

## The risk of smoking and the benefits of cessation on suicides

### 吸菸者戒菸後自殺風險減少之研究：台灣385,445成年人世代

2011.09.06  
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1

## 重要結論

- 吸菸提高**2倍**自殺的機率
- 當吸菸者戒菸，自殺的風險明顯下降
- 重度吸菸者自殺下降更明顯
- **精神科病人**戒菸，其自殺風險減少

2

## 研究背景

- 吸菸是許多死因的危險因子：心血管疾病、COPD、結核病、癌症、肺癌等
- 自殺風險相對較低


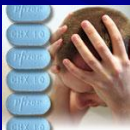


### 吸菸 自殺 兩碼子事？

3

## 研究背景

- 許多研究發現吸菸者的自殺率較高
- 戒菸有可能增加自殺的死亡率？
- 戒菸對於精神科病人是否有好處？

4



### 梵谷

(荷蘭人，後印象派)

吸菸同時也因為自殺而結束一生（37歲）

患有精神方面的疾病

梵谷自畫像(1889)

5



就連梵谷自己也知道吸菸有害！

如果梵谷戒菸是否事情會變得不一樣？

Skull of a Skeleton with Burning Cigarette (1885), oil on canvas.

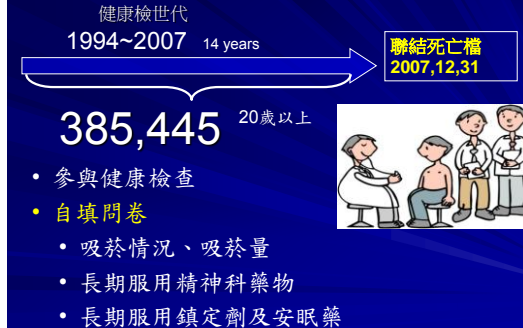
6

## 研究目的

- 比較吸菸者、戒菸者及不吸菸者的自殺死亡率
- 評估戒菸減少的死亡率

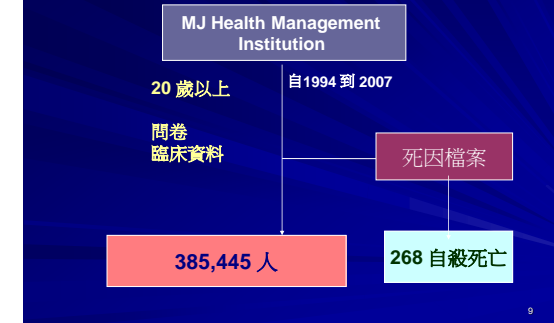
7

## 方法- 研究參加者



8

## 方法



9

## Method

- Demographic variables 背景變項
  - Gender 性別
    - Men
    - Women
  - Smoking Status 吸菸
    - Never smoking
    - Ex-smoking
    - Current smoking
  - Drinking Status 飲酒
    - Never drinking
    - Ex-drinking
    - Regular drinking
  - Marital status 婚姻狀態
    - Single
    - Married
    - Divorced
    - Widowed
  - Educational levels 教育
    - Middle school or below
    - High school
    - Junior college
    - College or above

10

## Method 方法

- Long-term use of medications 長期使用藥物
  - Major psychotropic medications 精神科藥物
    - Yes / No
  - Tranquilizers or sleeping pills 鎮定劑或安眠藥
    - Yes / No
  - Pain killers 止痛藥
    - Yes / No
  - Chinese herbal medicine 中草藥
    - Yes / No
- Self-reported history of cancer 癌症史
  - Yes / No

11

## Method

- Statistical analysis 統計方法
  - We calculated hazard ratios with the Cox proportional hazard model
  - 調整 8 個干擾因子
    - 年齡、性別、教育程度、飲酒狀態、婚姻狀況、長期使用精神科藥物、長期使用鎮定劑或安眠藥及癌症病史

12

### Results

	Number of Cohort subjects	Number of Suicide deaths	HR	95% CI
<b>Subjects with smoking status</b>				
Never smokers	270,835	137	<b>1.00</b>	- -
Current smokers	90,746	109	<b>2.17</b>	(1.37, 3.45)
<b>Former smokers</b>				
Former smokers	23,864	22	<b>1.28</b>	(0.58, 2.80)

Hazard ratio adjusted for age, gender, educational level, alcohol drinking status, marital status, cancer history and the long-term use of major psychotropic medications and sedatives/hypnotics

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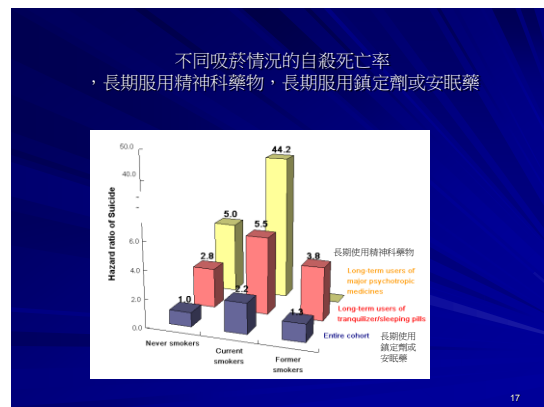
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	吸菸者		戒菸者		戒菸所減少的自殺死亡
	HR	95% CI	HR	95% CI	
Total	1.00	0.61 (0.38, 0.99)			<b>39%</b>
每天半包	1.00	0.67 (0.38, 1.20)			<b>33%</b>
每天半包到一包	1.00	0.64 (0.37, 1.10)			<b>36%</b>
每天超過一包	1.00	0.51 (0.28, 0.90)			<b>49%</b>

Hazard ratio adjusted for age, gender, educational level and drinking status

- 長期使用精神科藥物，及長期使用鎮定劑或安眠藥者也納入分析
- 高吸菸率及高自殺死亡率



### Results

#### 長期服用鎮定劑或安眠藥

	Subjects	Suicide death	HR	95% CI
<b>Not long term users of tranquilizer/sleeping pills</b>				
Never smokers	266,684	128	1	- -
Current smokers	88,637	93	<b>1.62</b>	(1.16, 2.27)
Former smokers	23,290	20	1.13	(0.66, 1.94)
<b>Long term users of tranquilizer/sleeping pills</b>				
Never smokers	3,744	8	2.81	(1.31, 6.04)
Current smokers	1,933	11	<b>5.3</b>	(2.69, 11.23)
Former smokers	535	2	3.79	(0.92, 15.69)

Hazard ratio adjusted for age, gender, educational level, alcohol drinking status, marital status, cancer history and the long-term use of major psychotropic medications and tranquilizer/sleeping pills

## Results 長期服用精神科藥物

	Subjects	Suicide death	HR	95% CI
Not long term users of major psychotropic drugs				
Never smokers	383,271	252	1	-
Current smokers	269,362	133	1.61	(1.15, 2.24)
Former smokers	23,714	22	1.22	(0.73, 2.03)
Long term users of major psychotropic drugs				
Never smokers	1,473	4	5.02	(1.59, 15.82)
Current smokers	551	12	44.21	(23.13, 84.52)
Former smokers	150	0	-	-

Hazard ratio adjusted for age, gender, educational level, alcohol drinking status, marital status, cancer history and the long-term use of major psychotropic medications and tranquilizers/sleeping pills

19

## 討論

■ 香菸中的尼古丁與憂鬱及焦慮有關，戒菸減少尼古丁，間接減少憂鬱，減少自殺

■ 戒菸後生活習慣的改變  
- 運動增加



20

## 結論一

醫生要讓病人更健康—讓病人戒菸

- 吸菸者增加2倍的自殺風險
- 但是當他們戒菸後，風險大幅降低至接近不吸菸者
- 即使是精神病患者或重度吸菸者，戒菸後風險的減低也是顯而易見
- 如果有更多的吸菸者能繼續戒菸，包括患有精神疾病者，其自殺風險將會大大減少
- 雖然戒菸提供的好處遠遠超過自殺預防，但戒菸保護吸菸者遠離他們自殺風險之方法。



梵谷的醫生

Thank you  
謝謝您

22

## Results

	HR <sup>§</sup>	95% CI
<b>Gender</b>		
Men 男性	1.52 *	(1.25, 1.85)
Women	1.00	-
<b>Educational level</b>		
Middle school or below	1.20	(0.74, 1.97)
High school 高中	2.10 *	(1.38, 3.22)
Junior college 專科	3.06 *	(1.97, 4.74)
College or above	1.00	-
<b>Smoking Status</b>		
Never smoking	1.00	-
Ex-smoking	1.53	(0.94, 2.48)
Current smoking 吸菸者	2.40 *	(1.77, 3.25)
<b>Drinking Status</b>		
Never/occasional drinking	1.00	-
Ex-drinking 戒酒	2.89 *	(1.87, 4.46)
Regular drinking 經常飲酒	1.58 *	(1.06, 2.34)
<b>Marital status</b>		
Single 單身	1.77 *	(1.23, 2.54)
Married	1.00	-
Divorced 離婚	4.44 *	(2.87, 6.88)
Widowed 經喪偶	2.29 *	(1.24, 2.90)

<sup>§</sup>Hazard ratios were adjusted for age and gender

23

## Results

	HR <sup>§</sup>	95% CI
<b>Screening finding<sup>§</sup></b>		
Diabetes Mellitus	0.95	(0.61, 1.47)
Hypertension	1.17	(0.90, 1.51)
Obesity	1.05	(0.64, 1.70)
hypertriglyceridemia	0.99	(0.73, 1.34)
Hypercholesterolemia	1.65	(0.73, 3.72)
<b>Self-reported history of cancer<sup>§</sup> 癌症史</b>		
Long-term use of medications <sup>§</sup> 長期服用精神科藥物	1.44 *	(1.03, 2.03)
major psychotropic medications	16.06 *	(9.62, 26.78)
Tranquilizer/sleeping pills 長期服用鎮定劑/安眠藥	3.85 *	(2.50, 6.00)
Pain killers (Analgesics)	2.03	(0.96, 4.32)
Chinese herbal medicine	1.10	(0.76, 1.59)

<sup>§</sup>Compared against those without the particular condition or factor

<sup>§</sup>Hazard ratios were adjusted for age and gender

24