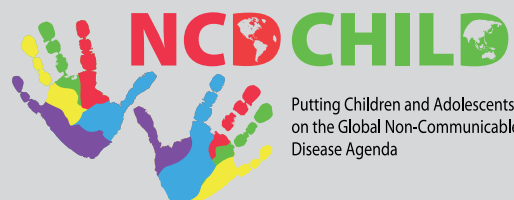


Working Well!

SAFE-GUARDING ADOLESCENT AND YOUTH LIVELIHOOD IN THE FACE OF NCDs AND THEIR RISK FACTORS



The theme of the 2012 ECOSOC AMR is 'Promoting productive capacity, employment and decent work to eradicate poverty in the context of inclusive, sustainable and equitable economic growth at all levels for achieving the MDGs'. This Paper was prepared specifically for the ECOSOC Ministerial Roundtable co-organised by UNICEF and PAHO to document the linkages between NCDs and decent work.



FIVE ADOLESCENT-SPECIFIC RECOMMENDATIONS FOR MEMBER STATES ON NCDs AND DECENT WORK

Priority Recommendations based on Practical Examples based on Policies and Programs

1. Make NCDs visible in the context of employment and livelihood

- Implement the recommendations of the Commission on Population and Development by strengthening their vital registration and health information systems, and developing the capacity of relevant national institutions and mechanisms to generate population data, disaggregated by sex, age and other categories needed to monitor the well-being of adolescents and youth, and to use these data for the formulation and implementation of national policies.¹
- Analyse the burden of NCDs and NCD-risk behaviours in children and young people, assess the impact that this has on present and future capacities and livelihoods, and review current responses to NCDs and NCD-related behaviours.

2. Develop a multi-sectoral agenda

- Support the development of policies and programs that take an inclusive approach to adolescent health, by engaging the education, legal, employment and other sectors, using a life-course approach that is gender sensitive and rights based, and including a focus on the underlying social determinants of health that are relevant to NCDs.²
- Ensure that targets and a monitoring framework are an integral part of a coordinated, multi-sectoral effort by a range of national, regional and global partners to accelerate action for the prevention, treatment and care of NCDs and NCD-risk behaviours in children, adolescents and youth, at individual and societal levels, including efforts to reduce poverty; improve nutritional security and access to education; promote gender equity; reduce exposure to environmental risks such as indoor air pollution (notably unsafe cook-stoves); and legislative measures that prevent advertising and promotion of unhealthy foods beverages to children and adolescents; and prohibit the sales of alcohol to minors.

3. Build capacity to prevent and mitigate the impact of NCDs

- Increase training and education among health care workers serving adolescents and youth; strengthen the capacity of service providers through multi-sectoral training, and support curricula changes that enhance education on adolescent and youth health issues.
- Promote a community development and health system strengthening approach to ensure adolescents and youth living with NCDs in developing countries enjoy their right to the highest attainable standard of health.
- Build research capacity to provide a robust evidence-base for effective prevention policies and programs at local, national, regional and global levels, develop internationally comparable core-indicators for inclusion in national health surveillance systems and global development goals, and establish mechanisms to monitor progress and identify corrective measures to ensure universal access to evidence-informed interventions.³

4. Give adolescents and youth a stronger voice

- Acknowledge adolescents and youth as agents of change, invest in their leadership while recognizing their vulnerabilities and the financial barriers confronting them, and further strengthen programs that effectively use information technology and social media.
- Meaningfully involve youth within all aspects of NCD policy debate and implementation at the national and global levels, including when appropriate the provision of resources for young people to participate in global events.

5. Invest in a life-course approach to prevention, early diagnosis and treatment

- Recognise and uphold obligations under international covenants, such as the United Nations Convention on the Rights of the Child, and make specific efforts to respect, protect and fulfil the right of adolescents and youth to work.
- Recognise prior commitments made in the United Nations Political Declaration on NCDs that support a life-course approach to prevention and control of NCDs.⁴

Defining Ages and Stages

This Issues Paper respects the following definitions:

- CHILDREN as persons under 18 years of age (Convention on the Rights of the Child).
- ADOLESCENTS as persons between the ages of 10 to 19 years (WHO).
- YOUTH as persons between the ages of 15 to 24 years (UN).

It uses young people to encompass adolescents and youth.



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2. BACKGROUND AND RATIONALE

The right to work is one of the most important human rights for adolescents and young people. Transitioning from school to work is an important rite of passage. Working means independence, 'liberation' and the right to manage one's life. For many adolescents and young people who live in poverty, employment may mean the difference between having shelter, food and clothing or not. Anything that prevents or impedes on-time entry into and full participation in the workforce is a threat to the well-being of adolescents and young people, their families and indirectly to the well-being of their communities. Non-communicable diseases (NCDs) are one such factor. Not only do a significant number of children and adolescents die from NCDs,^{5,6} but the vast majority of the behaviours and addictions that underlie NCDs start during adolescence.

NCDs negatively impact access to and full participation in the workforce on several levels. First, NCDs prevent children and adolescents from fully benefitting from education, and thereby limit their preparation and readiness for entry into the workforce. Absence from school because of personal illness or that of a family member limits learning achievement, emotional and social development. The cost of treatment of a child or adolescent with an NCD can be significant, and may be a strain on the family's resources. Parents who have to miss work to take care of a child with a prolonged illness face a triple jeopardy. The physical and emotional toll of taking care of a child can reduce their productivity while at work, and they may face loss of pay because of tardiness and absence from work. The emotional toll of prolonged illness on parents, families and the community is well documented.

Conditions at work also have a significant impact on NCDs. A safe and healthy work environment diminishes the risk of contracting a disease. Health insurance and other social protective measures are necessary to provide a financial safety net. Appropriate legislation, policies and support programs are necessary to ensure that young people who are ill, or in some other way affected by NCDs are not subject to discrimination or deliberately excluded from work solely because they are affected by an NCD, and that positive measures are taken to ensure that their contribution is maximised.

Given the significant level of morbidity and mortality associated with NCDs, the prevention, control and mitigation of the impact of these diseases on the ability of adolescents and young people to enter and fully participate in the workforce requires the same level of attention as other negative factors. According to the World Economic Forum (WEF), "Although research on the global economic effects of non-communicable diseases is still in a nascent stage, economists are increasingly expressing concern that NCDs will result in long-term macroeconomic impacts on labour supply, capital accumulation and GDP worldwide with the consequences most severe in developing countries ... Globally, the labour units lost owing to NCD deaths and the direct medical costs of treating NCDs have reduced the quality and quantity of the labour force and human capital."⁷

The international development community cannot promote productive capacity, employment and decent work without paying increased attention to the impact of NCDs, their increase, and the preventive, control and mitigation measures that are necessary to diminish and reverse their toll on individual, familial, community and national productive capacity. This issues paper examines the impact of NCDs on adolescent and young people's participation in the workforce, the underlying risk factors, and makes recommendations about policy decisions that would support enable the prevention and or mitigation of the impact of NCDs on young people's capacity to enjoy the right to work.

3. THE IMPACT OF NCDs AND THEIR RISK FACTORS ON SOCIAL ROLE TRANSITION

People under 25 make up 43.0 per cent of the world's population, with 1.2 billion between the ages of 10 and 19.⁸ The present cohort of young people worldwide is the largest it has ever been. Their ability to enter the workforce as healthy, educated, productive workers will shape national and global economic prospects. However, a lack of attention to addressing the barriers to adolescent health can be a major limiting factor, with substantial long-term effects on development and deployment of social and economic capital.⁹

Threats to adolescent health and the adverse effects on a country's economic and social prospects have been evident recently in countries most affected by HIV/AIDS. In 2005, more than half the estimated five million people who contracted HIV worldwide were young people between 15 and 24, the majority of them young women and girls. The impact on national economies has proven to be enormous, and although initial costs to national economic growth were high, these failed to take into account the inter-generational impact.

Just as devastating are the effects of NCDs on young people. Studies of 50-year mortality trends in children and young people show that while child-mortality rates have decreased, rates of mortality in adolescents have only marginally improved, with NCDs one of the leading causes of death.¹⁰ However, mortality is an incomplete measure of the real impact of NCDs on young people and their ability to prepare for and transition to the workplace. Like HIV/ AIDS, parents and care-givers living with NCDs may no longer be able to go to work, pushing families into poverty and stopping their children attaining skills and education to prepare for employment. In addition, understanding the role of health-risk behaviours in adolescents is paramount, with existing data sources indicating that risks for NCDs in later life are spreading rapidly in young people, with associated immediate as well as long-term consequences.

'Decent work' defined

According to the International Labour Organization, 'decent work' refers to the overall aspirations of people in their working lives, predicated on four pillars:

- 1 Productive employment
- 2 Rights at work
- 3 Social protection
- 4 Social dialogue

with gender equality as a cross-cutting objective.

Behavioural Risk Factors

Most NCDs are strongly associated and causally linked with four particular behaviours – tobacco use, physical inactivity, unhealthy diet and the harmful use of alcohol – many of which start during adolescence. As these are modifiable behaviours, there is significant scope to effect behavioural change and thereby contribute to the prevention of NCDs.

Alcohol

Alcohol use is the largest single contributor to risks to health in young people accounting for 7.0 per cent of incident disability-adjusted life years (DALYs) in young people aged 10 to 24 years.² Alcohol use starts at a young age: 14.0 per cent of adolescent girls and 18 per cent of boys aged 13 to 15 years in low- and middle-income countries (LMICs) are reported to use alcohol. Globally, alcohol consumption is responsible for 5.0 per cent of all deaths of young people between the ages of 15 and 29 years.¹¹ It contributes directly to risk of injury and violence and also to long-term mental health problems.

Tobacco Use

Nearly one in five of the world's adolescents aged 13 to 15 years use tobacco, and more than one in ten use tobacco in a form other than cigarettes.¹² Tobacco use in adolescents is rapidly increasing in many LMICs with substantial yearly increases in cigarette smoking in males seen in China (8.0 per cent), Indonesia (6.8 per cent) and Syria (5.5 per cent).² There is also a narrowing of the gap between rates in girls and boys in Latin America and sub-Saharan African countries, with some LMICs now showing equal rates of tobacco use.¹³ The overall rise in tobacco use in adolescents in many developing countries will have devastating future effects on adult health – Tobacco use is responsible for five million, or 12.0 per cent of all deaths of adults above the age of 30 globally each year.¹⁴ Globally, deaths from tobacco-related cardiovascular diseases are more likely to occur among younger adults. Thirty-eight per cent of deaths of adults resulting from ischemic heart disease in the 30 to 44 age group are attributable to tobacco, while 71.0 per cent of all lung cancer deaths are linked to the use of tobacco.¹⁴

Physical Inactivity and Unhealthy Diet

With childhood obesity rates doubling, or even tripling over the past 20 to 30 years in most countries, the next generation could become the 'O Generation'.¹⁵ Many gains in child health would be reversed if present trends continue. Paradoxically, this overweight and obesity phenomenon is often accompanied by micronutrient deficiencies and anaemia from diets that are dense in calories but poor in nutrients, combined with lower levels of physical activity. This situation holds deep economic implications in addition to the health problem: if the next generation is more overweight, less fit and less healthy, it will not learn as well and will incur higher healthcare costs over a lifetime, in turn affecting productivity and efforts to achieve fiscal consolidation.



Photograph
courtesy of PAHO/WHO

The Region of the Americas is the world's most overweight.⁶ The problem extends well beyond the United States: most countries in Latin America and the Caribbean, Oceania, and indeed in much of the world, are also experiencing upward trends in childhood and adult overweight and obesity, which are increasingly concentrated among the poor and less educated population sectors and thus are deepening social inequality. Obesity is simply a subset of a much bigger problem, the largely silent epidemic of NCDs.

A recent analysis of data on physical activity (60 minutes or greater on each of the past seven days) available for 85 countries representing more than half the world population, showed that with the exception of boys aged 13 years in Slovakia, no country had more than 50.0 per cent of either boys or girls achieve the recommended exercise level.¹³

NCD-Related Illness and Disability

For adolescents and youth living with NCDs, the challenges of managing these diseases on a day-to-day basis are exacerbated in developing countries where poverty and a lack of education at the individual and primary health care level are compounded by unaffordable access to quality medicines, support and treatment due to limited access to health services, inequities within the health system and inability to pay. For those born with special health needs in resource poor countries, the associated mortality, morbidity and disability is especially high, as access to the treatment and support needed to maximise health outcomes is usually limited. Disability associated with NCDs brings additional challenges for affected youth, leading many to experience discrimination, stigma, marginalisation and limited opportunities for schooling, education and ultimately decent work.

CASE STUDY: Healthy Habits for Obesity and NCD Prevention Among School Children in Mexico

Excess weight is widely recognized as a risk factor for NCDs. In Mexico, overweight and obesity rates are rising in children. A Mexico City nutritional survey (ENURBAL 2002) reports one in 10 children under age five is obese, rising to one in three between ages five to 11. As risk of obesity increases with age, targeting primary school children will yield immediate and long-term health benefits.

Since 2007, Project HOPE (PH) has been implementing Healthy Habits for a Healthy Weight school-based prevention initiative to raise awareness about the connection between diabetes and obesity, while promoting healthy eating and exercise habits among teachers, children and families. The program targets third grade boys and girls in 15 elementary schools, selected by 15 clinics that have participated in PH diabetes education programs. By expanding access to information about healthy habits beyond clinics and into schools, families and neighborhoods, PH aims to reverse the climbing rates of diabetes and obesity, along with associated complications, improving health and quality of life for area families.

To date, monitoring data indicate that, especially in comparison to the general population, obesity rates improved significantly in the program cohorts. Decreasing risk factors for NCDs in children will improve their health as adults preventing the disabling outcomes from premature onset of diseases such as diabetes. According to a 2003 study on diabetes economic costs, it was estimated that Mexico faced a \$US13 billion loss in productivity due to diabetes related disability and premature mortality.¹⁶ In addition to social and health considerations, preventing diabetes in children is imperative to preserving individual and country-wide economic growth in Mexico.

Acknowledgement: Project HOPE

The Four Principal NCDs

The main NCDs are cardiovascular diseases, diabetes, cancers and chronic respiratory diseases, according to the WHO. These diseases are increasing in children and adolescents, and children in LMICs are disproportionately affected due to lack of access to affordable, quality and effective medicines and health care, as well as educational and support services.

- **Asthma:** Asthma is a serious public health problem throughout the world and the most common chronic disease among children, and increasing. The WHO estimates that 15 million disability-adjusted life years are lost annually due to asthma.
- **Diabetes:** Type 1 diabetes affects an estimated 486,000 children under 15 years, and requires insulin injections for survival as well as life-long monitoring of blood sugar levels and continuous education to avoid serious complications.
- **Heart disease:** Rheumatic heart disease, a chronic heart condition caused by rheumatic fever, is the most common acquired heart disease in children, that without surgery and life-long medical treatment is generally fatal or debilitating.
- **Cancers:** Preventable infections account for two million cases of cancer per year and up to 25.0 per cent of all cancers in some LMICs including HPV (cervical cancer); hepatitis B (liver cancer); and helicobacter pylori (gastric cancer). Cervical cancer, preventable through vaccination of young adolescent girls and effective early detection, is responsible for almost 250,000 deaths in women each year: about 88 per cent live in developing countries, with 53,000 deaths in Africa; 31,700 in Latin America and the Caribbean; and 159,800 in Asia. Burkitt's lymphoma, which is the most common childhood cancer in parts of Africa, is potentially treatable with a generic drug at a cost of less than \$US500 per patient.

The Double Burden of Disease

The distinction between communicable and non-communicable disease is not always useful. Some NCDs are associated with infectious agents, and some specific chronic infections that occur during childhood and adolescence are associated with a significant burden of disease and disability in later life. For this reason, a focus on 'chronicity', and a life-course approach to health systems strengthening offers the best chance for effective and sustainable solutions.

CASE STUDY: The Effect of Rheumatic Heart Disease on Schooling and Employment of Young People in Fiji

Acknowledgements: World Heart Federation



Fiji has one of the world's highest rates of rheumatic heart disease, with 3.5 per cent of children affected. Rheumatic fever and the heart valve damage it causes (rheumatic heart disease, RHD) causes heart failure and chronic illness when young people are at their most productive. These children and young adults become too unwell to participate in schooling, employment and their community. Some require expensive treatment overseas and long term care by other family members. Young women are particularly at risk of death during childbirth. However, monthly shots of benzathine penicillin G, a cheap, off-patent antibiotic, can prevent RHD progressing to heart failure and can allow for complete resolution of disease. This treatment allows young people to contribute positively to the Fijian economy rather than accruing health care costs.

Since 2005, the Fijian Ministry of Health has developed a national RHD control program with support from the World Heart Federation through its RHD control program in the South Pacific. With technical support from Menzies School of Health Research (Darwin, Australia), the Ministry of Health has established a disease register, trained health workers in disease detection and management, updated guidelines, and piloted systems for continuous quality improvement of RHD control services.

School-based screening by echocardiography has identified hundreds of children in the early stages of RHD, when there is still time to intervene and improve outcomes. Now the Ministry of Health is working with Menzies to pilot a model of nurse-led screening by echocardiography. The Ministry of Health is investigating the feasibility and sustainability of integrating RHD screening into the existing system of school health checks. This early diagnosis and intervention reduces health care costs and the need for expensive operations. The Fijian government are providing support for the RHD program to become regional leaders, now involved in helping train and establish programs in other Pacific Islands.

Learning from the Communicable Disease Experience

CASE STUDY: After The Fall, HIV Grows Up – Young People Living with HIV in Romania

In the late 80's and early 90's, unscreened blood combined with unsafe medical practices resulted in a surge of HIV infections among youth in Romania. Over 13,000 infants were infected (cases continue to be reported). Of these, there are approximately 7,000 long-term survivors who are now young adults.

These youth have experienced many difficulties. With the advent of the ARV drugs, many were able to maintain enough health to go to school, however, the difficulty in maintaining privacy led to discrimination and expulsion in some cases. In addition, doctor's visits and sick days kept the youth from being able to consistently attend school and pass exams.

These issues followed them into the work force. Though there are laws against discrimination, the reality can be far different. If employment is obtained, it is often hard to retain if the young adult requires frequent doctor's visits or his or her health declines.

The World Vision Romania program, "Together For the Future," has grown and adapted through the years in working with these youth and their families. This is not a prevention program, and can be compared more accurately with triage. Each case must be assessed and handled independently for the most positive outcomes. From vocational training to healthcare and social assistance, each person's needs are highly individualised and require an intense commitment of time and dedication from the staff.

The challenges faced by young people living with HIV should inform the development of legislation, policies and programmes that support young people living with NCDs.

Acknowledgement: Kathleen Treat, Speranza Foundation

4. A LIFE-COURSE APPROACH: NCDs, YOUNG PEOPLE AND DECENT WORK

Understanding Adolescence

There is a growing recognition of the need for a life-course approach to policy and program development if the international development community is to affect sustainable, equitable and inclusive change and achieve the impact envisioned by the UN High Level Meeting and Political Declaration on NCDs.⁴ The life-course approach needs to be rooted in the social and structural determinants that define opportunity for children in their transitions into adulthood, including productive employment. Practically, this means embracing proven effective solutions across the care continuum and engaging a broad range of partners in multi-sectoral action.

Over the past decade our understandings from both basic and public health science has shifted the way we consider non-communicable conditions. The work of David Barker and colleagues has provided epidemiologic evidence that fetal and perinatal experiences (and particularly nutrition) greatly influence chronic conditions of adulthood such as diabetes, cardiovascular disease, metabolic syndrome, and hypertension.^{17,18} Recent epigenetic research has shown that in utero environmental and nutritional exposures affect the biochemical groups on a gene sequence that control gene expression establishing the risk for a range of disorders that develop later in life.

As our understanding has evolved, we have come to learn that the effects of environment at any stage of development impact chronic diseases at subsequent stages of the life course. Specifically, we now know that nearly half of the 36 million people who die annually from chronic conditions in adulthood had predisposing behaviours in adolescence: excessive eating, insufficient exercise, and tobacco use initiation are three examples.

Just as our understandings of the childhood and adolescent origins of adult disease has shifted, so too has our understanding of brain development; for as we once thought that brain growth ceased by age three when the bones of the skull fuse, today we know that the brain continues to grow well into the third decade of life. What that means is that the developing brain is susceptible to influences posing both risk and opportunity.

The risk is that the adolescent brain is malleable and influenced by social and environmental toxins (for example, nutrition, pollutants and socially toxic environments) affecting brain growth especially in the critical prefrontal cortex which controls higher functions of impulse control, emotional regulation, and reasoned action. Failure to fully develop this region of the brain has lifelong consequences impairing decision making, further disposing to health impairments and chronic conditions that have behavioural components at their origins.

The opportunity is that the malleable brain makes the developing adolescent ideally suited for interventions that engage him and facilitate life-style changes that can have life-long positive consequences.

**Sales to and by minors –
Each party shall adopt and implement
effective legislative, executive,
administrative or other measures at the
appropriate government level to prohibit
the sales of tobacco products to persons
under the age set by domestic law,
national law or eighteen.**

WHO Framework Convention on Tobacco Control, Article 16

What Works In Adolescence?

While it is often said (and equally frequently believed) that by adolescence it is too late to have an impact, there is ample evidence that such an attitude is unfounded. Rather, at both the policy and programmatic levels models exist that can demonstrate impact.^{19–22} A few examples:

Tobacco: Youth are very price sensitive to tobacco; and thus, the higher cost of tobacco products reduces adolescent use. Excise taxes have been shown to reduce adolescent smoking.

Alcohol: Like tobacco, youth are sensitive to price of alcohol so that raising taxation can reduce consumption.

Unhealthy eating: Adolescents are susceptible to messages from electronic media and restrictions on advertising targeted to young people have been found to impact behaviours.

Acknowledgements: Robert Wm. Blum MD, MPH, PhD, Senior Professor and Chair Department of Population, Family and Reproductive Health Director, Johns Hopkins Urban Health Institute, Johns Hopkins Bloomberg School of Public Health

Key Messages:

NCDs, ADOLESCENTS AND DECENT WORK

- The rapid spread of NCD-risk behaviours impacts negatively on the capacity of young people to prepare for and fully participate in the workforce.
- NCDs in adolescents and youth are not just a health matter; they have wide-reaching social, economic, development, and human rights implications.
- A lifecourse approach to prevention (primary, secondary and tertiary) that pays greater attention to adolescence is central to mitigating the effects of NCDs in individuals, communities and societies.
- Tackling NCDs in youth requires concerted multi-sectoral action, and meaningful participation of youth at all levels in policy and program development. Comprehensive data surveillance is needed, with the capacity to collect age-disaggregated data, including cross-sectoral analysis that links NCD prevalence in youth with social and structural indicators of development, including decent work.



PILLAR 1: Productive Employment, NCDs and Young People

Sustainable development is founded on productive employment. An economy that expands opportunities for investment, entrepreneurship, skills development, job creation and sustainable livelihoods is paramount to the decent work agenda. Conversely, in a time of slow economic growth, understanding the impact of NCDs on productive employment and equitable job creation is an imperative.

The evidence that NCDs affect economic growth, although nascent, is compelling. In 2010 and 2011, the World Economic Forum identified NCDs as a leading risk to the global economy, categorising NCDs as a chronic global risk “that manifests as long-term drains on economic or social activity but do not occur as major, time-bound events”.²³ Over the next 20 years, NCDs are estimated to cost more than \$US30 trillion, representing 48.0 per cent of global GDP in 2010.

The cost of NCDs to workforce productivity is of increasing concern – the impact of absenteeism, presenteeism (a worker is present but unable to effectively carry out the work) and the loss of critical skills not only affects individual companies but the long-term impacts on labour supply, capital accumulation and GDP as a result of NCDs have broader implications for national and global economies that are predicted to be most severe in developing countries.⁷ In addition, the current economic climate and the ensuing contraction of the labour market, has hit youth the hardest with young people in all regions more likely than adults to be unemployed.

However, we know that the economic burden associated with NCDs can be managed effectively and that a return on investment in the health of young people can be made. The World Health Organization estimates that a basic package of cost-effective strategies to address common NCD risk factors (tobacco, alcohol, diet and physical activity) would cost only \$US2 billion a year.²⁴ The public and private sectors both have roles to play, not only in

adopting policies and programmes that promote NCD prevention across the life-course, but ensuring that a greater investment in skill development and training, job creation and opportunities for entrepreneurship are expanded to meet the needs of those young people most affected.

Livelihoods, NCDs and the Environment

A wide range of environmental causes of NCDs encompassing environmental risks and occupation-related exposures such as asbestos and radiation, together make a significant contribution to the NCD burden.⁶

Creating safe and healthy environments not only diminishes the risk of children and adolescents developing and dying from an NCD, but there are also significant co-benefits for health, the environment and livelihoods. For example, using cleaner fuels and developing and implementing ways of using energy more efficiently, has major benefits for addressing respiratory illness in children and young people exposed to indoor air pollution.²⁵

It is estimated that nearly three billion people are still dependent on the use of rudimentary, traditional biomass and coal stoves. Cooking and heating with solid fuels such as dung, wood, crop waste or coal leads to indoor air pollution and is responsible for about two million deaths annually. Exposure is particularly damaging for women and children who spend the majority of their time indoors. Air pollutants from these stoves also have a strong impact on climate change. In addition to carbon dioxide, the poor combustion of traditional biomass and coal stoves also releases very high levels of other pollutants, as ‘products of incomplete combustion’.

While women are disproportionately impacted by the negative impacts of cooking on open fires and traditional cookstoves, they play a crucial role in the adoption and use of clean cooking solutions because of their responsibilities as cooks and managers of their households. The Global Alliance for Clean Cookstoves, an innovative public-private partnership led by the United Nations Foundation promotes the role of women within the cookstove and fuel value chains, as they often excel in entrepreneurial activities and can leverage their existing networks for distribution, marketing, and sales.²⁵

CASE STUDY: Young People Lead The Way – Nigeria’s First Bone Marrow Registry

Acknowledgement: Seun Adebijoyi

Innovative approaches to NCDs have the capacity to save lives and redress global health inequities, create new skills and job opportunities, harness technological advances and promote economic growth. This is the inspiring story from Seun Adebijoyi, who recently featured in the New York Times.

In June 2009, just after graduating from Yale Law School, I was diagnosed with two terminal blood cancers. My survival hinged on a stem cell transplant, but to my dismay, I did not have a matching donor. Worse, my best hope for a donor lay within my native ethnic group in Nigeria, which did not yet have a bone marrow donor registry. Thus six months later, I held the first-ever bone marrow drive in Nigeria, at the Nigeria Law School in Lagos. Despite no advance publicity, the participation rate was – astonishingly – nearly 100%. Several students contacted me in the following months to ask how they could make a greater impact. On 24 February 2012, when I launched the Nigerian bone marrow registry, once again students dominated the audience – in numbers and sheer enthusiasm.

That young people were the most actively engaged demographic at these milestones illustrates the tremendous potential – and, indeed, eagerness – of youth to effect lasting change in their own country. Any country’s plan for sustainable healthcare reform should, therefore, proactively seek to leverage the talent of its young people. As I wrote following the launch of the Nigerian registry: “This exciting experience has convinced me of at least one thing: we [IE, youth] are not the leaders of tomorrow. We are the leaders of today. We push the envelope, test uncharted waters, dodge red tape when necessary, and transcend national boundaries in our quest to combat non-communicable diseases in the global arena. Most importantly, we get things done.”



PILLAR 2: Rights at Work, NCDs and Young People

Everyone, including children and adolescents, has the right to the enjoyment of the the highest standard of health and access to facilities for the treatment of illness.²⁶ In all policies and programs aimed at guaranteeing this right their best interests shall be a primary consideration at all times.²⁷ Where UN Member States are unable to meet the minimum essential levels of primary health care, the international community has committed to provide “international assistance and cooperation, especially economic and technical” to enable developing countries to fulfil their core obligations.²⁸ It has also been recognized that “the role of the United Nations agencies and programs, and in particular the key function assigned to WHO in realizing the right to health at the international, regional and country levels, is of particular importance, as is the function of UNICEF in relation to the right to health of children.”²⁹

When thinking about the right to health, it is important to acknowledge that it is not about the right to be healthy. Nor, is it solely about the right to access health care and facilities. The right to health extends further. The Committee on Economic, Social and Cultural Rights confirms that it is closely related to and dependent upon the realisation of other human rights, including the right to food, housing, work, education and human dignity.³⁰ The right to health extends also to the underlying social determinants of health, such as nutrition, healthy occupational and environmental conditions, and access to health-related education and information.³¹ As such, these, along with other rights and freedoms, are integral components of the right to the highest attainable standard of health which member states have committed to provide to children and adolescents.

The interconnected nature of these human rights highlights the importance of discussions on NCDs extending to social and structural determinants that must be addressed to reduce and mitigate the impact of NCDs on the participation and productivity of adolescents and youth in the workforce. The promotion of decent work and productive capacity in connection with NCDs are central to poverty eradication, the achievement of the MDGs and equitable, inclusive and sustainable development. It will be imperative that international standards, conventions and recommendations (backed by governments, employers and workers) address these issues.

Photographs courtesy
of Tanzania's Tobacco
Control Forum



Children 'swimming' in tobacco – Iringa Region Tanzania

CASE STUDY: Child Labour in Tanzania's Tobacco Farming Sector

Tanzania is the third in Africa in tobacco production after Malawi and Zimbabwe. Unfortunately, in spite of increased tobacco production, Tanzania remains a poor country. Tobacco farmers have also remained poor, while the environment continues to suffer from multiple problems associated with the hazards of tobacco farming.

Tobacco farming is labour-intensive leaving farmers with very little time for food crops. It is also associated with the exploitation of child and female labour, as they are the ones who spend most of their time in the farms. It is reported that a hectare of flue-cured tobacco requires 533 man-days, compared to 217 man-days for rice, the next most laborious crop. It is also estimated that about 1,500 children aged eight to 17 work in tobacco plantations and farms in Iringa District and, 800 in Urambo District alone. In Iringa District, children are paid as little as \$US0.25 and, could earn as little as \$US80 for an entire season. In some cases in Urambo District, children are not paid until the end of the season when farm owners sell their tobacco. Apart from earning low wages, children are also denied schooling, work long hours, living in degraded and demoralising working conditions. In addition, these children face hazards such as humiliation, injuries, burns, snakebites, malnutrition and sometimes death.³²

Thus, not only is tobacco use a major risk factor for NCDs, but its cultivation has several interlinked negative effects on families and the economy.

Acknowledgement: Lutgard Kokulinda Kagaruki, Tanzania Tobacco Control Forum

Forty three per cent of the world's population is currently under the age of 25, reaching as much as 60.0 per cent of populations in some developing countries.⁸

PILLAR 3: Social Protection, NCDs and Young People

At the end of 2010, there were an estimated 75.1 million young people aged 15 to 24 years in the world struggling to find work – 4.6 million more than in 2007.³³ In some developed economies, the youth unemployment rate has reached record levels: 41.6 per cent in Spain and 32.9 per cent in Greece.³³ Young people in all regions are more likely than adults to be unemployed. However, the unemployment rate does not capture the full extent of difficulties facing young people in developing economies, with many more in these countries forced to work in vulnerable employment.

More youth are poor or underemployed and lack social protection than ever before: Globally, some 152 million young workers live in households that earn less than the equivalent of US\$1.25 per day.³⁴ Most of these workers are living in countries and regions where unemployment rates are relatively low, such as in South Asia, East Asia and sub-Saharan Africa yet there may be limited access to effective health insurance and other social protective measures that are necessary to provide a financial safety net. An analysis of employment trends in six Latin American countries found that in 2009, up to 82.4 per cent of young people between the ages of 15 and 19 were employed in the informal economy, up from 80.8 per cent in 2007, and compared to 50.2 per cent of adults between the ages of 30 and 64. Particular challenges arise for young women and men who find themselves in precarious employment without adequate health insurance coverage, especially in countries where such coverage is provided through employers. Unless there is a national health service in place to ensure effective access to healthcare for young people, programs should be put in place, where necessary to subsidize fully or partially the health insurance contributions of the unemployed youth.

The social implications for those young people out of work and unable to access services can be devastating. For young people living with an NCD, the dual burden of unemployment or underemployment plus an NCD can push them further into poverty and poor health, unable to afford effective and quality medicines and health services. Employment difficulties experienced by young people may also increase the likelihood of adopting NCD risk behaviours such as alcohol abuse and vulnerability to mental health problems.

CASE STUDY: Universal Health Coverage – Protecting Individuals and Families

After diagnosis with Stage III breast cancer, Juanita and her young family were faced with enormous financial hurdles. The minimum monthly wage in Mexico is \$US146, and even this is higher than the average for about 50 per cent of the workforce. A patient in treatment for breast cancer would probably be unable to work for about one-third of a year and the costs of transport alone are likely to exceed the monthly income of a female-headed household if she is diagnosed with breast cancer and seeking treatment in Mexico City. The impact on her family (including ability to finance education of dependent children and youth) is extreme.

Innovations to expand access: Qualitative research demonstrated that Juanita's story repeats itself in many district hospitals throughout Mexico as patients seek care close to home. Mexico is now leading efforts to perfect what is now one of the very few national programs with universal coverage for a complete range of breast cancer treatments. With funding from the Seguro Popular, several states such as Jalisco, are developing treatment sites at district hospitals located closer to patients. In addition to saving the patient the costs of transport, this strategy will reduce the strain on tertiary-level cancer centers, which often provide care that could be undertaken by a secondary-level hospital with appropriate supervision.

The Mexico strategy is a hybrid of the models used by many hospitals in high income countries to provide care to a large catchment area. It draws on the models currently in use to improve access to care in resource-constrained countries that have no specialty oncologists, but in this case, the specialists are located in other areas of Mexico and do not have to be sourced internationally.

There are many challenges even at the pilot stage, particularly in patient monitoring, training local physicians, and guaranteeing that funds flow between different levels of the health system. Ongoing evaluation is making it possible to document solutions and improve the delivery model to work towards scale-up. Early results suggest that this is a model that could be generalized and applied in other, mostly middle income countries where specialty providers exist, but are located in large urban centers.

**Juanita's story is based on the experience and information of a patient at the Women's Hospital of Yautepec, Morelos, Mexico, interviewed by Felicia Knaul in spring of 2010.³⁷*

The Role of Legislation and Regulation

The use of tobacco, alcohol and processed food, habits inculcated in childhood and adolescence, can last a lifetime. Governments must legislate to limit their use among children and adolescents. There is already tough industry resistance to taxes and the regulation of advertising and sales of unhealthy products. Governments will need superior legal capacity to defeat legal challenges in national courts and international forums.³⁵ The evidence of impact of measures in one jurisdiction can help inform the response to similar challenges in other countries. For example, the United Kingdom has limited television advertising aimed at children which promotes snacks and drinks high in sugar, with positive results.³⁶

WHO must continue to develop international standards on diet and nutrition, among others, for NCD prevention. These standards will be crucial evidence in court to rebut industry legal action to invalidate legislation, or receive crippling awards for future loss of profits. Developing countries must also maintain the protections provided in international agreements on intellectual property law to ensure affordable treatments for NCDs. These options are too easily lost in complex international trade and investment negotiations. We must nurture the young people who are the future developing world leaders in public health and international law to ensure the global South can legislate to protect children from NCDs.

Strong civil society demand for legislative measures means governments are generally more likely to act. For this demand to be heard, the right to protest, speak out and mobilise must be protected. In other words, respect for all rights underpins the right to a health. In tackling the challenge of NCDs as in all other areas of public policy, human rights are universal and inalienable; indivisible; interdependent and interrelated.

Australian Attorney General (then Minister for Health), Nicola Roxon, outlines the Australian Government's bold stance on plain packaging for tobacco at the UN High Level meeting on NCDs, September 2011



NCDs and Learning for Work and Life

“Education is the primary vehicle by which economically and socially marginalized adults and children can lift themselves out of poverty and obtain the means to participate fully in their communities. Education has a vital role in empowering women, safeguarding children from exploitative and hazardous labour and sexual exploitation, promoting human rights and democracy, protecting the environment, and controlling population growth. Increasingly, education is recognized as one of the best financial investments States can make”.³⁸

Young people need to acquire the right knowledge and skills to become productive workers. An investment in schooling is needed not only for primary education, but also throughout adolescence to equip young people with the necessary skills and training to transition into the world of work.

NCDs prevent children and adolescents from fully benefitting from education, limiting their preparation and entry into the workforce. Children and adolescents living with an NCD may miss opportunities due to absence from school, as well as experiencing stigma and discrimination from ‘being different’. The social and financial costs to carers can also be devastating – the cost of medicines and treatment consume resources limiting opportunities for children to receive an education, especially girls; for parents and adult carers, the emotional and physical toll of caring for a family member with an NCD can reduce their productivity while at work and result in frequent absences from work, leading to loss of income; and for young carers,³⁹ children and adolescents who

provide care in the home for adults or other relatives who are unwell, regular attendance at school can be compromised. In the United Kingdom alone, it is estimated that there are 175,000 young carers, with an average age of 12 years.³⁹ Social protection measures that help poor families manage their risks without compromising their children’s education are vital.

“Our world has a jobs and livelihoods crisis on its hands, and it is hitting young people the hardest. Today’s generation of youth is 1.2 billion strong, and the largest the world has ever known. The overwhelming majority of youth live in developing countries. This demographic phenomenon offers an unprecedented opportunity for innovation and development – what many refer to as a demographic dividend, if we invest in today’s youth.”

UNDP Administrator Helen Clark, March 2012

CASE STUDY: Strengthening Communities to Tackle NCDs so Young People can Enjoy Fulfilling Lives

For children who are living with NCDs, there is a golden window of time within which effective, best-practice treatment and care can have an enormous impact on ultimate quality of life, health outcomes and capacity to participate in decent work in later years.

Since 2004 CLAN (Caring & Living As Neighbours) has been taking a rights-based, community development approach to helping children and young people who are living with NCDs in developing countries, so they may enjoy the highest quality of life possible. Identifying a group of children with the same chronic health condition, such as Diabetes, Asthma, Thalassaemia, Nephrotic Syndrome, Autism, or Epilepsy, as a ‘community’, CLAN then collaborates with a broad cross-section of partners to help the community effect long-term, sustainable and population wide change.

CLAN’s Strategic Framework for Action focuses collaborative efforts on Five Pillars:

1. Affordable access to essential medicine and equipment
2. Education, research and advocacy
3. Optimal medical management
4. Encouragement of family support groups and
5. Helping families achieve financial independence.

Successes so far include: inclusion of drugs within the WHO Essential Medicines List for Children; importation and registration of drugs by Ministry of Health officials; inclusion of drugs within national insurance schemes to reduce cost to families; reduced mortality, morbidity and disability; increased attendance of children at school; engagement of young people in leadership roles within NCD communities; role modelling of young people living successful lives with NCDs to newly diagnosed families to encourage and inspire; pilot trial of micro-finance and enterprise development projects to empower parents to earn the money they need to care for their children (resulting in improved health outcomes for children); and strengthened local, national and international community links, with positive impact on capacity building and sustainability of project work.

Acknowledgements: CLAN (Caring & Living As Neighbours)



Members of the Diabetes Club in Hanoi, Vietnam, receive an encouragement award for good work at school, 2011

In 2002, more than 1.2 million people below the age of 20 died from a non communicable disease.

PILLAR 4: Social Dialogue, NCDs and Young People

Social dialogue has been defined by the ILO as including all types of negotiation, consultation and exchange of information between, or among, representatives of governments, employers and workers on issues of common interest. In the context of sustainable approaches to NCDs, empowering youth to participate across all levels will be imperative.

For Young People by Young People

Young people are agents of change, and can and should be empowered to contribute responsibly to all their decisions and the development of their communities. Despite the fact that within the field of development, the call for meaningful youth participation at both the local and global level has grown louder over the past few years, the term 'adolescent and youth' (youth) especially when referring to the NCD epidemic, is still typically relegated within the frame of a 'vulnerable' or 'at-risk' populations only. That is to say youth are not included as equal stakeholders in terms of policy debate and implementation. People under the age of 25 make up 43.0 per cent of the world's population, reaching as much as 60.0 per cent in some countries.⁹ These statistics alone could easily make the case for youth's legitimate stake in the NCD debate. Throughout their life-course, youth will be not only the ones living with and most at-risk for NCDs but will also be the ones who will be responsible for the repercussions of current policy implementation, bearing the brunt of the social and economic implications of today's decision-making.

Meaningful inclusion of youth is something that has been recognized many times in global development. In 2003, the UN General Assembly passed resolution 58/133, which states, **"that the participation of young people is an asset** and a prerequisite for sustainable economic growth and social development."

Participation of young people within the NCD global policy discussion and implementation goes beyond just receiving an invite to a meeting – it means that youth are not only meaningfully involved as an equal part of the policy discussion but also empowered to become leaders within the NCD global policy arena. According to the DFID sponsored guide, Youth Participation in Development, 'empowerment' is defined as, "an attitudinal, structural, and cultural process whereby young people gain the ability, authority, and agency to make decisions and implement change in their own lives and the lives of other people, including youth and adults." Similarly, participation is defined as: "the active, informed and voluntary involvement of people in decision-making and the life of their communities (both locally and globally). Participation means work with and by people, not merely work for them. The human rights approach to development acknowledges that youth have the right to participation, including under-18s who have the right 'to express ... views freely in all matters affecting [them], the views ... being given due weight in accordance with [their] age and maturity' (Convention on the rights of the Child 1989, Article 12)."⁴⁰

The first-ever Youth Rally on NCDs held in New York, September 2011



CASE STUDY: Empowering Young Health Professionals in the Field of NCDs

The Young Professionals' Chronic Disease Network (YP-CDN) is a youth organization whose mission is to build a cohesive and diverse global community of emerging leaders to drive policy and social change for a healthy and equitable future. This is accomplished by targeting the social injustice levied by NCDs. The Network capitalises on the energy, innovative thinking, and courage to challenge the status quo of young people – across disciplines and borders – and to ensure local and global representation at fora that affect the structures that govern our health. To do this, the YP-CDN uses social media to create virtual platforms to create an incubating space where technical knowledge, activism, and diverse perspectives can mix and innovate and where any young person with an idea is given the platform to lead. In just over two years, YP-CDN has expanded from a small group of 12 medical and public health students to a vast network of over 1200 people of all disciplines spanning more than 75 countries across six continents. Members are youth and budding experts in their fields – public health leaders, doctors, sociologists, anthropologists, philosophers and nutritionists. The network led the first-ever Youth Rally on NCDs opposite the UN Headquarters petitioning for Equity, Action and Targets at the UN HLM on NCDs; members across the globe collaborated on a youth position statement, the Youth Manifesto on NCDs that was presented at the WHO and in the halls of the UN General Assembly. The Network offers community meetings over potluck dinners on the third Thursday of each month across 15 cities worldwide to help re-imagine our world through active dialogue and commit to local actions to realize that vision through youth engagement. The network has been profiled at TEDMED in 2012.

Acknowledgements: The Young Professionals' Chronic Disease Network (YP-CDN)



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Adolescents and youth are powerful drivers of social media, which is uniquely placed to spread knowledge, shape attitudes and influence behaviours.

CASE STUDY: The Healthy Caribbean Coalition: Get The Message Campaign



In 2011, the Healthy Caribbean Coalition launched Get The Message campaign, a mobile phone text advocacy campaign to raise awareness of NCDs and their associated risk factors and send messages of support to Caribbean leaders to attend the United Nations High-Level Meeting (UNHLM). Working with only volunteers and mainly led by youth, the campaign set out to get one million text messages in support for NCDs from people in 17 Caribbean countries. People simply had to text 'yes' to a specific number and by partnering with mobile phone providers there was no cost involved. The campaign ran television and radio PSAs, worked with local radio stations and concert venues, leveraged Facebook and Twitter, and staged two all day text-a-thons. It heavily engaged and involved young people so that over 20,000 are now friends on their Facebook, mostly young people. Most of the 750,000 text signatures in support of the UNHLM on NCDs were received from young people in the Caribbean.

CASE STUDY: AYUDA (American Youth Understanding Diabetes Abroad) – Using Diabetes Education to Empower Youth to Become Agents of Change

AYUDA is a civil sector organization that empowers youth to serve as agents of change in diabetes communities around the world.

By empowering local young leaders (with and without diabetes) to serve as peer educators for other youth with diabetes in some of the poorest communities within their countries (specifically within Ecuador and the Dominican Republic), AYUDA has found big health benefits. Improvements in short-term and long-term glycemic control (HbA1c values) of children and adolescents who take part in the diabetes programs, as well as an increase in civic participation of the local youth leaders; engaging in local and global advocacy; taking part in gathering in-home diabetes data and for a few current youth leaders; and enrolling in medical school in hopes of making changes internally to the way health providers manage diabetes.

This active involvement increases the power, leadership and diabetes management of the other youth with diabetes through their engagement with the broader diabetes community.

Acknowledgements: Molly Lepeska



Youth leaders and campers participate in Campo Amigo, Ecuador, a camp for young people with diabetes, Ecuador 2009. Photograph courtesy of AYUDA

Barriers to Young People's Participation

Despite the inroads and the definitions of what meaningful youth inclusion and empowerment means, there are still many barriers – both logistical and symbolic that prevent young people from being meaningfully involved in the NCD policy debate and implementation. These barriers exist at national and community levels, as well as at the global level. In order to ensure that youth are meaningfully involved in the NCD policy process, they must be addressed.

Barriers to Inclusion of Young People at a Global and Policy Level

- **The needs of adolescents and youth:** Are not properly addressed or resourced and the importance of this group's contribution is not acknowledged.
- **Lack of diversity among young people involved:** Priority not given to organizations of, or young individuals living with NCDs – donors are not working within these communities.⁴⁰
- **Lack of research or reporting:** More data required on the importance of meaningful engagement of young people in policies and programs.⁴¹
- **Leadership opportunities for a select (and well-connected/well-versed) few:** At meetings, the same youth leaders are often invited because they have global experience already – this can lead to gaps in knowledge and misrepresentation.⁴²
- **Tokenism:** Often caused by a lack of understanding of the importance of youth participation – youth organisations or leaders are invited to fill a quota or guidelines, but not asked for feedback, or only asked for feedback regarding 'youth-specific' recommendations – no holistic integration into the outcomes of a process.⁴²
- **Youth volunteers:** Perception that youth leaders will participate for free, just for the chance to participate. Without remuneration, young people often seek employment in other fields, which diminishes their capacity to become meaningfully involved.⁴²
- **Lack of, or limited core funding:** Youth-led organisations – particularly those with limited experience – face extreme difficulty securing funds for core operating costs, including the funds necessary to run an office, compensate staff and cover other overhead expenses.⁴²
- **Attitude or preconceptions about youth:** Attitudes of 'adults' can often affect the way youth and adolescents are treated (and vice versa).⁴³

CASE STUDY: Global Meet at Dhaka Puts Health at the Core of Sustainable Development

"The notion of sustainable development will be devoid of any mere sense if health issues such as hunger, malnutrition, hygiene, sanitation, maternal and child health are not at the core of holistic design of sustainable of development". This was the take home message which was very strongly articulated by all the speakers including Honourable Ministers, State Ministers and Secretaries from the Ministry of Health and Family Welfare, Ministry of Food and Disaster Management and Ministry of Environment participating in the Global meet on Determinants of Sustainable Development: Road to Rio+20, held on 16–17 May 2012 in Dhaka, Bangladesh.

Organised by Eminence in collaboration with a number of partners, the global meet brought teachers, university students, researchers, development activists and development and health professionals under one umbrella to facilitate an insightful discussion in order to put specific health goals at the core of the next development goals. However differently it was stated by all the speakers, all voices harmoniously spoke in one tag line that is, without specific health goals at the core, sustainable development will be of no use.

Acknowledgements: Shusmita Khan, Eminence, Bangladesh



5. OPPORTUNITIES FOR CHANGE

NCDs and the social determinants of health on the Global Development Agenda

The current Millennium Development Goals (MDGs) are a series of time-bound goals and targets by which progress in reducing poverty, hunger, disease, lack of housing, and exclusion can be measured, with a target achievement date of 2015.

NCDs were not integrated in the current set of MDGs, and as a result, investment in addressing the social and economic impact of NCDs has been limited. However, now that the UN has recognized the importance of NCDs as a health and development issue, it is time for indicators and targets for NCD prevention and control, with special attention to the health of children and adolescents, to be part of the post-2015 development agenda.^{44, 45}

At the Rio+20 UN Conference on Sustainable Development in June this year, the global burden and threat of NCDs was again recognized as one of this century's major challenges for sustainable development.⁴⁶ As Rio+20 sets in motion the formulation of a new generation of internationally agreed development goals, the impact of the rising global NCD burden and its impact on the world's population of young people needs to be acknowledged, particularly in the developing world, so that a meaningful multisectoral response is implemented to meet all of the challenges to social and economic development.

Despite the challenges, opportunities for change exist to mitigate the impact of NCDs on young people. World Health Organization Director General Dr. Margaret Chan, speaking at the September 2011 UN High-Level Meeting on NCDs, quoted management expert Peter Drucker, who once said, "what gets measured gets done." Reducing the impact of NCDs on adolescents and youth requires translating those words into action by putting in place mechanisms to assess accurately the burden of NCDs and associated risk factors in adolescents and take corrective actions that are monitored and evaluated within the global development framework.

Data Surveillance and Coordination

Globally, data surveillance and coordination for NCDs and NCD risk factors in children, adolescents and youth are variable. NCD prevalence and mortality in those aged 10 to 24 is not measured systematically. In developed countries, there are some statistics now being collected regularly on the incidence of cancer, diabetes, cardiovascular disease and lung disease (including asthma) in children and adolescents, while coverage for health-risk behaviours in adolescents ranges from 41 to 86 countries, and is highly variable both across and between regions with Oceania, Eastern and Central Asia and parts of sub Saharan Africa having some of the lowest percentage of population coverage.¹³ Similarly these regions generally lack population-based registries for cancer and other NCDs.

What is needed urgently is to ensure that as part of national surveys, including demographic and health surveys, age-disaggregated data are collected on the incidence of major categories of NCDs, as well as on risk factors for NCDs. At the same time, further efforts are needed to develop population-based data surveillance mechanisms and information systems. These should be built into national and international frameworks on health statistics, reported on regularly, available to researchers, and form the basis for informed decisions by policy makers about appropriate steps to take to prevent and control NCDs in young people.

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

from the World Commission on Environment and Development's (the Brundtland Commission) report *Our Common Future* Oxford: Oxford University Press, 1987



Photograph courtesy of PAHO/WHO

NCD Child wishes to thank all those who have assisted in the development of this Issues Paper and preparations ahead of the Ministerial Roundtable at the ECOSOC AMR on 6 July 2012.

Adebiyi, Seun (Nigerian BMR)
Sir Alleyne, George (PAHO)
Asher, Innes (ISAAC)
Beran, David (University of Geneva)
Block, Charlotte (Project HOPE)
Blum, Robert (Johns Hopkins)
Denburg, Avram (GTF.CCC)
Dick, Bruce (Johns Hopkins)
Dishman, Deborah (UNICEF)
Eussen, Amy (NCD Child)
Ferguson, Jane (WHO)
Gayle, Jacob (Medtronic Foundation)
Grainger-Gasser, Alice (World Heart Federation)
Graham, Jane (Peekaboo Creations)

Gunn, Trevor (Medtronic Foundation)
Hiniduma-Lokuge, Prasanga (Medtronic Foundation)
Hospedales, James (PAHO)
Kakulinda Kagaruki, Lutgard (Tanzanian Tobacco Control Forum)
Kanungo, Aparna (Nossal Institute)
Kasedde, Susan (UNICEF)
Khan, Shusmita (Eminence)
Kishore, Sandeep (YPCDN)
Klein, Jonathan (AAP/IPA)
Klimas, Jinny (WHO)
Knaul, Felicia (Harvard, GTF.CCC)
Lepeska, Molly (AYUDA)
Meer, Jeff (PHI)

Patterson, David (IDLO)
Pleic, Maja (GTF.CCC)
Quinlan-Davidson, Meaghen (PAHO)
Reynolds, Barbara (UNICEF)
Remenyi, Bo (World Heart Federation)
Rojhani, Ariella (NCD Alliance)
Saxton Fox, Rebecca (UNICEF)
Sealey, Karen (PAHO)
Taubert, Kathryn (World Heart Federation)
Treat, Kathleen (Speranza Foundation)
Watt, Judith (NCD Alliance)

Special thanks to the primary authors of this paper, Kate Armstrong and Sue Henshall (NCD Child).

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WORKING WELL!

Safe-Guarding Adolescent and Youth Livelihood in the Face Of NCDs and their Risk Factors

This paper is being published with the kind support of UNICEF



The NCD Child movement is a global multi-stakeholder alliance, championing the rights and needs of children, adolescents and youth who are living with or at risk of developing NCDs. We work together to ensure that issues related to NCDs, children, adolescents and youth are equitably addressed and prioritised in global and national health policy and development agendas. We actively engage and collaborate with governments, foundations, multilateral and non-governmental organizations, civil society, private sector, academic and research institutions to mainstream NCDs and scale up knowledge, experience and resource sharing on NCDs.

NCD Child is committed to the prevention of NCDs throughout the life course. We promote policies and initiatives that minimise preventable death and disability. This includes a focus on the social determinants of health, as well as relevant behavioral interventions.

The NCD Child movement will do all it can to ensure children, adolescents and youth are fully integrated within the global NCD, health and development agendas.

For more information, please consult the 'Oakland Statement', a consensus document on Children, Adolescents and NCDs developed by the NCD Child Movement and approved by acclamation on 20 March 2012 at the Inaugural NCD Child Conference.



Maximising quality of life for children living with chronic health conditions in resource-poor countries through:

1. Access to affordable medication and equipment
2. Education, research and advocacy
3. Optimising medical management
4. Encouraging family support groups
5. Reducing poverty and promoting financial independence

so the children may grow to enjoy healthy, happy and fulfilling lives and know their neighbours care.



NCD Child is a project managed by CLAN Inc
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