Strategy on Cancer Control in Hong Kong

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Symposium on Cancer Control: Challenges & Opportunities
7 December 2013
Outline

1. Global burden of Non-communicable Diseases (NCD)
2. Cancer Epidemiology in Hong Kong
3. Five Major Behavioural Risk Factors
4. Policy Framework
5. Coordinating Mechanism for Prevention and Control of Cancer
6. Surveillance System
7. Primary Prevention of Cancer
8. Secondary Prevention of Cancer
Global burden of Non-Communicable Diseases (NCD)
### Global burden of NCD

57 million deaths in the world in 2008
7.6 million (21%) deaths were due to Cancer

<table>
<thead>
<tr>
<th>Cause of NCD deaths</th>
<th>Number of deaths</th>
<th>Percentage of NCD deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular diseases</td>
<td>17 million</td>
<td>48%</td>
</tr>
<tr>
<td>Cancers</td>
<td>7.6 million</td>
<td>21%</td>
</tr>
<tr>
<td>Respiratory diseases</td>
<td>4.2 million</td>
<td>12%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1.3 million</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: Global status report on noncommunicable diseases 2010, WHO
Global burden of NCD

• About 30% of cancer deaths are caused by the five leading behavioural and dietary risks:
  1. High body mass index
  2. Low fruit and vegetable intake
  3. Lack of physical activity
  4. Tobacco use
  5. Alcohol use

• Approximately 70% of cancer deaths in 2008 occurred in low- and middle-income countries

• Deaths from cancer worldwide are projected to continue rising, with an estimated 13.1 million deaths in 2030

Source: WHO fact sheet on cancer, 2013
WHO Global Non Communicable Disease Action Plan 2013-2020

Set of 9 voluntary global NCD targets for 2025

- Premature mortality from NCDs 25% reduction
- Essential NCD medicines and technologies 80% coverage
- Drug therapy and counseling 50% coverage
- Diabetes/obesity 0% increase
- Tobacco use 30% reduction
- Raised blood pressure 25% reduction
- Salt/sodium intake 30% reduction
- Physical inactivity 10% reduction
- Harmful use of alcohol 10% reduction

25% reduction of premature mortality from four NCDs
- Cardiovascular diseases
- Cancers
- Chronic Respiratory Diseases
- Diabetes

Source: WPRO, WHO
Cancer Epidemiology in Hong Kong
Leading Causes of Death in Hong Kong (2012)

- Cancers 30.5%
- Diseases of heart 14.4%
- Stroke 7.5%
- Dementia 2.1%
- Nephritis, nephrotic syndrome and nephrosis 3.7%
- External causes of morbidity and mortality 3.8%
- Diabetes 0.9%
- Pneumonia 15.9%
- Septicaemia 1.9%
- Others 14.7%

Chronic lower respiratory diseases 4.5%

Sources: Department of Health, Census and Statistics Department
Number of episodes of in-patient discharges and deaths for major chronic diseases (2012)

<table>
<thead>
<tr>
<th>Diseases</th>
<th>In-patient discharges and deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancers</td>
<td>182 742 (9.2%)</td>
</tr>
<tr>
<td>Injuries and poisoning</td>
<td>94 806 (4.8%)</td>
</tr>
<tr>
<td>Diseases of heart</td>
<td>78 516 (4.0%)</td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td>42 691 (2.2%)</td>
</tr>
<tr>
<td>Stroke</td>
<td>25 730 (1.3%)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>20 480 (1.0%)</td>
</tr>
</tbody>
</table>

Sources: Department of Health, Hospital Authority
Behavioural and Dietary Risk Factors

Five leading behavioral and dietary risks for NCD:

1. High body mass index
2. Low fruit and vegetable intake
3. Lack of physical activity
4. Tobacco use
5. Alcohol use*

* Alcoholic beverages is carcinogenic to humans (Group 1 Carcinogen). IARC Monographs Volume 96

Source: WHO fact sheet on cancer, 2013
Adult Overweight and Obesity Rate

Overweight and Obesity, 2004-2012

Sources:
Local data – Behavioural Risk Factor Survey, DH 2004-2012
Central obesity definition for Chinese - International Diabetes Federation
Low fruit and vegetable intake; Lack of physical activity

Source: Behavioural Risk Factor Survey, DH 2004-2012
Tobacco Use

Prevalence of daily cigarette smokers (aged 15 and over) by age groups from 1982 to 2012

Trends of Smoking and Lung cancer in HK

Source: Census and Statistics Department Hong Kong Cancer Registry
Local Epidemiology of Alcohol Consumption

Drinking Prevalence among HK Students by age, 2012

<table>
<thead>
<tr>
<th>Age group</th>
<th>Male</th>
<th>Female</th>
<th>Both sexes</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>75.9</td>
<td>79.9</td>
<td>79.9</td>
</tr>
<tr>
<td>25-34</td>
<td>79.9</td>
<td>77.0</td>
<td>78.3</td>
</tr>
<tr>
<td>35-44</td>
<td>69.0</td>
<td>62.2</td>
<td>65.6</td>
</tr>
<tr>
<td>45-54</td>
<td>50.0</td>
<td>44.0</td>
<td>47.0</td>
</tr>
<tr>
<td>55-64</td>
<td>35.2</td>
<td>33.3</td>
<td>34.3</td>
</tr>
<tr>
<td>All ages</td>
<td>53.6</td>
<td>45.9</td>
<td>50.0</td>
</tr>
</tbody>
</table>

Percentage (%)

**Note:** Binge Drinking is drinking at least 5 glasses/cans of alcohol on one occasion during the 30 days prior to the survey.

Source: The 2011/12 Survey of Drug Use among Students, Narcotics Division, Security Bureau

Binge Drinking** among HK Adults Aged 18-64, 2012

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<td>15.7</td>
<td>12.6</td>
<td>14.8</td>
</tr>
<tr>
<td>25-34</td>
<td>11.3</td>
<td>11.5</td>
<td>11.5</td>
</tr>
<tr>
<td>35-44</td>
<td>5.0</td>
<td>3.9</td>
<td>4.4</td>
</tr>
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Source: Behavioural Risk Factor Survey 2012, DH

Source: The 2011/12 Survey of Drug Use among Students, Narcotics Division, Security Bureau
Policy Framework
Strategic Framework for Prevention and Control of Non-communicable Diseases

- Strategic framework document
- Launched in 2008

**Goal**
- Increase positive health and quality of life of the people in HK

**Focus**
- Major risk factors that are potentially modifiable and have significant impact on health

The Steering Committee on Prevention and Control of NCDs was established in 2008 to deliberate and oversee the overall roadmap of the framework.
Intervene at upstream

**Behavioral RF**
- Smoking
- Unhealthy diet
- Physical inactivity
- Alcohol misuse

**Biomedical RF**
- Obesity
- Blood pressure
- Blood glucose
- Blood lipid

**Diseases**
- Heart disease
- Stroke
- Diabetes
- Cancer
- Chronic resp. disease

By having a healthier diet, increasing physical activity and stop smoking,

~80% of coronary heart disease, ~80% of type 2 diabetes and

~40% of cancer can be prevented

Source: Global status report on noncommunicable diseases 2010, WHO
Strategic Framework for Prevention and Control of Non-communicable Diseases

Six Strategic Directions

1. Health Promotion
2. Information Base
3. Partnership
4. Capacity Building
5. Responsive Health Sector
6. Health Promoting Legislation

Key Elements for Success - PEOPLE

1. Partnership
2. Environment
3. Outcome-focused
4. Population-based intervention
5. Life-course approach
6. Empowerment
Strategic Management Structure

Steering Committee on Prevention and Control of NCD(SC)

Working Groups (WG)

- Diet and Physical Activity
- Alcohol and Health
- Injuries
- Other priority areas

Remark: The Tasks on control of tobacco use, cancer and poison control are taken up by the DH’s Tobacco Control Office, Cancer Coordinating Committee and the Hong Kong Poison Control Network respectively.
Coordinating Mechanism in Prevention and Control of Cancer
Cancer Coordinating Committee

- Set up in **2001**
- Chaired by Secretary for Food and Health
- To review local and international scientific evidence
- To formulate strategies and make recommendations for cancer prevention and control

Under the Committee, **four** Cancer Expert Working Groups (CEWG) have been set up:

1. Cancer data and priorities
2. Cancer prevention and screening
3. Cancer treatment services standards
4. Cancer research and development
Cancer Coordinating Committee (CCC)

Cancer Expert Working Groups (CEWG)

- Cancer Data and Priorities
- Cancer Prevention and Screening
- Cancer Treatment Services Standards
- Cancer Research and Development
Recommendations on Prevention and Screening

  - Local recommendations for prevention and screening of seven cancers

- CEWG released updated recommendations on the prevention and screening of 3 cancers, namely breast, colorectal and prostate cancers in 2012

- Bilingual cancer booklets for general public were produced in 2013 to promote public awareness and early detection
Surveillance System

1. Behavioural Risk Factor Surveillance System (BRFSS)
2. Population Health Survey
3. Thematic Household Survey
4. Hong Kong Cancer Registry
Behavioural Risk Factor Surveillance System (BRFSS)

- Information on health-related behaviours of the Hong Kong adult population is included
- The first survey was conducted in October 2004
- Information was collected through telephone surveys conducted annually
- At least 2,000 randomly selected land-based, non-institutionalized persons aged 18 to 64 years are sampled
- Some health topics covered
  - Health status
  - Eating habits
  - Physical activity
  - Drinking pattern
Population Health Survey

• First large scale territory-wide survey on the health status of people in Hong Kong in 2003/2004
• To report the patterns of health status and health-related issues and screening practices of the general population in Hong Kong
• To strengthen the information base on population health, thereby, supporting evidence-based decision making in health policy
• Second PHS is being prepared
Thematic Household Survey

• Performed by the Census and Statistics Department
• Conducted periodically and systematically with different themes
• Some health topics included:
  – Hospitalisation, doctor and dental consultation
  – Patterns of smoking
  – Persons with Disabilities and Chronic Diseases
Hong Kong Cancer Registry

- Established in 1963
- Collect cancer new cases details from public and private hospitals in Hong Kong
- Collect cancer death data from Immigration Department and Department of Health.
- Compile annual statistics on cancer new cases and deaths and perform relevant research and surveillance.
- Around 25,000 cancer new cases and 13,000 cancer deaths are reported yearly.
Primary Prevention of Cancer
Action Plan to Promote Healthy Diet and Physical Activity Participation in Hong Kong

• Prepared by the Working Group on Diet and Physical Activity
• Launched in 2010
• Goal:
  – To halt the rising trend of overweight and obesity
• Content:
  – 5 Priority Areas
    » 14 Recommendations
    – 30 Actions
Actions to Promote Healthy Diet by Department of Health

- **StartSmart@school.hk**
  - Promote healthy eating among preschoolers across the territory through a preprimary institution-based approach
  - > 540 preprimary institutions (57%) participated by 2012/13

- **EatSmart@school.hk**
  - Promote healthy diet among primary students
  - > 480 primary schools (77%) participated in 2012/13

- **EatSmart@restaurant.hk**
  - Work with the catering business and dietetic profession
  - >600 EatSmart restaurants offer at least 5 “More Fruit and Vegetables” and/or “3 Less” dishes on a regular basis per day
Actions to Promote Healthy Diet (together with other departments)

- “Live it, Use it” Nutrition Labelling Award Scheme (Food and Environmental Hygiene Department)
  - Public education on nutrition information on food labels

- “I’m So Smart” Community Programme (Housing Department)
  - Promote healthy diet and health care education at estate level

- “Requirements for Nutrition Labelling and Nutrition Claim” Regulation (Center for Food Safety)
  - Prepackaged food are required to have nutrition labelling since 1st July 2010
Actions to Promote Physical Activity by Department of Health

• StartSmart@school.hk
  – Promote physical activity among preschoolers across the territory through a preprimary institution-based setting approach
  – Empower teachers with practical resource kits, training sessions and online resources

• Health@work.hk
  – Health promotion work at workforce settings
  – 18 organisations with around 3,300 staff have participated in the second phase of the Project
Actions to Promote Physical Activity (together with other departments)

- **Sport for All Day (Leisure & Cultural Services Department)**
  - Promotion of physical activities in the community

- **“Ideal BMI” Disease Prevention Project (Hospital Authority)**
  - Workplace health promotion programme
  - Aims to improve health at individual and organisation levels in collaboration with community partners
Alcohol: Group 1 Carcinogen

6.1 Carcinogenicity in humans

There is **sufficient evidence** in humans for the carcinogenicity of alcoholic beverages. The occurrence of malignant tumours of the oral cavity, pharynx, larynx, oesophagus, liver, colorectum and female breast is causally related to the consumption of alcoholic beverages.

Overall evaluation

Alcoholic beverages are **carcinogenic to humans** (**Group 1**). Ethanol in alcoholic beverages is **carcinogenic to humans** (**Group 1**).
Action Plan to Reduce Alcohol-related Harm in Hong Kong

• Prepared by Working Group Alcohol and Health
• Launched in Oct 2011
• Goals:
  - Create a sustainable environment to reduce alcohol-related harm;
  - General public to make informed choices about alcohol consumption;
  - Reduce burden of alcohol-related harm
• Content:
  – 5 Priority areas
    » 10 Recommendations
      – 17 Actions
Actions to Reduce Alcohol Related Harms

• Generate an effective information system
  – Review and strengthen existing surveillance on alcohol consumption among adults
  – Make use of appropriate research means to monitor alcohol consumption among youths
  – Explore with HKPF and SWD to collect information on alcohol-related harm

• Strengthen partnership
  – Sharing forums for community stakeholders to promote alcohol reduction
Actions to Reduce Alcohol-Related Harms

• Build capacity
  – Develop drinking advice and education materials for different target groups
  – Continue publicity targeting against drink-driving
  – Accord “alcohol” a high priority in relevant Government funds

• Ensure responsive health sector
  – Develop screening & brief intervention guidelines for use by primary healthcare professionals

• Strengthen supportive health promotion legislation
  – Collect evidence and make recommendation to SC on feasibility of effective measures, e.g. imposing age restriction on off-premise sales of alcohol
Local Health Professional’s Collaborative Works to Reduce Alcohol-related Harm

Various colleges of HKAM held a press conference in 2012 to advocate reducing alcohol related-harm in Hong Kong:

- HK College of Community Medicine
- HK College of Physicians
- HK College of Emergency Medicine
- HK College of Psychiatrists
- HK College of Family Physicians
World Health Organization
Western Pacific Regional Meeting on Addressing the Harmful Use of Alcohol by Young People

• Held on 12-14 November 2013 in Hong Kong
• Jointly organised by WHO and Department of Health
• 33 delegates from 17 countries/areas in the Western Pacific Region, together with 10 advisers and a number of local observers are attending the meeting
• Aim to develop collaborative strategic approaches to address the growing problem of alcohol use among young people
Tobacco Control

- Tobacco Control Office (TCO)
- Established in February 2001
- Enhance Government’s tobacco control, collaborate with NGOs to promote a smoke-free culture

- Major responsibilities:
  - Law enforcement
  - Health education
  - Promote and coordinate smoking cessation services
Tobacco Control

• Progressive approach
• Multi-pronged approach
  – Legislation
  – Enforcement
  – Publicity and education
  – Smoking cessation
  – Taxation
• The six most effective policies that can curb the tobacco epidemic are outlined in WHO's MPOWER strategy

| M | Monitor | Monitor tobacco use and prevention policies |
| P | Protect | Protect people from tobacco smoke |
| O | Offer | Offer help to quit tobacco use |
| W | Warn | Warn about the dangers of tobacco |
| E | Enforce | Enforce bans on tobacco advertising, promotion and sponsorship |
| R | Raise | Raise taxes on tobacco |
1982
- Smoking (Public Health) Ordinance first enacted
- Banned smoking in lifts, cinemas, concert hall, etc. by phases

1987
- Banned importation and sale of smokeless tobacco

1990
- Banned all cigarette advertisement and sponsorship on TV and radio

1994
- Prohibited sale of tobacco to people under age 18

1999
- Prohibited all tobacco advertisement in the printed media

2001
- Established Tobacco Control Office
- Started Smoking cessation clinics GOPC

2004
- Prohibited sale of tobacco to people under age 18

2007
- Extended no smoking areas
- Added new graphic warning and packaging on products

2009
- Increased tobacco tax 50%
- Implemented fixed penalty system
- Enhanced community based cessation services

2011
- Increased tobacco tax 41.5%
- Prevalence of daily cigarette smokers dropped to 10.7%

2012
- Prevalence of daily cigarette smokers dropped to 10.7%
Secondary Prevention of Cancer
Screening

• Definition of screening (from “A Dictionary of Epidemiology” by John Last):
  - Presumptive identification of unrecognized disease or defect by the application of tests, examinations or other procedures which can be applied rapidly
  - Screening tests sort out apparently well persons who probably have a disease from those who probably do not
  - A screening test is not intended to be diagnostic. Persons with positive or suspicious findings must be referred to their physicians for diagnosis and necessary treatment

• Purpose of screening
  - To detect early disease or risk factors for disease in large numbers of apparently healthy individuals.
  - To reduce the mortality from the cancer
Wilson and Jungner Criteria for Population Screening

1. The condition sought should pose an important health problem.
2. The natural history of the disease should be well understood.
3. There should be a recognizable early stage.
4. Early treatment is available for the diseases and can lead to decreased morbidity and mortality.
5. There should be a suitable test.
6. The test should be acceptable to the population.
7. There should be adequate facilities for the diagnosis and treatment of abnormalities detected.
8. For diseases of insidious onset, screening should be repeated at intervals determined by the natural history of the disease.
9. The chance of physical or psychological harm to those screened should be less than the chance of benefit.
10. The cost of a screening programme should be balanced against the benefit it provides.

Cervical Screening Programme

- Territory-wide cancer screening programme in Hong Kong, launched in March 2004

- Aims:
  - To facilitate and encourage women to have regular cervical smears
  - To reduce incidence and mortality due to cervical cancer in Hong Kong women

- Collaboration with Hong Kong Cancer Registry in 2013 to evaluate performance of CSP in terms of reduction in incidence and mortality of cervical cancer
Way Forward

• Cancer prevention and control is a major public health challenge and also a priority area targeted by Department of Health

• The Department of Health will continue to:
  – Maintain surveillance on the disease burden of cancer
  – Promote healthy lifestyle as the main prevention strategy
  – Strengthen cancer awareness and understanding of cancer screening among mainstream population
  – Support the work and deliberations of the CCC and CEWG on Cancer Prevention and Screening

• All sectors to join in the fight against cancers
Thank you