The Union

International Union Against Tuberculosis and Lung Disease

Health solutions for the poor

Tobacco Control Programmes and Prevention of Non-communicable Diseases (NCDs): a way forward

A Discussion Paper

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EXECUTIVE SUMMARY

Non-communicable diseases (NCDs) are one of the major threats to health and development in the 21st century. A leading cause of death globally, the four mains types of NCD – cardiovascular diseases, cancers, chronic respiratory diseases and diabetes – were responsible for 68% of deaths globally in 2012. More than 40% of these NCD deaths occurred before the age of 70. 73% of all NCD deaths, and 82% of premature deaths, occurred in low- and middle- income countries (LMICs). All age and socioeconomic groups are vulnerable to the risk factors driving the global NCD epidemic, whether from unhealthy diet, lack of physical activity, tobacco use or the harmful use of alcohol. Without action the human, social and economic costs of NCDs will continue to rise and eventually overwhelm the capacity of countries to address them.

The WHO's Global Action Plan for the Prevention and Control of NCDs 2013-2020 was endorsed by the World Health Assembly in 2013. This plan laid out nine voluntary global targets and provided Member States and the public health community with policy options to achieve them. If governments can make progress against these nine NCD risk factor-related targets by 2025, they should be able to achieve the primary target: a 25% reduction in the risk of premature mortality from NCDs.[1] Delegates at the United Nations General Assembly high-level NCD review meeting in 2014 agreed that there is no reason why any country – regardless of income status – should delay moving forward with the implementation of NCD interventions. All countries should aim to attain the global targets by 2025.[1]

Despite evidence of political commitment, insufficient attention has been devoted to NCDs to date and expressions of support have not been followed by concrete action - including availability of financial and human resources required to reduce prevalence. Consensus at a global level is now emerging for adoption of an integrated, whole-of-government approach to mitigate the growing burden of NCDs focusing and addressing all major modifiable risk factors. These proposals however have also aroused concerns about its ability to cater to specialist functions, such as tobacco control and if, given the maturity of programmes and policies currently in place at the national level, these will be diluted, thus compromising the effective programmes that already exist.

For example, significant progress has been made in tobacco control at national and global levels. Backed by the World Health Organization's Framework Convention on Tobacco Control, the only legally-binding international health treaty, it has delivered a decade of evidence-based strategies and solutions, honed over time and with the input of experts from the 181 countries who are party to the treaty. Development of regional and national programmes to prevent NCDs would proceed more rapidly and effectively if drawn from the lessons learnt in tobacco control.

The challenge now is to be specific about what an integrated approach for tobacco control and other modifiable risk factors should entail and how the lessons learnt from tobacco control over the last two decades can be applied.

An integrated approach could ensure that all modifiable risk factors are addressed. But it must take into account the vital roles of various organisations and stakeholders in creating an effective, nationally focused, targeted and sustainable approach.

For integration of NCD risk factors, without impeding the existing gains in tobacco control, The Union recommends the following:

- Governments commit to establishing dedicated NCD units to coordinate whole-of-government action led by Ministry of Health and with the support of Ministry of Finance and treasury.
- Collaboration between Governments and civil society to strengthen NCD efforts by applying the lessons from tobacco control to other NCD risk factors.
- Governments give priority to creating a sustainable source of funding to address tobacco control and other NCD risk factors.
- The Union develop an action plan to assist governments to take on integration of its progammes related to prevention of NCDs.
- The Union offer to assist countries with content discussion for developing national NCD targets' plans, monitoring and reporting processes.
- Civil society, including NGOs and academia advocate to keep NCDs and the need for sustainable health financing on the agenda of governments.
- Governments, civil society and global partners develop policies for engagement with private sector and related industries.

Since governments and civil society have a specific role to play we also recommend the following:

For Ministries of Health:

- Establishment of a dedicated NCD unit housed within the Ministry of Health (MoH) backed by a national action plan and allocation of resources for its implementation.
    - The NCD unit, while housed within the MoH, should serve as a coordinating body for a whole-of-government approach with the understanding that most NCD policy interventions will come under the jurisdiction of other ministries. The MoH should have the lead and a strong representation on policies which impact public health developed and adopted by other ministries

  - Development of detailed national action plans to decrease the risk factors associated with NCDs, maintaining a strong focus on tobacco control, creating new resources through raising tobacco taxes and clear policy guidelines for engagement with the private sector.

- For countries that have not yet ratified the WHO FCTC or have made little progress in policy development for tobacco control and face a high prevalence of smoking -- keep the tobacco control department separate as a focal point for WHO FCTC compliant policy development until more progress is made (ensuring close collaboration between tobacco control and the NCD departments.

- Meaningful involvement of national stakeholders, including civil society, in all public health policy debate.

For The Union and other civil society organisations:

- To undertake activities to increase the capacity of national stakeholders to develop operational plans for integration while continuing to work in close partnership with other stakeholders to ensure effective, multisectoral collaboration occurs on NCDs.
- To cement The Union's leadership role in bringing content discussion to national NCD prevention efforts with a focus on the development, passage, and implementation of specific policy measures.
- Continued contribution to the existing knowledge base on effective approaches to achieve policy change for NCD control.
- Civil society, including non-governmental organisations (NGOs) and universities need to assume an important role in promoting the integrated NCD agenda and keep this on the political agenda of the governments.
- Additionally, The Union should consider, based on its experience with the Global Fund to Fight AIDS, Tuberculosis and Malaria, advocating for the creation of an international funding scheme to achieve NCD goals by 2025.

INTRODUCTION

NCDs overview

Non-communicable diseases are receiving increased attention globally, but specific actions have not always accompanied policy statements. These diseases - comprising mainly cardiovascular diseases, cancers, chronic lung diseases, and diabetes - are the leading causes of death across the globe. The majority of these deaths occur in low- and middle- income countries (LMICs) .The combined burden of NCDs is rising fastest among these countries.[2] Despite their rapid growth and inequitable distribution, evidence shows that much of the human and social impact caused each year by NCD-related deaths could be averted through comprehensible and cost-effective interventions.[4]

A significant percentage of NCDs are caused by four main behavioural risk factors: tobacco use, physical inactivity, harmful use of alcohol and unhealthy diet. Exposure to these modifiable risk factors – either individually or combined – impacts on other underlying metabolic and physiological causes of NCDs, such as obesity and raised blood pressure, further driving the global NCD epidemic. One effective strategy to reduce the global burden of NCDs is to reduce the exposure of individuals and populations to these modifiable risk factors and to prevent emergence of the preventable common risk factors.[3]

Tobacco control as an advanced public health programme

Reducing tobacco use is one of the most effective strategies to help countries achieve the global targets set out in the Political Declaration on NCDs (2011) by the UN General Assembly to propel the prevention and control of NCDs. Indeed, tobacco use has been described as the most policy-responsive NCD risk factor.[5] Backed by an international health treaty - the WHO Framework Convention on Tobacco Control (WHO FCTC)[6] - tobacco control has delivered a long history of evidence-based solutions from which the challenges of NCD prevention could benefit.

An integrated approach to NCDs

Consensus is emerging among public health specialists and policy makers for an approach to mitigate the growing burden of NCDs which addresses all major modifiable risk factors as an integrated package. Without a comprehensive plan, the drive to integrate work has aroused concerns that specialist functions will be compromised, and that existing tobacco control efforts may face dilution, thereby slowing the momentum and gains that have been made over the past two decades.[7] The term "integration" means different things to different people.[8] Little clarity currently exists on what an integrated programme for NCDs might look like and how it might be delivered.

Tobacco control offers many important lessons for NCD prevention and this model should be explored and taken into account throughout development of an integrated approach. Integrated approaches can be more cost-effective and sustainable than vertical approaches[9]. While literature on NCDs recommends integration, there are more examples of policies in favour of integration than concrete examples of integrated programmes functioning in practice. And there has been minimal discussion about the potential effects of integration on tobacco control. It is therefore important to consider how tobacco control can be integrated to maximise gains and avoid the risk of dilution.

How to define an integrated approach

The immediate challenge is to define what an integrated approach for tobacco control and NCDs might look like. This paper discusses the growing burden of NCDs, policy responses to date, pros and cons of integration of tobacco control and NCDs, and finally offers recommendations on ways forward for Ministries of Health and NGOs. It is hoped that this paper will provide useful guidance on the issue of integrating tobacco control and NCDs, with the aim of improving global health and wellbeing.

BACKGROUND

Non-communicable Diseases

Of the 57 million deaths that occurred worldwide in 2008, 36 million, or two thirds, were due to NCDs. Chiefly cardiovascular diseases, diabetes, cancers, and chronic respiratory diseases, they have reached epidemic proportions and the burden is predicted to continue to rise globally along with the ageing population.[10] Mental health issues are also an important non-transmissible source of ill health, although not currently included in the official WHO definition of NCDs. Including depression, over half (54%) of disability-adjusted life years worldwide were due to NCDs in 2010, compared with 43% in 1990.[11]

NCDs, poverty and development

Contrary to popular belief about the spread of NCDs (that high income countries are most affected) the data shows that LMICs are disproportionately facing the disease burden with 86% of global NCD deaths occurring in these regions. Moreover, age-specific NCD death rates are nearly twice as high in LMICs as in high-income countries.[12]

Poverty and NCDs are clearly interlinked. The epidemic threatens progress towards global poverty reduction initiatives, including the Millennium Development Goals (MDGs) and the post-MDG development agenda. The financial burden of NCDs, is forcing millions of people into poverty each year, as households face increased costs for health care and decreased income through incapacity of primary earners.[13] Recognising this, the UN conference on sustainable development in 2012, Rio+20, referred to non-communicable diseases (NCDs) as “one of the

major challenges for sustainable development in the 21st century" - the cumulative economic losses are predicted to reach US$7 trillion over the next 15 years.[3]

Risk factors

The four major NCDs share the same modifiable risk factors: tobacco use; harmful use of alcohol; physical inactivity; and unhealthy diet. Current rates of NCDs in any population reflect past exposure to these risk factors and future rates will largely be determined by current levels of exposure to risk factors.[10] Over 80% of coronary heart disease, up to 90% of Type 2 diabetes and 33% of cancers could be prevented by changes in lifestyle factors - particularly smoking cessation, improved diet, weight maintenance and increased physical activity.[4]

Both economic development and urbanisation tend to be accompanied by increased prevalence of NCDs; however such increases are not inevitable. Increased exposure to tobacco smoking, excessive consumption of alcohol and fast foods, and increased use of motorized vehicles can be addressed. So too can the lack of good infrastructure for purposive physical activity and active recreation in ever-growing cities. Successful health policies can mean that economic development and urbanisation are accompanied by healthier lifestyles and nutrition, and consequently with reduced rates of NCDs.[4]

Tobacco use as a major contributor to NCDs

Tobacco use causes a range of diseases. It harms nearly every organ in the body.[14] Tobacco kills up to half its long-term users, amounting to nearly 6 million deaths per annum. Economic costs are 1 – 2% of the global gross domestic product, every year.[15] More than five million of these deaths are the result of direct tobacco use while more than 600,000 are the result of non-smokers being exposed to second-hand smoke. Left unchecked, the global death toll from smoking is projected to increase to 8 million by 2030.[3]

In comparison, about 3.2 million deaths annually are caused by insufficient physical activity and about 1.7 million deaths by low fruit and vegetable consumption. Of the 2.3 million annual deaths caused by harmful drinking, half are NCD-related. In terms of attributable deaths, elevated blood pressure is the leading NCD risk factor globally, causing an estimated 16.5% of global deaths, followed by tobacco use (9%), raised blood glucose (6%), physical inactivity (6%) and obesity (5%).[16]

Global and national attention

Prior to July 2014's "Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases" insufficient attention had been devoted to NCDs, despite their clear impact on global public health. Donor funding is extremely low.[1] New estimates indicate that just 2.3% ($503 million) of overall development assistance for health (DAH) in 2007 was dedicated to NCDs. A review of resolutions and statements about the strengthening of health systems found that, of the sixteen resolutions studied, only three

contain any reference to the need for a response to the growing burden of chronic diseases in LMICs.[17] Another estimate suggests that while overall DAH is growing, with $31.3 billion allocated in 2013, NCDs received just 1.2% ($377 million) despite almost two-thirds of global deaths being due to NCDs.[18] And just one-fifth of this was spent on tobacco control specifically.

A group of public health experts from The Lancet NCD Action Group and the NCD Alliance wrote that even where plans do exist, implementation is often slow; that other global health issues remain of more pressing concern; that growing attention to the urgency of NCDs has not led to immediate action; and that time is needed for the challenges posed by the NCDs to be understood and acted upon.[12] Thus far NCDs do not have the political support and commitment needed to reduce their prevalence.

Communicable diseases have historically been higher on the political agenda. Despite the urgent threat of NCDs to populations and economies, health priorities have not yet shifted to reflect this.

A factor leading to the insufficient global response to NCDs is perhaps the public demand for ensuring provision of clinical, curative care either by governments directly or through the private sector. At present there is greater political support for a curative approach to health, yet prevention must become a priority if the global burden of NCDs is to be reduced. A reduced NCD burden will give health services greater capacity to cope with existing illness and population needs. A balance needs to be struck to ensure due emphasis on both preventive and curative care. Recognising this, the American Cancer Society has changed its expressed focus from "finding the cure" to "the fight against cancer", with the new message "For 100 years, the American Cancer Society has been leading the way to transform cancer from deadly to preventable."[19]

International responses to NCDs

There is a strong historical precedent for prioritising infectious disease over NCDs. Global agendas require time to catch up with the epidemiological shift from communicable to non-communicable disease. In recent years the focus has been intensified in response to the rapidly growing prevalence and death rates, and the threat to economic and social development. The global response to NCDs, though still limited, is growing and includes actors outside the health system.[13] The major international responses are listed below, in Table 1.

Table 1. The Global Response to NCDs (2003 - 2015)

Response	Year	Key points
WHO Framework Convention on Tobacco Control (WHO FCTC)	2003	First legally binding global health treaty negotiated under the auspices of WHO; aimed at the control of a key NCD risk factor; contains demand and supply reduction measures; contains provisions that outline multisectoral action on the social determinants of tobacco use; sets important precedent for future international decisions in its call for a comprehensive, multisectoral approach that goes beyond health to encompass trade, tax, education, justice and law enforcement, environment and agriculture.
WHO Global Strategy on Diet, Physical Activity and Health	2004	Recommends action at multiple levels on two key modifiable risk factors for NCDs: unhealthy diet and physical inactivity.
Action Plan for the Global Strategy for the Prevention and Control of NCDs 2008-2013	2008	Consolidates comprehensive, multisectoral action on the four main NCDs into one plan with performance indicators. Most recommendations involve multisectoral action on social determinants of NCDs.
Recommendations on the Marketing of Foods and non-Alcoholic Beverages to Children	2010	Consists of policy-level recommendations aimed at changing the food environment. Recommendations represent explicit recognition of a life-course approach to NCDs by highlighting unique vulnerabilities of children to both marketing and to NCDs.
Global Strategy to Reduce Harmful Use of Alcohol	2010	Focuses on ten areas of national action including leadership; health services; community action; drink-driving; alcohol availability, marketing, pricing and informal production; impact mitigation; and monitoring.
'Best Buys'	2011	Identifies low-cost, high-return interventions to prevent and control NCDs; highlights multisectoral action on social determinants.
UN High-level Meeting on the Prevention and Control of Non-communicable Diseases	2011	Only the second time in its history that the General Assembly met to discuss a health issue (the first one was on AIDS in 2001). Led to the UN Political Declaration on NCDs.
UN Political Declaration on NCDs	2011	Recognises NCDs as a global health concern and a threat to social and economic development, including the MDGs; sets global priorities to tackle NCDs; commits the UN to five areas of action (Reduce risk factors and create health-promoting environments; strengthen national policies and systems; international cooperation, including collaborative partnerships; research and development; and monitoring and evaluation); calls on countries to develop multisectoral national policies and plans on NCDs by the end of 2013; stresses the need to adopt whole-of-government and whole-of-society approaches in the NCD response.
World Conference on the Social Determinants of Health	2011	Brought together partners to discuss action on drivers of health and health inequities, including NCDs; resulting Rio Declaration expressed "determination to achieve social and health equity through action on social determinants of health and well-being by a comprehensive intersectoral approach"; drew explicit attention to the role of non-health-sector actors in improving health and reducing health inequities.
25 by 25 goal	2012	Set a global target of a reduction in NCD-associated premature mortality by 25% by 2025.
UN Rio+20 Conference on Sustainable Development	2012	Unequivocal in its call for concerted action on NCDs; stressed the importance of national policy and plan development.
WHO Global Action Plan for the Prevention and Control of NCDs 2013–2020	2013	Sets out specific targets for country action on NCDs.
Global Monitoring Framework on NCDs (GMF)	2013	Comprises nine voluntary global targets and 25 indicators aimed at preventing, controlling and tracking the four main NCDs and their key risk factors.

High-Level Panel of Eminent Persons on the Post-2015 Development Agenda	2013	Preventing 'priority' NCDs is a proposed target.
Ashgabat Declaration on the Prevention and Control of NCDs	2014	High-level European government support to three areas: NCDs and development; tobacco-free Europe; and national responses to NCDs. Tobacco control is being used as an entry point due to low-cost implementation and self-funding mechanism through taxation
EU Summit on Chronic Diseases	2014	First ever EU summit to address NCDs; addressed the medical, social and economic burden of NCDs in the EU; brought together key policymakers, stakeholders, and interest groups to explore ways to tackle NCDs effectively; EC called for political leadership to address the burden of chronic diseases.

Current scenario - insufficient progress to date?

Despite evidence of political commitment to addressing NCDs, more strategic planning needs to be done at global and national levels to tackle the NCD burden. Expressions of support for NCD programming have not yet been followed by funding or the other resources required to act on these commitments. Strategies to target specific risk factors have also faced significant challenges.

The WHO FCTC, for example has been widely adopted and made significant ground for public health. But uptake has not been universal, nor has implementation been without problems. Securing symbolic support has been easier than enacting concrete measures. Government officials at the UN 'Rio+20 Conference on Sustainable Development' in June, 2012 , for example, called for accelerated implementation of the WHO FCTC both in the Political Declaration, 'Rio Declaration on Social Determinants of Health', and the outcome document 'The Future We Want.' In response, a UN Economic and Social Council resolution of July 2012 emphasized the need for the UN to work across sectors to facilitate WHO FCTC implementation, specifically encouraging,"integration of the World Health Organization Framework Convention on Tobacco Control implementation efforts within the United Nations Development Assistance Frameworks, where appropriate, in order to promote coordinated and complementary work among funds, programmes and specialized agencies."[20] Until now recognition of the need for action has not necessarily translated into anything beyond symbolic commitment, as indicated by the relative levels of DAH funding.

Uptake of the Global Strategy on Diet, Physical Activity, and Health is also lagging. A review of government policies in 140 LMICs to identify those that address salt consumption, fat consumption, fruit and vegetable intake, or physical activity found that: "More than eight years after the WHO Global Strategy was agreed upon, only a minority of the LMICs included in this analysis have comprehensive policies in place."[21]

NCD policies in low- and middle-income countries

Although one objective of the WHO Global Action Plan on NCDs was "to establish and strengthen national policies and strategies for the prevention and control of NCDs… more than half of LMICs do not have a national NCD policy, despite the growing burden of such diseases

within these countries.[22] The literature[23,33] indicates that there are several barriers to successful implementation of the WHO FCTC and other international health policy documents on NCDs, including:

- The global financial crisis that began in 2008, which has eviscerated government and donor budgets.
- Failure of governments and funding agencies to prioritise NCDs and failure to commit financial and technical resources.
- Tobacco industry interference specifically in preventing or delaying implementation of the WHO FCTC.
- The absence of national NCD policies and a weak national capacity for policy formulation and implementation in LMICs.

ADDRESSING HEALTH THROUGH A TREATY

Decades after the evidence linking tobacco use to disease was clear and despite the ever increasing burden of disease caused by tobacco consumption, interventions to reduce tobacco use continued to focus on individual-based approaches like cessation advice. It was believed that by educating people about the harms of tobacco use, with a special emphasis on educating children, rates of use would decline. Instead, educated smokers continued to smoke as before. School-based programmes became the norm, but they omitted well-designed long-term evaluations that would reveal whether they were achieving their desired effect. For decades, such programmes were carried out. Tobacco use continued to rise steadily as industry advertising and promotion took effect, as did the widespread acceptability of smoking and its perceived affordability.[24]

Over time, tobacco control workers realised that it made little sense to give the tobacco industry the monopoly over policy debates.[25] Health groups, having been "generally absent from policy discussions" while "the tobacco industry made itself heard"[26] began to approach tobacco control from a policy perspective. As laws and policies - specifically taxation, comprehensive bans on advertising and promotion, expansion of smokefree places (which also reduced the acceptability of smoking), and graphic health warnings - became the norm, tobacco use declined significantly.[27] This policy oriented approach taken by tobacco control should form the basis of work for other NCD risk factors.

This recognition within the tobacco control community and relevant stakeholders including policy makers for a policy-based approach as the only effective way to achieve significant and sustainable decreases in tobacco use, along with the difficulties of confronting the tobacco industry separately in every single country, led to the decision to take a global, policy-based approach under the auspices of the World Health Organization. The resulting treaty, the Framework Convention on Tobacco Control (WHO FCTC) is a landmark not only in tobacco control, but in public health. The WHO FCTC is the only legally-binding internatiobal health treaty, and in dealing with tobacco, it also tackles NCDs. It has been broadly ratified, with 181 Parties as of March 2015. The WHO FCTC uses a multi-sectoral approach, covering supply- and

demand-side measures to reduce tobacco use. The WHO FCTC also addresses governance issues: Article 5 calls for multisectoral national plans, coordination structures, and policymaking that is independent from tobacco industry interests.[20] In summary, the WHO FCTC has successfully:

- Raised the global profile of tobacco control.
- Strengthened governments in their fight against the tobacco industry, both politically and legally.
- Contributed to the global de-normalisation of the tobacco industry.
- Catalysed the formation and strengthening of transnational civil society coalitions.
- Facilitated the sharing of experiences, expertise and capacity among governments and non-governmental organisation.
- Brought new resources--political, financial and human--into the field[28.]

ADDRESSING THE TOBACCO EPIDEMIC IN THE CONTEXT OF NCD PREVENTION AND CONTROL

Though an integrated, multi-sectoral approach for any public health challenge has the potential to be both cost effective and beneficial for improving health the various modalities and practical implications of such an approach need to be analysed carefully.

It is also important to gain further understanding of the ways in which integration may affect or alter the ability of tobacco control programmes to reduce tobacco use and contribute towards the decrease in incidence of NCDs. The following sections address these issues by examining how integration will impact multisectoral partnerships, national policies, working with industry and availability of resources.

Maturity of approach within NCDs modifiable risk factors

The programmes developed to tackle different modifiable risk factors for NCDs are at various stages of development and maturity. While there is no health benefit to any form of tobacco trade or use, the same cannot be said about the other NCD related risk factors.[29] This, and the availability of legislation for tobacco control at national level, and an international health treaty (WHO FCTC) makes tobacco control efforts unique. Since tobacco control has a long history in achieving policy change it has many lessons that can be directly applicable to other risk factors, and it is therefore in a strong position to strengthen the overall NCD approach.

Policies to reduce tobacco use are extremely well-researched. Though the evidence base of the impact of other NCD risk factors on global public health continues to grow, there is not yet as much evidence to support policy approaches.[30] Lessons learned from tobacco control are likely to be applicable for control of the other risk factors. For example, we know that targeting behaviour changes at the individual level is not likely to work, and as with tobacco, changes to policy and the physical environment will be critical for other risk factors. The body of evidence

as to what specific changes are needed (if not on how to achieve them) is building. So, while "little exists in the literature linking fiscal policy and health promotion except in relation to tobacco"[20] and "there is a much larger body of evidence on intervention-related studies for tobacco than for the other two behaviors [physical activity and healthy eating]"[31], initial evidence suggests that the enabling environment approaches taken by tobacco control will also work for the other risk factors[32].

Big Industry

Important similarities exist between Big Tobacco and other industries; hence the common use of 'Big Food' to describe the major companies promoting products high in fat, sugar, and salt, and low in nutrients. As with Big Tobacco, Big Food also exerts significant influence over governments - this makes it difficult to pass legislation restricting related activities that are harmful to health. Article 5.3 of the WHO FCTC offers comprehensive guidance on banning tobacco industry representation from any forum related to developing policy to protect public health from the harms of tobacco. This offers an invaluable reference point for developing parallel policies to deal with other Big Industry. Public health policy development has to be independent from any commercial interests but keeping the Big Industries away would need a policy which clearly outlines the parameters of any engagement, similar to Article 5.3 of WHO FCTC. Failure to learn lessons from tobacco control, in our opinion, would lead to a delay in life-saving policy development.

A multisectoral partnership approach

What is true of tobacco control is true of other public health issues - that a policy-based approach to change the environment in which people make their decisions will be the most effective means for changing behaviour. Sustained change requires policies that impact foundation for the more targeted interventions that can follow later. For example, a community-based programme to promote healthy eating and physical activity is unlikely to succeed if there is a lack of access to healthy foods or places for physical activity.[31] Significant declines in tobacco use have followed strong policy measures: raising prices through taxation; decreasing attractiveness by banning advertising, promotion, and sponsorship and by placing graphic warnings on packets; and reducing social acceptability by making places smokefree.[33] Similar approaches are likely to have similarly strong effects on other NCD risk factors.

In order to pass and implement the policies that reduce tobacco use, various sectors including finance, foreign affairs, trade, and agriculture must be included.[17] Indeed, one of the overarching principles in the WHO Global Action Plan for the Prevention and Control of NCDs is multisectoral action. WHO recommends the sectors outlaid in Table 2 for policy debate.[3]

Table 2. Recommended Sectors for Policy Debate

Sector	Tobacco	Physical inactivity	Harmful use of alcohol	Unhealthy diet
Agriculture	✓		✓	✓
Communication	✓	✓	✓	✓
Education	✓	✓	✓	✓
Employment	✓	✓	✓	✓
Energy		✓		✓
Environment	✓	✓	✓	✓
Finance	✓	✓	✓	✓
Food/catering	✓	✓	✓	✓
Foreign affairs	✓	✓	✓	✓
Health	✓	✓	✓	✓
Housing	✓	✓		✓
Justice/ Security	✓	✓	✓	✓
Legislature	✓	✓	✓	✓
Social welfare	✓	✓	✓	✓
Social & economic dev.	✓	✓	✓	✓
Sports	✓	✓	✓	✓
Tax and Revenue	✓	✓	✓	✓
Trade & industry (excl. tobacco)	✓	✓	✓	✓
Transport	✓	✓	✓	✓
Urban planning	✓	✓	✓	✓
Youth affairs	✓	✓	✓	✓

WHO/UN and other public health researchers' position on integration

The UN Political Declaration on NCDs "recognised that to be effective, national actions need to go beyond the health system to address the social determinants of health and prevent exposure to NCD risk factors…National governments should also collaborate with other sectors in society, such as civil society, academia, and, when relevant and appropriate, the private sector."[34]

WHO has itself integrated the Tobacco Free Initiative (TFI) into Prevention of Non-communicable Diseases (PND), which falls under its Non-communicable Diseases and Mental Health Cluster. In its Global Action Plan,[3] WHO states that "Effective non-communicable disease prevention and control require multisectoral approaches at the government level including, as appropriate, a whole-of-government, whole-of-society and health-in-all policies approach". Some of the approaches suggested in the plan include:

- Assessment of the Ministry of Health and other sectors required for multisectoral action.
- Analyses of areas which require multisectoral action.
- Development of plans.
- Use of a framework to develop common understanding between sectors.
- Strengthening of governance structures, political will and accountability mechanisms.
- Enhancement of community participation.
- Adoption of other good practices to foster intersectoral action.
- Monitoring and evaluation.

The plan suggests that "Member States can also promote change to improve social and physical environments." According to the Global Action Plan, WHO anticipates the following benefits: "strengthened stewardship and leadership, increased resources, improved capacity and creation of enabling environments for forging a collaborative multisectoral response at national level, in order to attain the nine voluntary global targets." The plan also refers to "constructive engagement with relevant private sector actors" which, however, should be viewed with extreme caution - its inclusion in the plan may have more to do with industry lobbying than improvements to public health.

According to the WHO, integration should, "become a significant component of the monitoring of the implementation of national health and development strategies that are discussed at national reviews, such as annual health sector reviews. Multi-sector platforms such as the International Health Partnership should be considered along with NCD-specific monitoring platforms. There needs to be a link with the existing efforts to monitor progress, such as those under the WHO FCTC, and those at the regional level. Global partners should closely work together to minimize duplication and fragmentation. WHO should play a leadership role in the implementation of the global monitoring framework. Because of the multi-sectoral nature of NCD prevention and control, it is desirable that progress is also reviewed at the UN General Assembly."[35]

Other examples

Finland has successfully reduced various NCD risk factors through an integrated model using a multisectoral approach that included regulating food labelling, tobacco regulations, and shifting agricultural subsidies to encourage low-fat alternatives.[36] Singapore has a Health Promotion Board, established in 2001, which engages multiple sectors in coordinated national health promotion efforts and disease management programmes to reduce NCDs including public education through the media, food labelling and tobacco control policies. In Thailand, the National Health Commission (NHC) is a cross-sectoral mechanism chaired by the Prime Minister that comprises three broad sectors: government, academia and civil society. The multisectoral approach is used to emphasize health promotion and support development of Healthy Public Policies. Brazil provides an example of how an NCD action plan can be developed quickly through high-level leadership and multisectoral coordination.[34]

Box A. Brazil: an example response

Brazil's response to the UN political declaration on non-communicable diseases

Almost three quarters of deaths in Brazil are from NCDs. In 2011-12, President Dilma Roussef launched a national plan of action to tackle NCDs, in response to the UN political declaration on NCDs. The NCD plan was led by the Ministries of Health and Treasury. The plan involved multisectoral actions, with more than 20 sectors and stakeholder groups involved, including the government, private sector, civil society organisations, medical organisations, and the National Health Council that publishes health guidelines in Brazil. These partners and the government signed a declaration of commitments to reduce preventable NCD mortality. The plan specifically includes other government sectors: agriculture, education, sport, social communication, and the ministry of social development. The plan was presented to the tripartite council, which has representatives from the health secretaries of 27 states and more than 5000 municipalities.

An important part of Brazil's plan was tobacco control - this approach was carried over to other areas. Brazil passed a comprehensive tobacco law in December 2011, to accelerate the implementation of the WHO FCTC. The law covers smokefree environments, an increase of cigarette taxes to 85% of the retail price, health warnings, and a ban on all forms of tobacco advertising, promotion, and sponsorship. In addition, the government signed agreements with the food industry to reduce salt in processed foods and eliminate trans-fats, with an overall goal of a reduction in daily salt consumption from 12g per person to 5g by 2022. Interventions are underway in cities to promote physical activity.[34]

The National Action Plan for Prevention and Control of Non-communicable Diseases and Health Promotion in Pakistan, officially released in May 2004, represents a collaborative initiative of the Pakistani Ministry of Health, World Health Organization Pakistan, and the non-governmental organisation Heartfile. The partnership aims to develop and implement a long-term national strategy to prevent and control NCDs and to health.[37]

In Mexico, the National Council for the Prevention and Control of Chronic Non-Communicable Diseases was established by presidential decree. The National Council serves as the permanent coordinating body for national action on NCDs and their risk factors. The National Council connects senior health ministry executives with their counterparts in other ministries, including finance, trade, agriculture, and education. The role of the National Council includes coordination of actions among federal government agencies, and between the federal and state governments.[34]

An example of regional collaboration is the Healthy Caribbean Coalition, which was established when heads of government of Caribbean nations recognised that collaborative programmes, partnerships, and policies that were supported by governments, non-governmental

organisations, and other regional and international partners could be effective for reducing the NCD burden.[34]

Dealing with industry

While many lessons from tobacco control are directly applicable to other NCD risk factors, there are some clear differences related to the products themselves. While there is no need to consume tobacco, the same cannot be said of food, or some level of alcohol consumption. While these differences exist, it is nevertheless true that Big Food and Big Alcohol use similar tactics to Big Tobacco, and that they have closely observed the regulations and policies adopted by governments on tobacco control. According to WHO Director General Dr Margaret Chan, "Efforts to prevent non-communicable diseases go against the business interests of powerful economic operators. In my view, this is one of the biggest challenges facing health promotion. It is not just Big Tobacco anymore. Public health must also contend with Big Food, Big Soda, and Big Alcohol. All of these industries fear regulation, and protect themselves by using the same tactics."[38]

For example, it was recently revealed that Mars confectionery warned the UK government in 2012 not to pass laws on plain packaging for tobacco: "Mars is concerned that the introduction of mandatory plain packaging in the tobacco industry would also set a key precedent for the application of similar legislation to other industries, including the food and non-alcoholic beverage industries in which Mars operates."[39]

Business interests may also be one of the reasons for the slow response to NCDs. As Lawrence Gostin, professor of global health law and director of the WHO Collaborating Center on Public Health Law and Human Rights at Georgetown University writes, "This anaemic political response can be attributed, in part, to governments beholden to business interests. The agriculture industry lobbies for subsidies that lower prices of unhealthy foods, for example, for maize — some of which is turned into high-fructose corn syrup. The food and alcohol industries lobby for low taxation and light regulation…So too do industries that emit air pollutants. Companies and the media resist advertising limits…Without strictures such as those that the WHO FCTC places on tobacco; industries shape the policies that should be reining them in. Food and alcohol companies design and market compelling unhealthy products often with misleading labels. Despite peddling large quantities of sodium, sugar and trans-fats, junk-food companies have manoeuvred their way into schools and hospitals. Yet NCDs are often framed as a problem of individual responsibility, with prevention policies criticized as paternalistic."[2]

It is a widespread practice in UN documents to call for industry participation in policy development. An approach which deals with all Big Industry carries risks especially at a national level where a lack of transparency and accountability may exist. The WHO FCTC clearly defines the parameters around tobacco industry involvement in public policy and has called it 'an inherent conflict of interest'[6] while there are no legal international frameworks for alcohol and food corporations involvement in public health policy or in this case NCD prevention. In our opinion a similar approach cannot be taken for all private sector involvement in NCD prevention work. The tobacco control community remains rightly concerned that while the signatories of

the WHO FCTC have to abide by its rules on tobacco industry's engagement in public health policy, it would be challenging to gauge their influence as industry representatives of food and alcohol are invited to the table, resulting in easier access for the tobacco industry. Such involvement risks undoing years of concerted effort to lessen or eliminate industry interference in national and international policymaking on tobacco control.

One area where industry involvement is warranted is in the reformulation of foods to make them healthier. A harm reduction approach would infer that as people are likely to continue to consume fast food, soft drinks and other highly processed foods, population level health improvement could be achieved by working with the food industry to reformulate these products. This approach is difficult to apply to alcohol, and in tobacco control leads directly into the controversial area of alternative products such as e-cigarettes.

In terms of comprehensive bans on advertising, and information on the constituents of these products, lessons learned from tobacco control indicate that relying on voluntary actions by corporations is unlikely to achieve useful results. In fact, allowing the industry to make suggestions for voluntary changes to improve marketing practices (whether in tobacco or food or alcohol) is most likely to delay bans on promotion. The issue becomes more complicated when the information on product constituents needs to be displayed. While it is important to see the constituents of a food product and the consumer needs to make an informed decision on which product to buy same cannot be said or applied to any tobacco product. Any information on tobacco product' constituents or use of descriptors such as 'low' 'mild' can lead to a misperception of it being 'safe' and therefore is not allowed under the WHO FCTC. Simply there are no healthier or less harmful cigarettes but there are healthier foods.

Public education about the harm of a product including 'responsible' use is also an area that, should be regarded with caution. Adverts for public health information, e.g. an advert about responsible drinking, may in fact encourage drinking more than it makes people think about drinking responsibly. The experience of tobacco control shows that the industry will use voluntary regulations to avoid or postpone the more serious regulations mandated by government. In most cases, voluntary industry self-regulation is not an adequate replacement for government policy.

In terms of collaboration with the private sector, it is important to distinguish between areas where it is likely to do good, and those in which it is likely to do harm. Reformulation of food products (e.g. to reduce sodium, sugar, trans-fats, and saturated fats) makes sense; reformulation of alcohol and tobacco does not and remains questionable.

In terms of overall industry involvement, evidence already exists on how food, drink, and alcohol industries use similar tactics and strategies to tobacco in order to undermine public health interventions[40,41.] Sugar companies, for example, have convinced policymakers that actions to reduce sugar consumption would harm economies (an argument that is entirely familiar to those working in tobacco control).[10]

While many documents call for private sector involvement in NCD prevention, others speak strongly against it, pointing out, that industry "should have no role in the formation of national

or international policy for non-communicable disease policy. Despite the common reliance on industry self-regulation and public–private partnerships to improve public health, there is no evidence to support their effectiveness or safety." The only evidence-based mechanisms that can prevent harm caused by unhealthy commodity industries are public regulation and market intervention.[4] Tobacco control advocates may be able to help strengthen this position with the other risk factors because of their successes in reducing industry involvement in policymaking.

Strong leadership, as in the tobacco control movement, is essential to resist attempts by powerful organisations and corporations with vested interests to undermine the development and implementation of effective policies and laws.[34] Regional and international cooperation is imperative to ensure that individual countries do not have to take on the powerful food, sugared beverages, and alcohol industry separately. The recent litigation brought by the tobacco industry against countries with limited resources illustrates the importance of a coordinated global response from the public health community.

Consideration about whether to involve the private sector should undergo "rigorous, timely, and independent assessment" to show whether they are contributing to reducing NCDs.[40]

Table 3. Private sector involvement in NCD prevention

Potential area for industry involvement	Comments
Product reformulation	Controversial for tobacco; probably not relevant for alcohol; important for food products and potentially sugar-sweetened beverages.
Advertising/promotion/sponsorship (APS)	Overall, industry involvement is not productive in addressing APS; exceptions may be needed for promoting healthier alternative formulations
Public education	Best left to government without industry involvement; industry programs likely to mislead and downplay risks.
Taxation	Best left to government without industry involvement; industry is likely to strongly resist any attempts to impose taxation to reduce attractiveness/affordability of unhealthy products.
Other	To be determined on case-by-case basis but in general, industry involvement in policy decisions will weaken those decisions.

Opportunity to strengthen national policy and programmes

As the domain of public health expands to include demand and supply side measures under tobacco control, some of its work does not lie directly under the ambit of a Ministry of Health and requires coordination with other ministries and departments. Ministries that are not directly involved in public health may not have sufficient information or capacity to undertake policy development for tobacco control and other modifiable risk factors associated with NCDs. This situation is made more complex by inadequate levels of funding for preventive health in most LMICs.[18] An integrated national policy on NCDs led by the ministries of health would help overcome this obstacle and offer broader scope to address behavioural risk factors and their determinants. Integration also avoids the duplication which would occur with separate tobacco control programs within policies or programmes for cancer, cardiovascular disease, and other NCDs.[43]

Coordination of strategies, plans, and activities is needed in order to work effectively and efficiently towards mutual goals. A system of accountability is also important - annual global progress reports, for example. In order to be successful, a response to NCDs will require strong national laws and policies that create a supportive and enabling environment for positive behaviour change. Some specific areas are:

- Introducing taxation measures.
- Regulation of production and sales.
- Comprehensive bans on tobacco advertising, promotions and sponsorship, restricting marketing, labelling, advertising and sponsorship of alcohol, and to some degree, of highly processed foods and beverages - those that target children, for example.
- Removing subsidies that contribute to low prices of highly processed foods and tobacco. Creating subsidies that lead to local production and consumption of healthy food.
- Application of human rights law to justify government interventions designed to reduce NCDs, particularly amongst marginalised and vulnerable populations. [Paradoxically, human rights law has been used to both justify limits on government interventions for public health, as well as upholding government interventions to reduce tobacco use.[44,45]]
- Assessment of how trade and investment agreements enable or prevent countries from enforcing laws and policies relating to the sale of tobacco, food, and alcohol.[5]

Allocation of resources

Although much public health literature[47,48] argues that integration will be more efficient than tackling each risk factor independently, how resources will be equitably allocated remains to be determined. Even with an equitable resource allocation, spending needs to be priority-based and strategic. In tobacco control, governments have favoured funding low impact activities such as school-based education programmes rolling out soft messages, or opening cessation clinics which have not proven to be the most effective strategies. They are likely to want to take this approach for NCD control as well.

It is vitally important to prioritise interventions based on their effectiveness to reduce the harms caused. For a decade under the WHO FCTC tobacco control strategies have been producing good results, and yet tobacco control remains underfunded[65]. Worse, tobacco control is considered a threat to economic health in some nations, as the tobacco industry is perceived to contribute substantially to the tax base and job creation. Intensive lobbying from the tobacco industry has caused many governments to avoid funding tobacco control. There is a possibility that an integrated approach to NCDs may lead to the alignment of Big Industry tactics, projecting economic and job losses when faced with policies similar to tobacco control, and interfering with the allocation of resources for effective policy development and implementation.

Globally, Development Assistance to Control Tobacco (DACT) “grew from US$1.2 million in 2000 to US$44.2 million in 2009, primarily due to private philanthropy. Average annual funding (2000-2009) amounted to about US$0.003 per adult (US $0.0003 per adult in 2000 and US$0.011 per adult in 2009). DACT has been supplemented by domestic public funding that reached US$0.009

- Civil society, including NGOs and academia need to assume an important role in promoting an integrated NCD agenda and advocating to keep NCDs and the need for sustainable health financing on the agenda of governments.

- Governments, civil society and global partners develop policies for engagement with stakeholders in health, sustainable development, industry and other actors to strengthen health outcomes at same time as preventing tobacco industry interference and other "unhealthy" influences on public health policies.

- The Union based on its long history of working with governments to reduce global epidemics, including tuberculosis, HIV, AIDs and tobacco control, provide ongoing technical advice on NCDs with a focus on how to implement sustainable funding mechanisms for financing health infrastructure and operational programs for implementation and evaluation of national health policies.

Recommendations for the roles of civil society and governments

For Ministries of Health:

- Establishment of a dedicated NCD unit housed within the Ministry of Health (MoH) backed by a national action plan and allocation of resources for its implementation.
    - The NCD unit, while housed within the MoH, should serve as a coordinating body for a whole-of-government approach with the understanding that most NCD policy interventions will come under the jurisdiction of other ministries. The MoH should have the lead and a strong representation on policies which impact public health developed and adopted by other ministries
    - Development of detailed national action plans to decrease the risk factors associated with NCDs including maintaining strong focus on TC, creating new resources through raising tobacco taxes and clear policy guidelines for engagement with the private sector
- For countries that have not yet ratified the WHO FCTC or have made little progress in policy development for tobacco control and face a high prevalence of smoking, keep the tobacco control department separate as a focal point for FCTC compliant policy development until more progress is made (ensuring close collaboration between tobacco control and the NCD departments)

- Meaningful involvement of national stakeholders, including civil society, in all public health policy debate.

For The Union and other civil society organisations:

- To undertake activities to increase the capacity of national stakeholders to develop operational plans for integration while continuing to work in close partnership with other stakeholders to ensure effective, multisectoral collaboration occurs on NCDs.
- To cement The Union's leadership role in bringing content discussion to national NCD prevention efforts with a focus on the development, passage, and implementation of specific policy measures.
- Continued contribution to the existing knowledge base on effective approaches to achieve policy change for NCD control.
- Civil society, including non-governmental organisations (NGOs) and universities need to assume an important role in promoting the integrated NCD agenda and keep this on the political agenda of the governments.
- Additionally, The Union should consider, based on its experience with the Global Fund to Fight AIDS, Tuberculosis and Malaria, advocating for the creation of an international funding scheme to achieve NCD goals by 2025.

CONCLUSION

The literature on NCDs offers a near universal recommendation for an integrated approach. The experience of tobacco control provides many useful lessons for the other NCD risk factors in terms of how to deal with industry, the necessity of a policy-based approach, the need for multisectoral action and how to engage a variety of stakeholders.

The literature is less explicit about the details of integration. Given the maturity of tobacco control, the integrated approach will benefit greatly from involving and giving a lead to tobacco control, such that other NCD risk factors use the same policy-based approach to reduce disease prevalence. Tobacco control also offers a template for low-cost high-impact interventions, as well as a solution for sustainable funding, as in the mechanism, earmarking tobacco tax revenues for health promotion.

To maximise the advantages of integration, the initial focus of all stakeholders should be on how to achieve integration using the lessons learnt in tobacco control. This foundation will provide a sound basis for developing and implementing comprehensive NCD programmes.

The eagerness to involve Big Industry in NCD discussions, (as mentioned in many NCD-related strategy documents), deserves special reflection given the tobacco control experience. Any decision to involve industry in public health policymaking should not be taken lightly. There is a strong case for a precautionary approach which assumes that Big Industry's priority is profit well before public health. A broad alliance of health, environmental, and human rights groups could unite to resist pressure from industries that are working to dilute the strong policies needed to effectively reduce the NCD epidemic.[60]

APPENDICES

Appendix 1. Overview of recommendations of different agencies

Agency	Response
WHO	Integration; develop national-level NCD action plans; special attention to surveillance, prevention, and health care; analysis of social, economic, behavioural and political determinants in order to provide guidance for policy; legislative and financial measures.
UNDP	Integration; need for attention to root causes; leadership vital
The Lancet NCD Action Group and the NCD Alliance	International cooperation; raise the priority of NCDs on global agendas; increase funding for NCDs; promote synergies between programmes for NCDs and other global health priorities.
Various agencies/individuals	Advocacy; formation of effective partnerships; political leadership; include NCDs in any health aspect of the post-2015 development agenda.
Samb et al	Avoid fragmentation of the response (by single condition or subgroup); coordinate advocacy efforts to allow for heightened political commitment and action on NCDs as a unified cause; collate NCD and other health data into one national information system; get more NCD funding to flow through comprehensive national health plans; broaden ownership of responses to NCDs and of health-systems strengthening; implement measures to improve collaboration and joint planning.
Various authors	Be wary of industry involvement; do not automatically involve the corporate sector (see Moodie et al below for specifics).
Mendis & Fuster	Establish a high-level, national, multisectoral advisory board to coordinate development and enactment of national NCD policy; involve high-level staff members of various ministries; establish a multidisciplinary national NCD taskforce & working groups.
Wipfli and Samet	Tobacco control should share its strategies, experience and advocacy to support global NCD control; ensure that chronic diseases and tobacco use are addressed together; while continuing to maintain resources and focus on tobacco control, ensure that resources support integrated programs; channel energy from tobacco control towards spearheading the emerging NCD control movement.
Moodie et al	Allow no role for unhealthy commodity industries in the formation of national or international policy for NCDs; restrict interactions with tobacco industry consistent with FCTC recommendations; deny funding and other support for research, education, and programmes from the tobacco, alcohol, and ultra-processed food and drinks industries or their affiliates and associates; independently and objectively monitor all approaches; prioritise and accelerate funding of policy development research into modes of regulation and market interventions; develop a new scientific discipline that investigates industrial diseases and the transnational corporations that drive them

Appendix 2. Some relevant sectors to an integrated approach to NCDs

Sector	Tobacco control	Other risk factors
Health	Cross-cutting	Cross-cutting
Finance	Taxation to keep prices of tobacco products rising above inflation	Taxation policy to encourage healthy eating and active transport and to discourage unhealthy food and inactive travel
Law/justice/security	Legislation regarding marketing and labelling of tobacco products; smoke-free areas; attempts to address smuggling	Legislation regarding marketing, labelling, and sales of food, beverages, and alcohol; addressing illegal alcohol
Trade	International agreements that affect ability of government to implement policies on tobacco products	International agreements that affect ability of government to implement policies on alcohol, food, and beverages
Customs/revenue	Tobacco taxation; potentially health promotion fund from surtax on tobacco	Taxation on alcohol, unhealthy food/beverages; surtax could go towards a health promotion fund
Employment/labour	Employment issues regarding decline in tobacco use	Employment issues regarding decline in consumption of unhealthy products; potential increases in employment (bike repair, farmers' markets, …)
Energy	Energy use from transport is a main contributor to climate change and contributes to the obesity epidemic	Increased active travel would reduce energy use in transport
Environment	Negative effect on the environment of tobacco cultivation	Growing more chemical-free produce; reductions in pollution due to decreased passive and increased active travel
Industry	Promotion of local industry vs. transnational tobacco companies	Promotion of local industries to produce healthy foods, and of bicycle industry rather than cars/car imports
Social and economic development; poverty alleviation/social welfare	Potential to increase employment in other sectors to compensate for any loss in the tobacco sector	Potential for increased jobs and other social gains from active transport and more local production/availability of fresh produce
Agriculture	Subsidies/assistance to grow food crops vs. tobacco	Shifting from subsidies to corn (HFCS) to policies to encourage local production of fresh fruits and vegetables
Education	Integration of tobacco control into the curriculum (with strong evaluation component)	School-based education as well as policies on sale/use of healthy vs. unhealthy foods in educational settings
Urban planning	Smoke-free public spaces	Proximity of destinations facilitates active travel; access to healthy foods and to recreational areas; maintenance and preservation of public spaces (for outdoor physical activity)
Housing	Smoke-free housing policies	Policies to ensure outdoor recreational opportunities and access to healthy foods near housing areas
Transport	Smoke-free public transport; avoid advertising unhealthy foods/drinks/alcohol and cars on public transit	Policies to encourage walking/cycling and discourage car use facilitate active travel
Sports	Sporting events that are free of smoking and of tobacco promotion	Physical activity in schools/community settings; sporting events that do not market unhealthy foods/beverages

Food	Encouragement to spend money on food not tobacco	Encouragement of urban gardening, initiatives to increase availability and lower price of healthy foods
Youth affairs	Programs (not industry-supported) to encourage youth to avoid tobacco/resist the tobacco industry	Programs to encourage active travel e.g. Active and Safe Routes to School; keeping junk food/soft drinks out of educational institutions
Communications	Bans on all forms of advertising and promotion of tobacco products; public education on harms of tobacco	Bans/limits on promotion of unhealthy foods and of cars; public education on healthy lifestyles

Appendix 3. Potential UN agencies to involve in NCD prevention and control, and their potential roles (selected examples from WHO Global Action Plan)

Agency	Potential role
UNDP	▪ Support non-health government departments in their efforts to engage in a multisectoral ▪ whole-of-government approach to non-communicable diseases ▪ Support ministries of planning in integrating non-communicable diseases in the development agenda of each Member State ▪ Support ministries of planning in integrating non-communicable diseases explicitly into poverty-reduction strategies ▪ Support national AIDS commissions in integrating interventions to address the harmful use of alcohol into existing national HIV programmes
WTO	▪ Operating within the scope of its mandate, support ministries of trade in coordination with other competent government departments (especially those concerned with public health), to address the inter face between trade policies and public health issues in the area of non-communicable diseases
WFP	▪ Prevent nutrition-related non-communicable diseases, including in crisis situations
UNICEF	▪ Strengthen the capacities of health ministries to reduce risk factors for ▪ non-communicable diseases among children and adolescents ▪ Strengthen the capacities of health ministries to tackle malnutrition and childhood obesity
UN Women	▪ Support ministries of women or social affairs in promoting gender-based approaches for the prevention and control of non-communicable diseases
UNFPA	▪ Support health ministries in integrating non-communicable diseases into existing reproductive health programmes, with a particular focus on (1) cervical cancer and (2) promoting healthy lifestyles among adolescents
UNESCO	▪ Support the education sector in considering schools as settings to promote interventions ▪ to reduce the main shared modifiable risk factors for non-communicable diseases ▪ Support the creation of programmes related to advocacy and community mobilization for the prevention and control of non-communicable diseases using the media and world information networks Improve literacy among journalists to enable informed reporting on issues impacting the prevention and control of non-communicable diseases

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