Tobacco use is one of the most preventable causes of death globally and in the Democratic People’s Republic of Korea. Over six million people die every year due to tobacco use worldwide. Tobacco kills almost half of its users. In 2012, WHO estimated that almost 12% of all deaths in the Democratic People’s Republic of Korea were attributed to tobacco.

DPR Korea is one of the 180 countries that have endorsed the WHO Framework Convention on Tobacco Control (FCTC), an evidence-based treaty to reduce the demand and supply of tobacco. It is committed to accelerate prevention and control of tobacco use for the protection of health of its citizens. DPR Korea amended its Tobacco Control Law in 2009 and in 2016 to further strengthen tobacco control.

The knowledge, attitude and practices (KAP) survey was conducted from January to April 2016 to support the development and implementation of tobacco control activities in the country.

**Survey Objectives**
- To assess knowledge, attitudes and practices of tobacco use and cessation;
- To evaluate the effect of information, education and communication (IEC) activities performed during the past 12 months on tobacco cessation.

**Survey Methodology**
It was a nationwide household survey of the population aged 17+ years based on a three-stage cluster sampling. In the first stage, five provinces were selected randomly, followed by a simple random selection of one city and one county from each province. The selected county and city were classified into the lists of dong/up and ri to randomly select enumeration areas (EAs). A total of 51 EAs were sampled. All the 5308 households in the sampled EAs were selected for the survey, but 136 households could not be interviewed yielding a final sample of 5172 households (2602 urban and 2570 rural with 9777 respondents (4796 males and 4981 females): Paper-based questionnaires were administered in-person by trained interviewers.

**KAPS highlights**

**TOBACCO USE IN DPR KOREA**
- There is **no reported tobacco use among women**.
- **37.3%** of men and **0%** of women aged 17 years and older (~3.4 million men) reported smoking tobacco daily¹ (Figure 1).
- **40.6%** of rural respondents smoked compared with **35.2%** of urban respondents (Figure 1).
- The daily smoking prevalence ranges from **8.7%** among 17–24-year-old men to **43.2%** among 45–54-year-old men (Figure 2).
- On average, each smoker smoked **10.9 cigarettes** daily (10.6 in urban and 11.4 in rural areas).
- **Type of smoking tobacco used**: cigarettes: 78.1% (92.3% in urban and 55.9% in rural); hand-rolled cigarettes: 21.9% (7.7% in urban and 44.1% in rural) (Figure 3).
- **No respondent reported using smokeless tobacco**.

⁠Article 25 of the national tobacco law prohibits production, sale and import of both smokeless tobacco and e-cigarettes.

**Fig. 1: Prevalence of daily tobacco smoking among adult males (17+ year olds)**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-24 yrs</td>
<td>32.6%</td>
<td>30.7%</td>
<td>35.2%</td>
</tr>
<tr>
<td>25-34 yrs</td>
<td>37.3%</td>
<td>35.2%</td>
<td>40.6%</td>
</tr>
</tbody>
</table>

**Fig. 2: Prevalence of daily smoking by age group - KAP 2016**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Prevalence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-24 yrs</td>
<td>8.7</td>
</tr>
<tr>
<td>25-34 yrs</td>
<td>30.8</td>
</tr>
<tr>
<td>35-44 yrs</td>
<td>38.1</td>
</tr>
<tr>
<td>45-54 yrs</td>
<td>43.2</td>
</tr>
<tr>
<td>55-64 yrs</td>
<td>39.9</td>
</tr>
<tr>
<td>65+ yrs</td>
<td>32.1</td>
</tr>
</tbody>
</table>

¹ Based on responses to question: Are you a daily smoker? [yes/No]
KNOWLEDGE OF HARMFUL EFFECTS OF SMOKING ON SMOKERS

- All respondents believed smoking damages the health of smokers.
- All respondents mentioned respiratory diseases as main harmful effect of smoking; however, the awareness about the linkage between smoking and cancer or cardiovascular disease was low: only 43.8% and 36.2% respondents, respectively, mentioned these diseases (Figure 4).

- 1 in 3 respondents (36.1%) either did not know or did not think light smoking will affect their health.

- Worryingly, 1 in 3 respondents (33.7%) either believed smoking has advantages (41.3% rural, 28.8% urban) or they were not sure about it.

- People who thought smoking was advantageous mentioned the following advantages: helps to concentrate (43.7%); provide relief for fatigue (28.9%); weight loss (17.3%); social contact (15.8%); cure for certain ailments (9.4%) (Figure 5).

KNOWLEDGE OF HARMFUL EFFECTS OF SECOND-HAND SMOKE (SHS)

- 92% respondents believed that smoking harms the health of people around the smoker.
- Disease reported to be caused by SHS: respiratory diseases (95.7%), nervous system disease (22.8%), cancers (15.8%), and cardiovascular disease (6.2%).

- Almost half of all respondents (42.4%) either believed SHS from light smoking is not harmful or did not know.

CESSATION

- Nearly half of all smokers (51.2% urban and 46.6% rural) had thought of quitting smoking in the past 12 months.

- Most commonly reported reasons for attempting cessation was smoker’s own health (71.2%), knowledge of the harm from smoking (35.1%) and the price of cigarettes (28.3%). Almost one in five smokers (19.7%) mentioned doctors’ advice as a reason to quit smoking (Figure 6).

- Most commonly reported reasons for failure in quitting: lack of patience (53.7%), and resumption of smoking after quitting (47.3%) (Figure 7).

- Cessation tools reported: just stop smoking (100.0%), cessation pills (20.2%), and eating snacks (28.5%).

- Encouragement for quitting smoking in past one year: health counseling from doctor (73.8%), family members (69.0%), colleagues (45.9%).

- Less than half (42.6%) of daily smokers are thinking of quitting smoking in the next 12 months.

- Most important motivation reported for quitting: Own health damage

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2 Under what circumstances will you try to quit smoking?
**MEDIA EXPOSURE**

- **More than 3 in 4 adults** (78.6% overall: 81.6% in urban, 73.9% in rural) noticed visual or audio information on damaging effect of smoking on health.

- **Most common IEC sources for information in past one year on damaging effects of smoking on smokers’ health** among people who noticed audio/video information: Newspaper/TV/radio (89.8%), IEC activity by household doctor (62.1%), warning on cigarette pack (45.8%), poster/leaflet (23.1%), book/brochure/magazine (18.8%) (Figure 8).

- **Most common IEC sources mentioned as source of their knowledge** on damaging effects of smoking: Newspaper/TV/radio (52.5%), IEC activity by household doctor (43.2%), **warning on cigarette pack (35.6%)**, poster/leaflet (22.3%), book/brochure/magazine (40.8%).

**SECOND-HAND SMOKE EXPOSURE (SHS)**

- **More than one-third of smokers** (38.3%) smoked in living rooms shared by family members’ exposing them to SHS.

- **Nearly half** (42.6%) of smokers smoked in indoor workplaces exposing their coworkers to SHS.

- **33.6% overall** (25.7% in urban, 46% rural) were exposed to second-hand tobacco smoke at home (Figure 9).

- **35.2% of adults** (26.7% in urban, 48.5% rural) who worked indoors were exposed to tobacco smoke at the workplace (Figure 9).

- **Exposure to media on SHS** in past one year: 55.6% (61% in urban and 47% in rural).

- **Specific type of media exposure on SHS** in past one year among people who noticed IEC: Newspaper/TV/ Radio (74), IEC activity by household doctor (40%), warning on cigarette pack (23%), poster/leaflet (26%), book/brochure/magazine (15%).

- **Most common IEC sources mentioned in past one year as source of their knowledge on damaging effects of SHS**: Newspaper/TV/radio (74.4%), IEC activity by household doctor (40.1%), poster/leaflet (26.3%), warning on cigarette pack (23.2%), book/brochure/magazine (15.1%).

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**Fig. 6: Percentage of respondents reporting different reasons for attempting quitting tobacco - KAP 2016**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoker’s own health</td>
<td>66.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of harms of smoking</td>
<td>78.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price of cigarette</td>
<td>41.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor’s advice</td>
<td>41.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family/Relative/Friend advice</td>
<td>8.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>17.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of cessation means</td>
<td>6.3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 7: Percentage of respondents reporting different reasons for failure to quit smoking in the past 12 months by residence**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of patience</td>
<td>56.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resumption of smoking after quit</td>
<td>49.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of cessation means</td>
<td>46.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>19.4%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Prevalence (%)**
  - **Lack of patience**: Urban 56.5%, Rural 49.3%
  - **Resumption of smoking after quit**: Urban 46.8%, Rural 48.1%
  - **Lack of cessation means**: Urban 19.4%, Rural 3.5%
  - **Other**: Urban 9.4%, Rural 32.2%
KEY CONCLUSIONS AND RECOMMENDATIONS

- **Need for IEC to fill key knowledge gaps**, namely, tobacco is a key cause for cancers and cardiovascular diseases; light smoking is equally damaging; removing the misperceptions about perceived benefits of smoking reported by substantial percentage of respondents; increasing awareness on damaging effects of second-hand smoke exposure.

- **Strengthening quitting efforts**: Motivating more smokers to quit smoking and emphasizing quitting is feasible. Availability of cessation tools, including advice from health providers, and other cessation means such as pills and gums should be increased.

- **Increase tobacco price**: It is mentioned as one of the main factors encouraging smokers especially in urban areas to think about quitting. **Further efforts should be made to raise cigarette prices to encourage cessation and reduce initiation.**

- **Hand -rolled cigarettes** are more commonly used in rural areas—efforts should be made to raise prices and include health warnings on these products as well.

- **Health warnings on cigarette packs** was mentioned by substantial proportion of respondents as their source of knowledge on damaging effects of smoking; efforts should be made to introduce larger size pictorial health warnings (as opposed to the currently used only textual warnings covering 30% of area) and as per the guidance provided under Article 11 of FCTC, for both conventional and hand-rolled cigarettes.