

Integrating tobacco control into health and development agendas

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ABSTRACT

Tobacco use is one of the major risk factors for non-communicable diseases, with a profound impact on resource-poor low-income and middle-income countries such as India, where tobacco use is high and where socioeconomic as well as health inequalities are rampant. Effective implementation of the Framework Convention on Tobacco Control requires multisectoral efforts that can fructify through integration of tobacco control into broader health and development agendas such as food and water security, environment, the right to education and human rights. The global tobacco control community will need to explore innovative partnerships beyond its traditional confines and build a global coalition that supports tobacco control by partnering with others having convergent concerns on common determinants. A firm political commitment and intersectoral coordination between government and non-government agencies is paramount in order to implement effective tobacco control programmes. Integration of tobacco control into other health and development agendas as described in this paper has the potential to contribute to the achievement of all the eight United Nations Millennium Development Goals. This paper explores why the whole of government should accord a high priority to tobacco control, and how this integration could be achieved.

INTRODUCTION

The WHO estimates that 6 million people die due to tobacco-related diseases every year—more than tuberculosis (TB), HIV/AIDS and malaria combined.^{1,2} In 2015, tobacco is projected to kill 50% more people than HIV/AIDS and will be responsible for 10% of all deaths globally.³ Tobacco is also a leading risk factor for major non-communicable diseases (NCDs) such as cancers, cardiovascular diseases and chronic respiratory illnesses, which account for 63% of all deaths worldwide. About 80% of these deaths occur in low-income and middle-income countries (LMICs),⁴ and over half in people aged between 30–69 years,^{5,6} robbing productive years of life and exposing dependent family members to the risk of poverty. The threat posed by tobacco to the health, economic development, environment and social well-being of people is therefore profound.⁴ Nevertheless, due to influential opinions that control of NCDs (including tobacco control) was not an agenda of the ‘global poor’,⁷ NCDs were omitted from the Millennium Development Goals (MDG) adopted in 2000. Nothing could have pleased the tobacco industry more.

The United Nations High Level Meeting (UNHLM) on NCDs, convened in September 2011, partly redressed this omission. Although the summit failed to allocate resources or identify a global funding mechanism for NCD prevention and control, it recognised the need for tobacco control as a global health imperative. Following calls for tobacco control to be prioritised as part of efforts to address the NCD crisis,⁸ the political declaration adopted at the meeting called for effective implementation of the WHO’s Framework Convention on Tobacco Control (FCTC), the world’s first public health treaty developed under the auspices of the WHO.⁹ The WHO subsequently proposed a global target of a 40% reduction in smoking prevalence by 2025, relative to 2010.¹⁰

The FCTC, which recommends effective measures for reduction of demand and supply of tobacco, will be key to securing such global reductions in smoking prevalence.¹¹ Although this widely adopted treaty came into force on 27 February 2005, to date, only 17% of the world’s population is covered by two or more of its measures,⁴ and serious thought therefore needs to be given as to how further successes can be achieved.

The existence of the FCTC and the success, so far, of global tobacco control owe much to the growth and impact of a worldwide tobacco control movement. While the movement has advocated multisectoral actions for tobacco control, it has not drawn sufficient support from other civil society advocates working in areas such as food and water security, environment, right to education and human rights. The definitional scope of public health includes the multiple determinants of health and the tobacco control movement must, therefore, actively engage others who have convergent concerns on common determinants, from subnational to supranational levels. In short, the global tobacco control community must look beyond its traditional confines and carve a niche for tobacco control within other global health and development agendas in order to build a global coalition that supports tobacco control. It must also increase policy coherence and intersectoral coordination among Government and other agencies in order to ensure effective implementation of tobacco control programmes. This paper aims to explore why this aim is worthwhile and how this could be achieved. In doing so, it focuses in particular on India, the second largest producer and consumer of tobacco products in the world,¹² where socioeconomic and health inequality are rampant¹³ and NCDs are on the rise.¹⁴

INTEGRATING TOBACCO CONTROL WITH PRIMARY AND SECONDARY HEALTHCARE PROGRAMMES

As tobacco is a risk factor common to multiple diseases,^{15–21} integration of tobacco control with other national health programmes will ensure optimal use of limited human and financial resources in the health systems of LMICs and provide frequent opportunities for intervention at the primary and secondary care levels, thus helping reduce the addiction, illness and death caused by tobacco use.²² Though separate tobacco control programmes at national level now exist in several countries, they are frequently isolated from other health service functions. Cessation services could have a greater reach into the community if they were incorporated into the country's primary healthcare services. When patients attend clinics for tuberculosis, reproductive and child health problems, NCDs, or even a dental check-up, for example, an enquiry about active or passive tobacco exposure by a doctor and brief advice to quit can increase the rates of tobacco cessation.²³ However, until tobacco cessation advice is recognised as an important component of such services, these opportunities will be missed. A few specific examples are given below to illustrate this issue.

Tuberculosis control

Tobacco is an important risk factor to address while designing and delivering tuberculosis programmes.²⁴ Smoking contributes to up to half of all deaths from tuberculosis among males in India, which has a high tuberculosis burden.²⁵ Of the top 10 countries with the highest burdens of tuberculosis and tobacco use, 5 countries, including India and China, feature in both lists.²⁶ The WHO Tobacco Free Initiative (TFI) and the WHO Stop TB programme, in collaboration with the International Union Against Tuberculosis and Lung Diseases, successfully integrated tobacco control into a TB control programme through the Practical Approach to Lung Health. Piloted in Nepal, this programme was shown to improve detection and management of TB cases with respiratory symptoms along with recording of their smoking status and provision of cessation counselling.²⁷

Maternal and child health

Tobacco use is associated with delays in conception and infertility, complicated pregnancy and adverse outcomes including sudden death, pre-eclampsia, preterm delivery and low birth weight.^{28–29} Among children, secondhand smoke (SHS) exposure is associated with middle ear and respiratory infections, sudden death and severe asthma.¹⁶ Hence, tobacco control activities should be incorporated in maternal and child health services. Antenatal clinics should include appropriate screening and counselling of pregnant women to avoid tobacco use and exposure to SHS. Paediatricians should also actively encourage parents to quit tobacco use and assist them in successful quitting. Tobacco use among males is associated with lower sperm counts³⁰ and erectile dysfunction.^{31–32} Health professionals in infertility clinics should also screen for and counsel about tobacco use among males and females.

Adolescent health

Adolescent health programmes in most countries have components dealing with substance abuse, which include tobacco use. Adolescence is the age when experimentation with tobacco is most commonly reported.³³ It has been estimated that presently about 150 million adolescents use tobacco and the number is increasing globally.³⁴ Tobacco use is also associated with increased alcohol consumption.³⁵ Hence, it is important to

include tobacco use prevention in adolescent health programmes before such behaviour is established.

Most of the countries of the world now include health education as an essential part of their school curriculum. School-based tobacco education programmes that focus on skills training such as refusal and advocacy skills and address multiple psychosocial factors associated with tobacco use have been shown to be effective.³⁶ A school-based multicomponent health promotion intervention has been shown to be effective in reducing tobacco use in the USA,³⁷ and evidence suggests such programmes can be successfully adapted to suit the context of LMICs.^{38–39} For example, two such adaptations successfully reduced tobacco use among school students in India,^{38–39} and also influenced policy through the inclusion of school health programmes in the National Tobacco Control Programme.⁴⁰

Professional studies, including dental and medical studies

Tobacco use is associated with a wide variety of orodental disorders including various oral cancers, periodontal (gum) diseases (gingivitis, periodontitis) and dental problems including discolouration and staining, loose teeth, tooth loss, root-surface caries and plaque.^{19–21} Since the oral cavity is the first part of the human body to be exposed to smoke or chewed ingredients from tobacco and it is vulnerable to multiple life-threatening conditions, it is important to integrate tobacco cessation in dental care^{41–42} and dental professional education.⁴³ Considering the legally binding nature of the FCTC as the first international public health law, the multisectoral pathways for its implementation and requirements of compliance by all with the national tobacco control laws, it is equally important that tobacco control is included as an integral component of the curriculum in higher education and professional studies like administrative services, law, journalism and management besides medical and other public health studies. Such inclusion would help increase awareness of the complexities of tobacco control policy making and enforcement and the role that various professional groups can play in these processes. For example, trainee lawyers could be made aware of the ways the tobacco industry misuses legal arguments to intimidate governments from implementing tobacco control laws.⁴⁴ If lawyers were informed of these issues and appropriately trained at an early stage in their career, this could benefit tobacco control. This will help to create an enabling environment for tobacco control, with a society-wide engagement. The Public Health Foundation of India has taken the initiative among LMICs and launched tobacco control courses tailored to professionals such as medical personnel, lawyers, administrators, journalists and law enforcement officers.⁴⁵

TOBACCO CONTROL AS A CONCERN FOR ENVIRONMENTALISTS

The environmental impact of tobacco use merits mention given the growing worldwide concern about environmental degradation and global warming. Tobacco cultivation is responsible for deforestation, soil erosion and much faster depletion of soil nutrients and water.⁴⁶ Large quantities of wood fuel need to be burnt for 'flue-curing' tobacco.⁴⁷ Several harmful chemicals and pesticides used in tobacco cultivation can enter into food chain and thereby cause adverse health effects among humans.⁴⁸ Tobacco is also a water-intensive crop and its cultivation can aggravate water shortages.^{46–47} Moreover, smoked tobacco products are frequently the cause of fires that in turn cause loss of life, property and forestry.⁴⁹ Environmental pollution also results from tobacco smoke, spitting of smokeless tobacco,

inappropriate disposal of cigarette butts and plastic packs for smokeless tobacco.^{47 50 51}

Taking note of this last issue, in 2011 the Supreme Court of India upheld the 'polluter pays' principle and prohibited manufacturers of gutkha and pan masala from using plastic sachets to package their products.⁵² The matter came before the Apex Court in appeal from a 2007 judgement of the High Court of Rajasthan in India, which decided to impose an exemplary fine on the manufacturers of smokeless tobacco for polluting the environment. The petition was filed by a few public-spirited citizens and organisations concerned with environmental protection who were later joined by tobacco control advocates. This was a great leap for environmentalists and tobacco control advocates in India who joined forces to ensure effective implementation of the Court's order. This illustrates how the global movements for environmental protection and tobacco control could be natural allies.

TOBACCO CONTROL CONNECTS TO SEVERAL DEVELOPMENT CONCERNS

In most countries, tobacco use is more prevalent among the poorer sections of the society and among those with no or little education.⁵³ Strong evidence links poverty, lack of education and other social determinants to NCDs and their risk factors including tobacco use.⁵⁴ Among the LMICs of South-East Asia and the Middle East, expenditures on tobacco use vary from 10% of household expenditure to as much as 10 times more than the amount spent on education.⁵³ Workers in the tobacco industry, who include children and women, are often diagnosed with 'green tobacco sickness', which raises the issue of labour rights as they often remain devoid of treatment. Similarly, millions of poor and illiterate beedi rollers in South-East Asian countries including India and Bangladesh have been exploited by contractors and left disabled in old age.⁵⁵ Healthcare costs associated with tobacco production and use impose an enormous burden on these resource-poor countries and on the poor victims of tobacco-related diseases. Tobacco use results in an estimated US\$500 billion expenditure every year due to healthcare costs, productivity losses, fire damage and other costs.⁵⁶

About 4.2 million hectares of land that could be used for other crop production are presently diverted for tobacco production.⁵⁷ In a world where food insecurity is affecting millions and the UN Secretary General calls for a doubling of food production, the use of arable land for tobacco production rather than for nutrient crops is unacceptable.

Tobacco companies frequently argue that imposing strong tobacco control laws would lead to severe losses in employment. However, if people spend money on necessities other than tobacco, it will lead to more demand for those commodities and thereby create more job opportunities as their production is more labour intensive as compared to the tobacco industry, which is highly mechanised (except for the beedi industry).⁵⁸

Despite the many adverse developmental effects of tobacco and its cumulative impact on aggravation of poverty, tobacco control has not featured in the mainstream of poverty-related debates or development-related discourse at global and national levels. This needs to be redressed by a more active engagement of the tobacco control community with development economists and civil society activists who are influential in those domains. While this grouping has been occasionally visible in advocacy efforts, it has not been seen to play a role so far in the national planning process in LMICs.

TOBACCO CONTROL AS HUMAN RIGHTS CONCERN

Every individual has 'a right to the enjoyment of a variety of facilities, goods and services and conditions necessary for the realisation of the highest attainable standard of health'.⁵⁹ Tobacco production and use lead to diseases, healthcare expenditure and create degrading socioenvironmental conditions, such as poverty, pollution and deforestation-related global warming, which are not suitable for attaining the highest standard of health. Exposure to SHS is very common among the spouses and children of smokers and infringes on their right to health. Imposing a complete prohibition on smoking in public places in India, the Supreme Court of India observed exposing unsuspecting individuals to SHS, with ominous consequences, amounts to taking away their life by a slow and gradual process and labelled it as violation of the right to life enshrined under Article 21 of the Constitution of India.⁶⁰ Recent evidence on epigenetics suggests that active or passive exposure to tobacco smoke can have transgenerational effects on risk of disease, thereby threatening the rights of more than one generation.⁶¹ Tobacco contravenes the rights enshrined in the Universal Declaration of Human Rights, Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) and Convention on the Rights of the Child.⁶² Tobacco control as a human rights concern has long been identified as area of action by the National Human Rights Commission in India.

Tobacco companies have been infringing the rights of the farmers and workers globally by subjecting them to deplorable working conditions and treating them as slave labour.^{63 64} Tobacco control, therefore, has to be centrally positioned in the campaigns for protection of human, health and consumer rights. This will happen only when the tobacco control community actively participates in those campaigns.

AN INTEGRATED APPROACH TO TOBACCO CONTROL: A MIX OF CHALLENGES AND OPPORTUNITIES

Advocacy efforts by the tobacco control community alone are neither sufficient to implement effective tobacco control policies nor to address the myriad issues outlined above, as are currently experienced in LMICs such as India and Indonesia. Cooperation from other sector NGOs and government departments, through raising concerns around deforestation, food security, water security etc, is necessary. Messages from these diverse groups would be better received by relevant ministries (agriculture, environment etc) as they see those groups as their allies, rather than tobacco control NGOs and groups. Consequently, there is a need to engage professionals and volunteers alike from sectors other than health to intellectually engage with and operationally accommodate tobacco control through intersectoral collaboration, co-option and capacity building. The tobacco control community and its philanthropic supporters must connect with the development community to exchange information and expertise and to provide an immersion experience to each other. We suggest that civil society groups engaged with tobacco control, development, environment, food security and human rights provide sabbaticals to mid-career staff members to work in each other's organisations for a year to understand and internalise the connections and common concerns. Such cross-funding and fellowships will be of great benefit in integrating and advancing the tobacco control agenda. Social activists across the globe can help with issues related to poverty alleviation and bridging inequity from tobacco and deal with various human rights violations in tobacco cultivation, manufacturing and use. Besides healthcare costs, productivity loss due to tobacco use is an area to be dealt in collaboration with developmental

economists. Tobacco as an environmental hazard should become a concern for global environmental activists, whereby a collective and collaborative effort can help in achieving the larger goals of sustainable development. Integration can also lead to efficiency savings by reducing the number of issue-specific NGOs.

Often, despite the existence of a national tobacco control programme, it is only the health ministry that is actively engaged in tobacco control efforts. Lack of coordination and cooperation between various ministries and their departments frequently acts as a deterrent to effective tobacco control at national and subnational levels. Interministerial coordination is paramount for effective implementation of various regulatory and fiscal measures. For example, taxation of tobacco products, which is an effective tobacco control policy, requires advocacy with and cooperation of the finance and commerce ministries. Such ministries must recognise the links between tobacco use and poverty and the role that tobacco control can play in poverty alleviation. Similarly, education ministries must recognise the important role of education in reducing tobacco use. Also, it is important that policies adopted by state governments are in accordance with the national priorities for tobacco control. Tobacco control groups must therefore learn to engage with non-health ministries and NGOs. Table 1 outlines the ways in which tobacco control can contribute to each MDG. Such arguments will be essential in making these linkages and extending the commitment to tobacco control beyond ministries of health.

While the FCTC is an important enabling measure for global tobacco control, its effective implementation demands strong national laws that are enforced in earnest. The underpinning for this will be a firm political commitment that is reinforced by a wide social movement that positions tobacco control in the context of sustainable development. We believe the confluence of several NGOs and creation of mechanisms for intersectoral coordination will provide the much-needed momentum for this.

LMICs have minuscule budgets and inadequate human resources to undertake tobacco control, compared with the scale of the problem. Though 80% of global tobacco-related deaths occur in LMICs, they report only 1% of total global tobacco

control spending.⁶⁵ Globally, governments collect an annual tobacco tax revenue of US\$167 billion. However, they spend only US\$965 million on tobacco control.⁶⁵ As a result, several resource-poor countries are not able to generate enough revenue to support their tobacco control activities. This disproportionate pattern of resource availability and expenditure acts as a major obstacle and needs to be addressed by the global community. Although governments have been slow to respond by way of resource allocation, major philanthropic organisations such as the Bill and Melinda Gates Foundation and Bloomberg Initiative to Reduce Tobacco Use have recognised the importance of tobacco control in LMICs,⁶⁶ and have started to fund projects in LMICs. National budgets too should accord greater priority to tobacco control programmes. Raising taxes on tobacco products will enlarge the governmental revenue pool and permit additional funding for tobacco control. Furthermore, as outlined above, efficiency savings could accrue through better integration of smoking cessation services within the health system and by increasing quit rates, savings would accrue through reduced healthcare expenditures.

CONCLUSIONS

Tobacco control as a movement has come a long way from the initial efforts that were triggered by the US Surgeon General's report in 1964 that concluded 'smoking causes cancer'. Today we have a global treaty on tobacco control that has been adopted by 174 countries. However, the treaty is being inadequately implemented and consequently the tobacco epidemic continues to increase in magnitude, particularly in LMICs. This paper highlights the need for the tobacco control movement to be better integrated with broader health and development agendas and attempts to illustrate how this might be achieved. It emphasises why and how the tobacco control community must build new partnerships, develop synergies and engage with stakeholders in sectors beyond health, to bring tobacco control from the back burner of political priorities to front of the global health and development agendas, to become an integral part of the framework for sustainable development. Only once this is achieved will tobacco use and NCDs and the

Table 1 Contribution of tobacco control to each Millennium Development Goal (MDG)

MDG	Goal	Contribution through tobacco control
1	Eradicate extreme poverty and hunger	Raising taxes on tobacco products will reduce consumption as the poor and children have been shown to be highly sensitive to price rise. Associated decrease in tobacco-related diseases and the resulting expenditures will minimise the healthcare costs, thereby reducing the economic burden on the poor.
2	Achieve universal primary education	Reduction in spending on tobacco products will result in increased spending on other priority issues such as child education. Also, reduced employment of children in tobacco industry (especially in the developing countries) would provide increased opportunities for children to pursue education.
3	Promote gender equality and empower women	Tobacco industries increasingly target women to promote their products thereby exposing them to higher health risks. Reduction in tobacco use among women will contribute to better health for them and families.
4	Reduce child mortality	Tobacco use by pregnant women has been shown to be associated with a number of health risks among babies such as low birth weight and sudden death. A decrease in or avoidance of tobacco use by these mothers will prevent these adverse events. Moreover, the resources spent in purchasing tobacco would be available for purchasing healthier food for the child.
5	Improve maternal health	Tobacco use in same amount is more harmful for females as compared to males. Women who smoke are more likely to experience events such as placental abnormalities, premature birth and higher mortality. Reduction in tobacco use would prevent these and provide resources to buy healthier nutritious food.
6	Combat HIV/AIDS, malaria and other diseases	Smoking is associated with severe diseases in those affected with HIV/AIDS such as tuberculosis and pneumonia. Control of tobacco use would contribute to their prevention and control and thereby enhance the quality of life of those affected with HIV. More financial resources would be available for their healthcare.
7	Ensure environmental sustainability	Decrease in cultivation of tobacco would prevent deforestation and soil erosion, protection of natural flora and fauna, conservation of forests and prevention of exposure to toxic chemicals used for tobacco cultivation.
8	Establishing a global partnership for development	Greater emphasis on integrating tobacco control into the development agenda, by organizations like the World Bank, WHO, United Nations, Economic and Social Council (ECOSOC), United States Agency for International Development (USAID) and other regional organisations, would lead to crossfunding, larger collaborations and global partnerships for advancing tobacco control and development.

What this paper adds

- Despite the pressing need for effective implementation of the WHO Framework Convention on Tobacco Control (FCTC), as recognised in the recent UN High Level Meeting convened in September 2011, tobacco control has not been effectively integrated in the broader health or global development agendas such as food and water security, environmental protection, educational and human rights.
- This paper explores, from a low-income and middle-income country perspective, why and how tobacco control needs to be integrated with these broader health and development agendas.
- Effective enforcement of FCTC requires a firm political commitment and a reinforced social movement that will position tobacco control in the context of sustainable development. To this effect, the paper suggests the creation of a global coalition with intersectoral coordination to support tobacco control movement that will also contribute to achievement of the Millennium Development Goals.

consequent development issues (table 1) be effectively addressed in LMICs.

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