香港吸煙與健康委員會
HONG KONG COUNCIL ON SMOKING AND HEALTH

Tobacco Control Policy-related Survey 2020

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1. Introduction

Smoking is a major cause of premature death. Each year, tobacco kills more than 8 million people globally, including around 1.2 million non-smokers by secondhand smoke (SHS)[1]. In Hong Kong, we estimated that smoking causes nearly 7,000 deaths each year from both smoking and exposure to SHS, from mainly non-communicable diseases such as cancers and cardiovascular diseases[2]. During the past few decades, tobacco control has contributed prominently to international health, and the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), the first international health treaty negotiated under the auspices of WHO has propelled tobacco control into a new era[3]. The application of FCTC in China, including Hong Kong, started in 2006.

WHO set a goal of a 30% reduction relative to the 2010 prevalence of current tobacco use in persons aged 15 years or above by 2025 to prevent and control non-communicable diseases. In accordance with WHO's goal, the Hong Kong Government launched "Towards 2025: Strategy and Action Plan to Prevent and Control Non-Communicable Diseases in Hong Kong" in 2018, with reducing the smoking prevalence to 7.8% by 2025 as one of the targets.

The Hong Kong Government has adopted a multi-pronged approach, including legislation, taxation, education and smoking cessation services, and the smoking prevalence reduced from 23.3% in 1982 to 10.2% in 2019. However, tobacco control efforts in recent years have not been strong enough. Other than enlarging the area of the pictorial health warning to be at least 85% of the two largest surfaces of cigarette packets in 2018, there was only minor expansion of statutory no smoking areas. The last substantial tobacco tax increase was in 2011 (by 41.5%), and the tax has been frozen at HK$38 per pack since the modest increase in 2014 (by 11.7%). The amendment bill that aims at a total ban on alternative smoking products, including heated tobacco products (HTPs) and electronic cigarettes (e-cigarettes), has not been enacted since first gazetted in February 2019.

Several overseas surveys have assessed the impact of tobacco control policies, including the National Health and Nutrition Examination Survey in the United States[4], the International Tobacco Control Surveys[5] and the Global Adult Tobacco Survey[6]. In Hong Kong, COSH conducted seven waves of the Tobacco Control Policy-related Survey (TCPS) via landline interviews. The surveys gathered information such as smoking prevalence and SHS exposure, impact of tobacco control policies, and opinions on current and future policies (such as tobacco tax and pictorial health warnings [PHWs]). The results have been used to demonstrate public support for tobacco control and to advocate various measures, such as plain packaging, a ban on point-of-sale (POS) smoking product displays, tobacco tax increase and a ban on alternative smoking products. The previous two waves of TCPS were pre- and post-surveys to evaluate the effects of new and enlarged pictorial health warnings, which came into full effect in June 2018. It found that more current smokers thought about the harms of smoking after seeing the new pictorial health warnings, but the effects on thinking about quitting and restraining from using cigarettes were not clear. These behaviours have warranted continuous monitoring to inform future policies.

The present report highlights the key findings of TCPS 2020 and discusses tobacco control issues to be addressed and advocated in the future. The report mainly focuses on the following 8 aspects: (1) smoking product use; (2) nicotine dependence and intention to quit; (3) smoking perception and behaviours during COVID-19 outbreak; (4) exposure to SHS and third-hand smoke (THS); (5) tobacco advertising; (6)

plain packaging; (7) tobacco tax; and (8) tobacco endgame (total ban on smoking) and other smoke-free policies.

2. Methods

2.1 Study design and participants

TCPS 2020 was a cross-sectional telephone survey conducted from December 2019 to September 2020. Hong Kong residents aged 15 years or above who spoke Cantonese were recruited. Three target groups were included: (1) current smokers who used any forms of smoking products daily or occasionally, (2) ex-smokers who had used any form of smoking products in the past but stopped, and (3) never smokers who had never used any forms of smoking products. Data collection of the survey was contracted to the Hong Kong Public Opinion Research Institute Limited (HKPORI). Initial calls took place during 2:30 pm to 10:30 pm on weekdays and weekends in order to cover respondents of diversified working hours of different industries. Each randomly selected telephone number was called 5 times, at different times and on different days, before it was dropped as "non-contact". All interviews were conducted anonymously except for those who were willing to participate in follow-up surveys. Participants could withdraw from the study at any time without providing a reason, and with no consequences.

2.2 Sampling methods and respondent selection

TCPS 2020 recruited 5,111 participants, including 1,701 current smokers, 1,702 ex-smokers and 1,708 never smokers. Telephone numbers were first drawn randomly from residential telephone directories as seed numbers, from which another set of numbers was generated by a computer programme using the "plus/minus one/two" method to capture unlisted numbers. Duplicated numbers were then filtered, and the remaining numbers were mixed in random order to produce the final sampling frame. When a telephone contact was successfully established with a target household, one person of the household was selected from all eligible household members using the "next birthday" rule. As never smokers consist of the majority of the population, recruitment switched to current and ex-smokers only once the number of recruited never smokers exceeded 1,700. Oversampling of the two groups allowed for better estimation of the prevalence of tobacco use within them and weighting was applied to adjust for oversampling.

2.3 Questionnaire development

The questionnaire was modified from previous TCPS surveys, and included two sections: core questions and random questions. Core questions were answered by all respondents, and consisted of questions on tobacco use, COVID-19 and smoking, SHS exposure, nicotine dependence, etc. Random questions were designed for random subsets of respondents with specific smoking status (6 for current smokers, 4 for ex-smokers and 2 for never-smokers), including THS exposure, tobacco advertising, plain packaging, tobacco tax increase and tobacco endgame, etc. All respondents in a subset answered the same sets of random questions.

2.4 Weighting and statistical analysis

The whole sample was weighted against the sex, age and smoking status distribution of the 2019 Hong Kong population. Univariate analysis of variables of interest by overall smoking status, status of using specific smoking products (regardless of use of other products) or sex was conducted. Chi-squared test and linear regression were used to examine differences by sub-groups. Statistical significance was set at $P < 0.05$. All analyses were conducted using STATA (Version 15.1, TX: StataCorp LP).

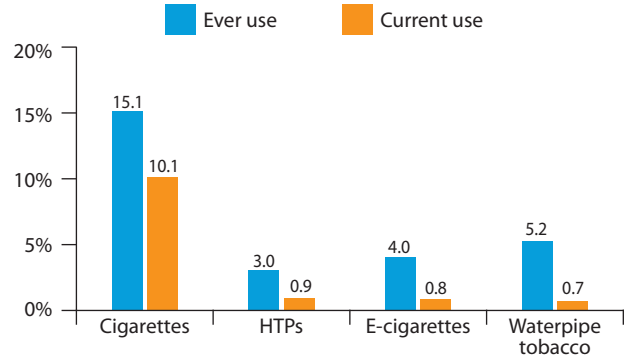
3. Results

3.1 Smoking product use

Figure 1 shows that, in all respondents, the prevalence of ever use and current use was 15.1% and 10.1% for cigarettes, 3.0% and 0.9% for HTPs 4.0% and 0.8% for e-cigarettes, and 5.2% and 0.7% for waterpipe tobacco.

Figure 1

Ever and current use of smoking products in all respondents (n=5,111)

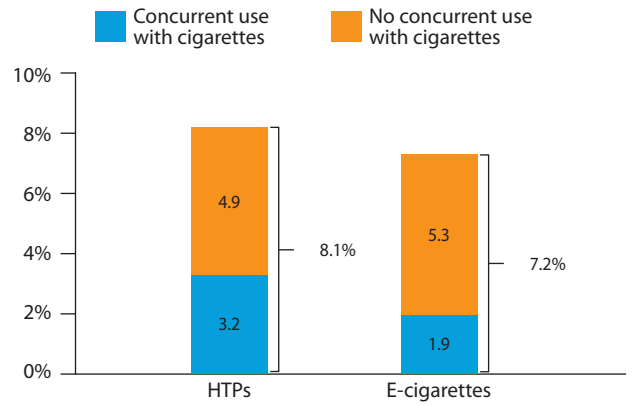


Results were weighted by sex, age and smoking status of the 2019 Hong Kong population.

Figure 2 shows that 8.1% of current smokers were current HTP users and over half of them (60.5%) concurrently used cigarettes. A similar proportion of current smokers were current e-cigarette users (7.2%), majority of whom also used cigarettes (73.6%).

Figure 2

Concurrent HTP or e-cigarette use with cigarettes in current smokers (n=1,701)



Results were weighted by sex and age of current smokers in Hong Kong in 2019.
Current smokers were current users of any smoking products.

Table 1 shows 79.6% of current smokers used only one smoking product, predominantly cigarettes (72.4%), but also HTPs (2.2%), waterpipe tobacco (1.9%), and e-cigarettes (1.1%). Around 1 in 8 (13.7%) current smokers used two products, including cigarettes and cigars (5.4%), cigarettes and HTPs (2.4%), and cigarettes and e-cigarettes (2.3%). Use of three or more smoking products was reported by 6.7% of current smokers.

Table 1. Combinations of smoking products currently used by current smokers

	Total (n=1,701)	
	(n)	(%)
One product	**1,355**	**79.6**
Cigarettes	1,231	72.4
HTPs	38	2.2
Waterpipe tobacco	33	1.9
E-cigarettes	20	1.1
Others	33	1.9
Two products	**232**	**13.7**
Cigarettes and Cigars	91	5.4
Cigarettes and HTPs	40	2.4
Cigarettes and e-cigarettes	39	2.3
Other combinations	62	3.6
Three or more products	**114**	**6.7**

Results, including number of respondents and percentages, were weighted by sex and age of current smokers in Hong Kong in 2019.
Current smokers were current users of any smoking products.

3.2 Nicotine dependence and intention to quit

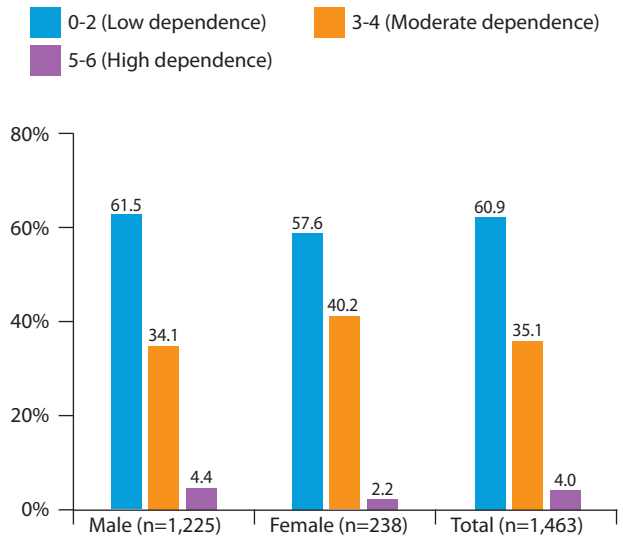
Table 2 shows 93.0% of current cigarette users usually smoked no more than a pack of cigarettes per day (10 cigarettes or fewer, 55.6%; 11 to 20 cigarettes, 37.4%). About half smoked the first cigarette within 5 minutes (20.7%) or 6 - 30 minutes (27.5%) after waking up.

Heaviness of Smoking Index (HSI) measures the level of nicotine dependence based on the daily cigarette consumption and time to first cigarette after waking up. Figure 3 shows that based on HSI, 60.9% of current cigarette users had low dependence and 35.1% had moderate dependence. High dependence was observed in 4.0% of current cigarette users, which was insignificantly higher in males (4.4%) than in females (2.2%).

Table 2 also shows that 43.9% of current cigarette users had an intention to quit cigarettes, including 12.2% who intended to quit within 6 months.

Figure 3

Level of nicotine dependence of current cigarette users



HSI ranges from 0 to 6, and a higher score indicates stronger addiction.

Results were weighted by sex and age of current smokers in Hong Kong in 2019.

Current cigarette users who answered "Don't Know/Redused To Answer" to either of the two items were excluded.Difference between sex was not significant by Chi-squared test (P = 0.10).

Table 2. Nicotine dependence and intention to quit in current cigarette users

	Male (n=1,322) (%)	Female (n=255) (%)	Total (n=1,577) (%)	P-value
Usual cigarette consumption in a smoking day				
10 sticks or fewer	53.8	64.9	55.6	0.02
11-20 sticks	38.6	31.0	37.4	
21-30 sticks	4.2	2.1	3.9	
31 sticks or more	1.9	1.2	1.8	
DK/RTA	1.5	0.8	1.4	
Time to first cigarette after waking up				
Within 5 minutes	19.5	26.9	20.7	0.06
6-30 minutes	27.5	27.6	27.5	
31-60 minutes	12.7	7.6	11.9	
After 60 minutes	33.3	32.2	33.2	
DK/RTA	6.9	5.7	6.7	
Intention to quit cigarettes				
Within 6 months	12.1	12.8	12.2	0.22
After 6 months or undecided	30.6	37.4	31.7	
No intention to quit	55.5	48.5	54.4	
DK/RTA	1.9	1.4	1.8	

DK/RTA: Don't know/Refused to answer.
Results were weighted by sex and age of current smokers in Hong Kong in 2019.
P-values were for differences between sex from Chi-squared tests.

3.3 Smoking perception and behaviours during COVID-19 outbreak

Current smokers rated the perceived likelihood that smoking would increase the risk of contracting COVID-19 on an 11-point scale from 0 (extremely unlikely) to 10 (extremely likely). Table 3 shows that current smokers perceived the risk as unlikely, with a mean score of 3.5 and median score of 5.0. Female smokers rated higher (mean: 4.0, median: 5.0) than male smokers (mean: 3.3, median: 4.0).

Table 3. Perceptions of increased risk of COVID-19 infection due to smoking in current smokers

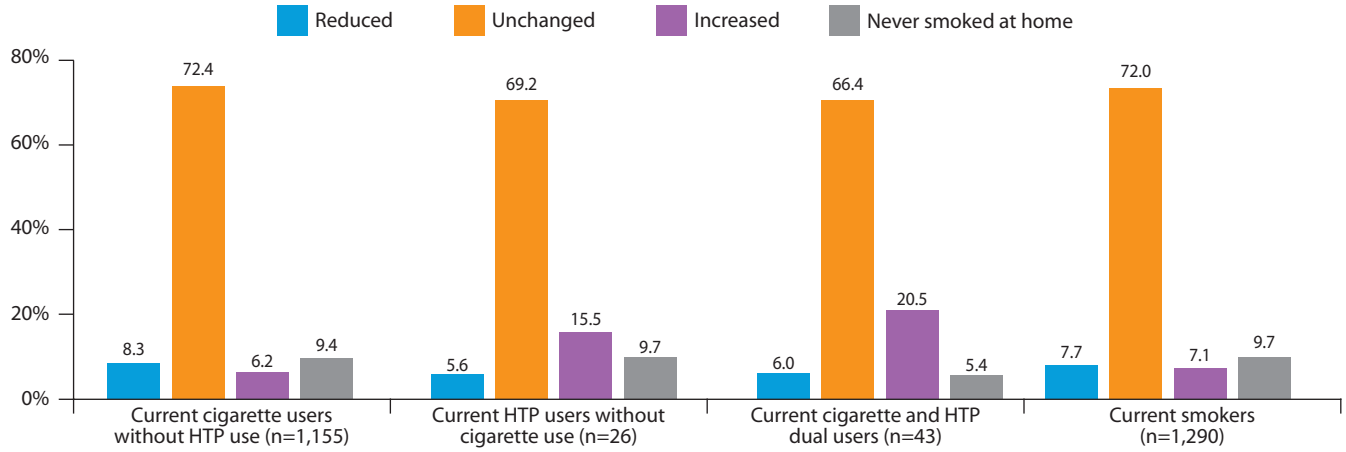
	Mean (score)	SD (score)	Median (score)	IQR (score)
Male (n=915)	3.3	2.9	4.0	0.0-5.0
Female (n=187)	4.0	2.9	5.0	0.0-6.0
Total (n=1,102)	3.5	2.9	5.0	0.0-5.0

Current smokers rated the perceived likelihood of increased COVID-19 risk due to smoking from 0 (extremely unlikely) to 10 (extremely likely),
SD: Standard Deviation; IQR: Interquartile Range.
Results were weighted by sex and age of current smokers in Hong Kong in 2019.
Current smokers were current users of any smoking products.
Only current smokers who provided a score were included.
Difference between sex was significant by linear regression (P= 0.02).

Figure 4 shows that changes in tobacco consumption at home during COVID-19 outbreak marginally differed across cigarette and HTP user groups. Increased tobacco consumption at home was more common in current dual users of cigarette and HTPs (20.5%) and current HTP users who did not use cigarettes (15.5%) than in current cigarette users who did not use HTPs (6.2%).

Figure 4

Changes in tobacco consumption at home during COVID-19 outbreak

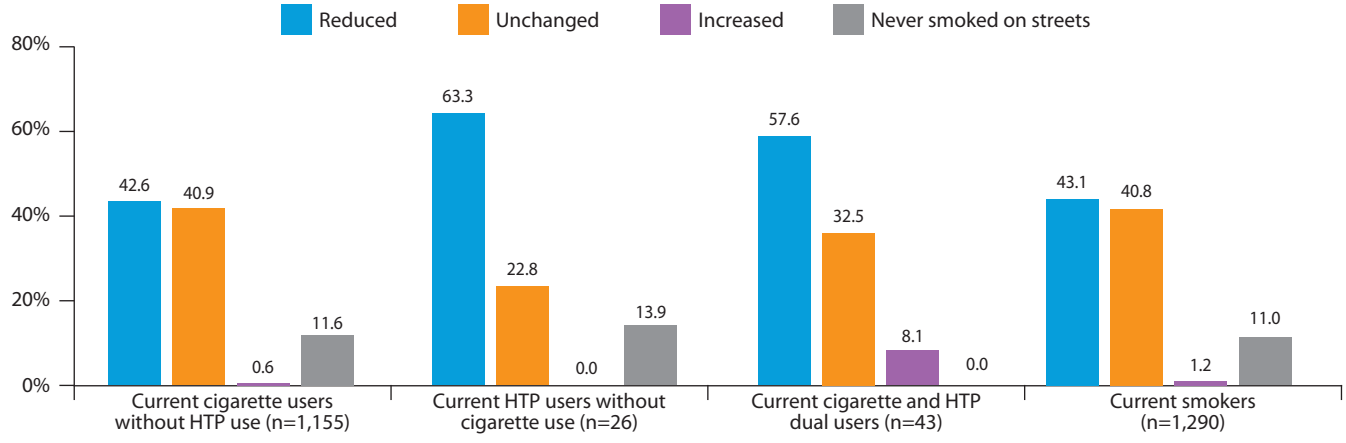


Results were weighted by sex and age of current smokers in Hong Kong in 2019.
Current smokers were current users of any smoking products.
Difference across status of cigarette and HTP use was not signficant by Chi-squared test (P = 0.07).
Response "Don't know/Refused to answer" is not displayed.

Figure 5 shows 43.1% of current smokers reduced tobacco consumption on streets. The reduction was more prevalent in current HTP users who did not use cigarettes (63.3%) and current dual users of cigarette and HTPs (57.6%) than in current cigarette users who did not use HTPs (42.6%).

Figure 5

Changes in tobacco consumption on streets during COVID-19 outbreak



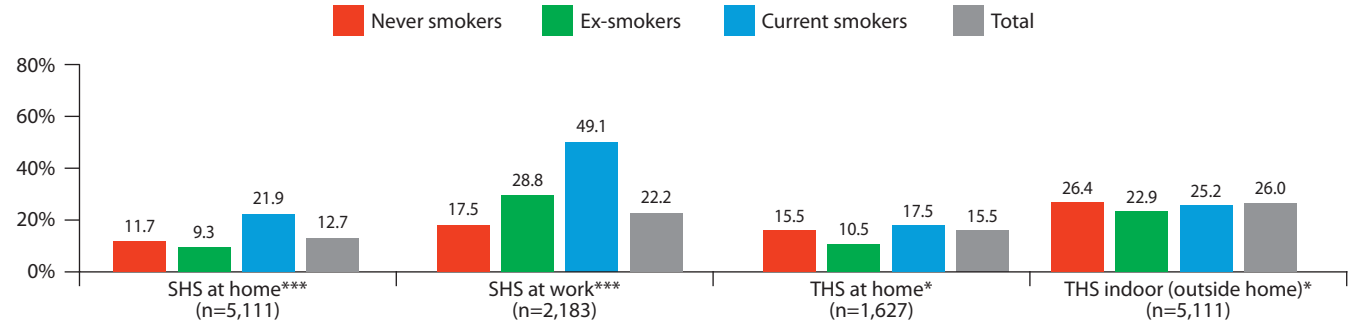
Results were weighted by sex and age of current smokers in Hong Kong in 2019.Current smokers were current users of any smoking products.
Difference across status of using cigarettes and HTPs was signficant by Chi-squared test (P < 0.001).
Response "Don't know/Refused to answer" is not displayed.

3.4 Exposure to SHS and THS

Figure 6 shows 12.7% and 22.2% of respondents were exposed to SHS at home and at work in the past 7 days, respectively. More current smokers were exposed to SHS at home (21.9%) and at work (49.1%) than ex-smokers (9.3% and 28.8%) and never smokers (11.7% and 17.5%). The prevalence of THS exposure at home was lower in ex-smokers (10.5%) than in current (17.5%) or never (15.5%) smokers. Lower prevalence of THS exposure at indoor places outside home was also observed in ex-smokers (22.9%), compared with current (25.2%) or never (26.4%) smokers.

Figure 6

Exposure to SHS and THS in the past 7 days



Results were weighted by sex, age and smoking status of the 2019 Hong Kong population.
Smoking means the use of any smoking products.
Differences across smoking status were tested by Chi-squared tests (* P < 0.05; ** P < 0.01; *** P < 0.001).

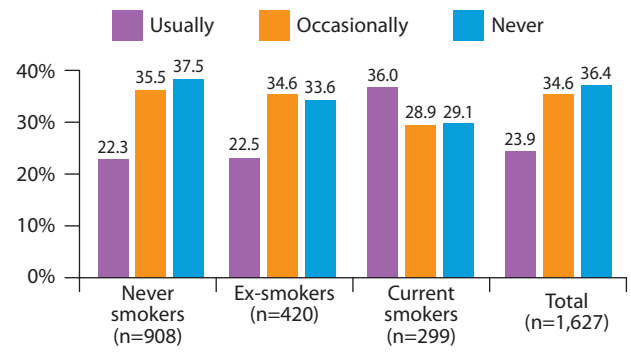
3.5 Tobacco advertising

Figure 7 shows 64.9% of current smokers usually or occasionally exposed to POS smoking product displays in the past 30 days. The corresponding prevalence was 57.1% in ex-smokers and 57.8% in never smokers.

Figure 8 shows 68.4% of respondents regarded POS smoking product displays as tobacco advertisement, and the perception did not significantly differ by smoking status.

Figure 7

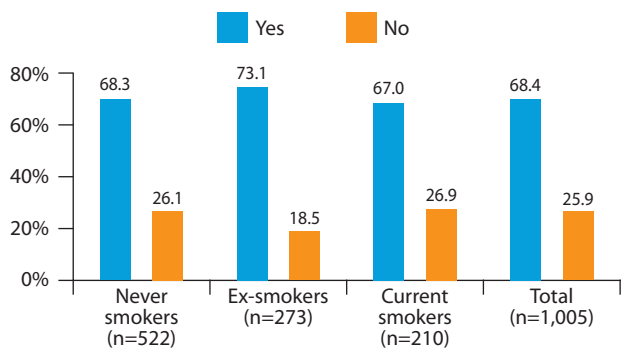
Frequency of exposure to POS smoking product displays in the past 30 days



Results were weighted by sex, age and smoking status of the 2019 Hong Kong population.
Smoking means the use of any smoking products.
Difference across smoking status was significant by Chi-squared test (P<0.001).
Response "Don't know/Refused to answer" is not displayed.

Figure 8

Perception of whether POS smoking product displays were advertisements

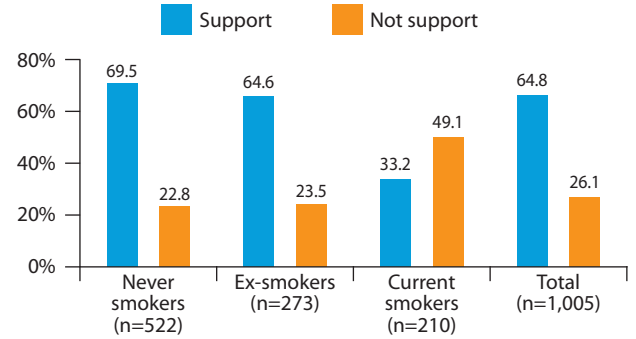


Results were weighted by sex, age and smoking status of the 2019 Hong Kong population.
Smoking means the use of any smoking products.
Difference across smoking status was not significant by Chi-squared test (P=0.14).
Response "Don't know/Refused to answer" is not displayed.

Figure 9 shows 64.8% of respondents supported banning POS smoking product displays. The support was stronger in never smokers (69.5%) and ex-smokers (64.6%) than in current smokers (33.2%).

Figure 9

Support for banning POS smoking product displays



Results were weighted by sex, age and smoking status of the 2019 Hong Kong population.

Smoking means the use of any smoking products.

Difference across smoking status was significant by Chi-squared test (P<0.001).

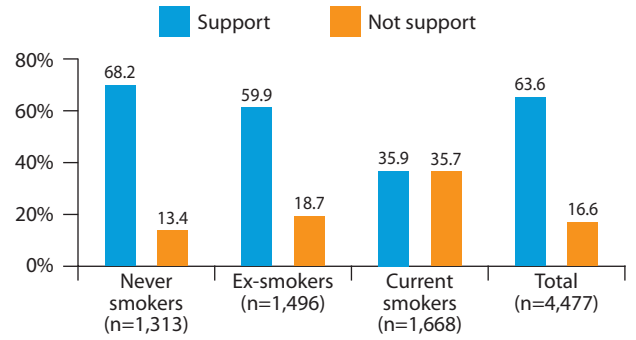
Response "Don't know/Refused to answer" is not displayed.

3.6 Plain packaging

Figure 10 shows 63.6% of respondents supported plain packaging. Support in never smokers (68.2%) and ex-smokers (59.9%) was greater than that in current smokers (35.9%). Proportions of current smokers who supported (35.9%) and did not support (35.7%) plain packaging were similar.

Figure 10

Support for plain packaging



Results were weighted by sex, age and smoking status of the 2019 Hong Kong population.

Smoking means the use of any smoking products.

Difference across smoking status was significant by Chi-squared test by Chi-squared test (P < 0.001).

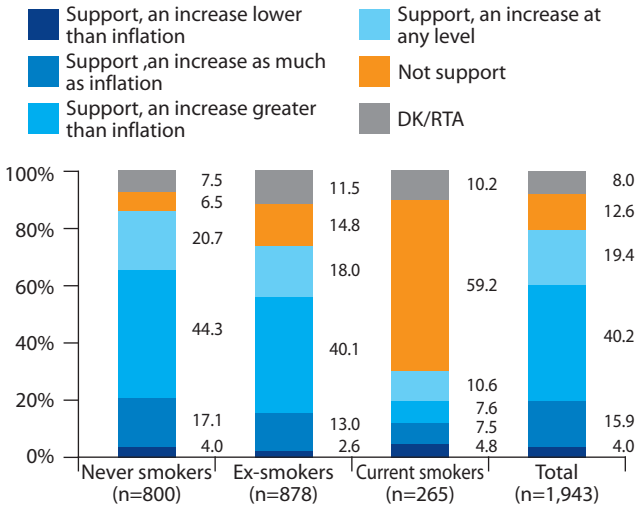
Response "Don't know/Refused to answer" is not displayed.

3.7 Tobacco tax

Figure 11 shows 79.5% of respondents and 30.5% of current smokers supported a regular increase in tobacco tax. Four in 10 (40.2%) respondents supported a tax increase greater than inflation.

Figure 11

Support for regular tobacco tax increase



Results were weighted by sex, age and smoking status of the 2019 Hong Kong population.

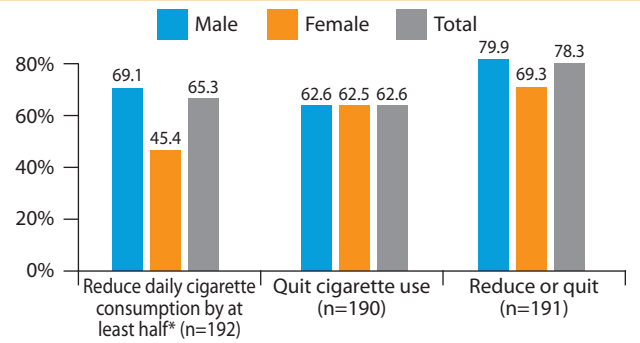
Smoking means the use of any smoking products.

Difference across smoking status was significant by Chi-squared test (P<0.001).

Figure 12 shows that, if cigarette retail price increased, 65.3% of current cigarette users would reduce their daily cigarette consumption by at least half and 62.6% would quit cigarette use. Majority (78.3%) of current cigarette users would reduce cigarette consumption by at least half or quit cigarettes.

Figure 12

Reducing daily cigarette consumption by at least half or quitting upon cigarette retail price increase



Results were weighted by sex and age of current smokers in Hong Kong in 2019.
Current smokers were current users of any smoking products.
Difference between sex was tested by Chi-squared test (* P < 0.05).

Table 4 shows the mean and median retail price that would make current cigarette users reduce their consumption by at least half was HK$101.6 and HK$100.0, respectively. The mean and median retail price that would make current cigarette users quit cigarettes was HK$155.1 and HK$100.0, respectively.

Table 4. Cigarette retail price that would result in reduction in daily cigarette consumption or quitting

	Male (HK$)	Female (HK$)	Total (HK$)
Reduce daily cigarette consumption by at least half (n=99)			
Mean (SD)	100.0 (28.2)	112.0 (50.9)	101.6 (32.6)
Median (IQR)	100.0 (80.0-100.0)	100.0 (80.0-100.0)	100.0 (80.0-100.0)
Quit cigarettes (n=92)			
Mean* (SD)	161.7 (116.0)	114.9 (35.9)	155.1 (109.6)
Median (IQR)	100.0 (100.0-200.0)	100.0 (90.0-150.0)	100.0 (100.0-200.0)
Reduce by at least half or quit (n=116)			
Mean (SD)	100.7 (34.0)	110.9 (46.2)	102.2 (36.4)
Median (IQR)	100.0 (80.0-100.0)	100.0 (80.0-100.0)	100.0 (80.0-100.0)

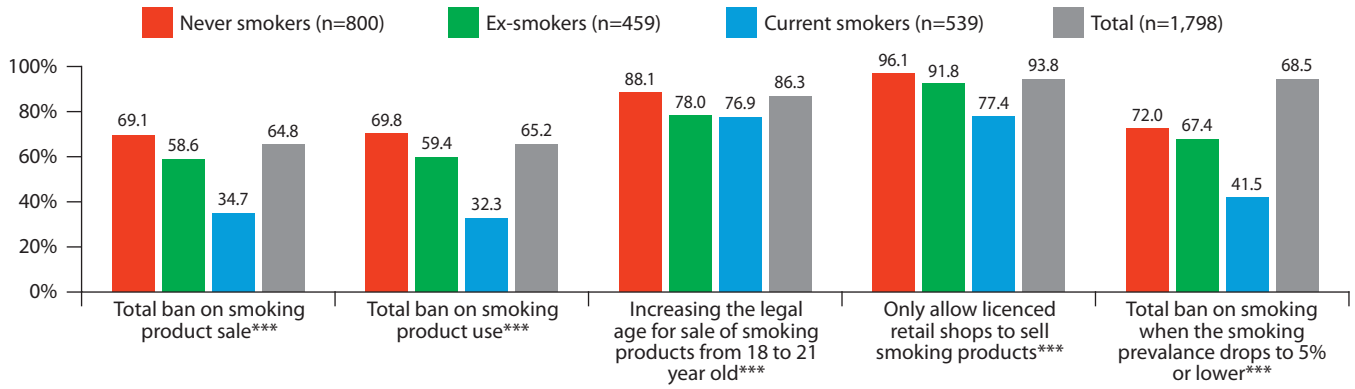
SD: Standard Deviation; IQR: Interquartile Range.
Results were weighted by sex and age of current smokers in Hong Kong in 2019.
Only current cigarette users who provided the retail price that would make them reduce cigarette consumption by at least half or quit cigarette use were included.
For "reduce or quit", either the price for reducing daily cigarette consumption by at least half or for quitting cigarettes, whichever lower, was adopted for estimation.
Differences between sex were tested by linear regression (* P < 0.05; ** P < 0.01).

3.8 Tobacco endgame (total ban on smoking) and other smoke-free policies

Figure 13 shows 64.8% of respondents supported banning smoking product sale and 65.2% supported banning smoking product use. Most (86.3%) respondents supported prohibiting sales of smoking products to people under the age of 21 years (increase from 18 years old), 93.8% supported allowing only licenced retail shops to sell smoking products and 68.5% supported banning smoking when the smoking prevalence drops to 5% or lower. Support for the above policies in current smokers was lower, ranging from 32.3% for banning smoking product use to 77.4% for allowing only licensed retail shops to sell smoking products.

Figure 13

Support for tobacco endgame and other smoke-free policies



Results were weighted by sex, age and smoking status of the 2019 Hong Kong population.
Smoking means the use of any smoking products.
Differences across smoking status were tested by Chi-squared tests (*** P < 0.001).

4. Discussion

According to the Thematic Household Survey Report No. 70 by the Census and Statistics Department, the prevalence of daily use in 2019 was 10.5% for any form of smoking products, 10.2% for cigarettes, 0.2% for HTPs, 0.1% for e-cigarettes and 0.1% for other smoking products[7]. In TCPS 2020, the prevalence of current use of cigarettes, HTPs and e-cigarettes were 10.1%, 0.9% and 0.8%, respectively. Although the results are not directly comparable, both suggested that the current use of HTP or e-cigarette was still uncommon in Hong Kong. However, more than half of current users of these products concurrently used cigarettes (HTPs: 60.5%, e-cigarettes: 73.6%), suggesting they may be used as complements to cigarettes when cigarette use is not permitted or desired (e.g. at home with non-smoking family members). Close monitoring of these emerging smoking products is needed.

Smoking was associated with increased risk of severe COVID-19 symptoms in a meta-analysis of 19 peer-reviewed studies[8], partly due to carcinogens in smoking products that weaken the immune system[9]. In line with international health authorities such as WHO, the Department of Health of the Hong Kong Government has been advocating smokers to quit during the pandemic. However, current smokers thought smoking was unlikely to increase risk of COVID-19 infection, which may explain why two-thirds of them did not change tobacco consumption at home during the COVID-19 outbreak. Some smokers even increased tobacco consumption at home, which was more prevalent in those who used HTPs. HTP users probably increased use at home due to perceived lower harmfulness of HTPs relative to cigarettes.

Almost a quarter of respondents and half the current smokers reported exposure to SHS at workplaces, although all indoor workplaces, indoor public places and some outdoor public areas had been designated as no-smoking areas since 1 January 2007. This indicates insufficient coverage or inadequate enforcement of the regulations. In addition, approximately a quarter of respondents were exposed to THS in indoor areas outside home. The Government should expand no-smoking areas with no further delay and strengthen enforcement.

A total and complete ban on tobacco advertising and promotion is effective in curbing tobacco use. Exhibition of tobacco advertisement in printed publications, in public places, by film, or on the internet is prohibited by the Smoking (Public Health) Ordinance (Cap 371)[10]. However, POS smoking product displays remain as a loophole. Tobacco companies have been exploiting retail settings for promotion in various ways, such as provision of slotting or promotional allowance to store manager and setting up new in-store advertising items, to maintain popularity[11]. In Hong Kong, smoking products are displayed in glamorous light boxes and display racks at POS. These POS smoking product displays are likely to trigger curiosity in never smokers, especially adolescents, and stimulate purchase by current smokers. About 6 in 10 respondents were occasionally or frequently exposed to POS smoking product displays in the past 30 days, which shows that POS had made smoking products normal and prominent in people's daily life. The Government should ban POS smoking product displays following the success in Macau since 2018.

Since 21 June 2018, all smoking product packets must carry a pictorial health warning covering at least 85% of the two largest surfaces, and show new health warning messages and smoking cessation hotline number. However, the effect on thinking about quitting and restraining from using cigarettes was not clear. To increase the effectiveness of PHWs on quitting, enhancements are urgently needed. The warning from WHO that 1 in 2 smokers will be killed by smoking is a potential candidate. This information on the all-cause mortality of smoking is simple, direct, and can be easily understood. Our experience of disseminating it as part of the brief advice intervention in "Quit-to-Win" Smoke-free Community Campaigns suggests this is not well recognised by smokers and could evoke smokers' interest in quitting. Some countries (e.g. Ireland) have also disseminated this warning information in health promotion campaigns, but we found no countries using such warning on PHWs as of June 2021. The Hong Kong Government is strongly advised to consider adopting this warning on cigarette packs as it was subsequently dropped out in 2018.

Plain packaging for smoking products can also further enhance the effects of the PHWs. Australia is the first country to implement such policy in 2012 and its National Health Survey showed that the smoking prevalence for Australians aged 18 or above dropped from 16.1% in 2011-12 to 14.5% in 2014-15[12, 13]. Currently, nearly 20 countries have implemented or legislated for plain packaging. In the current TCPS, almost two-thirds of respondents supported the legislation on plain packaging. To continuously reduce the attractiveness of smoking products, the Government should consider this effective method in the near future.

Although 96.0% of current cigarette users had low to moderate nicotine dependence, 54.4% had no intention to quit smoking and 31.7% had only low intention (quit after 6 months or undecided). The existing tobacco control policies appear to be ineffective in promoting abstinence. For example, the results in the previous two waves of TCPS showed that new and enlarged pictorial health warnings did not increase thinking of quitting or forgoing a cigarette, even though more smokers thought about the harm of smoking. These results suggest that current smokers are hardening and stronger measures are needed. A substantial increase in tobacco tax, which is proven to be the single most effective approach to motivate smokers to quit and to prevent adolescents from smoking initiation, is urgently needed to reduce the smoking prevalence to 7.8% by 2025.

Consistent with previous TCPS surveys, this study found strong support for regular tobacco tax increase (79.5%) and for an increase greater than inflation (41.2%). However, tobacco tax has been frozen for 7 consecutive years, accounting for only about 63% of the retail price of cigarettes and much lower than the level suggested by WHO (at least 75%). This study also showed the mean retail price that would make current cigarette users to reduce consumption by half and to quit smoking was HK$101.6 and HK$155.1, respectively, indicating the urgent need to raise cigarette retail price substantially. COSH has been advocating for a tax increase of 100% (from HK$38 to HK$76 per 20 cigarettes) for many years, which will bring the cigarette price (HK$98) close to the aforementioned price suggested by current cigarette users. It would however be still cheaper than other developed places, such as Australia (~HK$210), New Zealand (~HK$180), Norway (~HK$121), United Kingdom (~HK$120)[14].

COSH has also been advocating for "Tobacco Endgame 2027" in Hong Kong for years, especially when the smoking prevalence dropped to 5% or below. Support for endgame policies remained strong in the Hong Kong population with two-thirds supported for a total ban on tobacco sale or on tobacco use, while around 9 in 10 of them supported for prohibition on selling smoking products to people under the age of 21 years and licensing tobacco retail shops. Vigorous measures are necessary to achieve tobacco endgame in Hong Kong.

5. Limitations

This study had some limitations. First, all information was collected through telephone. While the data precision may be inferior relative to face-to-face interview, the anonymous nature would encourage more truthful responses. Second, only Cantonese-speaking respondents were interviewed, but they consisted of 96.7% of the population aged 15 years or above in the 2016 Population By-Census. Third, as a cross-sectional survey, it cannot track changes in tobacco consumption and opinions towards tobacco control policies from the same respondent over time.

6. Conclusions

TCPS 2020 found strong support from the public, including nearly one-third of current smokers, for various kinds of tobacco control policies. The Government should strengthen regulations in multiple aspects such as tobacco tax increase, plain packaging and even a total ban on smoking. To reach the goal of reducing smoking prevalence to 7.8% by 2025, the Government should motivate and assist more smokers to quit. Future TCPS shall continue to assess public opinions on and impact of tobacco control policies, and may explore various opinion-collecting channels such as mobile phone and online surveys.

7. Others results

7.1 Use of other smoking products

- Ever use of any other smoking products (apart from cigarettes, HTPs, e-cigarettes and waterpipe tobacco) in all respondents was 10.1%, including cigars (8.5%), hand-rolled cigarettes (6.8%), pipe tobacco (4.2%), herbal cigarettes (0.7%), snuff tobacco (0.3%), chewing tobacco (0.2%) and snus tobacco (0.2%).

7.2 Smoking products used indoor or in the presence of children

- In the past 30 days, 12.5% of current cigarette users used cigarettes indoor, 12.1% used cigarettes at home in the presence of children, and 16.4% used cigarettes outdoor in the presence of children.
- In the past 30 days 20.4% of current HTP users used HTPs indoor, 11.2% used HTPs at home in the presence of children, and 22.6% used HTPs outdoor in the presence of children.
- In the past 30 days, 18.8% of current e-cigarette users used e-cigarettes indoor, 12.1% used e-cigarettes at home in the presence of children, and 15.8% used e-cigarettes outdoor in the presence of children.

7.3 Perception of alternative smoking products

7.3.1 Heated tobacco products

- Most (91.6%) respondents did not perceive switching from cigarettes to HTPs as quitting. Nearly three quarters (73.1%) of respondents and 59.2% of current smokers perceived HTPs ineffective for quitting cigarettes.
- About two-thirds (65.0%) of respondents perceived HTPs at least as harmful as cigarettes, and 57.4% perceived HTPs at least as addictive as cigarettes.

7.3.2 E-cigarettes

- Nine in 10 (90.6%) respondents did not perceive switching from cigarettes to e-cigarettes as quitting. Three-quarters (76.0%) of respondents and 68.2% of current smokers perceived e-cigarettes ineffective for quitting cigarettes.

- Nearly two-thirds (63.1%) of respondents perceived e-cigarettes at least as harmful as cigarettes and 55.8% perceived e-cigarettes at least as addictive as cigarettes.

7.4 Pictorial health warnings

- Nine in 10 (89.7%) current smokers were aware of (had seen) PHWs on cigarette packs in the past 30 days. The awareness was less common in never smokers (50.7%) or ex-smokers (47.9%).
- In current smokers who had seen PHWs in the past 30 days, 70.6% saw the quitline number. 59.8% thought about harms of smoking, 29.4% thought about quitting smoking and 9.3% forwent a cigarette after noticing PHWs.
- Almost three quarters (72.4%) of respondents agreed that PHWs should be clearer and more threatening about harms of smoking.
- Near half (47.3%) of respondents agreed changing PHWs regularly.

7.5 Quit attempt and smoking cessation services

- About one-fifth (19.6%) of current smokers had their most recent quit attempt in the past 12 months.
- About one-sixth (14.6%) of current smokers had ever used smoking cessation services.
- The most commonly used smoking cessation service was face-to-face counseling (12.1%), followed by telephone inquiry (6.2%), telephone counseling (5.7%) and group counseling (2.2%).
- Around one-fourth (23.6%) current smokers had ever used any smoking cessation products. The most commonly used products were nicotine gum (13.5%) and nicotine patch (13.4%), followed by nicotine lozenge (8.3%), smoking cessation medication (3.0%) and acupuncture (2.6%).

7.6 Tobacco advertisement

- One-tenth (10.1%) of respondents perceived POS smoking product displays attractive.
- Upon seeing POS smoking product displays, 9.5% and 5.6% of current smokers had desire to smoke and buy cigarettes, respectively.

7.7 Tobacco tax

- Over half ex-smokers (53.0%) and current smokers (63.9%) perceived the current cigarette price ineffective in motivating smokers to quit smoking.

7.8 Smoke-free policies

- Most (92.1%) respondents supported a mandatory declaration of conflicts of interest with the tobacco industry by Legislative Council members and their parties. Most (86.1%) supported prohibition of these Legislative Council members and their parties from formulating tobacco control policies.

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