Health Factsheet

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World No Tobacco Day Information Paper

Smoking is a contributory factor to cancers and many other diseases. Local data shows that there is a higher proportion of smokers among cancer, heart attack, stroke and kidney failure patients than in the general population. On this World No Tobacco Day, learn more about the health effects of tobacco use and encourage smokers around you to quit.

BACKGROUND

Tobacco use is the most preventable cause of illness and death. Globally, there are more than 1 billion smokers. Tobacco kills nearly 6 million people each year, of which more than 600,000 are non-smokers dying from the effects of second-hand smoke. Tobacco is projected to kill more than 8 million people each year by 2030.

SMOKING TRENDS IN SINGAPORE

Locally, tobacco kills approximately 2,500 smokers and 250 non-smokers each year. Among Singapore residents, the percentage of current smokers dropped from 18.3% in 1992 to 12.6% in 2004, but stabilized thereafter with 13.3% smokers in 2013 (Figure 1). A higher percentage of current smokers were observed among Singapore residents aged 18 to 69 with certain diseases, compared to the general population in 2010 and 2013 (Figure 2).
Figure 1: Percentage of current smokers among Singapore residents aged 18 to 69

Figure 2: Percentage of current smokers among Singapore residents aged 18 to 69 with diseases
TOBACCO PRODUCTS

Though most smokers in Singapore are cigarette users, there are an increasing number of tobacco users who experiment with other tobacco products. These alternative tobacco products are:

**Cigars** contain higher amounts of tobacco than cigarettes. As the majority of the cigar smoke remains in the oral cavity, cigar smoking is usually associated with oral cavity cancer, throat cancer, larynx cancer, chronic heart disease and lung disease\(^5\).

**Roll-your-own cigarettes**, also known as ang hoon, may be thinner but they contain the same harmful chemicals as found in cigarettes. As such, ang hoon and cigarette smokers face similar risk of smoking-related diseases\(^6\)-\(^8\).

**Shisha** involves smoking from a waterpipe with flavoured, partially burned tobacco. It is a popular social activity among youth smokers who view it as a harmless recreational activity. However, the smoke from a 45-minute session of shisha contains more harmful substances than a cigarette; one session of shisha smoking is approximately equivalent to smoking 200 cigarettes\(^9\). In Nov 2014, shisha smoking was banned in Singapore\(^10\).

**Electronic cigarettes**, which resemble conventional cigarettes, are banned in Singapore under the Tobacco (Control of Advertisements and Sale) Act (CHAPTER 309)\(^11\). Electronic cigarettes, also known as e-cigarettes, are battery-powered vaporizers that produce an aerosol when the e-liquid they contain is heated. E-liquids usually contain a mixture of propylene glycol, glycerine, nicotine and flavorings\(^12\). Contrary to popular belief, e-cigarettes are not effective and safe smoking cessation aids, according to the US Food and Drug Administration (FDA)\(^13\). E-cigarettes have been found to contain damaging levels of nicotine and high levels of cancer-causing agents comparable to smoke produced by cigarettes\(^14\).
ADVERSE HEALTH EFFECTS OF TOBACCO PRODUCTS

In 2013, the risk of getting any cancer among current smokers was 1.3 times of that among former and never-smokers for Singapore residents aged 18 to 69. Tobacco is known to cause several types of cancer such as lung, oral and nasopharynx cancer\textsuperscript{15}. Most of these cancers were among the top common cancers diagnosed in Singapore residents in 2009 to 2013 as shown in Table 1.

Table 1: Top ten frequent cancers among Singapore residents in 2009 to 2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Site</td>
<td>%(^\wedge)</td>
</tr>
<tr>
<td>1</td>
<td>Colo-rectum*</td>
<td>17.3</td>
</tr>
<tr>
<td>2</td>
<td>Lung*</td>
<td>15.1</td>
</tr>
<tr>
<td>3</td>
<td>Prostate</td>
<td>12.1</td>
</tr>
<tr>
<td>4</td>
<td>Liver*</td>
<td>7.5</td>
</tr>
<tr>
<td>5</td>
<td>Lymphoid neoplasms*</td>
<td>6.6</td>
</tr>
<tr>
<td>6</td>
<td>Skin, including Melanoma</td>
<td>5.6</td>
</tr>
<tr>
<td>7</td>
<td>Stomach*</td>
<td>5.0</td>
</tr>
<tr>
<td>8</td>
<td>Nasopharynx*</td>
<td>3.9</td>
</tr>
<tr>
<td>9</td>
<td>Kidney &amp; Other urinary*</td>
<td>3.6</td>
</tr>
<tr>
<td>10</td>
<td>Myeloid neoplasms*</td>
<td>3.0</td>
</tr>
</tbody>
</table>

\(^\wedge\)percentage of all cancers diagnosed in 2009 to 2013
*related to tobacco

Other than cancers, tobacco also increases the risk of cardiovascular diseases. Smoking was estimated to increase current smokers’ risk of heart attack by 4.3 times and stroke by 3.2 times compared to that of former and never-smokers, based on 2013 registry data for Singapore residents aged 18 to 69.

Smokers also have a higher risk of being diabetic, which leads to higher risk of kidney failure. Smoking together with diabetes, raise amputation rate, exacerbate vision problems, and worsen gum disease and other complications of diabetes (Figure 3)\textsuperscript{16,17}.

For mothers who smoke during pregnancy, tobacco increases the risk of premature birth and lowers the infant’s birth weight\textsuperscript{18}.
For current smokers, the risk of getting diseases increases with the number of years smoked and the number of cigarettes smoked per day\textsuperscript{19,20}.

Some of the diseases associated with tobacco were also among the top common causes of death among Singapore residents in 2013 (Table 2)\textsuperscript{24}. Current smokers among Singapore residents who were diagnosed with cancer between 1968 and 2013 are twice as likely to die compared to former and never-smokers.

Table 2: Top ten frequent causes of death among Singapore residents in 2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Principal cause of death</th>
<th>%(^{^\text{^A}})</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cancer*</td>
<td>30.5</td>
</tr>
<tr>
<td>2</td>
<td>Pneumonia</td>
<td>18.5</td>
</tr>
<tr>
<td>3</td>
<td>Ischaemic heart disease*</td>
<td>15.5</td>
</tr>
<tr>
<td>4</td>
<td>Cerebrovascular diseases (including stroke)*</td>
<td>8.9</td>
</tr>
<tr>
<td>5</td>
<td>External causes of morbidity and mortality</td>
<td>4.9</td>
</tr>
<tr>
<td>6</td>
<td>Hypertensive diseases (including hypertensive heart disease)*</td>
<td>3.1</td>
</tr>
<tr>
<td>7</td>
<td>Urinary tract infection</td>
<td>2.6</td>
</tr>
<tr>
<td>8</td>
<td>Nephritis, nephrotic syndrome &amp; nephrosis</td>
<td>2.4</td>
</tr>
<tr>
<td>9</td>
<td>Other heart diseases</td>
<td>2.0</td>
</tr>
<tr>
<td>10</td>
<td>Chronic obstructive lung disease*</td>
<td>1.6</td>
</tr>
</tbody>
</table>

\(^{^\text{^A}}\text{out of all deaths in 2013}\)

Tobacco not only affects the health of those who smoke, but also the people around them who inhale the smoke. Exposure to second-hand smoke causes ear infections, more frequent and severe asthma attacks, respiratory symptoms, respiratory infections and greater risk for sudden infant death syndrome in children\textsuperscript{18,21,22}. In adults who never smoked, second hand smoke can result in lung cancer, heart disease and stroke\textsuperscript{18,23}.
Figure 3: Harmful effects of tobacco use
HEALTH BENEFITS OF QUITTING SMOKING

Quitting smoking can reduce the risk for cancers, cardiovascular diseases, respiratory symptoms and lung diseases (Figure 4). Women who stop smoking during pregnancy can reduce their risk of giving birth to an infant with low birth weight. Smoking cessation also reduces risk from all-cause death.

Figure 4: Health benefits of quitting smoking

- Blood pressure returns to normal
- Pulse rate returns to normal
- Body temperature normalizes
- Risk of heart attack decreases
- Lungs start to clear toxins and mucus out
- Breathing becomes easier as bronchial tubes relax
- Lung function improves
- Body energy increases
- Coughing and shortness of breath decrease
- Sinus congestion and fatigue decrease
- Risk of stroke and coronary heart disease decrease to that of a non-smoker
- Risk of lung cancer reduces to about half that of non-smoker
**HEALTH AS A REASON TO QUIT SMOKING**

The World Health Organization has indicated that brief advice from healthcare professionals can bring about 2% to 6% increase in quitting rate among patients who smoke.\(^{29}\)

Concurrently, systematic reviews show that smoking cessation programmes that begin during a hospital stay and include counselling with follow-up support for at least one month after discharge are effective, due to the “teachable moments” in hospital settings.\(^{30}\) Additionally, it has also been found that provision of nicotine replacement therapy increases the quit and abstinence rate among inpatient smokers.

In view of such evidence, the Health Promotion Board (HPB) established the Inpatient Smoking Cessation Programme in 2006/07. The Inpatient Smoking Cessation Programme seeks to integrate tobacco cessation intervention into existing clinical management of patients who smoke. Hospitals provide inpatient smoking cessation counselling free of charge to patients.

**THE NATIONAL TOBACCO CONTROL CAMPAIGN 2015**

In 2011, the HPB introduced the I Quit campaign, a national anti-smoking campaign. The campaign is community-based and offers a personalised approach by building a network of support to help smokers of all ages make their first or subsequent attempt to quit smoking. The personalised approach used in I Quit campaign was a deliberate shift away from the usual scare tactics used in previous campaigns.

This year, the I Quit campaign will centre on the theme of “support”. Titled “Take the Next Small Step”, the campaign encourages smokers to sign up for the 28-day Countdown with a supporter. The supporter may be the smoker’s family member, friend, colleague, healthcare professional, social worker, health ambassador, or Quit consultant. The supporter plays a crucial role in ensuring that the smoker stays motivated to quit smoking and encouraged to “take the next small step”.

The HPB will also increase the number of smoking cessation touchpoints in the community and build the capacity of health professionals and HPB’s Health Ambassadors to support smokers who wish to quit smoking.

For more information on the I Quit 28-Day Countdown, please refer to the website: [http://www.hpb.gov.sg/iquit](http://www.hpb.gov.sg/iquit)
Stay smoke-free for 28 days and you’re 5 times more likely to quit for good.
Here’s what you’ll experience during your countdown.

21 DAYS
Breathing is easier, but cravings come at least 3 times a day.

14 DAYS
You’re free from anxiety and your body is changing into a non-smoker’s.

7 DAYS
Your brain receptors no longer respond to nicotine cravings.

4 DAYS
Your journey’s just begun. Nicotine levels in your body drop and you start to feel slightly anxious.

1 DAY
The countdown is over. Physically and mentally, your body is back to how it was before you started smoking.

0 DAYS
I QUIT
Because I want to be a role model for my two daughters.

How you can stay vigilant:
- Get rid of cigarettes and ashtrays to avoid temptation.
- Ask the support of your loved ones by telling them about your quitting.
- Keep your guard up even after 28 days. This is only the first step.

Head to iquitclub.sg and be a part of the largest quit-smoking movement in Singapore.
REFERENCES


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