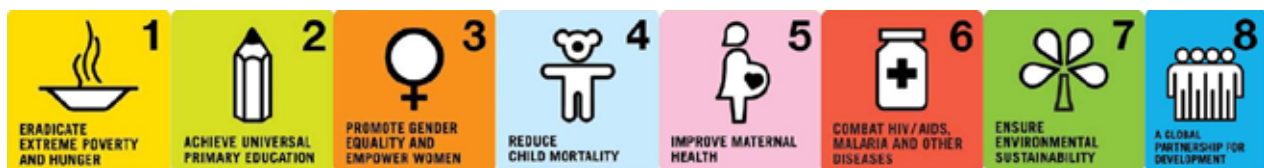


# The Millennium Development Goals and Non-Communicable Diseases (NCDs)



## Health and Development held back by NCDs

- The Millennium Development Goals state that health is critical to the economic, political and social development of all countries, yet they contain no goals or targets for NCDs, the largest burden of disease in low- and middle-income countries
- NCDs – which include diabetes, cardiovascular disease, cancer and chronic respiratory disease – cause 60% of all deaths globally (35 million) each year
- 4 out of 5 deaths occur in low- and middle-income countries
- NCDs share the common risk factors of tobacco use, unhealthy diet and physical inactivity
- NCDs only receive 0.9% of health official development assistance (ODA)
- The provision of affordable essential medicines could save millions of lives each year
- Financial and technical assistance is needed to turn around the NCD epidemic that threatens to undo development gains made worldwide
- NCDs are a major cause of poverty, a barrier to economic development, and a neglected global emergency

**DON'T LET NCDs UNDERMINE THE MILLENNIUM DEVELOPMENT GOALS – IT'S TIME TO ACT!**

# 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

### 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

### 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

### 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

### 4 REDUCE CHILD MORTALITY

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

### 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

## CARDIOVASCULAR DISEASE AND THE MDGs

**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.

**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.

**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.

**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.

**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.

# The Millennium Development Goals and Cardiovascular Disease

## A Critical Connection



## GOALS AND TARGETS from the Millennium Declaration

### 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!**

# The Millennium Development Goals and Asthma

**Asthma is controllable. Let's overcome the barriers to the management of asthma - and help reach the Millennium Development Goals**



## GOALS AND TARGETS from the Millennium Declaration

### 1 ERADICATE EXTREME POVERTY AND HUNGER

**Target 1:** Halve the proportion of people whose income is less than one dollar a day and who suffer from hunger between 1990 and 2015

**Control asthma: help eradicate extreme poverty and hunger.** Asthma is a worldwide public health problem affecting about 300 million people. The majority of persons with asthma are in developing countries where access to essential asthma medicines is limited. The financial burden for persons living with asthma and their families is very high. Inadequate treatment of asthma and the high cost of asthma medications lead to disability, absenteeism and poverty. Inadequate control of asthma makes the poor even poorer because they are unable to work.

### 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

**Control asthma: reduce children's absenteeism from school.** Childhood asthma is associated with absenteeism from school. A systematic review including 32 trials reports that educational programmes for the self-management of asthma in children and adolescents reduce absenteeism from school and the number of days with restricted activity. Proper treatment of asthma is essential to ensure that children will be able to complete a full course of primary schooling.

### 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

**Control asthma: eliminate an obstacle for girls seeking education.** Poverty is a major barrier preventing girls from receiving an education. It has been reported that girls from the poorest 60% of household are three times more likely to be out of school than boys. Asthma would aggravate this difficult situation for girls.

### 7 ENSURE ENVIRONMENTAL SUSTAINABILITY

**Target 7:** Integrate principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. By 2020, achieve significant improvement in the lives of at least 100 million slum dwellers

**Control asthma: air pollution contributes to the development of asthma.** Indoor and outdoor air pollution contributes to the development of asthma or asthma-like symptoms. Reduction of global emissions of carbon dioxide is essential for ensuring environmental sustainability and is beneficial for asthma control as well.

Ensuring the affordability of essential asthma medicines will improve the lives of slum dwellers who are living with asthma.

### 8 A GLOBAL PARTNERSHIP FOR DEVELOPMENT

**Target 8:** Address the special needs of the least developed countries; in cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

**Control asthma: good case management and access to essential medicines saves lives.** About 250,000 people died of asthma worldwide in 2009. The countries with the highest fatality rates are those in which essential asthma medicines are not available. Better asthma management can reduce asthma deaths especially in the least developed countries.

**The Asthma Drug Facility (ADF)** was established by the International Union Against Tuberculosis and Lung Disease (The Union) to make affordable quality-assured essential asthma medicines available in low- and middle-income countries, and to facilitate the implementation of standardised case management of asthma with evaluation of the quality of care. This is the first initiative put in place to improve the access to essential asthma medicines for the population in low- and middle-countries.

The products supplied by ADF are in line with the recommendations in The Union's Asthma Guide, which was updated in 2008 by the Asthma Division. This guide proposes adapted solutions for managing the diagnosis, treatment and monitoring of asthma patients in low- and middle-income countries.

# The Millennium Development Goals and Diabetes

We know how to treat and manage diabetes – let's do it now!



## GOALS AND TARGETS from the Millennium Declaration

### 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

## DIABETES AND THE MDGS

**Diabetes is a poverty issue:** 80% of all people with diabetes live in lower and middle income countries. India has over 50 million people with diabetes. In sub-Saharan Africa 12.1 million people have diabetes. The diabetes epidemic has moved to low and middle income countries and threatens to reverse development (MDG) gains made in low income countries.

**Diabetes affects the most vulnerable:** Studies in India have shown that people living in slums show especially high prevalence rates. Vulnerable indigenous peoples have a genetic predisposition to diabetes and some, such as the Australian aborigines, have very high rates of diabetes and serious complications.

**Diabetes is a cause of poverty:** Lost income, lost jobs and high costs of treatment and complications (such as amputation, blindness, stroke, heart attack) can push poor families into destitution

**Diabetes can be caused by malnutrition:** Poor and irregular nutrition can lead to diabetes, particularly during pregnancy.

### 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.

**Diabetes limits education:** the high cost of diabetes treatment and care in low income countries can force parents to withdraw children from school, particularly girls.

**Diabetes and education are linked:** In some contexts, people with more years of education have a lower chance of getting Type 2 diabetes.

**Children with diabetes can have less access to education.** Children with Type 1 diabetes in some settings are denied entry to school.

### 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.

**Women with diabetes face major barriers to health care:** Gender biases in power, resources, culture and the organisation of services constrain women with diabetes from accessing essential healthcare, resulting in more complications and deaths

**Diabetes in a household places additional care burdens on girls & women:** girls can be removed from school to care for parents or siblings with diabetes. Women caring for family with diabetes can lose economic and social opportunities.

**Women & girls are key agents of diabetes prevention:** Evidence shows that investing in girls achieves a range of health & socio-economic development goals. Women, as mothers and gatekeepers of household nutrition and lifestyle patterns, need to be at the forefront of the fight against diabetes.

### 4 REDUCE CHILD MORTALITY

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

**Untreated diabetes kills:** In some low-income countries, children with diabetes have a life expectancy of less than a year. Children receiving treatment should live long healthy lives.

**Diabetes causes infant deaths:** Maternal diabetes is associated with low and very high birth weight babies and increases the chance of the child dying before or during birth.

### 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

**Diabetes is a neglected cause of maternal mortality:** Pre-gestational & gestational diabetes (GDM) is associated with life threatening delivery complications & adverse pregnancy outcomes such as macrosomia (high birth weight babies).

**Increasing number of pregnancies complicated by diabetes:** Rising prevalence of obesity means more women of reproductive age have diabetes.

**Gestational diabetes affects health of mother and child later in life:** Mothers with GDM are more likely to develop Type 2 later in life, and offspring have a 4-8 fold increased risk of diabetes.

**Maternal malnutrition is key to the intergenerational transmission of diabetes:** Both maternal under & over nutrition increases the risk of future diabetes for the child.



# The Millennium Development Goals and Diabetes

## A Critical Connection



### GOALS AND TARGETS

#### from the Millennium Declaration

#### 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

### DIABETES AND THE MDGS

**Diabetes risk increases in people with HIV/AIDS:** HIV/AIDS patients who are infected with Hepatitis have a higher risk of developing diabetes.

**Diabetes risks increased by anti-retroviral treatment (ART):** The use of some ART can triple the risk of getting diabetes in people with HIV/AIDS.

**Diabetes increases risk of developing TB:** Diabetes patients are three times more likely to develop TB when infected. In India, 15% of TB is attributed to diabetes.

**Diabetes and malaria are a deadly combination:** A person with diabetes has a higher chance of suffering severe malaria, and higher chance of mortality.

**Diabetes threatens sustainable development:** Diabetes and climate change share common risks and common solutions. Type 2 diabetes is increasing everywhere in children & adolescents. This is a largely preventable public health disaster closely linked to obesity.

Well designed towns and cities with good public transport and food systems can increase physical activity and access to healthy food and simultaneously reduce diabetes risks and CO2 emissions

**Diabetes is more common among slum dwellers:** Diabetes is not just a disease of affluence. There is a strong social gradient. Research has shown a diabetes prevalence of 10.3% in urban slums in India compared to the national average of 7.1%.

**Diabetes medicines do not reach all people or all markets:** Many countries still apply tariffs and taxes on essential medicines for diabetes which limit affordability and access.

**Diabetes is not recognized as a development priority:** Diabetes and other non-communicable diseases (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. WHO headquarters, with around 2,500 staff, has just one staff member dedicated to diabetes, a disease now affecting more than 300 million people.

**Diabetes has hit small island states especially hard:** Pacific island state Nauru has a 30.9% diabetes prevalence rate, ranking first in the world. Other small island states struggle to afford the treatment and care for high rates of diabetes and its complications, leading to increasing government deficits and their ability of repaying debt. The Commonwealth, with 32 small states as members, has recognized the threat of diabetes and called for a UN General Assembly Special Session (UNGASS) on NCDs.

**Essential medicines for diabetes are often accessible nor affordable:** In many low-income countries, insulin and other diabetes essential medicines are not affordable or accessible to the poor. Children and adults with Type 1 diabetes need insulin and syringes to survive.

**Diabetes self-management technologies are not available for the poor:** Accessible and appropriate technology for diabetes enables better management, reduces costs, and improves outcomes, substantially reducing the burden on the health system.

## DON'T LET DIABETES UNDERMINE THE MILLENNIUM DEVELOPMENT GOALS

# The Millennium Development Goals and Cancer

Cancer is a leading cause of death worldwide, despite the fact that the majority of cancer cases are preventable or treatable — the time to act is now!



## GOALS AND TARGETS from the Millennium Declaration

## CANCER 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

**Cancer is a major burden for the world's poor:** Cancer accounts for more deaths worldwide than AIDS, malaria, and tuberculosis combined. Cancer is not only a disease of affluent nations: over 70% of all global cancer deaths occur in low- and middle-income countries (LMICs), where it claims over 5.3 million lives each year.

**Cancer affects the most vulnerable:** The cancer burden imposes a substantial financial toll on families, which is felt most acutely by the global poor. Lost jobs, lost income, and high treatment costs, as well as potential complications can push poor families into destitution. Inequities in cancer care and outcomes both between and within nations are grave human rights concerns that need to be addressed to combat poverty and promote sustainable development.

**Poor nutrition is a risk factor for cancer:** Poor diet and malnutrition are linked to cancer incidence and outcomes. Low intake of vitamins and micronutrients is a known co-factor for cancers such as cervical cancer.

### 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

**Cancer limits education:** The financial burden of cancer treatment and care for low-income families can force parents to withdraw children from school, particularly girls.

**Educational status is linked to the cancer burden:** Cancer prevention and screening rates are generally low among less educated populations.

### 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

**The cancer burden undermines gender empowerment:** Breast and cervical cancer are among the cancers with the highest incidence worldwide. Existing gender biases in power, resources, culture and the organisation of services restrain women with cancer from accessing essential healthcare, resulting in late diagnosis, which may lead to lower chances of survival and increased disability. The social and economic costs of cancer seriously affect women, as victims or as caregivers.

**Women & breast cancer:** Breast cancer is the second most common cancer in the world and the most common among women. Despite proven interventions to identify high risk populations and to support early screening, 1.38 million cases are diagnosed each year, and about 458,000 women die annually.

**Women & cervical cancer:** Cervical cancer is the second most common cancer among women worldwide and the most common for women in LMICs. The primary risk factor is infection with human papilloma virus (HPV). Despite proven interventions to prevent the disease (sexual behavioural change & vaccination) or to detect it early, there are approximately 529,000 cases diagnosed annually with 274,000 deaths each year.

**Women & tobacco:** The use of tobacco is a known risk factor for lung cancer as well as for 14 other cancers, notably cervical cancer in women. Women currently represent about 20% of the world's smokers, but the tobacco industry is aggressively marketing their products to women and girls in high population countries.

**Improved cancer control empowers women:** Improved support for cancer control can directly diminish the impact of cancer on women's health and socio-economic status. Investing in girls as future mothers and gatekeepers of household nutrition and lifestyle patterns serves as a cornerstone of more participatory models of health and educational policy formulation that empower women to define priorities, policies, and strategies.

### 4 REDUCE CHILD MORTALITY

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

**Children are disproportionately affected by cancer:** Although they are rare, 80% of all childhood cancers occur in low-income settings. Advances in high-income countries lead to survival rates as high as 80%, but poor access to diagnosis and care in LMICs results in 160,000 largely avoidable deaths annually.

### 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

**Cancer control can help improve overall maternal health:** Improved cancer control, especially for cervical cancer, would make a strong contribution to services for women's health by complementing and supporting sexual and reproductive health initiatives, and by supporting and improving models of "universal access to reproductive health".

# The Millennium Development Goals and Cancer



## GOALS AND TARGETS from the Millennium Declaration

## CANCER AND THE MDGS

### 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

**Cancer control can complement HIV/AIDS and TB prevention:** HPV infection—the main risk factor for cervical cancer—can be prevented through similar and synergistic reproductive health initiatives as HIV/AIDS prevention activities. HIV/AIDS can also lead to HIV-related cancers, and tertiary prevention efforts in HIV/AIDS patients may therefore improve their life expectancy and quality of life. Cancer patients have also been found to be more vulnerable to tuberculosis.

**Cancer control contributes to overall Health Systems Strengthening (HSS):** Resource-appropriate and evidence-based improvements in cancer control should be a cornerstone of overall health systems strengthening in LMICs. Improved cancer control can thus contribute to the promotion of increased global health funding and strengthened healthcare systems, both of which are essential to improve overall healthcare quality and equity and to combat major diseases.

**Cancer is a major disease:** Cancers are among the leading global disease burdens and contribute more to the global burden of disease — and its social and economic costs — than other major global health concerns encapsulated in the MDGs. Cancer should be given more attention as an essential component of the major health issues targeted by the MDGs to combat poverty and empower the socio-economically marginalized.

### 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

#### Cancer prevention efforts can complement initiatives to:

- Promote green transportation efforts
- Promote biodiversity-friendly, sustainable food production and extraction systems that provide diversified diets with high proportion of plant-based foods
- Limit production of and exposure to air and water pollution
- Limit occupational exposures to toxic compounds

### 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

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**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

**Cancer is not recognized as a development priority:** Cancer is still perceived as a disease of high-income countries, leading to an underestimation of the costs associated with premature deaths and disability in LMICs. These economic losses may alter these countries' successful development as they face increasing cancer incidence.

**Access to affordable essential medicines for cancer is a condition for healthy development:** Cancer treatment is often not affordable, and therefore, not accessible. Failure to access vaccines, chemotherapy, hormone therapy and palliative drugs represents a key barrier to improved and equitable cancer control and care in LMICs.

**Cancer can be prevented if technologies are available:** The benefits of several screening and diagnosis tools available in high-income countries have to be shared with the least developed nations to establish successful prevention programmes. Prevention is a cost-effective way for LMICs to avoid the major economic losses associated with premature deaths and disability due to cancer.

## DON'T LET CANCER UNDERMINE THE MILLENNIUM DEVELOPMENT GOALS