

The Millennium Development Goals and Cardiovascular Disease

Cardiovascular disease is the leading cause of death worldwide despite the fact that the majority of cardiovascular disease deaths are preventable or treatable – the time to act is now!



GOALS AND TARGETS from the Millennium Declaration

CARDIOVASCULAR DISEASE AND THE MDGs

1 ERADICATE EXTREME POVERTY AND HUNGER

Target 1A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

Target 1B: Achieve employment for women, men and young people

Target 1C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

Cardiovascular disease (CVD) is a poverty issue: Poverty plays a role both as a risk factor and as a consequence of CVD. Global CVD deaths have increased to 17.1 million, over 80% of which take place in low-and middle-income countries. Today, CVD is the largest single contributor to global mortality and estimates indicate that nearly 23.6 million people will die from CVD by 2030. The sheer magnitude of this disease and the far reaching damage it inflicts on individuals, families and communities threatens to reverse development (MDG) gains made worldwide.

CVD affects the most vulnerable: Unhealthy diet, tobacco use and physical inactivity are the major contributors to CVD, which is increasingly affecting the poor. Studies in Brazil have shown that the prevalence of hypertension was 30 to 130% higher among the less educated, those with the lowest income and Afro-Brazilians.

CVD and its related risks are becoming diseases of the poor: CVD is one of the few diseases that increases global health inequalities and places increased strain on already overburdened families. The high cost of treatment can lead to lost employment opportunities as well as lost economic and social opportunities for young adults and women specifically.

The economic impact of CVD places a significant burden on a country's development prospects and therefore their ability to provide basic necessities: Studies estimate that US\$84 billion of economic production will be lost due to heart disease, stroke and diabetes in 23 high burden developing countries between 2006 and 2015.

2 ACHIEVE UNIVERSAL PRIMARY EDUCATION

Target 2: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

CVD and education are linked: The harmful lifestyle behaviours related to CVD risk have a dramatic impact on a child's access to education and their social well being. In India, studies have shown that households that consumed tobacco had lower spending on education.

CVD limits education: CVD events can result in catastrophic health costs forcing parents to reduce basic consumption. Often this translates into children being withdrawn from school to assist in care giving or to enter into the workforce. In China, out of pocket expenses from stroke pushed 37% of patients and their families below the poverty line; 62% without insurance went into poverty.

3 PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

Target 3: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

CVD is the number one killer of women: Gender biases in power, resources, culture and the organization of services negatively impacts the nutrition and overall health of females. Evidence shows that investing in girls achieves a range of health and socio-economic development goals, thereby improving the prospects and health of the whole family. CVD-related illness of a loved one can deter young women from accessing this needed education, because it results in them either becoming the main caregiver and taking over the mother's responsibilities in the home, or them entering into the labour market for additional income.

Women & girls are key agents of prevention: Women, as mothers, educators, healthcare providers and gatekeepers of household nutrition and lifestyle patterns, need to be at the forefront of the fight against CVD.

4 REDUCE CHILD MORTALITY

Target 4: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate

Limited access to healthy lifestyle choices leads to child deaths: Nutrition related factors are responsible for over 35% of child deaths. One third of all child deaths occur within the first 28 days of life. Women who smoke during pregnancy increase the child's risk of dying within the first week. Basic health interventions that educate people on healthy lifestyle choices can be effective in reducing mortality rates, improving child health, and reducing the risk factors associated with CVD.

Maternal smoking dramatically increases a child's risk of congenital heart disease: Compared with the infants of mothers who did not smoke during pregnancy, infants of mothers who were heavy smokers (25 or more cigarettes daily) were twice as likely to have a birth defect of the heart.

5 IMPROVE MATERNAL HEALTH

Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality rate

Target 5B: Achieve universal access to reproductive health by 2015

Smoking, a high risk factor for CVD, greatly increases the chance of complications during pregnancy for women: Studies suggest that women who smoke during their pregnancy increase their risk of pregnancy complications such as foetal death, miscarriage, ectopic pregnancy and placenta previa, all of which can be fatal.

Behavioural factors associated with CVD negatively affect healthcare spending thereby placing barriers to improving maternal health: A study in China indicated that for every 100 yuan spent on tobacco, there was an associated decline in spending on education by 30 yuan, medical care by 15 yuan and food by 10 yuan.

Unhealthy eating habits contribute to maternal mortality: Iron deficiency contributes to 115,000 maternal deaths a year.

Maternal malnutrition is key to the intergenerational transmission of CVD risk factors: Both maternal under- and over-nutrition increases the risk of future risk factors associated with CVD for the child later in life. Specifically, studies have found that foetal undernutrition of females can increase their chances of developing CVD later in life.



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A Critical Connection



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6 COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES

Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

Target 6B: Achieve, by 2010, universal access to treatment for HIV/AIDS

Target 6C: Have halted by 2015 and begun to reverse the incidence of malaria and other diseases

7 ENSURE ENVIRONMENTAL SUSTAINABILITY

Target 7A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Target 7B: Reduce biodiversity loss

Target 7C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Target 7D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

8 A GLOBAL PARTNERSHIP FOR DEVELOPMENT

Target 8A: Develop further an open, rule-based, non-discriminatory trading and financial system.

Target 8B: Address the special needs of the least developed countries

Target 8C: Address the special needs of landlocked countries and small island developing States

Target 8D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

Target 8E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

Target 8F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

CARDIOVASCULAR DISEASE AND THE MDGs

HIV-related heart disease is common but often attributed to other problems: Pericardial effusion has become one of the most common AIDS defining illnesses.

CVD is an important cause of death among patients with HIV infection: In many health systems, HIV infection has become a chronic illness requiring surveillance and monitoring. Studies suggest that HIV infection can double or triple the risk of a major cardiovascular event. Therefore, current prevention and treatment programmes that encourage HIV-infected patients to take control of their health, must also incorporate their increased risk of developing heart-related illness. A study found that patients with HIV infection have a significantly greater prevalence of smoking, placing them at greater risk for CVD.

Combat Other Diseases: The increase in and prevalence of CVD and other non-communicable diseases (NCDs) represents a global health crisis. One third of the poorest two quintiles in the developing world die prematurely from preventable NCDs, affecting all aspects of society from children to the elderly and often holding them back from achieving their potential or fulfilling essential roles in their communities. Despite this, NCDs are perceived to primarily afflict the wealthy. This misconception, has led to the virtual absence of vital investment. Achievement of the MDGs requires a global response to health systems strengthening, inclusive of NCDs. The approval of a UN High Level Summit involving Heads of State on NCDs in 2011 further illustrates this priority. The prevention and control of NCDs and CVDs specifically, is critical to improving the life chances of people in every corner of the globe.

CVD threatens sustainable development: Sustainable development requires multisectoral solutions that take into consideration the rapidly growing burden of CVD. The healthcare costs to individuals and governments poorly equipped to deal with this challenging health issue, translates into reduced financial capacity in the area of environmental degradation.

Promoting sustainable development is closely linked to promoting "embedded health": Health and sustainable development should become an integral part of new social and infrastructure programmes that encourage well designed towns and cities with good public transport and food systems. This can increase physical activity and access to healthy food and simultaneously reduce cardiovascular risks and CO2 emissions.

CVD is becoming increasingly more common among the poor: CVD is not just a disease of affluence. While simultaneously reducing physical activity, the poor are also more likely to consume diets heavy in fats, salt and sugar, increasing the risk of CVD. Food subsidies furthermore, encourage the consumption of energy-dense foods.

CVD medicines do not reach all people or all markets: Many countries still apply tariffs and taxes on essential medicines, such as aspirin, limiting affordability and access. In patients with a high risk of CVD, aspirin can reduce the risk of future vascular events by a quarter.

Although the number one global killer, CVD is not recognized as a development priority: CVD and other NCDs account for 60% of all deaths in the developing world, but only 0.9% of US\$22 billion international aid (ODA) spent on health in developing countries is spent on NCDs.

CVD has hit small island states especially hard: CVD is the leading cause of death globally, affecting women and men at an almost equal rate. Low-income countries struggle to afford the treatment and care for the high rate of CVD and its complications, leading to increasing government deficits and an inability to repay debt. As a result, in May 2010, the UN, led by CARICOM states, voted unanimously to hold a Summit on NCDs in September 2011.

Essential medicines are often inaccessible and unaffordable: In many low-income countries, aspirin, statins, anti-hypertensives and other essential medicines are not affordable or accessible to the poor.

The fact that CVD is the number one killer of men and women, and is increasingly a disease of the poor, remains largely unknown: Advocacy, education and awareness efforts are needed to ensure people have adequate information allowing them to better manage their health, thereby saving lives, reducing economic costs, and substantially reducing the burden on the health system.

DON'T LET CARDIOVASCULAR DISEASE UNDERMINE THE MILLENNIUM DEVELOPMENT GOALS - IT'S TIME TO ACT!