMICs are lacking dedicated heart failure practices and programmes that can effectively implement graded care to improve patient outcomes. Low literacy levels further compound the problem in health-care delivery in LMICs. Developing and strengthening national programmes for cardiovascular diseases could potentially address some of these shortcomings in such regions and play an important part in health-system improvement.

Significant heterogeneity exists in the causes and associated comorbidities in the patients with heart failure across various economic regions, although its generalisability warrants caution because of small samples from some countries. The reported decline in prevalence of valvular heart disease in LMICs is encouraging, but needs corroboration from other studies. The extremely low in-hospital mortality is also striking, and might be due to potential recruitment bias. Tromp and colleagues have not reported on use of other heart failure therapies such as digoxin, angiotensin receptor neprilysin inhibitors, and device-based care within these geographies.

This study reinforces the potential health-care benefits that can accrue from a strategy of implementing relatively simple measures such as delivery of appropriate GDMT. This should serve as an important message to professional bodies, health administrators, and policy makers to delve deep to identify potential barriers, and design strategies to improve physician and institutional practices for heart failure.

We declare no competing interests.

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