Acting on Non-communicable Diseases

Key Messages

※ Non-communicable diseases (NCD) are major causes of death, disability and ill-health in Hong Kong. Between 2009/2010 and 2016/2017, the number of persons self-reported having diabetes mellitus, cancer, stroke and heart diseases as diagnosed by practitioners of Western medicine had increased considerably. Of 46,662 registered deaths in 2016, over half were attributed to cancer, heart diseases, stroke, chronic lower respiratory diseases and diabetes.

※ Risk factors of today are diseases of tomorrow. The Population Health Survey 2014/2015 revealed that biomedical risk factors (such as overweight and obesity, high blood cholesterol, high blood pressure and high blood glucose) and unhealthy lifestyle practices (such as inadequate fruit and vegetables consumption, excessive salt intake, alcohol drinking, smoking, prolonged sitting and inadequate physical activity) were prevalent among the general population.

※ The Government of the Hong Kong Special Administrative Region is committed to fight against NCD. On 4 May 2018, the Government launched “Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong”. It proposes a list of actions with clear targets and indicators to track the progress and achievements that Hong Kong will pursue collectively to achieve the 9 local NCD targets by 2025.

※ Individuals can contribute to the fight against NCD by choosing to live in healthy ways. Working in partnership, we can make ourselves healthier and Hong Kong a healthier city!
Acting on Non-communicable Diseases

Non-communicable diseases (NCD) usually refer to a group of chronic diseases that are of long duration but potentially preventable. These diseases which include cancer, cardiovascular diseases (such as heart diseases and stroke), chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes mellitus, are literally reaching epidemic proportions and have become dominant sources of morbidity and mortality in most countries of the world.\(^1\)

**Global Burden of NCDs**

According to the World Health Organization (WHO)’s estimation, 40 million people die from NCD annually, including 17.7 million deaths from cardiovascular diseases, 8.8 million deaths from cancers, 3.9 million deaths from chronic respiratory diseases, and 1.6 million deaths from diabetes. Besides, these four groups of diseases account for over 80% of 15 million premature NCD deaths occurring between the ages of 30 and 69 years each year. While genetic make-up (such as family medical history) plays a role in the predisposition to NCD, most NCD are closely associated with lifestyle. With the globalisation of unhealthy lifestyles, children, adolescents, and adults including the elderly are all vulnerable to the risk factors contributing to NCD, whether from unhealthy diets, physical inactivity, smoking or alcohol drinking.\(^1\)

**Burden of NCD in Hong Kong**

Like many other countries, NCD are major causes of death, disability and ill-health in Hong Kong. Of 46 662 registered deaths in 2016, over half (55.2%) were attributed to cancer, heart diseases, stroke, chronic lower respiratory diseases and diabetes. In terms of premature deaths, these five major NCD accounted for over 100 000 potential years of life lost at age 70 in 2016 (Table 1).\(^2\)

<table>
<thead>
<tr>
<th>NCD Group</th>
<th>Number of registered deaths (Proportion of all registered deaths)</th>
<th>Potential years of life lost at age 70 (Proportion of total potential years of life lost at age 70)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>14 209 (30.5%)</td>
<td>74 567 (43.2%)</td>
</tr>
<tr>
<td>Heart diseases</td>
<td>6 201 (13.3%)</td>
<td>18 308 (10.6%)</td>
</tr>
<tr>
<td>Stroke</td>
<td>3 224 (6.9%)</td>
<td>8 605 (5.0%)</td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td>1 639 (3.5%)</td>
<td>1 726 (1.0%)</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>498 (1.1%)</td>
<td>1 431 (0.8%)</td>
</tr>
<tr>
<td>Total</td>
<td>25 771 (55.2%)</td>
<td>104 637 (60.6%)</td>
</tr>
</tbody>
</table>

Source: Department of Health, Census and Statistics Department.
The Census and Statistics Department conducts regular territory-wide surveys with some 10,000 randomly selected households and collects information on the health status of Hong Kong residents, including the presence of selected chronic health conditions as told by practitioners of Western medicine. As shown in Table 2, except asthma, the number of persons self-reported having diabetes mellitus, cancer, stroke and heart diseases as diagnosed by practitioners of Western medicine had increased considerably between 2009/2010 and 2016/2017.\textsuperscript{3,4}

Risk factors of today are diseases of tomorrow.\textsuperscript{5} Conducted by the Department of Health (DH), the Population Health Survey 2014/2015 showed that 50% of persons aged 15 to 84 were overweight or obese; 49.5% had high blood cholesterol; 27.7% had high blood pressure; and 8.4% had high blood sugar (including diabetes). By the age of 40, over half (53.2%) of persons are having high blood cholesterol, high blood pressure or diabetes. In other words, assuming a group of 10 friends or colleagues, at least 5 of them have one or more of the above three health conditions and require treatment. The risk clearly increases with age so that over 75% among people aged 50 and above are having one or more of the three health conditions. While 86.3% of persons aged 15-84 had excessive salt intake, the survey also observed that 94.4% of persons aged 15 and above had inadequate fruit and vegetables consumption; 61.4% had alcohol drinking habit; 19.1% spent 10 hours or longer sitting or reclining each day; 14.8% had the habit of cigarette smoking; and 13.0% had insufficient physical activity (Table 3).\textsuperscript{6}

Table 2: Number (Rate) of persons with selected NCD as told by practitioners of Western medicine, 2009/2010 and 2016/2017

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Cancer*</td>
<td>63,400 (0.9%)</td>
<td>86,900 (1.2%)</td>
</tr>
<tr>
<td>Heart diseases</td>
<td>135,900 (2.0%)</td>
<td>145,900 (2.1%)</td>
</tr>
<tr>
<td>Stroke</td>
<td>37,800 (0.6%)</td>
<td>50,000 (0.7%)</td>
</tr>
<tr>
<td>Asthma</td>
<td>70,600 (1.1%)</td>
<td>51,300 (0.7%)</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>277,500 (4.1%)</td>
<td>402,200 (5.8%)</td>
</tr>
</tbody>
</table>

Note: *Referring to primary cancer but not secondary metastases.
Source: Thematic Household Survey Reports No. 45 and 63, Census and Statistics Department.
Collective Efforts to Prevent and Control NCD

The threats posed by NCD should no longer be ignored. If the prevalence of NCD and their modifiable risk factors are left uncontrolled, we can expect significant health, social and economic consequences for our population, which in turn, will put strain on already stretched public health care services and resources. The Government of the Hong Kong Special Administrative Region is committed to protect population health and reduce the disease burden of NCD.

Since 2008, the Government has launched a strategic framework to prevent and control NCD and has set up a high-level multidisciplinary Steering Committee to deliberate on and oversee the overall roadmap for implementation. Working groups were set up, focusing on promotion of healthy diet and physical activity, and reduction of alcohol-related harm respectively.

### Table 3: Prevalence of major risk factors for NCD in people aged 15 and above, 2014/2015

<table>
<thead>
<tr>
<th>Major risk factors</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td><em><em>Biomedical risk factor (among persons aged 15 – 84</em>)</em>*</td>
<td></td>
</tr>
<tr>
<td>Overweight and obese (i.e. BMI ≥ 23.0 kg/m²)</td>
<td>50.0%</td>
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<tr>
<td>High blood cholesterol (i.e. total blood cholesterol ≥ 5.2 mmol/L and self-reported doctor-diagnosed hypercholesterolaemia)</td>
<td>49.5%</td>
</tr>
<tr>
<td>High blood pressure (i.e. systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg and also self-reported doctor-diagnosed hypertension)</td>
<td>27.7%</td>
</tr>
<tr>
<td>High blood sugar (i.e. fasting blood glucose ≥ 7.0 mmol/L or HbA1c ≥ 6.5 mmol/L and also self-reported doctor-diagnosed diabetes mellitus)</td>
<td>8.4%</td>
</tr>
<tr>
<td><strong>Behavioural risk factor (among persons aged 15 and above</strong>)</td>
<td></td>
</tr>
<tr>
<td>Excessive salt intake* (i.e. salt intake in excess of WHO’s recommended limit of less than 5 grams of salt per day)</td>
<td>86.3%</td>
</tr>
<tr>
<td>Inadequate fruit and vegetables consumption (referring to less than 5 servings or 400 grams per day)</td>
<td>94.4%</td>
</tr>
<tr>
<td>Alcohol drinking habit (referring to drinking alcohol regularly on at least one day a week or occasionally on no more than three days a month)</td>
<td>61.4%</td>
</tr>
<tr>
<td>Prolonged sitting (referring to spending 10 hours or longer sitting or reclining each day, but does not include sleeping)</td>
<td>19.1%</td>
</tr>
<tr>
<td>Smoking habit (referring to currently having a habit of cigarette smoking)</td>
<td>14.8%</td>
</tr>
<tr>
<td>Inadequate physical activity (according to WHO’s recommendations including recreational activity, walking or cycling and work-related activity)</td>
<td>13.0%</td>
</tr>
</tbody>
</table>

Notes: * All respondents aged 15 – 84 who had participated in health examination; ** All respondents aged 15 and above. Source: Population Health Survey 2014/2015, Department of Health.
In light of global developments in NCD prevention and control, the Steering Committee formulated and launched “Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong” (SAP) in May 2018. The main focus of SAP is on the four NCD (namely cardiovascular diseases, cancers, chronic respiratory diseases and diabetes) and four shared behavioural risk factors (namely unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol) that are potentially preventable or modifiable and have significant impact on population health. The SAP document sets out overarching principles and approaches, and new strategic directions in line with the WHO recommendations (please see page 7). It also proposes a list of actions that Hong Kong will pursue to achieve the 9 committed NCD targets as we move towards 2025 (Figure 1). With successful implementation of the SAP, we envisage that the population risk of premature deaths (i.e. dying between ages 30 and 70) from the four NCD could ultimately lead to a 25% relative reduction by 2025.

Figure 1: 9 NCD Targets by 2025
While the Government will take a leading role in bringing the agenda forward, successful prevention and control of NCD relies on collaborative efforts by every sector and every member in the community. Individuals too can contribute to the fight against NCD by choosing to live in healthy ways (Box 1). Working in partnership, we can make ourselves healthier and Hong Kong a healthier city!

**Box 1: Healthy choices and living**

- Do not smoke
- Be physically active, and sit less
- Eat a balanced diet. Eat more fruit and vegetables. Limit foods high in fat, salt and sugar.
- Avoid alcohol consumption
- Maintain an optimal body weight and waist circumference
- Take medication to control NCD as prescribed. Get vaccinated against hepatitis B virus and human papillomavirus
- Seek advice from doctors and obtain full information about cancer screening
- Breastfeeding exclusively to 6 months

**References**

Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong (SAP)

Goal
The SAP aims to reduce NCD burden including disability and premature death in Hong Kong by 2025.

Objectives
The SAP sets out to prevent and control NCD by achieving the following objectives:
1. Create equitable health-promoting environments that empower individuals to lead healthy lives;
2. Strengthen health literacy and capacity of individuals to make healthy choices;
3. Strengthen health systems for optimal management of NCD through primary health care and universal health coverage; and
4. Monitor progress of NCD prevention and control actions with clear targets and indicators adapted from the WHO’s global monitoring framework.

Overarching Principles and Approaches
The SAP builds upon public health and health promotion principles and approaches covering:
- Upstream approach
- Life-course approach
- Focus on equity
- Multisectoral actions
- Health system strengthening
- Universal health coverage
- Evidence-based strategies
- Empowerment of people and communities

Strategic Directions
Underpinning our efforts to prevent and control NCD are the following new strategic directions:
i) Government demonstrating leadership;
ii) Schools transformed into healthy settings (e.g. Health Promoting Schools);
iii) Supportive physical and social environments created for physical activity;
iv) Effective partnerships with primary care professionals; and
v) Consideration and adoption of WHO’s ‘best buys’ and other recommended interventions at appropriate stages.

Developing the SAP represented but one milestone in Hong Kong’s commitment to address NCD. The Steering Committee on Prevention and Control of NCD will closely monitor and review progress of implementation of the stated actions. Copy of the SAP can be found at the Change for Health website of the Department of Health at http://www.change4health.gov.hk/en/saptowards2025/.

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