6.17 Tobacco use

See Background Paper 6.17 (BP6_17Smoking.pdf)

Background

Smoking is considered to be the single most important cause of preventable illness and premature deaths worldwide.\(^1\) It is estimated that about 100 million deaths were caused by tobacco addiction in the 20th century. Today, 5.4 million people worldwide die each year from tobacco-related diseases. Unless resolute and urgent action is taken, it is estimated that by 2030 smoking will cause 8 to 10 million deaths a year, over 80% of them in low- and middle-income countries.\(^2\)

In the WHO European Region in 2011, about 32% of the adult population was smoking on a regular basis. Together with the Americas, Europe currently has the highest proportion of all deaths attributable to tobacco (Table 6.17.1).

<table>
<thead>
<tr>
<th>WHO Region</th>
<th>Proportion of all deaths attributable to tobacco (%)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
</tr>
<tr>
<td>Europe</td>
<td>25</td>
</tr>
<tr>
<td>Americas</td>
<td>17</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>14</td>
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<tr>
<td>South-East Asia</td>
<td>14</td>
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<tr>
<td>Eastern Mediterranean</td>
<td>12</td>
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<tr>
<td>Africa</td>
<td>5</td>
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<tr>
<td>Global</td>
<td>16</td>
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</tbody>
</table>

Source: WHO global report: mortality attributable to tobacco (2012).\(^1\)

Data from the Global Adult Tobacco Survey 2009 show that the prevalence of smoking at country level is highly variable, with countries such as the Russian Federation and other Eastern European countries having a higher prevalence (39.1% in the Russian Federation, 30.3% in Poland, and 28.8% in Ukraine) than elsewhere in Europe (25% in Finland, 24% in the United Kingdom, Republic of Moldova, Portugal, Kazakhstan and Iceland, and 21% in Israel).\(^3\) In 2010 in the WHO European Region, 22% of women smoked, compared with only 3.5% in Africa, Asia, and the Middle East. While the use of tobacco products was formerly largely a male phenomenon, the gap in use between male and female adults is now smaller in countries like Austria, Denmark, Ireland, Norway and the United Kingdom. In Norway and
Sweden today, more women than men use tobacco on a daily basis. Meanwhile, in Bulgaria, Croatia, Poland, and Slovenia more girls than boys use tobacco.\textsuperscript{4, 5}

Stopping smoking is very difficult, often requiring repeated interventions and/or multiple attempts to quit. Only 1% to 5% of smokers attempting to quit on their own (without a smoking cessation programme) succeed.\textsuperscript{6} There is a very high relapse rate (93\%) after 10 months of follow-up.\textsuperscript{7} In Europe, pharmacotherapeutic interventions for smoking cessation have been shown to be both effective and cost-effective in a variety of settings, compared with other interventions within the health system.\textsuperscript{1} The medication involved belongs mainly to two distinct groups: nicotine replacement therapy (NRT), involving mainly patches, gum and nicotine inhalers; and non-nicotinic compounds such as bupropion hydrochloride, nortriptyline and, more recently, varenicline tartrate and cytosine.\textsuperscript{8}

\textbf{Developments since 2004}

In 2009, NRT products were included in the WHO Model List of Essential Medicines. A systematic review of studies reported a risk ratio (RR) of abstinence for any form of NRT of 1.60 (95\% CI: 1.53 to 1.68) compared to no medication for smoking cessation.\textsuperscript{9} The use of NRT increases long-term success rates by approximately 50\% to 70\%, regardless of the setting.\textsuperscript{9} Combining a nicotine patch with a rapid delivery form of NRT was more effective for long-term smoking cessation than using a single type of NRT (RR 1.34, 95\% CI 1.18 to 1.51); and a combination of NRT and bupropion was more effective than bupropion alone (RR=1.24; 95\% CI: 1.06 to 1.45). \textsuperscript{9}

\textbf{Research needs}

However, more research is needed in a number of areas. These include efforts to:

- develop more effective medicines to achieve long-term abstinence
- establish a better definition of the criteria which need to be fulfilled in order to use some of the therapeutic modalities in combination;
- develop “rescue” interventions for smokers, since evidence suggests that smokers who relapse during their cessation attempt are at high risk of future relapses;
- determine the efficacy and effectiveness of existing and new therapeutic modalities for specific patient groups, including adolescents and pregnant women; and
- establish the cost-effectiveness of pharmacotherapy for smoking cessation in low- and middle-income countries in order to inform decision makers about the need for the development of lower-cost therapeutic options for their countries.

\textbf{References}


