Main Research Findings of HKU Youth Quitline

29th April, 2021

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The University of Hong Kong
HKU Youth Quitline Program

Background
- Established in **August, 2005**;
- **First smoking cessation hotline** for youth smokers under the age of 26;
- Funded by the **Tobacco and Alcohol Control Office (TACO)** (from Jun 2011 to Nov 2020);
- Funded by the **Sir Robert Kotewall endowed Professorship Fund** since Dec 2020.

Goals
- To provide **peer-counseling** service to those in need;
- To enhance **smoking cessation** and **smoking reduction rates**, and to **prevent relapse**.
Service Outcome

2,909 counselled youth smokers.

14,508 accumulated incoming calls.

54,633 website browsing frequency.

http://nursing.hku.hk/yquit/

Service Outcome

Over 10 Counsellor Training Workshops.

Over 500 peer-counsellors.

Over 250 times of outreach activities.

## Youth Quit Line Service Summary

<table>
<thead>
<tr>
<th>Stage</th>
<th>At 6th month follow-up stage:</th>
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<tbody>
<tr>
<td>Quit smoking</td>
<td>29.5% (654/2217)</td>
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<tr>
<td>≥50% smoking reduction</td>
<td>19.2% (426/2217)</td>
</tr>
<tr>
<td>Attempted quit for ≥7 days</td>
<td>51.3% (1137/2217)</td>
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Main Research Findings
Trends in usage of New Tobacco Products (NTPs)

Youth Smokers who have used E-Cigarettes or Heated-Tobacco-Products

- 2017-2018: 57.4% (178/310)
- 2018-2019: 72.9% (186/255)
- 2019-2020: 85.9% (243/283)

1.2017 – 11.2020
# Reasons for using NTPs

<table>
<thead>
<tr>
<th>Reasons</th>
<th>N (%)</th>
</tr>
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<tbody>
<tr>
<td>Curiosity</td>
<td>249 (51.3)</td>
</tr>
<tr>
<td>Peer Influence</td>
<td>181 (37.3)</td>
</tr>
<tr>
<td>Wants to quit/reduce smoking</td>
<td>105 (21.6)</td>
</tr>
<tr>
<td>Likes the flavors</td>
<td>32 (6.6)</td>
</tr>
<tr>
<td>Saving money</td>
<td>23 (4.7)</td>
</tr>
<tr>
<td>Feels healthier</td>
<td>19 (3.9)</td>
</tr>
<tr>
<td>Convenient when in non-smoking areas</td>
<td>18 (3.7)</td>
</tr>
<tr>
<td>Odorless and less second-hand smoking</td>
<td>17 (3.5)</td>
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</tbody>
</table>

*Data collected until 30th Nov 2020, from participants in phase 4 to phase 6. Missing data not included in percentage, participants could choose more than one option.

*Total number of surveyed youth smokers = 485

1.2017 – 11.2020
Youth Smokers’ NTPs User Habits

Youth Smokers who used both HTPs and traditional cigarettes

- 2017-2018: 25.8% (80/310)
- 2018-2019: 40.0% (102/255)
- 2019-2020: 51.2% (145/283)

1.2017 – 11.2020
Youth Smokers’ **Knowledge** on E-Cigarette (EC)

- Agree that EC is less health hazardous: 36.7%
- Agree that EC is less addictive than traditional cigarettes: 55.3%

*Total number of surveyed youth smokers = 733*
Youth Smokers’ **Attitudes** on E-cigarette

- Agree Ecs to be cheaper priced than traditional cigarettes: 44.9%
- Agree ECs are more convenient to use and easier to obtain: 48.8%
- Agree to be attracted by EC’s flavors: 48.7%

*Total number of surveyed youth smokers = 733*
Youth Smokers’ Knowledge and Attitudes on Heated Tobacco Products (HTPs)

Total number of surveyed youth smokers = 106

**Lower** quit rate for HTPs users compare to that of non-HTPs users

At 6th month follow-up stage

<table>
<thead>
<tr>
<th></th>
<th>HTPs users</th>
<th>Non-HTPs users</th>
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<tbody>
<tr>
<td>7-days quit rate</td>
<td>19.0% (15/79)</td>
<td>34.2% (120/351)</td>
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</tbody>
</table>

*Among 579 participants, 106 (18.3%) were HTPs users and 473 (81.7%) were non-HTPs users*
Other Risk Behaviors

More than 60% of participants had other risk behaviors

- Regular Drinking: 945/1538 (61.4%)
- Lack of Regular Exercise: 727/1860 (39.1%)
- Drug Abuse: 47/307 (15.3%)

Other risk behaviors

<table>
<thead>
<tr>
<th>Other risk behaviors</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (=0)</td>
<td>34.1</td>
</tr>
<tr>
<td>One or more than one (≥1)</td>
<td>65.9</td>
</tr>
</tbody>
</table>

*total surveyed smokers = 2082
Other Risk Behaviors in Participants

Quitted/Attempted to quit within nearest 1 year period

- 46.0% (805/1752)
- 33.3% (110/330)
- 12.7%

0-1 other risk behaviors 2-3 other risk behaviors

Reducing other risk behaviors can help smoking cessation

Total number of surveyed youth smokers = 2082

Reasons for surge in use of new tobacco products

NTPs users’ opinions

- Increased online marketing
  “I’m curious about the ads on Instagram”

- Unregulated underage users
  “It’s easy to purchase on Instagram, they don’t check your age”

- Peer influence
  “My friends use e-cigarettes too”

- Convenient to use in public areas
  “I don’t have to stand next to a trash can”

- Cheaper pricing
  “The batteries are durable, saving me money”

- Modern package designs
  “The device is rather small and is pretty stylish”

Qualitative (Interview) Study Result (2020)
NTPs users on using both new tobacco products and traditional cigarette

**Agree that EC fits more occasions than traditional cigarettes would**

“I still smoke traditional cigarettes everyday, but it’s more convenient to smoke e-cigarettes when I’m in the public”

**Using E-cigarettes is less noticeable for school and family**

“I only smoke traditional cigarettes after school and e-cigarette when I’m at school because traditional cigarettes’ odor is too strong”

**Increased side effects due to increased smoking rate**

“Using both would increase my smoking rate, making me tired, having mucus, and just generally uncomfortable”

**Harder to quit smoking**

“This would actually increase the difficulty in quitting, because you might quit traditional cigarettes if you only used e-cigarettes, but then it might lead you back to using traditional cigarettes again”

Qualitative (Interview) Study Result (2020)
Outlook
Betterment in **Counselling Workshops and workshop content**

<table>
<thead>
<tr>
<th><strong>Addition of NTPs content in peer-counsellors training workshops</strong></th>
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<tbody>
<tr>
<td>• Knowledge on NTPs</td>
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<td>• Health impacts of NTPs</td>
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<td>• Related policies on NTPs</td>
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<table>
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<tr>
<th><strong>Strengthen management on risk behaviors</strong></th>
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</thead>
<tbody>
<tr>
<td>Regular exercise</td>
</tr>
<tr>
<td>Avoid drinking</td>
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<tr>
<td>Avoid substance abuse</td>
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<tr>
<td>Enhance education on healthier lifestyles</td>
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Expecting 50 more peer counsellors and 250 more youth smokers being counselled annually
Support **Total Ban on New Tobacco Products**

**Common misconceptions on NTPs**
- NTPs being less health hazardous
- NTPs can help quit/reduce smoking
- NTPs can be used in non-smoking areas too

**Marketing tactics for boosting NTPs sales**
- Varied flavors, modern package design
- Targeted online market for youth smokers
- Marketed through online media platforms, diminishing its harmfulness
- Unclear/misleading ingredient labeling

Attracting more youth smokers to try NTPs prevents

**Total ban of the manufacture, import, sale, and showing of new tobacco products in Hong Kong**
Summary

- Help youth smokers in quitting smoking
- Enhance popularity of HKU Youth Quitline
- Spread more smoke-free information to the public

Extend promotion to online platforms, enhancing our digital reach

Urge for tobacco control policies, call for a total ban on new tobacco products, and tobacco tax increase

Better our peer-counsellors training program and the education on NTPs related topics and risk behavior management

Increase our promotional materials’ coverage, expanding connections with schools and organizations for more outreach opportunities
Please scan the QR codes below for more information.
Mortality Risk of Smoking

Professor Tai-Hing Lam
BBS, JP
Sir Robert Kotewall Professor in Public Health
Chair Professor of Community Medicine
School of Public Health
Li Ka Shing Faculty of Medicine
The University of Hong Kong
Smoking kills

1 in every 2

OR EVEN

2 in every 3

if began smoking at a young age

However, according to findings from the UK, US and Australia studies (2012 - 2013): 2/3 could avoid almost all excess health risks if quit before the age of 40

(WHO, 2008, Jha 2013)


(Pirie 2012, Thun 2013, Jha 2013, Banks 2015)
Utilizing the data from the **Guangzhou Biobank Cohort Study**, the University of Hong Kong, Guangzhou 12\textsuperscript{th} Hospital, and the University of Birmingham, have published a research on smoking and mortality in April, 2018.

The research involved 21,658 female and 8,284 male participants (aged 50 or above) enrolled from 2003 to 2008, with follow-ups until January, 2016.

Findings suggested: the **mortality risk of smokers** who were born after 1949 in Guangzhou and other regions with the longest smoking history could have reached **three fold of that of never smokers**. This finding **was consistent with the mortality risks that were found by research conducted in the UK, US and Australia**

*(Lam, et al, 2018)*
Thank you!
Enact a total ban on all alternative smoking products promptly, strengthen the multi-pronged tobacco control measures, to facilitate the progress of tobacco control

Ms Vienna LAI, MPH(HK)
Executive Director
Hong Kong Council on Smoking and Health
29 April 2021
ASPs are harmful to individual and public health

• Alternative smoking products (ASPs) including e-cigarette and heated tobacco products (HTPs) **release harmful chemicals** as cigarettes do. Some chemicals are in **higher levels in HTPs than cigarettes**, including carcinogens (such as formaldehyde and acetaldehyde), some of which are **unique** to ASPs (such as formaldehyde cyanohydrin).

• **Do not help quitting.** ASPs lead to **dual use** of cigarettes and ASPs and reduce intention to quit.

• Promotion strategy targets at young people, ASPs serve as **a gateway to cigarette smoking**.

• Various international health authorities, including **World Health Organization**, clearly pinpoint the health risks of ASPs, reiterate that ASPs do **NOT reduce in harms** and **never be an alternative to cigarettes**.
WHO disagrees with harm reduction claims of ASPs

Recommendation: … to regulate, including restrict, or prohibit… novel and emerging tobacco products… taking into account of a high level of protection for human health.

E-cigarette contains nicotine and toxic chemicals, which pose health risks, and are undoubtedly harmful and unsafe.

Harmful chemicals in HTPs are similar with those in cigarettes, most of them are carcinogens.

Exposes harmful substances to both smokers and bystanders. Some of harmful substances are specific to HTPs.

Don’t help smokers to quit smoking.

Tobacco industry’s own data even failed to showed detectable reduction in harms of HTPs than cigarettes.
Rejected “risk modification” claims and emphasized HTPs are neither safe nor “FDA approved”

- No sufficient evidence to show that HTP poses less health risks than cigarettes do
- Only authorized the sales of a HTP with “exposure modification” claims, but rejected the application of “risk modification” claims.
- “Exposure modification” claims based on complete switch from cigarettes to HTPs, but most HTP users smoke cigarette concurrently
- FDA’s Tobacco Products Scientific Advisory Committee rejected the risk modification claims by a majority vote.
ASPs collect personal data to develop and promote smoking products

Tobacco industry could **collect personal and usage data through the devices and Mobile App** of ASPs. They could then analyse the characteristic of smoking behavior, improve the products and send designated messages to smoker serving as promotion, reminders of smoking and purchasing HTPs, which is an alternative form of **direct tobacco advertisement and promotion**.

- Some Apps are used to **control the temperature and lighting of devices**, while some share the news, social network and games related to e-cigarette.

- An e-cigarette App aims to **build vaping social network** for user, matching with users in the surroundings through Bluetooth, and **urging e-cigarette smoking**.

- Device of a HTP brand **contains a chip that captures data such as smoking time and frequency, number of puffs, heating temperature and nicotine concentration**, etc. Those data can be stored in users’ mobile phone and computer, and **transferred to tobacco industry by Bluetooth**. Through its affiliated App, users can **order HTPs and search for nearby retailers**, in order to promote the HTP sale.
ASPs collect personal data to develop and promote smoking products

- Started from June 2019, USA Apple Store terminated the examination of all applications from e-cigarette related Apps and removed all those Apps that promote and advocate e-cigarette smoking.

- Smoking (Public Health) Ordinance (Cap. 371) currently prohibits all kinds of tobacco advertising and sale of cigarettes to minors (including online channel).

- There is no law regulating these kinds of tobacco advertisements and information directly sent by tobacco industry to the public. While rule and restrictions are introduced by some platforms on voluntary basis, no regulatory measures could be taken by the Government.

- Difficult to regulate tobacco industry on collection and utilization of personal and usage data, constituting a threat to information security.
Enact a total ban on all ASPs promptly to facilitate the progress of tobacco control

Pass the Bill of total ban on all ASPs promptly
Prevent ASPs from smoking initiation in teenagers and hinderance of smokers to quit.

Strengthen the multi-pronged tobacco control measures
Raising tobacco tax, extending the statutory smoke-free areas, banning tobacco product display at point-of-sale, implementing plain packaging, placing legal onus on venue managers for smoking offences, raising the legal tobacco sales age to 21, tightening law enforcement, more resources for smoking cessation services and smoke-free education, countering tobacco industry interference with tobacco control policies, etc.

Tobacco endgame goal with defined timeline to achieve smoke-free Hong Kong
Please visit www.smokefree.hk for more information