6 Billion People Have No Access to Safe, Timely, and Affordable Cardiac Surgical CareOpen Access

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Background

Six billion people lack access to safe, timely, and affordable cardiac surgical care when needed. Nevertheless, cardiovascular diseases are the leading cause of morbidity and mortality, and an estimated one-third of this burden will require surgical or interventional care. This is exacerbated by the epidemiological transition away from communicable diseases and toward noncommunicable diseases: Ischemic heart disease affects younger populations in low- and middle-income countries (LMICs) compared to high-income countries (HICs), at ages when adults are their families' primary caregivers and greatly contribute to their countries' socioeconomic growth. Rheumatic heart disease is a disease of poverty affecting 30 to 40 million people worldwide, a number anticipated to only be the tip of the iceberg. Congenital heart disease is the most common major congenital anomaly with a relatively stable incidence worldwide, affecting 1 in every 100 live births. LMICs are estimated to reach over 2 billion children by 2050, projecting enormous burdens of congenital and rheumatic heart disease. In addition, neglected diseases among the world's poorest populations, such as endomyocardial fibrosis and Chagas cardiomyopathy, present unique cardiac surgical challenges that remain poorly understood.

Access to cardiac surgery requires accessibility, capacity, quality, affordability, and acceptability. A lack of political prioritization, government spending on health care, and misconceptions regarding cardiac surgical care delivery have impeded global cardiac surgery scale-up. The cardiac surgical workforce, including nonsurgical members of heart teams, remains a notable rate-limiting factor: Qualified, multidisciplinary human resources for health care are indispensable to ensuring access and optimizing patient outcomes. Nevertheless, the long training pathways and diversity of heart teams severely limit cardiovascular care delivery worldwide and prevent rapid scaling of the global workforce.