2012 Lambie-Dew Oration
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Challenging popular myths of Australian health in crisis
“Why life is better in Australia”
Editorial, Lancet, 22 September 2012

Expectation of life at birth

Source: AIHW, 2006
Death rates in Australia, by age and sex

Age 1-14

Age 15-34

Age 35-49

Age 50-59

Age 60-69

Age 70-79
Ever heard the expression "Nothing is certain, except death and taxes"?
Ever heard the expression “Nothing is certain, except death”? 
Counting deaths and acting on the findings have had major impacts on life expectancy.

1592 - Bills of Mortality

1836 – Compulsory registration of deaths
Death rates in 5 countries, age 35-69 years

Males

Females

Australia
Japan
New Zealand
United Kingdom
United States

www.MORtrends.org (Gary Whitlock)
Vascular death rates in 5 countries, age 35-69 years

Males

Females

Australia
Japan
New Zealand
United Kingdom
United States
Cancer death rates in 5 countries, age 35-69 years

Males

Females

Australia
Japan
New Zealand
United Kingdom
United States
Reasons for the spectacular decline in adult mortality in Australia

- changes in the main avoidable causes of premature death:
  Tobacco
  Obesity
  Alcohol

- improvements in treatment
Indigenous Australians:
Expectation of life at birth

Wilson et al, 2007

All Australians

Indigenous Australians
The elderly:
Disability-free years of life after age 65 (UK)
1.3 million women aged 50-64 recruited in 1996-2001

initial aim was to study the relation between HRT use and breast cancer
THE MILLION WOMEN STUDY

1.3 million women aged 50-64 recruited in 1996-2001

can also study other exposures and other conditions
Smoking and death

Relative Risk (95% CI)

Cigarettes per day

Lancet, 28 October, 2012
**THE MILLION WOMEN STUDY**

Statistically significant increase in 23 out of the top 30 causes of death

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number of Deaths</th>
<th>RR &amp; 95% CI</th>
<th>RELATIVE RISK</th>
<th>RR &amp; 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic lung disease (J40-44)</td>
<td>1789</td>
<td>121</td>
<td></td>
<td>35.3 (29.2-42.5)</td>
</tr>
<tr>
<td>Cancer of lung (C34)</td>
<td>5633</td>
<td>698</td>
<td></td>
<td>21.4 (19.7-23.2)</td>
</tr>
<tr>
<td>Aortic aneurysm (I71)</td>
<td>330</td>
<td>164</td>
<td></td>
<td>6.32 (5.17-7.71)</td>
</tr>
<tr>
<td>Intestinal ischaemia (K55)</td>
<td>183</td>
<td>91</td>
<td></td>
<td>5.58 (4.27-7.29)</td>
</tr>
<tr>
<td>Cancer of mouth/pharynx/larynx/nasal cavity/sinuses (C00-14,30-32)</td>
<td>204</td>
<td>91</td>
<td></td>
<td>4.83 (3.72-6.29)</td>
</tr>
<tr>
<td>Coronary heart disease (I21-25)</td>
<td>2726</td>
<td>1732</td>
<td></td>
<td>4.47 (4.19-4.77)</td>
</tr>
<tr>
<td>Cirrhosis or alcoholic liver (K70,74)</td>
<td>478</td>
<td>256</td>
<td></td>
<td>3.35 (2.84-3.94)</td>
</tr>
<tr>
<td>Cancer of bladder (C67)</td>
<td>178</td>
<td>156</td>
<td></td>
<td>3.29 (2.61-4.15)</td>
</tr>
<tr>
<td>Cancer of oesophagus (C15)</td>
<td>450</td>
<td>397</td>
<td></td>
<td>3.10 (2.68-3.58)</td>
</tr>
<tr>
<td>Pneumonia (J12-18)</td>
<td>494</td>
<td>408</td>
<td></td>
<td>3.09 (2.68-3.56)</td>
</tr>
<tr>
<td>Cerebrovascular disease (I60-69)</td>
<td>1528</td>
<td>1458</td>
<td></td>
<td>3.06 (2.83-3.31)</td>
</tr>
</tbody>
</table>

*Lancet, 28 October, 2012*
Smokers die 10 years earlier than non-smokers: 50% vs 20% dead before age 80
OBESITY has its main effect on vascular disease

Body mass index: 20-24=ideal; 25-29=overweight; 30+=obese

**THE MILLION WOMEN STUDY**

Moderate drinking and death

Alcohol has beneficial effects on cholesterol
Heavy drinking and death, in Russia

Relative risk of death associated with drinking 1 bottle vodka/day:

=2 for all deaths

=6 for liver disease

=4 road traffic accident

=6 any other accident

=8 suicide

=10 murder

Mortality rates in adults approximately doubled by:

- 10 cigarettes/day
- 1 bottle vodka/day
- severe obesity
Trends in smoking, drinking and obesity in Australia

Alcohol, since 1960

Smoking, since 1970

Obesity, since 1980
Cirrhosis mortality at age 35-69 and alcohol consumption in Australia

[Graphs showing trends in alcohol consumption and cirrhosis mortality over time]
Lung cancer mortality at age 35-69 and smoking
Vascular death rates in 5 countries, age 35-69 years
CANCER

Many different types
- different causes
- different treatments

Factors contributing to the decline:
- early detection (including screening)
- changing incidence
- improved treatment
Spectacular reductions in death rates in Australia (and elsewhere) over the last 40 years

In middle-age:
- no sign of reversal of trends
- no single reason, contributions from improved treatments and public health interventions
- many small gains have large cumulative effects
- smoking is the most important avoidable cause of ill-health and premature death
- Australia has been more effective than many other places in tobacco control
Age 15-34 years: death rates in 5 countries

Males

Females

Australia
Japan
New Zealand
United Kingdom
United States
Causes of death at age 15-34 years in Australia

All deaths

Motor vehicle

Suicide

Infections

Cancer

Coronary heart dis.
Continuing to smoke is much the most important avoidable cause of ill-health and premature death – stopping really works

Lancet, 28 October, 2012
The Australian economy is very healthy and the earth is very unwell...

Well I'm sure glad we live in the lucky country and not on the earth...
The Australians are very healthy.

Well, I'm sure glad we live in the lucky country.

Thank you.
Today's Random Medical News

from the New England Journal of Panic-Inducing Gobbledygook

According to a report released today...

1. Smoking
2. Exercise
3. Faulty Food
4. Stress
5. Red Wine
6. Computer Terminals

Can cause

1. Hypothermia
2. Heart Disease
3. Breast Cancer
4. Spontaneous Regression
5. Depression
6. A Feeling of Well-Being
7. Sexual Dysfunction
8. Whiplash

In

1. Children
2. Two-income Families
3. Men 25-40
4. Overweight Smokers
5. Twins
6. Arthritis Sufferers
7. 7 out of 10 Women

NEWS