Promoting Cardiovascular Health in the Developing World
A Critical Challenge to Achieve Global Health

Cardiovascular disease (CVD), once thought to be confined primarily to industrialized nations, has emerged as a major health threat in developing countries. Cardiovascular disease—especially coronary heart disease and stroke—now accounts for nearly 30 percent of deaths in low and middle income countries each year and is accompanied by significant economic repercussions. Yet most governments, global health institutions, and development agencies have largely overlooked CVD as they have invested in health in developing countries.

The risk factors for CVD are well known, and the actions needed are deceptively simple: eat a healthy diet, be physically active, avoid tobacco, and seek health care regularly. However, the reality is much more complex. Behavior change is difficult, individual choices are influenced by broader social and environmental factors, and many people do not have the resources for or access to appropriate health care. It also can be difficult for governments and other organizations to promote these actions. Many health and development priorities compete for scarce resources, and implementation capacity for policies, programs, and health services is often inadequate. Context is also critical—strategies that have worked in one setting may not work in another.

Recognizing the gap between the compelling evidence of the global CVD burden and the investment needed to prevent and control CVD, the National Heart, Lung, and Blood Institute (NHLBI) turned to the Institute of Medicine (IOM) for advice on how to catalyze change. The IOM convened a committee to assess current knowledge and strategies and recommend promising ways to reduce the global burden of CVD.
The committee’s report is intended foremost as a guide for the NHLBI to set goals and priorities for its investments in global CVD, including strategic partnerships with other U.S. government agencies and international stakeholders. More broadly, the report identifies ways in which the global health agenda can evolve to be more inclusive of chronic diseases, including CVD.

One primary goal in meeting the challenges of CVD in the developing world is to create environments that promote heart healthy lifestyle choices and help reduce the risk of chronic diseases. An equally important goal is to build public health infrastructure and health systems with the capacity to implement programs that will effectively detect and reduce risk and manage CVD. The report identifies a set of “essential functions” that will be required to meet these goals. Successfully carrying out these functions, described below, will require resources—financial, technical, and human—and the combined efforts of multiple players sustained over many years.

**Exercising Leadership and Advocacy for Chronic Diseases**

Multilateral and bilateral development agencies should take a lead role in recognizing the critical health issue of chronic diseases—including CVD—by explicitly identifying these diseases as an area of focus for technical assistance, capacity building, program implementation, funding, and other areas of activity. Leading nongovernmental organizations (NGOs) and professional societies focused on chronic diseases should align their efforts to advocate for government and private donor support.

National governments and other health and development stakeholders face many challenges when allocating scarce resources. Investments can be maximized by aligning chronic disease needs with existing global health efforts to strengthen health systems, promote the health of mothers and children, and find sustainable solutions for infectious diseases that require long-term care such as tuberculosis and HIV/AIDS.

**Building Evidence-Based and Locally Relevant Solutions**

Based on local priorities, national and subnational governments (such as provincial, district, or city) should introduce or expand policies to promote cardiovascular health and reduce risk for CVD. These policies could include laws, regulations, and incentives. Efforts to introduce policies should be accompanied by sustained health communication campaigns focused on the same priorities.

In planning their approach to reduce the impact of CVD, stakeholders will need to carefully assess the needs of the target population, the state of current efforts, the available capacity and infrastructure, and the political will to support action.

Improved population data are crucial to compel action, inform local priorities, and measure the impact of implemented policies and programs. Therefore, governments should improve health surveillance systems to monitor chronic diseases more effectively.

Although feasibility may vary across countries, the available evidence suggests that substantial progress in reducing CVD can be made in the short term by prioritizing strategies to reduce tobacco use, reduce salt consumption, and improve delivery of clinical prevention in high-risk patients. However, real work lies ahead to successfully adapt and implement these approaches in low and middle income countries and to strengthen the knowledge base to inform other promising strategies in the longer term. Policymakers, researchers, and program implementers at both the global and local levels need to build on the knowledge derived from existing best practices for CVD in developed countries and from successful implementation experiences in other areas of global health.
Assessing What Works and Disseminating Innovation

Efforts to address CVD are underway in many developing countries, but evaluation and reporting of these programs and policies is insufficient. The NHLBI and its partners in the newly-created Global Alliance for Chronic Disease, along with other research funders and bilateral public health agencies, should prioritize research to determine what interventions will be most effective and feasible to implement in low and middle income countries. Using appropriate evaluation methodologies, this implementation research should be conducted in partnership with local governments, NGOs, researchers, and communities.

There also are inadequate systematic mechanisms in place for sharing what has worked. Various regional organizations should continue and expand dissemination of information about successful intervention approaches and reporting on CVD trends. The goal should be to maximize communication and coordination among countries with similar epidemics, resources, and cultures in order to encourage and standardize evaluation, help determine locally appropriate best practices, encourage innovation, and promote dissemination of knowledge.

Promoting Solutions through Collaboration

Progress in controlling CVD requires that key players better coordinate their efforts and take decisive action together. Successful partnerships should include a clear articulation of roles, agreement on targets, and transparent monitoring. This can include collaboration with the private sector if conducted on public health terms. For example, the World Health Organization, the World Heart Federation, the International Food and Beverage Association, and the World Economic Forum, in conjunction with select international NGOs and national governments, should coordinate an international effort to develop strategies to reduce dietary intake of salt, sugar, saturated fats, and trans fats. This process should include the public health community and multinational food corporations as well as the food services industry and retailers. It also should take into account the challenges of regulating local food production and sales.

Collaboration also is needed to ensure equitable access to affordable diagnostics, essential medicines, and other preventive and treatment interventions for CVD. This process should involve multilateral and bilateral development agencies; CVD-related professional societies; public and private payers; pharmaceutical, medical technology, and information technology companies;
and experts on health care systems and financing. Attention should be given to ensuring appropriate, rational use of these technologies.

**Working Toward Global Progress**

Although national and regional actions will be the foundation for successful efforts to reduce the burden of CVD, some global coordination and monitoring is also critical. To accomplish this, the World Health Organization should produce a report every other year that objectively tracks progress in the global effort against CVD. The reporting process should be designed not only for global monitoring but also for building capacity and supporting planning and evaluation at the national level in low and middle income countries.

**Conclusion**

Ultimately, reducing the burden of CVD worldwide, and particularly in developing countries, is an achievable goal. It will require collaboration among stakeholders based on clearly defined goals. Rather than competing against other global health and development priorities, the CVD community needs to engage policy makers and global health colleagues to integrate attention to CVD and related chronic diseases within existing global health missions and efforts. Without better efforts to promote cardiovascular health, global health as a whole will be undermined.