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A Report of Effective Intervention Strategies Conducted by Non-Health Sectors

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Abstract

Non-communicable diseases (NCDs) are the main leading cause of global mortality. Several causes of NCDs emerge from social and commercial determinants of health. Many of these causes cannot be tackled by the health sector alone. Most of data in this report were collected from the preparatory meeting of the Prince Mahidol Award Conference (PMAC) 2019, under the theme 'Political Economy of NCDs: A Whole Society Approach' with the main objective to accelerate implementation of NCDs prevention and control around the world. This paper concluded examples of NCD interventions that were presented at the conference. The article demonstrates how the non-health sectors can take a pivotal role in NCDs prevention. The key non-health sectors include, but are not limited to, the Ministry of Finance, private enterprises, communities and media. Public policies such as taxation on unhealthy commodities like alcohol, tobacco, and sugar sweetened beverages, helps reduce consumption of these products. Company's voluntary policy to provide a lactation room in the workplace presents a strong vision of balancing company profits and well-being of the employees. Community intervention helps engage all relevant stakeholders to take part in NCDs prevention. The role of media is one of the powerful strategies to raise awareness in the population. These exemplified interventions have established ideas on how multi-sectoral actions are one of the key players that help topple down NCDs crisis in Thailand.

Keywords: non-communicable diseases, intervention, non-health sectors, Thailand

Introduction

Non-communicable diseases (NCDs) are one of the greatest public health challenges nowadays. NCDs, including cardiovascular diseases (CVDs), cancer, diabetes, chronic respiratory diseases and mental health, are the main leading causes of death worldwide. Recent data from World Health Organization (WHO) reported that NCDs accounted for 41 million deaths or 71% of global mortality. Importantly, more than three quarters of these deaths occurred in low- and middle-income countries (LMICs).[1] Moreover, NCDs caused a 75% loss of global gross domestic product (GDP) in 2010. It is also expected that in the near future, LMICs will share larger global burden of NCDs due to fast economic and population growth.[2]

Potential causes of NCDs are complex with many factors involved. One of the main causes of NCDs is related to the conditions in which people are born, grow, live, and work, also known as social determinants of health.[3] People born in low socio-economic status mostly face greater NCDs risks including alcohol and tobacco consumption, and unhealthy diet.[4] Another factor that contributes to NCDs which has been wildly discussed is commercial determinants of health, the conditions that closely link with rapid globalization. The term, commercial determinants of health, is defined as *'the strategies and approaches used by the private sector to promote products and choices that are detrimental to health'*.[5] Aggressive marketing by tobacco, alcohol and ultra-processed food industries have contributed to the increasing demand among the consumers and the change of people's behaviours towards unhealthy lifestyle.[6]

Table 1. Excise tax rates for alcohol, Thailand, 2017[15]

Type of alcohol	*Ad valorem* rate (%)	Specific rate (Baht/litre of pure alcohol content)
1. Beer	22	430
2. Wine		
2.1 Wine with retail price less than 1,000 Baht	0	1500
2.2 Wine with retail price above 1,000 Baht	10	1500
3. White spirit	2	155
4. Spirit	20	255

Table 2. Excise tax rates for tobacco, Thailand, 2017[15]

Type of tobacco	*Ad valorem* rate (%)	Specific rate	
		Baht	Unit
1. Tobacco			
1.1 Cigarette with retail price less than 60 Baht per package	20	1.20	Baht/roll of cigarette
1.2 Cigarette with retail price above 60 Baht per package	40	1.20	Baht/roll of cigarette
2. Cigar	10	1.20	Baht/gram
3. Roll-your-own cigarettes	10	1.20	Baht/gram

Many NCDs causes are preventable by concerted effort from all sectors.[7] This idea is confirmed by the agreement of the member states in the United Nations General Assembly (UNGA) in 2011, which urged all member states to 'engage non-health actors and key stakeholders, where appropriate, including the private sector and civil society, in collaborative partnerships to promote health and to reduce non-communicable disease risk factors through building community capacity in promoting healthy diets and lifestyles'.[8] The functions of non-health sectors vary in nature. They may influence NCDs prevention in a positive way such as promoting sport and fitness while some may decelerate the process of NCDs (such as the campaigns against alcohol and tobacco).[9]

Despite an emphasis on the engagement of non-health sectors in the control measures of NCDs, it still lacks tangible examples of how non-health sectors can have seminal roles in addressing NCDs crisis. This article, therefore, aimed to provide examples of NCDs prevention interventions carried out by non-health sectors in Thailand. Most of the information reported in this article was presented in the side meeting of the Prince Mahidol Award Conference (PMAC) on 30 January 2018 (as a preparatory meeting for PMAC 2019) and in the main conference of PMAC 2019. The meeting brought many NCDs champions all over Thailand to share their knowledge, experiences and successful (or unsuccessful) stories related to NCDs prevention in the fields. The meeting participants included representatives from the Ministry of Public Health, Ministry of Finance, Department of Public Relation, private companies, and academics.

The following discussion highlights how NCDs prevention can be accelerated by non-health sectors: (i) taxation policy, (ii) voluntary lactation policy in workplace, (iii) community health promotion intervention and, (iv) media advocacy: media for health.

Taxation Policy

Fiscal policy is an economic tool used for many purposes including raising revenue, redistributing resources and changing population behaviour.[10] Taxation is also part of the fiscal policy, which has been used to promote health for the population for many decades. Products that are mainly the target of taxation are tobacco, alcohol, and sugar sweetened beverages (SSBs).[11,12] The WHO has identified taxation as one of the 'best-buy' strategies for NCDs prevention. The best-buy strategies mean measures that are cost-effective with favourable health outcomes.[13] Theoretically, taxes always influence people's purchasing behaviour.[14]

Thailand has just reformed the excise tax structure for alcohol, tobacco, and SSBs in September 2017. The Excise Department has worked closely with

Ministry of Public Health, academics and non-governmental organization (NGOs) to gather related evidence on feasibility and impact of taxation. The main aim of tax restructuring was to reduce the consumption of unhealthy commodities in the population. Alcohol tax rate is now proportionate to alcohol content. Tobacco tax rate has grown double from 20% to 40% since 2019. The tax rate for SSBs also varies according to the products' sugar content. Any SSBs containing more than 6 grams of sugar per 100 millilitres will be taxed for 0-14% for ad valorem and 0.1-1 Baht (approximately US$ 0.003-0.03) per litre for a specific rate of sugar content. The specific tax rates will be increased after 2 years of a grace period to a maximum of 5 Baht per litre for fruit and vegetable juice, soda, and carbonated drinks and of 44 Baht per litre for beverage concentrates by 2023 and onwards.[15] Table 1-3 present the excise tax rates for tobacco, alcohol and SSBs based on the Excise Tax Act B.E. 2560.

The reformed excise tax structure echoes the important role of the Department of Excise in health promotion. Chaiyasong et al. suggested that the consumption behaviour of the Thai population is likely to be changed after the tax reformulation. Prices of beer, white spirit, and spirit are estimated to increase by 3.5%, 18.0%, and 0.2%, respectively. Alcohol consumption is projected to reduce by 2.8% or 10.4 million litres equivalent.[16] Price of SSBs is likely to increase by 12.5% and several SSBs products are aiming to reduce sugar content.[17] Consequently, there will be more revenue from tobacco and alcohol taxes dedicated to health promotion activities through the Thai Health Promotion Foundation (ThaiHealth).[18] In 2017, over US$ 129 million fund from excise tax were spent on NCDs campaigns.[19] Over the past 15 years, the collective efforts of the ThaiHealth and relevant partners have contributed to better health outcomes, reduction of tobacco and alcohol consumption, and increase in moderate-intensity exercise.[19]

Voluntary Lactation Policy in Workplace

Breastfeeding is confirmed by many studies as one of the most effective strategies to prevent the babies against obesity, diabetes, and cancer as well as to provide effective immunisation.[20] The WHO has recommended all mothers to exclusively breastfeed their babies for minimum six months as breastfeeding can benefit both mothers and babies.[13] However, as more women are now in the labour market, it is difficult for many employed mothers to continue breastfeed up to six months. One of key facilitating factors for breastfeeding is arranging breastfeeding-friendly environment in the workplace.[21,22]

One of the companies presented in the PMAC provided a showcase on how breastfeeding can be implemented in the workplace. The company has fully endorsed breastfeeding-friendly workplace policy

Table 3. Excise tax rates for sugar sweetened beverages (SSBs), Thailand, 2017[15]

Type of beverages	*Ad valorem* rate (%)	Sugar content (gram/100 ml.)	Specific rate, based on sugar content (Baht/Litre)			
			16/09/2017 - 30/09/2019	1/10/2019 - 30/09/2021	1/10/2021 - 30/09/2023	1/10/2023 - 30/09/2025
1. Soda, no sugar added	14	-	-	-	-	-
2. Carbonated soft drink with added sugar or other sweeteners or flavour	14	≤6	0.0	0.0	0.0	0.0
		>6-8	0.1	0.1	0.3	1.0
		>8-10	0.3	0.3	1.0	3.0
		>10-14	0.5	1.0	3.0	5.0
		>14-18	1.0	3.0	5.0	5.0
		>18	1.0	5.0	5.0	5.0
3. Fruit juice and vegetable juice	10	≤6	0.0	0.0	0.0	0.0
		>6-8	0.1	0.1	0.3	1.0
		>8-10	0.3	0.3	1.0	3.0
		>10-14	0.5	1.0	3.0	5.0
		>14-18	1.0	3.0	5.0	5.0
		>18	1.0	5.0	5.0	5.0
4. Beverage concentrates	0	≤6	0.0	0.0	0.0	0.0
		>6-8	0.1	0.1	0.3	1.0
		>8-10	0.3	0.3	1.0	3.0
		>10-14	0.5	1.0	3.0	5.0
		>14-18	1.0	3.0	5.0	5.0
		>18	1.0	5.0	5.0	5.0

since 2011 with strong support from the Department of Labour Protection and Welfare. The company also works closely with nearby health centres and the Thai Breastfeeding Centre Foundation in many activities, such as providing breastfeeding information to and arranging breastfeeding training for mothers. Besides, the company does not allow formula companies to intervene with breastfeeding process.

The key successes from this practical intervention are attributed to the vision and leadership of employers and the close collaboration with other partners. However, challenges still exist, especially for the incoherence between WHO breastfeeding recommendation and the Thai law. According to the Labour Protection Act B.E. 2541, a mother is allowed to have 90 days for maternity leave, in which a mother will get fully paid from her employer and the Social Welfare Fund.[23] This means most mothers likely return to work before completing the 6-months exclusive breastfeeding period.

The case study above attests that leadership and vision of the employers are indispensable to the success of NCDs prevention measures.[24] Tubsart et al. also confirmed that having lactation room policy in the workplace is feasible given the support of the employers. The support can be in many forms, such as setting policy agenda, granting budgets, and disseminating information on breastfeeding.[25] The balancing of the company profit and quality of life of employees is clearly seen from this case study. However, transferring this practice to other workplaces is doubtful. As mentioned earlier, one of the most powerful factors for success breastfeeding policy in workplaces is the support from employers.[26] In reality, not all workplaces have the employers who are such supportive.[27] Therefore, campaigns to raise awareness and support positive attitudes of breastfeeding among employers with extensive support from the authorities (such as Ministry of Labour and Ministry of Public Health) are necessary to expand the implementation of this policy to a wider scale.[25,28]

Community Health Promotion Intervention

A case study was presented regarding Mueang Ang Thong Municipal Office, Mueang District, Ang Thong Province where NCDs prevention programs originated by the local residents. The municipality has set the city strategy as 'Promote good health and prevent all risk factors for all populations in all age groups in the community'. Many activities have been instigated, creating self-help groups for physical activities among the elderly, and raising awareness of NCDs through local wisdom such as local songs and lullabies. The city also links these activities with tourism business. The local dances of the elderly are also used to attract revenue from the city guests. The contributory factor for this success is due to adequate financial support from the community itself in addition to extra-revenue from the business sector in the area and the ThaiHealth. Moreover, schools and monasteries have engaged in the campaigns.

The story above is comparable to 'the North Karelia' project in Finland, which was introduced in the early 1970s. The main objective of the project was to reduce the increasing prevalence of CVDs. The intervention was based on the practical idea of life-style modification and environment, together with the community participation.[29] After four decades of the project operation, it is found that the coronary artery disease mortality reduced substantially by 84%.[30,31]

It is worth noting how Mueang Ang Thong gains strong support from the communities. One of the key explanations is the utilisation of local culture and tradition to NCDs prevention campaigns.[31] This, among other things, makes the local residents conform to the campaigns and agree to change their behaviours.

Media Advocacy: Media for Health

Media advocacy is not generally mentioned in the public health field. However, it is very useful to promote behavioural changes among various sectors of the society.[32,33] The Thai Public Broadcasting Service (Thai PBS) is a public media institution in Thailand. Thai PBS is established under the Thai Public Broadcasting Service Act, B.E. 2551. Its legal body is a state agency that does not belong to the Government. Its institutional mission is to provide and inform the public with diverse educational and entertainment programs while strictly abiding to the code of media ethics.[34]

Since 2018, the Thai PBS has committed to broadcast campaigns to create healthy environment and promote healthy behaviour of populations through three main communication channels: on air, online and on ground. The reported content is adapted to meet the nowadays audiences' favours while still keeping the main ideas of NCDs prevention. Therefore, it is not exaggerating to mention that the Thai PBS is serving as 'media for health' in the Thai

society; and indeed, the country needs more and more media for health in light of the rising trend of NCDs in the modern world.

Remaining Challenges and the Way Forward

Several examples were illustrated on how various sectors beyond the health field could play seminal role in NCDs prevention. However, one of the key challenges is how to monitor and evaluate the success of these programs while taking into account the fact that behavioural changes need time and are multi-faceted.[35] Innovative means of monitoring and evaluation are required and these are critical tasks for modern-day academia. Though the aforementioned examples are mainly from the non-health sectors, it does not mean that the role of the government can be neglected. All of the above examples cannot be successful without continuing support from the state; and this support must be seamlessly linked at all levels.

Conclusions

This article presented four examples of NCDs prevention strategies which are managed by non-health sectors. As root causes of NCDs involve various social determinants of health, which cannot be addressed solely by the health sector. The role of media, communities and private sectors in NCDs prevention could not be ignored. Without seamless collaborations between the health and non-health sectors, the quest towards the world free of preventable NCDs is still a long way to go.

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