Tobacco Control Programmes and Prevention of Non-communicable Diseases (NCDs)

Way Forward

A Discussion Paper

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

Noncommunicable diseases (NCDs) are one of the major threats to health and development in the 21st Century. A leading cause of death globally, the 4 mains types of NCDs - cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes - were responsible for 68% of the worlds deaths in 2012. More than 40% of these NCD deaths occurred before the age of 70. Bearing a disproportionate burden, 73% of all NCD deaths, and 82% of premature deaths, occurred in low- and middle-income countries (LMICs). All age groups are vulnerable to the risk factors driving the global NCD epidemic, whether from unhealthy diets, 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 overwhelm the capacity of countries to address them.

The global community has an unprecedented opportunity to alter the course of the NCD epidemic. Recognising this, WHO Member States have agreed on a time-bound set of voluntary global targets designed to reduce exposure to the risk factors to be attained by 2025. Countries will need to make progress on all 9 targets to attain the overarching target of a 25% reduction of premature mortality from the four major NCDs by 2025.

Delegates at the United Nations General Assembly in 2014 agreed that there are no reasons why any country – regardless of income status – should delay moving forward with the implementation of NCD interventions for attaining the global targets by 2025. Despite evidence of political commitment, insufficient attention has been devoted to NCDs to date and expressions of support have not yet been followed by the financial or other resources required to enact effective measures to reduce prevalence. Further, while a consensus is emerging for an approach to mitigate the growing burden of NCDs through addressing all of the major modifiable risk factors as an integrated package, talk of such integration has simultaneously aroused fears that specialist functions will be compromised and existing efforts, including those for tobacco control, will be diluted.

Tobacco control stands as the only domain where significant progress has been made at the national and global levels. Backed by an international health treaty, it has delivered a long history of strategies, evidence-based solutions, and lessons from which the world of NCD prevention could benefit from. The current challenge is to be specific about what an integrated approach for tobacco control and NCDs might look like.

The Union agrees that tobacco control practitioners should take advantage of integrated disease treatment and control programmes to ensure that chronic diseases and tobacco use are addressed together. Based on the role different organizations and stakeholders need to play to move towards an effective, nationally focused, targeted and sustainable approach for integration of the modifiable risk factors of NCDs, without impeding the existing gains in tobacco control, The Union recommends,
For Ministries of Health:

- establishment of a dedicated NCD unit housed within the Ministry of Health (MoH);
- for countries that have not yet ratified the WHO FCTC or have made little progress in implementation, and in which there is a high prevalence of smoking, keep the tobacco control department separate until more progress is made in tobacco control (ensuring close collaboration between tobacco control and the other NCD risk factors);
- 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 ministry of health should have a strong representation on policies made by other ministries;
- development of detailed nation plans based upon policy measures put forth by WHO, including and with respect to funding of NCDs;
- meaningful involvement of national stakeholders including the civil society.

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 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, as has been recommended by others.
INTRODUCTION

Non-communicable diseases (NCDs) are receiving increased attention globally, but specific actions do not always accompany policy statements. These diseases - comprising mainly cardiovascular diseases, cancers, chronic lung diseases, and diabetes - are the leading causes of death across the globe, with the majority of deaths from NCDs occurring in low- and middle-income countries (LMICs) and the combined burden of NCDs rising fastest among these countries. 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, cost-effective and feasible interventions.

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

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

A consensus is emerging among public health specialists and policy makers for an approach to mitigate the growing burden of NCDs through addressing all of the major modifiable risk factors as an integrated package, though talk of such integration has simultaneously aroused fears that specialist functions will be compromised and existing tobacco control efforts will be diluted, thereby slowing the momentum and gains that have been made over the past two decades. Further, the term "integration" means different things to different people, and 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 to NCD prevention and control efforts and these should be explored and taken into account for any integrated approach as integrated approaches can be more cost-effective and sustainable than vertical approaches. While literature on the topic recommends integration, as discussed below, there are more examples of policies in favour of integration than actual examples of implementation, and minimal discussion exists about the potential effects of such integration on tobacco control. It is therefore important to consider ways to decrease the risks to vigorous tobacco control efforts from integration, while maximizing the gains.
The current challenge is to be specific about 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 nongovernmental organisations (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

Noncommunicable Diseases

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

Contrary to popular belief about the spread of NCDs, the data shows that these diseases affect LMICs disproportionately, with 86% of global NCD deaths occurring in these regions. Moreover, age-specific NCD death rates are nearly twice as high in LMICs countries as in high-income countries.

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, primarily by increasing household costs associated with health care. The financial burden of NCDs, often including lengthy and costly treatment and loss of key family wage earners, is forcing millions of people into poverty each year. 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”, where the cumulative economic losses are predicted to reach US$7 trillion over the next 15 years.

Risk factors

The four major NCDs share the same modifiable risk factors including: 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 mostly be determined by current levels of exposure. Over 80% of coronary heart disease, and up to 90% of type 2 diabetes and 33% of cancers could be prevented by changes in lifestyle factors - particularly smoking cessation, diet, weight maintenance, and physical activity.
Both economic development and urbanization tend to be accompanied by increases in NCDs prevalence; however an increase is not inevitable. Increased exposure to tobacco smoking, alcohol and fast foods consumption, and 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 and promotion can mean that economic development and urbanization are accompanied by healthier lifestyles and nutrition, and consequently with reduced rates of NCDs.³

**Tobacco use as a major contributor to NCDs**

Tobacco use/consumption causes a range of diseases and harms nearly every organ of the body.¹² Tobacco kills up to half of its long-term users, amounting to nearly 6 million deaths from tobacco, and costing 1–2% of the global gross domestic product, every year.¹³ More than five million of those 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 death toll from smoking is projected to increase to 8 million by 2030.²

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 from harmful drinking, half are due to NCDs. 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 overweight and obesity (5%).¹⁴

**Insufficient global and national attention**

Despite the importance of NCDs to global health insufficient attention has been devoted to NCDs to date and donor funding remains 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 global 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.¹⁵ Another estimate suggests that while overall DAH is growing, with $31.3 billion allocated in 2013, NCDs received just 1.2% ($377 million), one-fifth of which was spent on tobacco control specifically. This is despite almost two-thirds of global deaths being due to NCDs.¹⁶

A group of public health experts writing for The Lancet NCD Action Group and the NCD Alliance feel that even where plans exist, implementation is often slow; that other global health issues remain a pressing concern; that growing attention to the urgency of NCDs does not lead to immediate action; and that time is needed for the problem to be understood and acted on.¹⁰ Thus far NCDs still do not have the political support and commitment that is needed to enact effective measures to reduce their prevalence.
This may be due to the traditional approaches adopted to tackle NCDs. Although communicable diseases have received more global attention and funding for many years, non-communicable (or chronic) diseases have not been completely ignored. Various institutions have been established to address chronic diseases such as cancer societies and heart, diabetes, and lung foundations and there are also organizations that address individual risk factors, including tobacco control organizations and groups to promote healthier diets or physical activity.

Another factor leading to an insufficient global response to NCDs is perhaps the need to respond to public demand for ensuring provision of curative care to all segments of the population, either by the governments directly or through the private sector. At present there is greater political support for a curative approach, yet prevention must become a priority as not only will this reduce the global burden of disease due to NCDs but, when further disease is prevented, it will also enable within health services to cope with existing illness and population needs. A balance needs to be in place to ensure proper 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.”

The complexity of the issue continues with the fact that, even within prevention, many diseases share the same risk factors and are being addressed through vertical programmes. The same lifestyle approach (avoiding tobacco and excessive alcohol use; eating a healthy diet and getting enough physical activity) is being promoted albeit not an optimal level for a number of different diseases clustered under the NCDs.

**International responses to NCDs**

Global attention to tobacco control has preceded by decades the recent global attention to NCDs. There is strong historical momentum in terms of prioritizing infectious disease over NCDs. Global agendas require time to catch up to the epidemiological shift from communicable to non-communicable disease. However, there have been important milestones in the response to NCDs, and in recent years these have 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. The major international responses to NCDs are listed below, in Table 1.
Table 1. The Global Response to NCDs (2003 - 2015)

<table>
<thead>
<tr>
<th>Response</th>
<th>Year</th>
<th>Key points</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO Framework Convention on Tobacco Control (FCTC)</td>
<td>2003</td>
<td>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.</td>
</tr>
<tr>
<td>WHO Global Strategy on Diet, Physical Activity, and Health</td>
<td>2004</td>
<td>Recommends action at multiple levels on two key modifiable risk factors for NCDs: unhealthy diet and physical inactivity.</td>
</tr>
<tr>
<td>Action Plan for the Global Strategy for the Prevention and Control of NCDs 2008-2013</td>
<td>2008</td>
<td>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.</td>
</tr>
<tr>
<td>Recommendations on the Marketing of Foods and non-Alcoholic Beverages to Children</td>
<td>2010</td>
<td>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.</td>
</tr>
<tr>
<td>Global Strategy to Reduce Harmful Use of Alcohol</td>
<td>2010</td>
<td>Focuses on ten areas of national action including leadership; health services; community action; drunk-driving; alcohol availability, marketing, pricing and informal production; impact mitigation; and monitoring.</td>
</tr>
<tr>
<td>‘Best Buys’</td>
<td>2011</td>
<td>Identifies low-cost, high-return interventions to prevent and control NCDs; highlights multisectoral action on social determinants.</td>
</tr>
<tr>
<td>UN High-level Meeting on the Prevention and Control of Noncommunicable Diseases</td>
<td>2011</td>
<td>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.</td>
</tr>
<tr>
<td>UN Political Declaration on NCDs</td>
<td>2011</td>
<td>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.</td>
</tr>
<tr>
<td>World Conference on the Social Determinants of Health</td>
<td>2011</td>
<td>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.</td>
</tr>
<tr>
<td>UN Rio+20 Conference on Sustainable Development</td>
<td>2012</td>
<td>Unequivocal in its call for concerted action on NCDs; stressed the importance of national policy and plan development.</td>
</tr>
<tr>
<td>Global Monitoring Framework on NCDs (GMF)</td>
<td>2013</td>
<td>Comprises nine voluntary global targets and 25 indicators aimed at preventing, controlling and tracking the four main NCDs and their key risk factors.</td>
</tr>
<tr>
<td>High-Level Panel of Eminent Persons on the Post-2015 Development Agenda</td>
<td>2013</td>
<td>Preventing ‘priority’ NCDs is a proposed target.</td>
</tr>
</tbody>
</table>
Current scenario - Insufficient progress to date

Despite all the initiatives and evidence of political commitment towards addressing NCDs, not enough has yet been done at the country or global level. Expressions of support for NCD programming have not yet been followed by the financial or other resources required to act on those commitments.

Despite its significant success and widespread adoption, uptake of the FCTC has not been universal, nor has implementation been without problems. It has been easier to secure symbolic support than concrete measures. For example, government officials at the UN ‘Rio+20 Conference on Sustainable Development’ called for accelerated implementation of the FCTC in the Political Declaration, ‘Rio Declaration on Social Determinants of Health’, and in the outcome document of Rio+20, ‘The Future We Want.’ In response, a UN Economic and Social Council (ECOSOC) resolution of July 2012 emphasized the need for the UN to work across sectors to facilitate FCTC implementation, specifically encouraging, in Article 1, “…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.” Recognition of the need for action does not necessarily translate into anything more than symbolic commitments.

Uptake of the Global Strategy on Diet, Physical Activity, and Health is also lagging. A review of government policies in 140 LMICs to identify ones 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.”

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 LMIC do not have national NCD policies, even though NCDs in such countries show rising trends.” The literature indicates that there are several barriers to successful implementation of the FCTC and other international health policy documents, including:

- the worldwide financial crisis that began in 2008, which has continued to eviscerate government and donor budgets
- failure of most governments and funding agencies to prioritize NCDs and thus commit financial and technical resources
- tobacco industry interference specifically in implementation of the FCTC
the absence of national NCD policies and a weak national capacity for policy formulation and implementation in LMIC

ADDRESSING HEALTH THROUGH A TREATY

For decades after the evidence linking tobacco use to disease was clear, interventions to reduce tobacco use continued to focus on individual-based approaches. People believed that by educating the population about the harms of tobacco smoke, with a special emphasis on children, rates of tobacco use would decline. School-based programs became the norm; missing were well-designed evaluations that would reveal whether or not the programs were having their desired effect. For decades, such programs were carried out. Tobacco use continued to rise steadily in response to industry advertising and promotion, as did the widespread acceptability of smoking and its perceived affordability.

Over time, tobacco control workers realized that it made little sense to give the tobacco industry the monopoly over policy debates. Health groups, from having been “generally absent from policy discussions” while “the tobacco industry made itself heard” began to approach tobacco control from a policy perspective. As laws and policies - specifically taxation policy, comprehensive bans on advertising and promotion, expansion of smoke-free places (which also reduced the acceptability of smoking), and graphic warnings - became the norm, tobacco use declined significantly in the countries in which such measures were implemented. Any integration of tobacco control into NCDs should maintain this successful, policy-based approach.

Recognition that a policy-based approach is 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 (FCTC) is a landmark not only in tobacco control, but in public health overall. The FCTC is the only legally binding treaty related to health; in dealing with tobacco, the treaty encompasses NCDs. It is the first global health treaty negotiated under the auspices of WHO. It has been broadly ratified, with 180 Parties as of March 2015. The FCTC uses a multisectoral approach to address supply- and demand-side measures of tobacco use. The FCTC also addresses governance issues, e.g. in Article 5 which calls for multisectoral national plans, coordination structures and policymaking that is independent from tobacco-industry interests. In summary, 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 deepening of transnational civil society coalitions
- facilitated the sharing of experiences, expertise and capacity among governments and non-governmental organizations (NGOs)
- brought new resources--political, financial and human--into the field
ADDRESSING THE TOBACCO EPIDEMIC IN THE CONTEXT OF NCD PREVENTION & CONTROL

Though an integrated, multi-sectoral approach for any public health challenge has the potential of being both cost effective and beneficial for improving health such an approach for modifiable NCD risk factors needs to be analyzed carefully.

It is also important to gain further understanding of the ways in which integration may affect or alter the ability of tobacco control programs to reduce tobacco use and contribute towards the decrease in NCD’s incidence. 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 the NCDs modifiable risk factors

The modifiable risk factors for NCDs which need to be tackled are at various stages of development and scale of maturity of efforts for their control. While there is no benefit of any form of tobacco trade or use, the same cannot be said about the others. This factor 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 much longer history of working towards policy change and thus has many lessons that can be directly applicable to the other risk factors, it is in a strong position to strengthen the overall NCD approach.

Tobacco control is extremely well-researched. The other risk factors for NCDs do not have as much evidence to support needed policy approaches, though the evidence base is nevertheless substantial and continues to grow. The lessons learned from tobacco control are likely to be highly applicable to the other risk factors, e.g. we know that targeting behaviour changes at the individual level are no more likely to work to increase physical activity than they are to prevent tobacco use. As with tobacco, so with the other risk factors: changes to the policy and physical environment will be critical. The body of evidence as to which changes are needed (if not on how to achieve them) is building. Thus, while “Little exists in the literature linking fiscal policy and health promotion except in relation to tobacco” 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],” initial evidence suggests that the enabling environment approaches taken by tobacco control will also work for the other risk factors.

Important similarities exist between the tobacco industry and other industries, hence the common use of the appellation “Big Food” to describe the major food companies promoting products high in fat, sugar, and/or salt and low in nutrients. As with Big Tobacco, so “Big Food” exerts significant influence over governments that can make it difficult for governments to pass legislation to restrict their activities. Just as it is important to learn lessons about vertical versus horizontal programming from, for example, the vast attention given to the AIDS epidemic, so it is important to transfer lessons learned about taking on a major industry and fighting, often
successfully, for policy change, from tobacco control to the other key risk factors for NCDs. Such lessons include the need to counter misleading industry messages and to disallow the representation of industry representatives at policy discussions. Failure to learn lessons from tobacco control would mean allowing a far larger toll of disease and death from NCDs that we could otherwise prevent, and would mean that the gains made from reduced global tobacco use could be overshadowed by the increased risks from poor diet, overweight/obesity, physical inactivity, and excessive use of alcohol.

In addition to the risk of creating greater inefficiencies within an already stretched health system, there are other downsides to risk-specific approaches. One is the intensity of the response that is required when devoting attention separately to individual risk factors. It may be helpful to learn from the early days of addressing AIDS, where separate institutions and agencies focused on HIV/AIDS were created in order to address limitations within national Ministries of Health. Those structures were in turn supported by WHO. Given the fact that the Ministries were not fully equipped to respond to the multidimensional AIDS epidemic, it was decided to create UNAIDS specifically to provide support to national efforts across the globe. Meanwhile, many countries, especially those with generalized epidemics, established National AIDS Commissions (NACs) or programmes (NAPs). In order to give the NACs more power, many of them were based outside the Ministry of Health, in some cases even within the office of the President or Prime Minister, in order to increase their political access.

However, it is not clear whether housing NACs outside the Ministry of Health has proved more successful, in terms of developing multisectoral coordination to respond to AIDS, than has putting them within ministries of health. This could be due to the importance of leadership, which is not necessarily greater when the coordinating body is not within the line ministry. Further, issues of sustainability arise due to the fact that NACs are typically expensive and largely donor-financed. Effectiveness can be hampered when, for instance, Global Fund grants require the creation of partially parallel structures such as Country Coordinating Mechanisms. Increasingly, in response to these problems and lessons learned, countries are moving their NACs back into ministries of health. As with AIDS, so with tobacco control: it remains to be seen whether addressing the issue separately from the other risk factors will necessarily or even likely result in stronger outcomes.

Lessons learned from the focus on HIV/AIDS reveal two main possible outcomes of a strong focus on a single disease: 1. The attention weakens already poorly functioning health services and thus reduces a nation’s ability to respond to other disease threats, or 2. If the focus on a single disease is set within a more comprehensive agenda of broadening health services generally, then the focus can actually lead to a strengthening of those services, but that goal needs to be set from the start (in terms of HIV/AIDS, examples include Haiti, Rwanda, Malawi, Ethiopia, and Uganda). A similar issue exists with NCDs, where efforts to scale-up interventions in low-income and middle-income countries “tend to focus on one disease and its causes, and are often fragmented and vertical. These efforts represent missed opportunities to leverage the health-system reforms that are needed.”
A multisectoral partnership approach

What is true of tobacco control—that a policy-based approach that changes the environment in which people make their decisions will be the most effective approach to changing behaviour—is true of other public health issues as well. Sustained change requires policy and environmental change. Policy and environmental approaches are often low cost, have a high reach, and tend to provide a supportive environment for the more targeted interventions that can follow later. For example, a community-based program to promote healthy eating and physical activity is unlikely to succeed if there is a lack of access to healthy foods or places for activity. Thus 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 acceptability by making places smoke-free. Similar approaches are likely to have similarly strong effects on other NCD risk factors.

In order to pass and implement the policies that will reduce tobacco use, tobacco control must involve various sectors including finance, foreign affairs, trade, and agriculture. 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 outlined in table 2 for policy debate.

Table 2. Recommended Sectors for Policy Debate

<table>
<thead>
<tr>
<th>Sector</th>
<th>Tobacco</th>
<th>Physical inactivity</th>
<th>Harmful use of alcohol</th>
<th>Unhealthy diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Communication</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>Education</td>
<td>✓</td>
<td>✓</td>
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<td>Employment</td>
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<td>Transport</td>
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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.”

WHO has itself integrated the Tobacco Free Initiative (TFI) into Prevention of Noncommunicable Diseases (PND), which falls under Noncommunicable Diseases and Mental Health. In its Global Action Plan, the WHO writes that “Effective noncommunicable 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 of 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 this 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, as its inclusion in the Plan may have more to do with industry lobbying than with actual experience of the willingness of industry to be involved in activities to improve public health.

According to the WHO, integration should, in turn, “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 Framework Convention on Tobacco Control (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 multisectoral nature of NCD prevention and control, it is desirable that progress is also reviewed at the UN General Assembly.”

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. Singapore has a Health Promotion Board, established in 2001, which engages multiple sectors in coordinated national health
promotion efforts and disease management programs to reduce NCDs. Programs include public education utilizing 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 (see box below) provides an example of how an NCD action plan can be developed quickly through high-level leadership and multisectoral coordination.

Box A. Brazil: an example response

**Brazil’s response to the UN political declaration on noncommunicable 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 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 the plan was tobacco control, with the tobacco control approach being carried over to other areas as well. Brazil passed a comprehensive tobacco law in December, 2011, in order to accelerate the implementation of the FCTC. The law covers smoke-free 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 12 g per person to 5 g by 2022. Interventions are underway in cities to promote physical activity.

The National Action Plan for Prevention and Control of Noncommunicable Diseases and Health Promotion in Pakistan, officially released on May 12, 2004, represents a collaborative initiative of the Pakistani Ministry of Health, World Health Organization (WHO) Pakistan, and the nongovernmental organization Heartfile representing the civil society. The partnership aims to develop and implement a long-term national strategy to prevent and control NCDs and for health promotion.

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 government and state governments.

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, nongovernmental organisations, and other regional and international partners could be effective at reducing the NCD burden.

Dealing with industry

While many of the lessons from tobacco control are directly applicable to the other main NCD risk factors, there are also some clear differences related to the products themselves. While there is absolutely no necessity to consume tobacco, the same cannot be said of food, and some level of alcohol consumption. While these differences exist, it is nevertheless true that ‘Big Food’ and ‘Big Alcohol’ engage in similar tactics to Big Tobacco and have closely observed the regulations and policies adopted by governments around 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.”

At the moment, for example, the food and beverage industry is closely monitoring the legislative environment around tobacco control. It has recently been revealed that manufacturers of Mars (chocolate bars) warned the UK government in 2012 not to pass laws on plain packaging for tobacco as “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.”

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 World Health Organization Collaborating Center on Public Health Law and Human Rights at Georgetown University in Washington DC, USA, 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 (corn) — 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 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.”
It is a widespread practice in UN and other documents to call for industry participation. However, there are some important risks as well as opportunities in involving alcohol and food corporations in NCD prevention. A similar approach cannot be taken for the tobacco industry. WHO-FCTC clearly defines the parameters around tobacco industry involvement in public policy and has called it “an inherent conflict of interest”\(^5\). The tobacco control community is 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 an 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 possibility of food manufacturers reformulating their foods to make them significantly less unhealthy. A harm reduction approach, such as is standard for HIV/AIDS, would say that as people are likely to continue to eat fast food and consume soft drinks as well as other highly processed foods, one way to improve health at the population level is to change the formulation of those foods to reduce the unhealthy ingredients and increase the healthy ones. That 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, the experience of tobacco control would indicate that relying on voluntary actions by companies is unlikely to achieve any useful result. In fact, allowing the industry to put forth suggestions for voluntary changes to improve marketing practices, whether in tobacco or food or alcohol, is likely simply to delay needed bans on promotion. The issue again becomes more complicated when a new formulation may in fact be significantly healthier, but advertising bans do not allow the companies to communicate that information. Again, experience in tobacco control reveals the complexity of this issue, as it is vital to differentiate between claims of safer products and actual increased safety.

Public education about the harm of the product including “responsible” use is also an area that, given the experience of tobacco control, should be regarded with caution. Ads that appear to be in the public service, e.g. about responsible drinking, may in fact have the effect of encouraging drinking more than of getting people to think about being more responsible. The experience of tobacco control has made clear that often, industry will use voluntary regulations to avoid or postpone more serious ones mandated by government. In most cases, voluntary industry self-regulation is not an adequate replacement for government policies.

In terms of collaboration with the private sector, it is thus important to distinguish between areas where it is likely to do more good and in which it is likely to do more harm. Reformulation of food products (e.g. to reduce sodium, sugar, trans fats, and saturated fats) makes sense; reformulation of alcohol and tobacco is more questionable. Voluntary restrictions on advertising, sponsorship, and promotion (e.g. misleading ads, ads targeting children) and public education about the harm of the product including “responsible” use make little sense for any of the risk factors.
In terms of overall industry involvement, evidence exists on how the food, drink, and alcohol industries use similar tactics and strategies to the tobacco companies in order to undermine public health interventions\(^3,\!^{35}\) and how sugar companies have convinced many policymakers that actions to reduce sugar consumption would harm economies (an argument that is entirely familiar to those working on tobacco control).\(^8\)

Thus while many documents call for private sector involvement in NCD prevention, others speak quite strongly against it, pointing out, e.g., 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. In view of the present and predicted scale of non-communicable disease epidemics, the only evidence-based mechanisms that can prevent harm caused by unhealthy commodity industries are public regulation and market intervention.\(^3\) Tobacco control advocates may be able to help strengthen this position with the other risk factors because of their successes in reducing industry's involvement in policymaking.

Strong leadership, as has been seen in the tobacco control movement, is essential to resist attempts by powerful organisations with vested interests (e.g. the tobacco, food, and alcohol industries) to undermine the development and implementation of effective policies and laws.\(^28\) Regional and international cooperation, so that individual countries do not need to take on the powerful food, sugared beverages, and alcohol industry separately, will be vital.

Efforts to involve the private sector should thus undergo “rigorous, timely, and independent assessment” to show whether they in fact are contributing to reducing NCDs.\(^34\)
Table 3. Private sector involvement in NCD prevention

<table>
<thead>
<tr>
<th>Potential area for industry involvement</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Product reformulation</td>
<td>Controversial for tobacco; probably not relevant for alcohol; important for food products and potentially sugar-sweetened beverages.</td>
</tr>
<tr>
<td>Advertising/promotion/sponsorship (APS)</td>
<td>Overall, industry involvement is not productive in addressing APS; exceptions may be needed for promoting healthier alternative formulations</td>
</tr>
<tr>
<td>Public education</td>
<td>Best left to government without industry involvement; industry programs likely to mislead and downplay risks.</td>
</tr>
<tr>
<td>Taxation</td>
<td>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.</td>
</tr>
<tr>
<td>Other</td>
<td>To be determined on case-by-case basis but in general, industry involvement in policy decisions will weaken those decisions.</td>
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Opportunity to strengthen national policy and programs

NCDs are a health issue and require leadership and commitment from the ministries of health. While undertaking the prevention efforts there are some actions that may not be under the direct scope of a ministry of health and would required coordination with other ministries and departments outlined above. Public health is at times not adequately financed and faces limited availability of resources.16 An integrated national policy on NCDs would assist in alleviating this barrier and can offer broader scope to address behavioural risk factors and their determinants. Integration also avoids duplication which would occur with, for instance, separate tobacco control programs within policies or programs for cancer, cardiovascular disease, and other NCDs.36

Coordination is needed of strategies, plans, and activities in order to work towards mutual goals. A system of accountability is also important, for instance annual global progress reports. A successful response to NCDs will require strong national laws and policies that create a supportive and enabling environment, specifically in terms of:

- Taxation, 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.
- Re-assess subsidies that contribute to low prices of highly processed foods and of tobacco while encouraging those that lead to local production of healthy food.
- Application of human rights law to justify government intervention to address NCDs, particularly the most marginalized and vulnerable. Although human rights arguments have been used to justify limits on government intervention, they have also been used to promote tobacco control.
- Assessment of the ways in which trade and investment agreements enable or prevent countries from enforcing laws and policies relating to sale of tobacco, food, and alcohol.4
Allocation of Resources

Although most of the literature and a common sense approach seem to argue that integration will prove more efficient than separate approaches, a question remains in terms of how an integrated approach will ensure an equitable allocation of these to the risk factor prevention and move the efforts from a more clinical based approach to prevention. Governments are typically prone to fund school based education programmes rolling out soft messages, undertaking and opening cessation clinics and are more likely to take this approach for NCD control as well.

For decades, tobacco control has been underfunded and whatever is available in the low and middle income countries is spent on ineffective programmes. Worse, tobacco control was and is still considered a direct threat to the economic health of many nations, given the supposed contribution of the tobacco industry to employment and the tax base. Intensive lobbying of the tobacco industry caused many governments to avoid funding tobacco control, adding to the problems of an already underfunded sector (health). 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 contributions from private philanthropies. Average annual 2000-2009 funding 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 per adult in 2008.” The main influx of funds was from Bloomberg Philanthropies and the Gates Foundation, following decades of extremely limited funding for tobacco control which left tobacco control in the poorer countries “underfunded and vulnerable.”

The obvious solution to the funding limitations in tobacco control specifically is to utilize some portion of tax revenues from taxing tobacco products to fund tobacco control. Down the line, a similar approach could be taken for other major NCD risk factors. Where there is a direct link between a product and NCDs, as with alcohol, sugar, energy-dense foods such as heavily-processed foods, cars, and telecommunications, then surtaxes on the products, as well as congestion charges on car use in cities, could be used to fund NCD prevention programs. A broader use of taxation to fund health promotion following the integration of tobacco control with other NCDs would also relieve the burden of exclusively utilizing tobacco tax revenues to fund non-tobacco control programs.

Examples of the use of a tobacco surcharge to fund health programs includes VicHealth in Australia, the Thai Health Promotion Foundation (which is partly funded by a surtax on alcohol as well), a health promotion fund in Korea, and the Jamaica National Health Fund. A portion of cigarette tax revenues is used to fund a cancer hospital in Nepal. The funding is significant; in one country alone, the fund provides an annual budget of more than US$30 million for tobacco control, based on a progressively increasing tax on cigarettes. Integration could mean that health promotion funding would be collected not only from a surtax on tobacco, but also from a surtax on alcohol and potentially other products such as sugar-sweetened beverages and fast food, thus widening not only the base of programs to be funded, but the funding base itself. For more details on health promotion funding models please refer to The International Union
against Tuberculosis and Lung Disease discussion paper, "Sustainable Funding Models for Tobacco Control".*

Governments receive vastly more in tobacco taxes than is spent worldwide on tobacco control. Over US$167 billion was collected in tobacco tax worldwide in 2008, while less than 1% of that amount was spent on tobacco control. In addition to the taxes were the over $10 billion in corporate income taxes from tobacco companies in 2008. In low-income countries, just $1 out of every $9,100 received in tobacco taxes was spent on tobacco control, while the ratio was 1:4,200 in middle-income countries and 1:340 in high-income countries. If tobacco control were seen as a global health priority, it would be easier to find funding for it within existing government mechanisms. Similarly, if tobacco control were considered a signature US initiative on NCDs within the Global Health Initiative, more funding could be made available.37

While funding is critical, many of the key interventions needed to reduce the prevalence of NCDs by addressing its major risk factors would require relatively little funding. While the economic costs of NCDs could exceed US$7 trillion in low-income and middle-income countries in 2011–2025, basic interventions would cost as little as $1.00–2.00 per head. That funding could easily become available not only through donors but through additional taxes on tobacco and other harmful products.28 For example, the annual cost to implement three priority interventions (tobacco control, salt reduction, and treatment of cardiovascular risk) in 23 high-burden countries was estimated in 2007 to be about $6 billion. A new global fund is not needed in order to implement these priority interventions. All countries can afford the two most important actions: full implementation of tobacco control and salt reduction. In addition, countries which depend on aid should ensure that they have included NCDs on their priority list of requests for assistance, in their national health and development plans, and in their UN Development Assistance Frameworks.46

Human resources

Given the under-resourcing of health programs, there is understandable concern that integrating tobacco control with NCDs in general could increase the burden and thus reduce the effectiveness of already over-taxed tobacco control programs. The same is also true in the reverse: maintaining a vertical approach and addressing risk factors/diseases separately will require more resources (in terms of number of people and available skills) than an integrated one.

Experience suggests that there may only be a few people with responsibility for NCDs within the ministry of health. Those people often also have oversight of other areas of work. Development and implementation of a comprehensive plan for all NCDs would need to consider continuity and availability of resources to the most productive actions. For example, countries could start with a small set of priority interventions, and work to implement those with partners in civil society and relevant government sectors. As human and financial resources increase, countries can work towards implementation of a broader range of interventions. Since many countries

have similar challenges, sharing of experiences with other countries, especially those in the same region, is important. As skills increase and familiarity with integrated work-plans increase, coordination would not only lower the need for large numbers of people working on the issues, but could help avoid duplication of efforts, thus reducing the number of skilled/trained people needed to address NCDs.

An important opportunity exists here for civil society organizations to support governments in carrying out their NCD commitments by offering their assistance and expertise. In particular, tobacco control advocates could become a resource to governments not only in addressing the issue of tobacco use, but also in supporting the application of lessons learned from tobacco control to other NCD risk factors. Over-burdened governments would benefit from the assistance. Those providing the assistance would also gain by having greater access to key policymakers if they are able to approach them with expertise on a wide range of issues. Enhanced access to policymakers across a range of sectors would, in turn, support the tobacco control agenda.

The issue of limited human resources can thus be looked at as an opportunity (for those advocating for broader NCD prevention policies) as well as a threat.

It is also important to add clarity to what exactly is meant by multisectoral response or multisectoral coordination in the tobacco control-NCD context. Possibilities for such a response include inter-ministerial executive committees, task forces, action teams, and joint strategies. What is important is the presence of shared, interdepartmental goals and integrated budgets. This stands in contrast to an approach that focuses on individual diseases, organs, or risk factors. Further, any long-term, sustainable approach will require integration, as focus on any single disease will eventually wane, as it has done with AIDS. “High-level political commitment to a particular group of diseases may be relatively straightforward to secure, but the challenge for chronic diseases such as HIV/AIDS and NCDs is to ensure that this political commitment translates into sustainable programmes that will serve patients for longer than the tenure of the politicians who signed the declaration.”

**DISCUSSION**

Public health professionals, researchers and literature cite various reasons for utilizing an integrated NCD approach rather than separate policies to address individual NCDs and associated modifiable risk factors. Some of these are:

- Integration facilitates the efficient use of resources and reduces duplication of efforts;
- An integrated policy can reduce the demand and burden on the public health workforce responsible for policy development and implementation and thus increase the effectiveness of existing programs;
- An integrated policy could be more successful at attracting resources;
- Integration can facilitate coherent, high-level, inter and multisectoral action, which is needed not only for tobacco control but for all the major NCD risk factors.
However in our opinion, an integrated approach to NCDs with reference to curtailing the modifiable risk factors will require a broad understanding of firstly the scale of development within the control of individual NCD risk factors and secondly outlining specifically the effective approaches to addressing them. The first major global commitment to addressing NCDs was the WHO Framework Convention on Tobacco Control (FCTC). The FCTC set an important precedent not only as the first global treaty to address public health, but in recognizing the need to incorporate other sectors besides health (such as finance and trade) in contributing to better health yet countries have still not implemented the Treaty fully as priorities had to be put in place linking these to most cost effective measures and the resources available. Given the choice majority of governments would opt for adopting a ‘soft approach’ for the control of NCDs and undertake awareness programmes for educational institutions and the young - a lesson learnt from decades of tobacco control where involving other stakeholders like finance and trade has been extremely challenging.\(^2\)

Furthermore, to increase the attention and to give NCDs a wholesome response by addressing the risk factors, the planners in the ministries of health along with other ministries and departments involved would need to bring a balance between preventive and curative care.\(^2\) Shifting the focus from cure to prevention will require an extensive coordinated effort. It will also be a significant challenge to shift the balance from predominantly vertical approaches that have existed for many years to a more integrated approach as there are understandable concerns that need to be addressed in terms of the danger of diluting attention to individual issues, such as tobacco control, when an integrated approach is utilized.

The various plans, conferences, strategies, and commitments share some important points in common as mentioned in Table 1 above. They all advocate for a multisectoral approach. They all recommend a high-level approach to addressing NCDs. They all indicate the momentum towards addressing NCDs. One can easily see the utility for this integration but threats certainly exist if the public health community does not figure out the ‘HOW’ of this integration.

The four major risk factors for NCDs have many influencing factors in common. It is therefore possible that integration of tobacco control into NCDs would alter the nature of the partnerships with other sectors and also the way we interact with the industry. As described earlier, the nature of the industries behind the production of products which influence the increase of NCDs is similar. They all are weary of tax increases, limits to the way they advertise, putting up of health warnings on their products, restrictions on sales and product regulation.\(^53\) Tobacco control has the benefit of having a internationally ratified treaty (FCTC) to address this. The example cited earlier in this document of the MARS Bars manufacturers opposing ‘plain packaging for tobacco products’ is not an isolated event. It is an indication of how the industry is carefully watching the way governments and civil society are pushing for tighter controls and are preparing for it. On the other hand a possibility also exists that the tobacco industry may or is already asking the governments to treat it the way it treats food or the alcohol industry thereby seeking a place on the negotiating table for any or all regulatory measures. Tobacco control is protected by the FCTC articles and associated guidelines specially Article 5.3 but as we
have seen ministries like finance and trade continue to engage in a dialogue with the industry for a variety of reasons. So the question on ‘HOW’ to integrate the work on all NCD risk factors and diseases is not only a question of making efficient use of resources but is slightly more complicated and we as public health professionals need to figure out and consider these eventualities.

From a pure public health perspective, it is also possible that integration will create competition in setting priorities for programmes to reduce the incidence of NCDs for obtaining the needed resources. Some would argue that a positive scenario can be that integration will allow for piggybacking of efforts, thus enabling one risk factor to reach sectors and populations that it previously found inaccessible. One can easily see the need for integration but threats certainly exist if the public health community does not outlay a plan on the ‘HOW’ of this integration.

A comprehensive case can be made for adopting an integrated approach and tobacco control can offer solutions on the modalities of how this will be done. This still remains unclear or, at the least, has not yet undergone a rigorous planning process. Our research did not find evidence of any institution having done this to date.* Preventive and public health units have varying titles within the ministry of health including NCD units. These units tend to be under-resourced or have human resource tasked with other responsibilities therefore leading to experiencing challenges for influencing other sectors, especially finance and trade. Tobacco control has now reached a stage where these “more powerful and better-resourced ministries” are getting involved in different debates including taxation, illicit trade, trade protocols and other topics not traditionally under the ambit of health, to bring about intersectoral action. As some of the determinants of NCDs are outside the health sector, intersectoral action is particularly important for prevention of NCDs and can lead the way to decrease the further complexity added given the number of sectors that are relevant to controlling NCD risk factors.2,20

A simple restructuring within the national units or changing organograms without a well resourced operational plan to back it up will not lead to any effective integration. Capacity of both civil society and governments will need to be built to take on an integrated approach. Tobacco control organizations working at both national and international level, like The Union, are well placed to take this role and develop operational plans in consultation with local and international partners to oversee this integration and figure out the most feasible approach for that specific country and the region.

This approach is further strengthened by the fact that, amongst the modifiable risk factors, tobacco control has achieved significant successes in terms of policies and legislative approaches similar to those that will be needed to address NCDs. WHO-FCTC offers a legal framework for the countries to develop long term polices for tobacco control. While the FCTC does not address other NCD risk factors besides tobacco, the approaches it takes in terms of addressing fiscal policy (taxation), promotion/marketing, restrictions on use (smoke-free areas), and packaging and labelling are directly applicable to the other key risk factors, particularly alcohol but also

* Last performed 17 February 2015 using PubMed, Google Scholar, plus the wider web.
diet and, to some degree, physical activity. The opportunity to utilize tobacco control to strengthen other national policies and programs is too important to be missed. Examples of policies that are most likely based on the experience of tobacco control not only indicate current successes but also suggest potential future directions, for example the Government of Tonga has increased import duties on tobacco, lard and fizzy drinks, and decreased import duties on fresh fish; Nauru and French Polynesia have raised taxes on sugary beverages; Colombia is addressing physical activity through the environment by encouraging cycling.\textsuperscript{18}

An integrated approach with tobacco control as a lead can also provide answers to the availability of resources so that preventive health can become sustainable. Tobacco taxes have been utilized for financing health programmes and have been instrumental for the creation of Health Promotion Foundations (HPFs). HPFs evolved as a solution to the dilemma of sustainable funding for tobacco control. Indeed they have been described as an ‘invention designed to solve a health problem which was also a political problem’.\textsuperscript{50} A health promotion foundation can generally be defined as ‘an autonomous or semi-autonomous statutory body which has, as its major purpose, the promotion of health’.\textsuperscript{51}

Integration could strengthen national policy at other levels as well. For example, integration of NCD surveillance into the national health information system, and of NCD progress monitoring into country accountability processes, could follow the path taken by tobacco control through its Global Adult Tobacco Surveillance (GATS) efforts.\textsuperscript{6}

While integration is perhaps needed, it may be wise to start gradually in many low-income and middle-income countries. A broad policy dialogue needs to happen, involving governments, civil society and public health experts to ensure the momentum of work for the individual modifiable NCD’s risk factors continues.

**RECOMMENDATIONS**

Various agencies and individuals have contributed towards the formulation of recommendations for future NCD programming. Those making recommendations include people with many years of experience in tobacco control. The key element in common across the recommendations is the importance of an integrated, rather than vertical, approach to NCDs (Annex 1). The recommendations in this paper are based on the role different organizations and stakeholders need to play to move towards an effective, nationally focused, targeted and sustainable approach for integration of the modifiable risk factors of NCDs.

**The Union and civil society organizations**

The Union has established a global track record in addressing NCDs. It has shown innovation through being one of the founding members of the NCD Alliance and serving on the NCD Alliance Steering Group. The Union thus has a vital role to play in contributing to effective action for NCD prevention and control. The Union should catalyze its wealth of expertise to support
ministries of health in fulfilling their obligations to address NCDs. The Union should undertake activities to increase the capacity of national stake holders to develop operational plans for the widely recommended ‘integrated approach’ and also continue to work in close partnership with governments, UN agencies including the WHO, and with NGOs to ensure that effective, multisectoral collaboration occurs on NCDs.

The Union with its tobacco control offices in all WHO regions staffed by experts in tobacco control is also well placed to cement its leadership role in bringing content discussion to national NCD prevention efforts, particularly with a focus on the development, passage, and implementation of specific policy measures addressing the four major NCD risk factors. The Union should also continue to contribute to the existing knowledge base on effective approaches to achieve policy change for NCD control.

In addition, at a macro level, 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, as has been recommended by others.¹

Civil society, including 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.

Ministries of Health

Commitment of government to NCD prevention and control should be reflected in the establishment of a dedicated NCD unit within the ministry of health with adequate human resources and a defined budget. At a minimum, the NCD unit should include a team with the required public health expertise to address population-wide prevention through legislative and/or regulatory measures related to tobacco and alcohol use, diet and physical activity, scaling up of primary care, and forging of intersectoral partnerships.² This should not be viewed as a renaming of existing National Tobacco Control Cells as NCD Units but should be based on detailed operational plans so as not to lose momentum gained under tobacco control and related policy development efforts.

For countries that have not yet ratified the WHO FCTC or have made little progress in implementation, and in which there is a high prevalence of smoking (e.g. male or combined prevalence of over 40%), should keep the tobacco control department separate until more progress is made in tobacco control, but ensure close collaboration between tobacco control and the other NCD risk factors.

Given the multisectoral nature of NCD prevention, the NCD unit, though housed within the ministry of health, 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 ministry of health should coordinate with different branches of government that will enable the policy changes needed and ensure ongoing communication so that the ministry of health has input into plans that will have an impact on NCDs such as agricultural policy, trade
agreements, and transport projects. Given the toll on health of decisions made in other sectors, the ministry of health should have a strong representation on policies made by other ministries.

All of the above activities should be based on a detailed national plan based upon policy measures put forth by WHO on the prevention and control of noncommunicable diseases 2013-2020, including and with respect to funding of NCDs. Civil society, including NGOs and universities, need to assume an important role in promoting the integrated NCD agenda.

The plan should also address capacity for change along the lines of human resources, financial mechanisms, and needed regulatory mechanisms.28

The ministry of health should ensure that a policy-based, preventive approach to addressing NCDs accompanies efforts aimed at treatment while looking at establishing sustainable funding mechanisms, a robust monitoring and evaluation system and a meaningful involvement of national stakeholders including the civil society.28

CONCLUSION

The literature on NCDs is nearly universal in recommending an integrated approach to NCDs. The experience of tobacco control provides many useful lessons for the other NCD risk factors in terms of, e.g., 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.

What the literature is less explicit about are the details of that integration and given the maturity of tobacco efforts how the lessons learnt in tobacco control efforts will be built into the process. The integration will benefit greatly from involving and giving a lead to tobacco control advocates such that other NCD risk factors also use the same policy-based approach to reduce the prevalence of NCDs. Given the demonstrated cost-effective nature of tobacco control and the availability of a direct funding mechanism through taxation of tobacco products outlines the importance of tobacco control within an overall NCD approach. Further, success in integration could lead to a broad-based coalition to advocate for reduction of all major NCD risk factors, to the benefit of other health promotion programs and the population overall.

To fully utilize the advantages of an integrated approach, the focus initially by all stakeholders should be on how to achieve integration through the incorporation of lessons learnt in tobacco control and then further these efforts to develop and launch comprehensive NCD programmes.

The eagerness to involve industry, as reflected in its mention in numerous NCD-related documents, deserves special reflection given the experience within tobacco control. Any effort to include industry should be handled with extreme caution, and there is a strong case for a precautionary approach which assumes that industry (food, alcohol, drinks, cars, pharmaceuticals...) is more interested in increasing profits than in contributing to a decline in NCDs. The precautionary approach of tobacco control in working with industry could be replicated across the risk factors. A broad alliance of health, environmental, and other groups could help to resist the pressure from industry to establish less effective policies than those needed to reduce the NCD epidemic.49
APPENDICES

Appendix 1. Overview of recommendations of different agencies

<table>
<thead>
<tr>
<th>Agency</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO</td>
<td>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.</td>
</tr>
<tr>
<td>UNDP</td>
<td>Integration; need for attention to root causes; leadership vital</td>
</tr>
<tr>
<td>The Lancet NCD Action Group and the NCD Alliance</td>
<td>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.</td>
</tr>
<tr>
<td>Various agencies/individuals</td>
<td>Advocacy; formation of effective partnerships; political leadership; include NCDs in any health aspect of the post-2015 development agenda.</td>
</tr>
<tr>
<td>Samb et al</td>
<td>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.</td>
</tr>
<tr>
<td>Various authors</td>
<td>Be wary of industry involvement; do not automatically involve the corporate sector (see Moodie et al below for specifics).</td>
</tr>
<tr>
<td>Mendis &amp; Fuster</td>
<td>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 &amp; working groups.</td>
</tr>
<tr>
<td>Wipfli and Samet</td>
<td>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.</td>
</tr>
<tr>
<td>Moodie et al</td>
<td>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</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Sector</th>
<th>Tobacco control</th>
<th>Other risk factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Cross-cutting</td>
<td>Cross-cutting</td>
</tr>
<tr>
<td>Finance</td>
<td>Taxation to keep prices of tobacco products rising above inflation</td>
<td>Taxation policy to encourage healthy eating and active transport and to discourage unhealthy food and inactive travel</td>
</tr>
<tr>
<td>Law/justice/security</td>
<td>Legislation regarding marketing and labelling of tobacco products; smoke-free areas; attempts to address smuggling</td>
<td>Legislation regarding marketing, labelling, and sales of food, beverages, and alcohol; addressing illegal alcohol</td>
</tr>
<tr>
<td>Trade</td>
<td>International agreements that affect ability of government to implement</td>
<td>International agreements that affect ability of government to implement policies on</td>
</tr>
<tr>
<td>Policies on Tobacco Products</td>
<td>Alcohol, Food, and Beverages</td>
<td></td>
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<tr>
<td>-----------------------------</td>
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<td></td>
</tr>
<tr>
<td><strong>Customs/Revenue</strong></td>
<td>Tobacco taxation; potentially health promotion fund from surtax on tobacco</td>
<td>Taxation on alcohol, unhealthy food/beverages; surtax could go towards a health promotion fund</td>
</tr>
<tr>
<td><strong>Employment/Labour</strong></td>
<td>Employment issues regarding decline in tobacco use</td>
<td>Employment issues regarding decline in consumption of unhealthy products; potential increases in employment (bike repair, farmers’ markets, …)</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td>Energy use from transport is a main contributor to climate change and contributes to the obesity epidemic</td>
<td>Increased active travel would reduce energy use in transport</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Negative effect on the environment of tobacco cultivation</td>
<td>Growing more chemical-free produce; reductions in pollution due to decreased passive and increased active travel</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>Promotion of local industry vs. transnational tobacco companies</td>
<td>Promotion of local industries to produce healthy foods, and of bicycle industry rather than cars/car imports</td>
</tr>
<tr>
<td><strong>Social and Economic Development; Poverty Alleviation/Social Welfare</strong></td>
<td>Potential to increase employment in other sectors to compensate for any loss in the tobacco sector</td>
<td>Potential for increased jobs and other social gains from active transport and more local production/availability of fresh produce</td>
</tr>
<tr>
<td><strong>Agriculture</strong></td>
<td>Subsidies/assistance to grow food crops vs. tobacco</td>
<td>Shifting from subsidies to corn (HFCS) to policies to encourage local production of fresh fruits and vegetables</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Integration of tobacco control into the curriculum (with strong evaluation component)</td>
<td>School-based education as well as policies on sale/use of healthy vs. unhealthy foods in educational settings</td>
</tr>
<tr>
<td><strong>Urban Planning</strong></td>
<td>Smoke-free public spaces</td>
<td>Proximity of destinations facilitates active travel; access to healthy foods and to recreational areas; maintenance and preservation of public spaces (for outdoor physical activity)</td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td>Smoke-free housing policies</td>
<td>Policies to ensure outdoor recreational opportunities and access to healthy foods near housing areas</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td>Smoke-free public transport; avoid advertising unhealthy foods/drinks/alcohol and cars on public transit</td>
<td>Policies to encourage walking/cycling and discourage car use facilitate active travel</td>
</tr>
<tr>
<td><strong>Sports</strong></td>
<td>Sporting events that are free of smoking and of tobacco promotion</td>
<td>Physical activity in schools/community settings; sporting events that do not market unhealthy foods/beverages</td>
</tr>
<tr>
<td><strong>Food</strong></td>
<td>Encouragement to spend money on food not tobacco</td>
<td>Encouragement of urban gardening, initiatives to increase availability and lower price of healthy foods</td>
</tr>
<tr>
<td><strong>Youth Affairs</strong></td>
<td>Programs (not industry-supported) to encourage youth to avoid tobacco/resist the tobacco industry</td>
<td>Programs to encourage active travel e.g. Active and Safe Routes to School; keeping junk food/soft drinks out of educational institutions</td>
</tr>
<tr>
<td><strong>Communications</strong></td>
<td>Bans on all forms of advertising and promotion of tobacco products; public education on harms of tobacco</td>
<td>Bans/limits on promotion of unhealthy foods and of cars; public education on healthy lifestyles</td>
</tr>
</tbody>
</table>
### Appendix 3. Potential UN agencies to involve in NCD prevention and control, and their potential roles (selected examples from WHO Global Action Plan)

<table>
<thead>
<tr>
<th>Agency</th>
<th>Potential role</th>
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</thead>
</table>
| UNDP   | - Support non-health government departments in their efforts to engage in a multisectoral whole-of-government approach to noncommunicable diseases  
- Support ministries of planning in integrating noncommunicable diseases in the development agenda of each Member State  
- Support ministries of planning in integrating noncommunicable 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 interface between trade policies and public health issues in the area of noncommunicable diseases |
| WFP    | - Prevent nutrition-related noncommunicable diseases, including in crisis situations |
| UNICEF | - Strengthen the capacities of health ministries to reduce risk factors for noncommunicable 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 noncommunicable diseases |
| UNFPA  | - Support health ministries in integrating noncommunicable 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 noncommunicable diseases  
- Support the creation of programmes related to advocacy and community mobilization for the prevention and control of noncommunicable diseases using the media and world information networks  
- Improve literacy among journalists to enable informed reporting on issues impacting the prevention and control of noncommunicable diseases |
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