

HKU Study on Smoking and Mortality in Older People in Hong Kong



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Smoking kills people

HALF (50%) of
smokers will be
killed by smoking:

- One-quarter in middle age (35-64)
- One-quarter in old age (65+)
- Smokers lose an average of 15
YEARS in terms of life expectancy



Tobacco Kills 5700 people in Hong Kong (per year)

Cancer	54%
Respiratory disease	30%
Circulatory disease	12%
Other diseases	4%

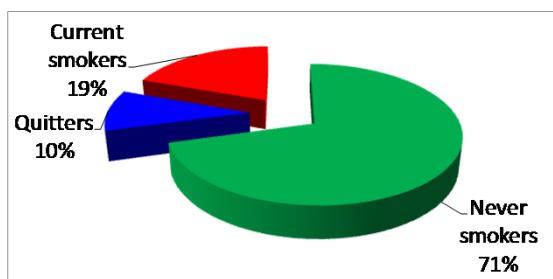


School of Public Health, HKU conducted the first & largest follow- up study in HK

1. Aim: Examine the association between smoking and mortality in HK older people
2. Study Period: From 1998-2001 and followed up until October 2010 (about 10 years on average).
3. Methodology: Data analysis based on data from 18 Elderly Health Centres of Department of Health.

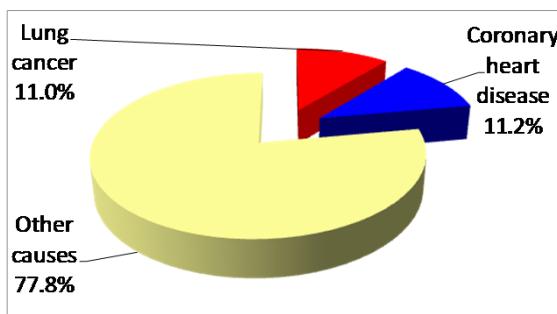
4. Subjects

- 64,654 older people aged 65-84 years, who first enrolled in the Elderly Health Centres during 1998-2001 (Women 42,585; Men 22,069) were included with long-term follow-up.



Basic information

- Up to October 31, 2010, the mean follow-up was 9.7 years, and 14,438 deaths (22.3%) were observed.
- Death and causes of death were obtained from the Death Registries.



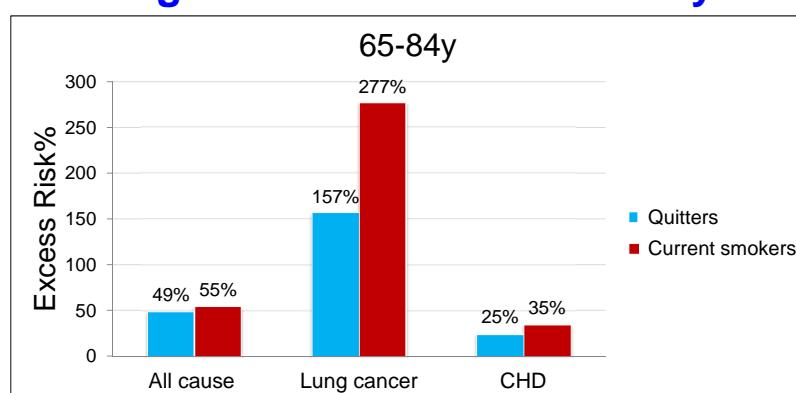
Mortality by different smoking status

Age, y	65-69	70-74	75-79	80-84	Total (65-84)
Never smokers	9.0	16.8	30.3	52.3	17.9
Quitters	15.5	25.4	43.5	69.8	26.7
Current smokers	16.4	25.9	44.4	73.8	27.8

Unit: Per 1000 persons per year

Among older current smokers, there were 27.8 deaths per year per 1000 persons, higher than that in the never smokers (17.9 deaths per year per 1000 persons).

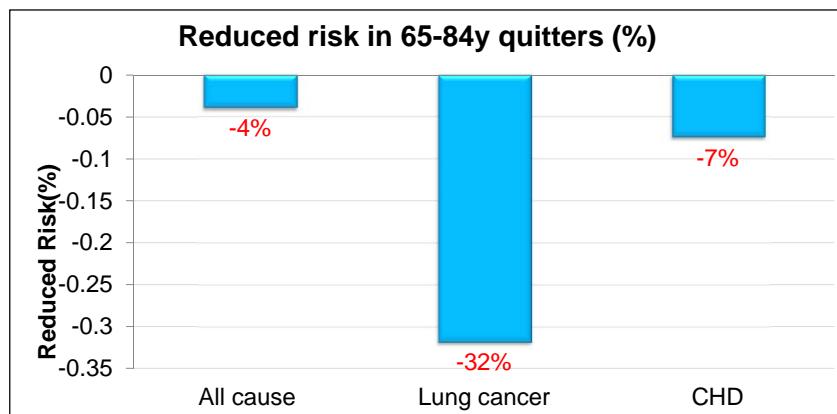
Smoking increases risk for all-cause, lung cancer and CHD mortality*



Compared to never smokers, the risks of all-cause, lung cancer and coronary heart disease mortality are increased by 55%, 277% and 35% respectively.

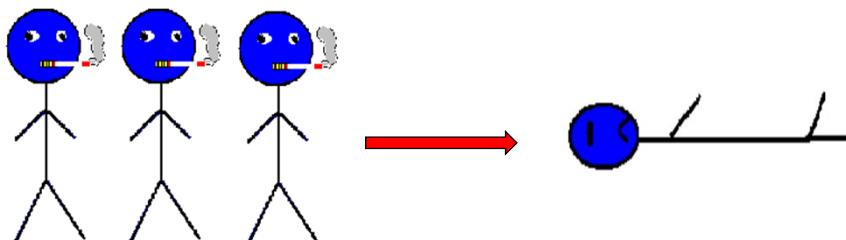
*all-cause= deaths from any causes; CHD= coronary heart disease

Smoking cessation reduces risk of all-cause, lung cancer and CHD mortality



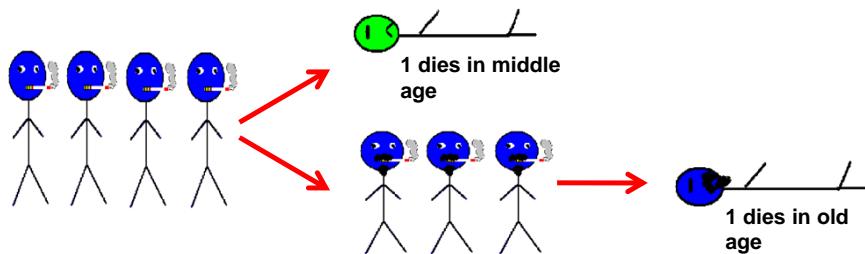
Relative to current smokers, the risks of all-cause, lung cancer and CHD mortality in quitters are reduced by 4%, 32% and 7% respectively.

Effect of smoking on mortality in older people



In older people aged 65-84, **ONE OUT OF THREE** smokers will be killed by smoking.

Smoking causes deaths



- In 2 smokers (started smoking since adolescence), 1 will be killed by smoking.
- Among 4 smokers, 1 will be killed by smoking in middle age, another will be killed by smoking in old age* (3 older smokers, 1 will be killed by smoking).
- Among 4 smokers, 2 will be killed (1 middle age, 1 old age)
=in 2 smokers, 1 will be killed

*source: Richard Peto

This first, largest and 10-year follow-up study on mortality & smoking association in older people has found that:

1. In HK, of every 3 older smokers, 1 will be killed by smoking-induced diseases.
2. Compared to never smokers, the risks of all-cause, lung cancer and CHD mortality in older smokers are increased by **55%**, **277%** and **35%** respectively.

3. Compared to current smokers, the risks of all-cause, lung cancer and CHD mortality in quitters are reduced by **4%, 32% and 7%** respectively.
4. According to previous findings, smoking cessation reduces risk of death. The earlier and longer the quitting, the more reduction in mortality risk.
 - Because of the lack of data on duration of quitting in our study, the association between quitting duration and mortality cannot be assessed.

Study implications and suggestions

- Smoking cessation can significantly reduce risk of lung cancer mortality (-32%).
- It is observed that, the risk reduction of all-cause mortality was relatively low among quitters, probably because:
 - Quitting too late
 - Quitting after having serious diseases
- Older people should **quit smoking immediately** to reduce mortality risk.
- **Increase in tobacco tax** can encourage smoking cessation in older people, as a result improving their health and prolonging their life.

Health benefits of smoking cessation (US DHHS 1990)

- The risk to have CHD is reduced by half after stopping smoking for 1 year; similar to that of never smokers after 15 years.
- Lung cancer risk is reduced to 30-50% after stopping smoking for 10 years.
- Quitting before the age of 50 reduces risk of dying in the next 15 years by a half, compared with continuing smokers.
- Reduces risks of other cancers and diseases.

Source: US Department of Human Health Services 1990

Smoking cessation: Instant Benefits

- 20 min Lower blood pressure & improvement in circulation
- 8 hour Normal blood oxygen
- 24 hour Removal of carbon monoxide
- 48 hour Clearance of nicotine
- 72 hour Improvement in respiration & physical function

Other Benefits

- Improving sense of taste & smell
- Fresh breath
- Improving image
- Senses of success and freedom
- Role model for children
- Improve social relationship: family, work
- Saving money

World Health Organisation

“Increasing the price of tobacco products through significant tax increases is the single most effective way to decrease tobacco use and to encourage current users to quit.” (WHO, 2009)



1. World Health Organisation (WHO) Report. (2009). WHO report on the global tobacco epidemic, 2009.

Acknowledgements

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2009



2010

