Watching television and pulmonary embolism mortality

TORU SHIRAKAWA,
PUBLIC HEALTH, DEPARTMENT OF SOCIAL MEDICINE,
OSAKA UNIVERSITY, JAPAN
DECLARATION OF INTEREST

- I have nothing to declare
Pulmonary embolism and lengthy sitting

• **Pulmonary embolism** is a serious, **sometimes fatal**, vascular disease caused by the obstruction of the pulmonary artery

• **Public health** issues related to pulmonary embolism due to prolonged sitting
  - *Shelter death* in London during World War II (1940)
  - *Economy class syndrome* during a long-haul flight (1954)

• More common situation, which leads to leg immobility?

**Watching Television**
The **JACC Study** (Japan Collaborative Cohort Study)

- How **lifestyle** affects morbidity and mortality
- Over 200 original contributions have been published

Baseline survey 1988-1990

20 years of follow-up

Until the end of 2009

Hours spent watching television per day

59 deaths from pulmonary embolism

Analysed the data of **86,024** participants aged **40 to 79** years
Main results

Aged 40 to 79 years

Aged 40 to 59 years

Hazard ratio

<table>
<thead>
<tr>
<th>Hours spent watching television per day</th>
<th>Hazard ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2.5</td>
<td>1.00</td>
</tr>
<tr>
<td>2.5-4.9</td>
<td>3.14</td>
</tr>
<tr>
<td>&gt;=5.0</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Prolonged television watching can be a strong risk factor of fatal pulmonary embolism

e5.0 hrs/day = two-fold risk

e5.0 hrs/day = six-fold risk
Message to the public

• Prolonged television watching is prevalent
  - One forth of the population in Japan watches television for ≥ 5.0 hours per day

• Prevention
  - Take a break, stand up, walk around, drink water

• Prolonged use of personal computers
  - Cases of fatal pulmonary embolism after prolonged computer gaming have been reported

Public awareness of the risk of pulmonary embolism from lengthy leg immobility during watching television is essential
Thank you for your kind attention.

Toru Shirakawa
shirakawa@pbhel.med.osaka-u.ac.jp