Trends in adolescent smoking behavior and its correlates in Japan

Symposium 10: Education, communication, training and public awareness

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Healthy People Japan for 21 century  Target: diminishing minor smoking

Health Promotion Law; Protecting from passive smoking

Tobacco advertisement regulation

Life skill education in school (primary, junior high), senior (from 2003)

Age confirmation obligation (convenience store etc.)

FCTC ratification (effect in 2005)

Reinforcement of the health warning on a package

Treatment of Nicotine dependence covered by the national medical insurance

Decreasing the number of vending machines (304 thousands in 2012); TASPO (from 2008)
Trends in smoking prevalence by age group <adults>

National Health and Nutrition Survey, Ministry Health, Labour and Welfare
<table>
<thead>
<tr>
<th>country</th>
<th>Sample size (15 years old and over)</th>
<th>Current smoking rate (Male)</th>
<th>Current smoking rate (Female)</th>
<th>Smokeless tobacco (Male)</th>
<th>Smokeless tobacco (Female)</th>
<th>Any tobacco products (Male)</th>
<th>Any tobacco products (Female)</th>
<th>Experience of cessation (within 12M)</th>
<th>Passive smoking</th>
<th>Anti-tobacco information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh (2009)</td>
<td>9629</td>
<td>44.7</td>
<td>1.5</td>
<td>20.4</td>
<td>27.9</td>
<td>58.0</td>
<td>27.9</td>
<td>47.3</td>
<td>63.0</td>
<td>(workplace)</td>
</tr>
<tr>
<td>Philippine (2009)</td>
<td>9705</td>
<td>47.7</td>
<td>9.0</td>
<td>2.8</td>
<td>1.0</td>
<td>49.0</td>
<td>10.0</td>
<td>47.8</td>
<td>55.3</td>
<td>(public transport)</td>
</tr>
<tr>
<td>Thailand (2009)</td>
<td>20566</td>
<td>46.5</td>
<td>3.1</td>
<td>1.3</td>
<td>6.3</td>
<td>46.4</td>
<td>9.1</td>
<td>49.8</td>
<td>53.5</td>
<td>(public place)</td>
</tr>
<tr>
<td>China (2010)</td>
<td>13354</td>
<td>52.6</td>
<td>2.4</td>
<td>0.6</td>
<td>0.3</td>
<td>22.0</td>
<td>13.3</td>
<td>36.4</td>
<td>58.4</td>
<td>(public building)</td>
</tr>
<tr>
<td>Brazil (2008)</td>
<td>39425</td>
<td>21.6</td>
<td>13.1</td>
<td>0.6</td>
<td>0.3</td>
<td>22.0</td>
<td>13.3</td>
<td>45.6</td>
<td>24.4</td>
<td></td>
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<tr>
<td>Japan (2009)</td>
<td>1783 20+</td>
<td>34.9</td>
<td>8.0</td>
<td>0.9</td>
<td>0.2</td>
<td>36.1</td>
<td>8.3</td>
<td>30.2</td>
<td>44.5</td>
<td>(workplace)</td>
</tr>
<tr>
<td>Japan (2010)</td>
<td>1143 20+</td>
<td>37.1</td>
<td>8.9</td>
<td>0.1</td>
<td>0</td>
<td>37.1</td>
<td>8.9</td>
<td>23.7</td>
<td>38.1</td>
<td>(workplace)</td>
</tr>
</tbody>
</table>
Advise of cessation from medical staff (current smoker)

- Interviewed smoking status by physician
- Advised cessation by physician
- Advised cessation at health examination

### Male
- 2009: 46%
- 2010: 37.2%
- 2011: 63.6%

### Female
- 2009: 38.9%
- 2010: 37.2%
- 2011: 41.5%

### Interpretation
- There is an increase in the percentage of medical staff advising cessation from smoking over the years for both males and females.
- In 2009, males had a higher percentage of cessation advice compared to females.
- By 2011, males had a higher percentage of cessation advice compared to females, with females having a slight increase from 2009.
Background

Nationwide surveys on cigarette smoking among high school students revealed that many students had started smoking in spite of the existence of the Act to Prohibit Minors from Smoking, enacted in 1900. We assessed trends in smoking behavior among Japanese adolescents, and analyzed attributable factors to the changes.

Periodical Nationwide Surveys

Nationwide cross-sectional surveys were conducted in 1996, 2000, 04, 08, 10 and 12. Junior and senior high schools were sampled randomly. Enrolled students were asked to fill up a self-reporting anonymous questionnaire on smoking behavior. Questionnaires were collected from about more than 100 thousands students in every survey through sampled junior and senior high schools throughout Japan. School principals were asked school policy on smoking restriction.
Current smoker: students who had smoked or drunken at least once during the previous 30 days.
Comparison of the results from GYTS surveys

<table>
<thead>
<tr>
<th>country</th>
<th>Sample size (13-15 years)</th>
<th>Current smoking rate (boy)</th>
<th>Current smoking rate (girl)</th>
<th>Smokerless tobacco (boy)</th>
<th>Smokerless tobacco (girl)</th>
<th>Smokers who buy tobacco from shops</th>
<th>Smokers who want to quit</th>
<th>Prevalence of parental smoking</th>
<th>Passive smoking (at home)</th>
<th>Passive smoking (other than home)</th>
<th>School education about tobacco and health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh (07)</td>
<td>3113</td>
<td>2.9</td>
<td>1.1</td>
<td>8.0</td>
<td>4.2</td>
<td>38.3</td>
<td>70.7</td>
<td></td>
<td>34.7</td>
<td>42.2</td>
<td>54.2</td>
</tr>
<tr>
<td>Philippines (09)</td>
<td>11630</td>
<td>32.6</td>
<td>12.9</td>
<td>18.3</td>
<td>9.5</td>
<td>45.0</td>
<td>84.1</td>
<td></td>
<td>58.4</td>
<td>73.1</td>
<td>58.6</td>
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<tr>
<td>Thailand (09)</td>
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<td>20.1</td>
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<td>15.3</td>
<td>6.5</td>
<td>47.9</td>
<td>75.5</td>
<td></td>
<td>45.7</td>
<td>67.6</td>
<td>59.6</td>
</tr>
<tr>
<td>Indonesia (09)</td>
<td>3319</td>
<td>41.0</td>
<td>3.5</td>
<td>10.3</td>
<td>3.1</td>
<td>51.1</td>
<td>83.4</td>
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<td>68.8</td>
<td>78.1</td>
<td>65.3</td>
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<tr>
<td>Hungary (03)</td>
<td>4484</td>
<td>33.1</td>
<td>32.7</td>
<td>11.1</td>
<td>3.3</td>
<td>65.3</td>
<td>36.7</td>
<td></td>
<td>85.8</td>
<td>73.7</td>
<td></td>
</tr>
<tr>
<td>Japan (08)</td>
<td>42090</td>
<td>3.6</td>
<td>2.3</td>
<td>50.7</td>
<td>48.2</td>
<td>43.9</td>
<td>42.5</td>
<td>40.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Smoking status of family and friends

Junior High school

Senior High school

Sources of cigarettes of adolescent smokers

Drinking prevalence by smoking status

Aggregation of risk factors in students’ smokers

JH/Smoker  JH/non  SH/smoker  SH/non

Smoking prevalence by school smoking regulation (2004 survey)

Enforce bans on tobacco advertising, promotion and sponsorship

• In 2004, a guideline for advertisements of tobacco products was released.
• Advertisements of tobacco products on TV, radio, internet, and billboard were intended to diminish.
• However, the policy has been depended on a voluntary regulation by tobacco companies.
• Advertisements on printing matters, sponsorship for sports events, street sales promotion, vending machine, and manner CM on TV do not yet disappear.
Cigarette vending machine
Lifetime proportion smokers who got cigarette by using age verification card (2008 survey)
Menthol, slim, flavor cigarettes

Figure 1. Menthol share of the Japanese cigarette market (2000-2009); data from

Figure 3. Share of menthol brand preference among Japanese adolescents by gender (1999 & 2000) (data from [3]).
Raise taxes on tobacco

Japanese yen (1 US$=98 yen, 2013)

A case of ‘Mild Seven’ (one of most popular brand in Japan)
Smoking prevalence of pregnant women

Survey on smoking status among pregnant women at obstetric medical facilities of the Japanese obstetrician society
(2002 260 facilities, 16528 participants; 2006 344 facilities, 19650 participants)

Ohida et al, 2007
Conclusions

- Some progress for smoking control was observed in Japan after 2000. These policies have played a large role for decreasing in smoking prevalence. We still have many problems.

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased smoke-free workplace and smoke-free school</td>
<td>More than half of workers are exposed passive smoking (small companies, bar, or restraints workers)</td>
</tr>
<tr>
<td>Guarantee universal access for cessation treatment. Facilities and physicians are increasing.</td>
<td>The coverage is still low. Utilize obligate health examination for recruiting patients.</td>
</tr>
<tr>
<td>Number of advertisements decrease.</td>
<td>Advertisements and promotion activities still exist. Legislation is necessary.</td>
</tr>
<tr>
<td>Raised tobacco tax</td>
<td>Raise of further tobacco tax.</td>
</tr>
<tr>
<td>Periodical nationwide monitoring of smoking behavior</td>
<td>Continue monitoring survey. Epidemiological studies for policies and smoking behavior.</td>
</tr>
</tbody>
</table>
Thank you for your attention