



HKU's 'Youth Quitline' successfully helped post-80's quit smoking

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Organizing Units and Funding Sources

- **Team members:** Prof Sophia Chan, Prof TH Lam, Dr. Angela Leung, Dr. Daniel Fong, Dr. Debbie Lam, Mr. David Wong
- **Organizing Units**
 - Department of Nursing Studies, HKU
 - School of Public Health, HKU
 - Department of Social Science and Social Administration, HKU
 - Join effort with Hong Kong Council on Smoking and Health
- **Funding Source:** Health Care and Promotion Fund, Food & Health Bureau (#18040084)



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Background

- Smoking is the most preventable cause of death
 - Tobacco was responsible for $\frac{1}{4}$ of all deaths between age of 35 and 69 in Hong Kong in 1998 (*Lam et al., 2001*)



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Smoking is harmful to youth

- Smoking increases the systolic blood pressure, thus increases the risk of cardiovascular disease
- Youth smokers had higher risks of common illnesses

Cough and phlegm	Disorders of digestive system
Asthma	Skin problems
Sore or irritating throat	Chronic anxiety
Back pain and neck pain	Insomnia
Headache and dizziness	Depression
Poor appetite	Menstrual pain (for girls)
- Smoking is the gateway to drugs consumption
- Youth smokers may have a higher chance to develop alcohol abuse

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Benefits of smoking cessation

- ☐ Quitting at early age would greatly avoid the risk of cancer that would result from continuing to smoke

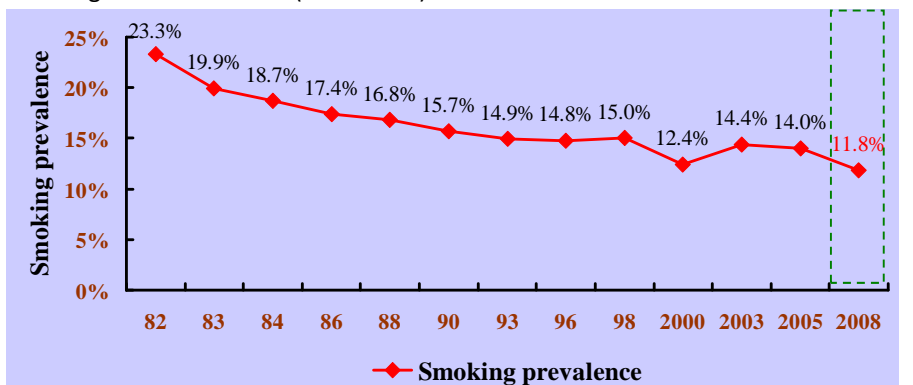
Cancer site	Lower risk in former smokers than current smokers?	Quitting early would benefit more?	A long-term cessation would reduce the risk to that of never smokers?
Lung	Yes	Yes	No
Laryngeal	Yes	Yes	No
Oral	Yes	Yes	Yes
Oesophageal (squamous-cell)	Yes	Yes	No

IARC handbooks of cancer prevention, tobacco control. Vol 11, Reversal of risk after quitting smoking, 2007

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Smoking is de-normalizing

Smoking Prevalence in HK (1982-2008)



Source: Thematic Household Survey 2008, HKSAR

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The Hong Kong Youth Quitline 28559557

- The **FIRST** smoking cessation hotline for youth in Hong Kong
- Established in August 2005 and it's ongoing

Aims

- To publicize quitting among youth smokers
- To support those who want to quit by providing peer-led smoking cessation counselling



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Characteristics of Youth Quitline

- Target
 - Youth smokers (12 – 25 years)
- Inclusion criteria
 - Youth smokers aged 12 to 25
 - Smoked at least one cigarette in the past month
 - Cantonese speaking
 - Consent to participate in the study verbally



Smoking Cessation Training for university and secondary school students - Peer counsellors



2005 training



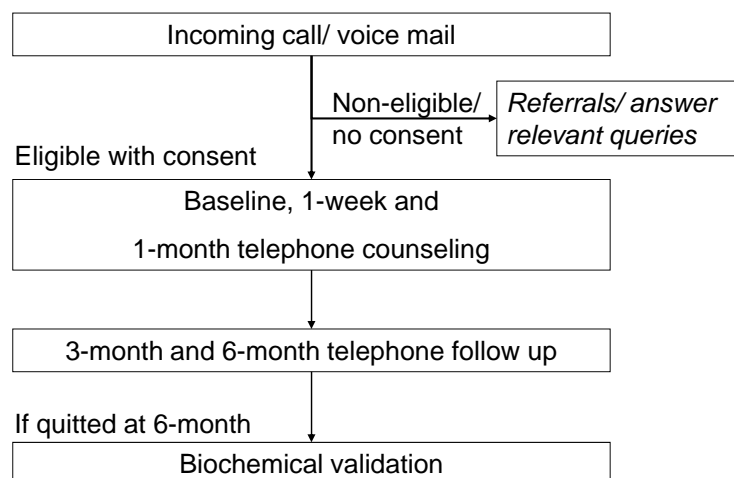
2009 training



2007 training

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Protocol for YQ telephone counseling



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The smoking cessation counselling intervention

- Transtheoretical model
 - To improve the stage of readiness to quit smoking
- Cognitive skills
 - To overcome temptations to relapse smoking
 - To cope with the withdrawal symptoms

No medication/ nicotine replacement therapy is required



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Results of the Youth Quitline

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The Study Results

- From August 2005 to November 2009 (over 4 years), the Youth Quitline received **over 3,000 calls**
- Peer counsellors provided telephone counseling to **618** eligible youth smokers (aged 12 – 25 years)
- At 6 months, **24%** quit successfully (did not smoke in the past 7 days)

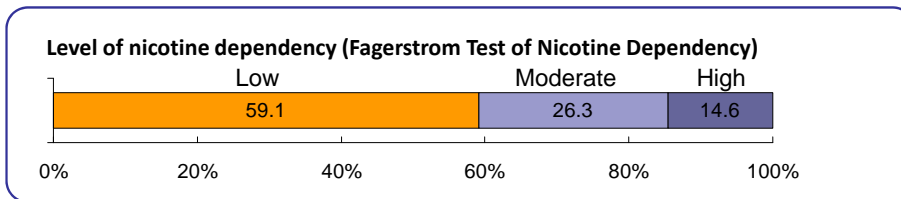
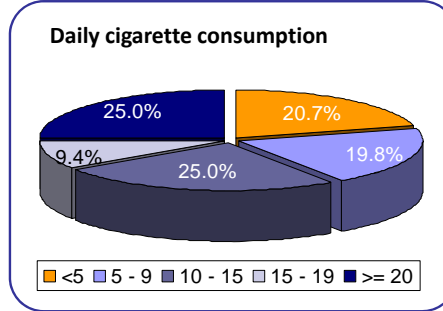
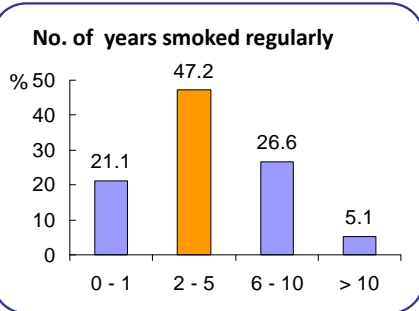
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Baseline characteristics (n = 618)

Demographic	Percent	Demographic	Percent
Male gender	74%	Employment status	
Age (years)		□ Full time student	61%
□ 12 – 14	21%	□ Employed	32%
□ 15 – 17	32%	□ Unemployed/ housekeeping	7%
□ 18 – 20	17%	Living district	
□ 21 – 23	19%	□ Hong Kong Island	12%
□ 24 – 25	11%	□ Kowloon	33%
Single	96%	□ New Territories	55%
Educational attainment		Monthly household income	
□ Junior secondary	45%	□ Less than \$20,000	56%
□ Secondary 4 – 5	38%	□ \$20,000 or above	44%
□ Matriculation or above	17%		

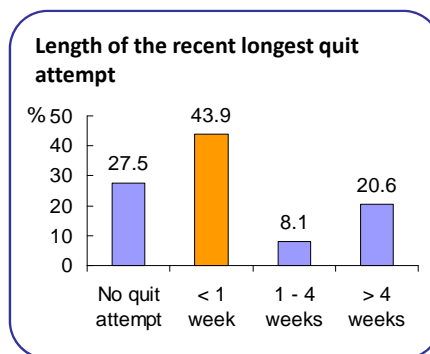
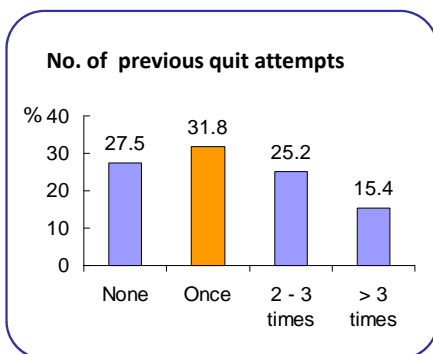
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Baseline smoking profile (n = 618)



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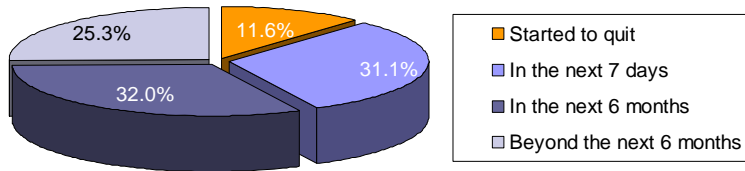
Quitting history (n = 618)



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Intention to quit smoking (n = 618)

Planning to quit smoking



Reasons to quit smoking	Percent
<input type="checkbox"/> Self-health problems	76%
<input type="checkbox"/> Encouraged/ enforced by others	31%
<input type="checkbox"/> As a self-achievement	15%
<input type="checkbox"/> Smoking is de-normalized	10%
<input type="checkbox"/> Smoking affects the academic/ sports performance	3%

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Perceptions to quit smoking (n = 618)

Confidence
(Mean = 5.66)

Difficulties
(Mean = 6.90)

Importance
(Mean = 7.36)



Scale = 0 (minimum) to 10 (maximum)

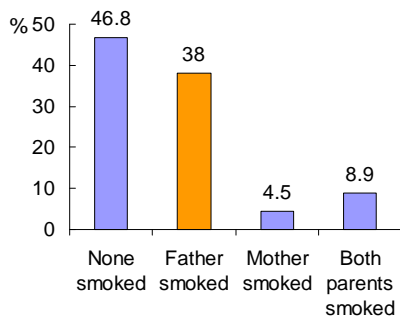
Barriers to quit smoking	Percent
<input type="checkbox"/> Others smoke nearby	50%
<input type="checkbox"/> Craving to smoke	32%
<input type="checkbox"/> Boring/ no one care	14%
<input type="checkbox"/> Smoking as a habit	14%
<input type="checkbox"/> Emotional distress/ irritation	12%
<input type="checkbox"/> Being persuaded to smoke	10%

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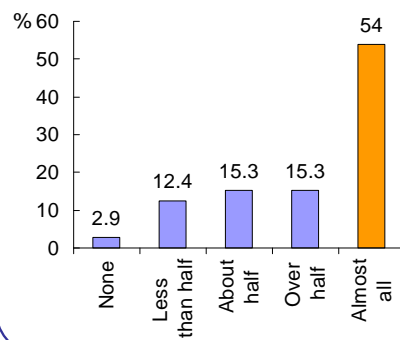
Second-hand smoke exposure (n = 618)

Living with current smokers: 55%

Parental smoking habit



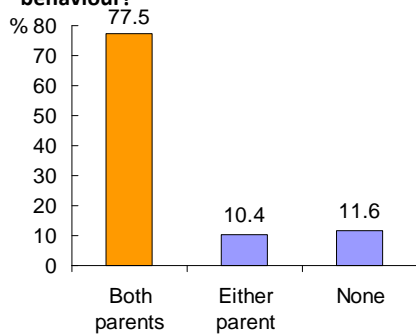
Proportion of smoking friends



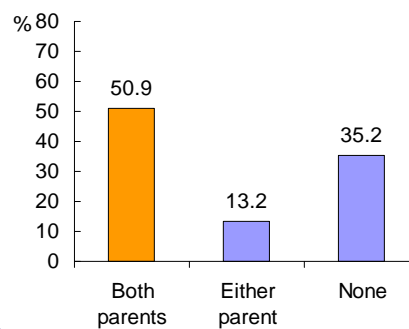
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Social norms (n = 618)

Any of your parents **know** your smoking behaviour?



Any of your parents **forbid** you to smoke?



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Received support to quit smoking (n = 618)

	Percent
<input type="checkbox"/> Family members	64%
<input type="checkbox"/> Friends	35%
<input type="checkbox"/> Boy/ girl friend	16%
<input type="checkbox"/> School teacher	13%
<input type="checkbox"/> Social workers/ health care professionals	6.6%
<input type="checkbox"/> None	12.5%

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Attitudes toward smoking (n = 618)

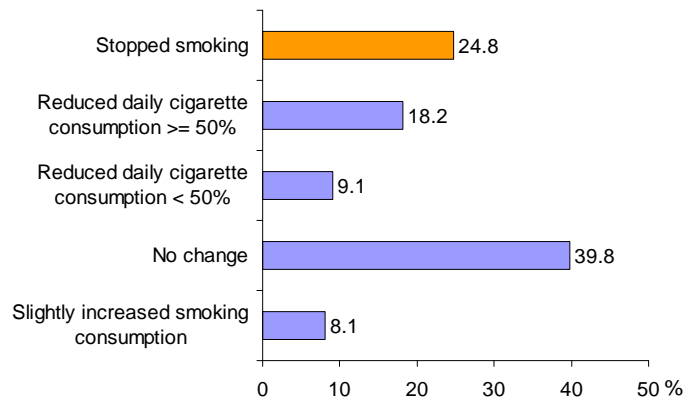
	Percent
Pro-smoking attitudes	
<input type="checkbox"/> Smoking is relaxing	71%
<input type="checkbox"/> Smoking helps with concentration	66%
<input type="checkbox"/> Smoking helps people to be creative	27%
Anti-smoking attitudes	
<input type="checkbox"/> Smoking is addictive	92%
<input type="checkbox"/> Smoking wastes money	91%
<input type="checkbox"/> Smoking is a bad habit	83%

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Outcomes at 6-month follow up (n = 593)

Quit rate (No smoking in the past 7 days) = 24%

Changes in smoking behavior



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Comparing the YQ 6-month quit rate vs. an adult Quitline (2000 – 2002)

Youth smokers aged < 18 years = 27%

Adult smokers aged \geq 18 years = 12%

(P-value < .001***)

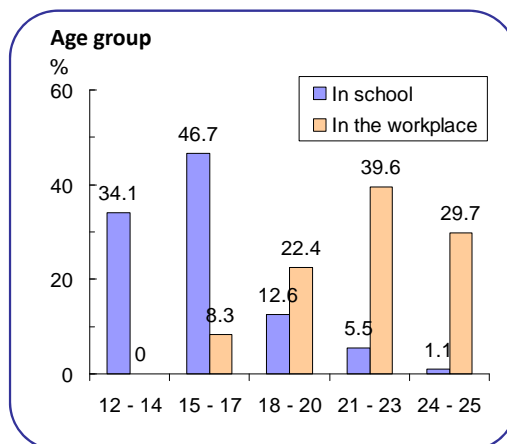
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Youth smokers who are studying vs. working

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Demographic characteristics

Gender	Percent
In school	
□ Male	74%
□ Female	26%
In the workplace	
□ Male	76%
□ Female	24%

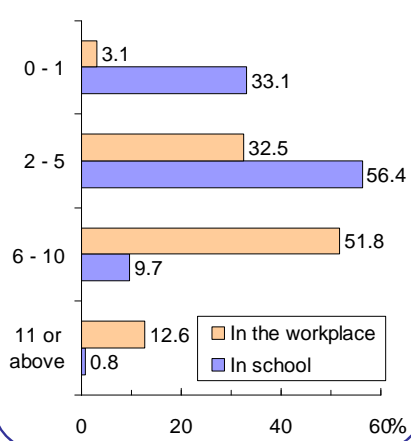


P-value < .001***

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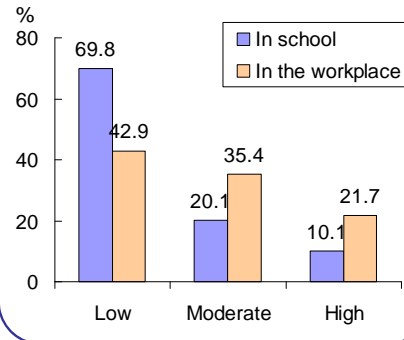
Smoking profile at baseline

No. of smoking years



P-value < .001***

Nicotine Dependency (FTND)



P-value < .001***

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Baseline profile of youth smokers

Frequent places to smoke	Studying	Working	P-value
<input type="checkbox"/> Public places	80%	58%	<.001***
<input type="checkbox"/> At home	45%	68%	<.001***
<input type="checkbox"/> School or workplace	21%	43%	<.001***

Reasons to quit smoking	Studying	Working	P-value
<input type="checkbox"/> Self-health problems	72%	80%	.04*
<input type="checkbox"/> Encouragement/ enforced	38%	20%	<.001***
<input type="checkbox"/> Self-achievement	15%	18%	.30

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Health behaviors of youth smokers

	Studying	Working	P-value
Drank alcohol	23%	44%	<.001***
With depressive symptoms†	Mean = 1.93 SD = 0.73	Mean = 2.25 SD = 0.74	<.001***

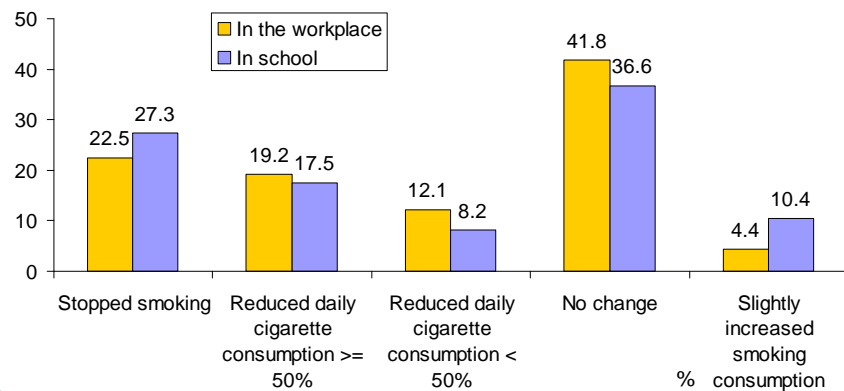
† Depression scale: 1 = None; 4 = severe

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Outcomes of youth smokers at 6 months

	Studying	Working	P-value
Quit rate	27%	23%	.23

Changes in smoking behavior (P-value = .06)



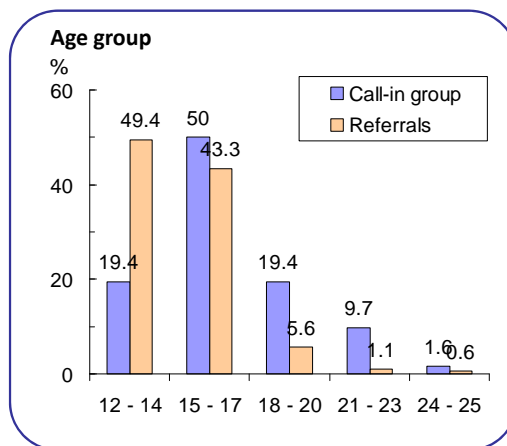
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Student smokers who called the YQ vs. referred by school teachers

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Demographic characteristics

Male sex	Percent
□ Call-in group	73%
□ Referrals	74%

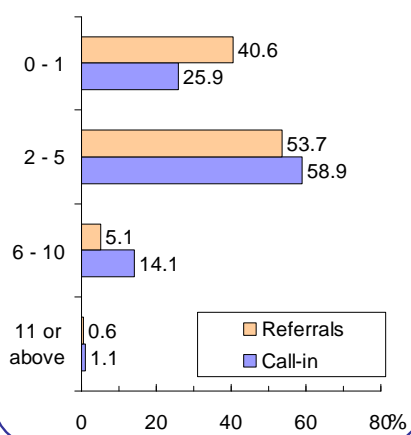


P-value < .001***

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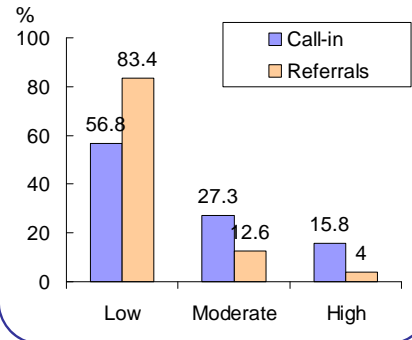
Smoking profile at baseline

No. of smoking years



P-value < .001***

Nicotine Dependency (FTND)



P-value < .001***

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Intention to quit smoking

	Call-in	Referrals	P-value
Planned to quit in the next 7 days	50%	32%	<.01

Outcomes at 6-month follow up

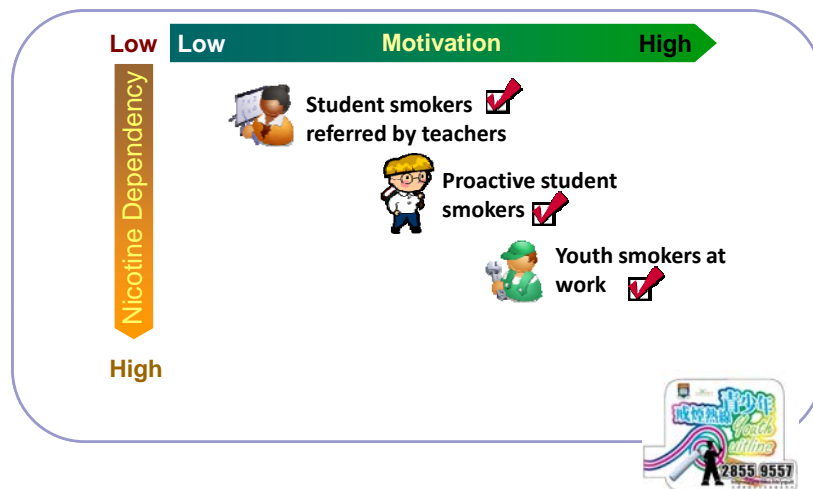
	Call-in	Referrals	P-value
Quit rate	30%	24.4%	.23

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Summary

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Identify different groups of youth smokers by nicotine dependency and motivation to quit



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Conclusion

- The HKU Youth Quitline has provided a tailored smoking cessation programme to the post-80s smokers by their peer group, (trained student counsellors), achieving a quit rate of 24%
- Youth smokers who are working are exposed to a different social environment, and may pick up behaviour such as alcohol drinking, which may in turn increase smoking.
- Motivating smokers to quit while they were young and before they enter the workforce is important, not only because it is more beneficial to health, but it is also easier to quit as they are less addicted.

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Conclusion

- The [HKU Youth Quitline](#) was effective to help different groups to quit smoking and reduce their cigarette consumption
- Youth smokers should be encouraged to call the YQ and received counselling so as to increase their motivation and decrease their difficulty to quit.
- Those who were encouraged or enforced to quit were more likely to stop smoking, and those who were referred by school teachers also had a high chance to quit.

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A new website of the HKU Youth Quitline

<http://www.hku.hk/yquit>



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Refer youth smokers to the HKU Youth Quitline

TODAY

- We would like to work with ALL schools in Hong Kong to help youth smokers stop smoking
- School teachers, social workers, parents and members of the public are welcome to refer youth smokers to the

“HKU Youth Quitline”

2855-9557

Please contact Mr. Bryan Chik at 2819 2661 for promotional posters and leaflets

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