Activities and Plans of GARD Korea

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GARD General Meeting,
May 30-31 2008, Istanbul, Turkey
Overview

- Burden of major chronic respiratory diseases (CRD) in Korea
- GARD Korea and participating parties
- Activities of GARD Korea
- National plan on chronic respiratory diseases (CRD) in Korea
Burden of CRD in Korea: Prevalence

- **Asthma prevalence (Children)**
  - 12-15yr children, nationwide survey
  - by ISAAC questionnaire

1995 vs 2000:
- **Wheeze ever**: 13.9% vs 12.8%
- **Recent wheeze**: 8.5% vs 9.3%
- **Asthma ever diagnosis**: 2.7% vs 5.3%

Burden of CRD in Korea: Prevalence

- Asthma prevalence (adult)
  - 2,467 subjects, nationwide survey (2000-2001)
  - confirmed by questionnaire and bronchial challenge test

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Current wheeze (%)</th>
<th>BHR</th>
<th>Current asthma</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 40 yr</td>
<td>2.2%</td>
<td></td>
<td>2.2%</td>
</tr>
<tr>
<td>40-54 yr</td>
<td>3.8%</td>
<td></td>
<td>3.8%</td>
</tr>
<tr>
<td>55-64 yr</td>
<td>7.7%</td>
<td></td>
<td>7.7%</td>
</tr>
<tr>
<td>≥ 65 yr</td>
<td></td>
<td>12.7%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

### Burden of CRD in Korea: Prevalence

- **COPD prevalence**
  - confirmed by questionnaire and pulmonary function test

<table>
<thead>
<tr>
<th>GOLD Stage</th>
<th>Age &gt; 18 yr</th>
<th></th>
<th></th>
<th>Age &gt; 45 yr</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>I</td>
<td>4.2</td>
<td>5.7</td>
<td>2.7</td>
<td>9.5</td>
<td>14.0</td>
<td>5.6</td>
</tr>
<tr>
<td>II</td>
<td>3.1</td>
<td>4.1</td>
<td>2.1</td>
<td>6.4</td>
<td>9.3</td>
<td>3.9</td>
</tr>
<tr>
<td>III</td>
<td>0.4</td>
<td>0.8</td>
<td>0.1</td>
<td>1.1</td>
<td>2.2</td>
<td>0.1</td>
</tr>
<tr>
<td>IV</td>
<td>0.1</td>
<td>0.2</td>
<td>0.0</td>
<td>0.2</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7.8</strong></td>
<td><strong>10.8</strong></td>
<td><strong>4.9</strong></td>
<td><strong>17.2</strong></td>
<td><strong>25.8</strong></td>
<td><strong>9.6</strong></td>
</tr>
</tbody>
</table>

Burden of CRD in Korea: Mortality

- Korea National Statistical Office data
- The death rate from chronic lower respiratory diseases (including asthma) between 1992 and 2002

<table>
<thead>
<tr>
<th>Disease</th>
<th>1992</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>110.7</td>
<td>130.7</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>80.3</td>
<td>77.2</td>
</tr>
<tr>
<td>Heart disease</td>
<td>43.0</td>
<td>37.2</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>34.4</td>
<td>25.1</td>
</tr>
<tr>
<td>Chr. lower respiratory disease</td>
<td>31.6</td>
<td>22.6</td>
</tr>
<tr>
<td>Disease of liver</td>
<td>13.5</td>
<td>22.0</td>
</tr>
<tr>
<td>Transport accidents</td>
<td>12.9</td>
<td>19.1</td>
</tr>
</tbody>
</table>

Economic burden of CRD in Korea

- Survey conducted by the Korea Asthma Allergy Foundation (KAF) in 2004

- Collecting and analyzing data sources from:
  - Health Insurance Review Agency (HIRA)
  - National Survey on Health and Nutrition (NSHN)
  - National Health Insurance Corporation (NHIC)
  - Ministry of Health and Welfare (MOHW)
  - Patient cost survey
Economic burden of CRD in Korea

Cost of Asthma

- 2.04 billion US Dollar (direct+indirect cost)
- Total 4.11 billion US Dollar (including intangible cost)
  \[
  \rightarrow \text{equivalent to 0.52\% of Korea’s GDP in 2004 (NHIC data)}
  \]

<table>
<thead>
<tr>
<th></th>
<th>HIRA data</th>
<th>NHIC data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct cost</td>
<td>573</td>
<td>962</td>
</tr>
<tr>
<td>Indirect cost</td>
<td>538</td>
<td>1,086</td>
</tr>
<tr>
<td>Intangible cost*</td>
<td>948</td>
<td>2,066</td>
</tr>
<tr>
<td>Direct + Indirect</td>
<td>1,112</td>
<td>2,048</td>
</tr>
<tr>
<td>Total</td>
<td>2,059</td>
<td>4,114</td>
</tr>
</tbody>
</table>

* Intangible cost in this table is just WTP (willingness to pay) for a month (not a year); WTP is usually evaluated higher than true value, but still not decided how much is appropriate.
GARD Korea Launch

- GARD Korea Launching : on May 31, 2007, Seoul
- WHO/GARD General meeting : on June 1-2, 2007, Seoul Korea
GARD Korea Participating Parties

- Korea Asthma Allergy Foundation
- Korean Academy of Asthma, Allergy and Clinical Immunology
- Korean Academy of Pediatric Allergy and Respiratory Disease
- Korean Academy of Occupational Asthma
Activities of GARD Korea

1. Developing and implementing guides to prevention of chronic respiratory diseases
   - Develop evidence-based guidelines for primary and secondary preventions
   - Implementation of computer-assisted asthma management program
   - Operating education center for asthma and atopic diseases
2. Publicizing guides to prevention of chronic respiratory diseases via mass media
   - TV, newspaper, and magazine campaigns to increase awareness of the importance of chronic respiratory diseases
3. Supporting chronic respiratory diseases patient groups and foundations
4. Establishing the Asthma cohort
Education and Information Center
for asthma and atopic disease

- Opening: May 6th, 2008
- Activities - education & consultation for patients,
  - collection & evaluation of information
  - development of education materials
  - supporting nationwide prevention and management program
Easy Asthma Management Project

Computer-assisted asthma management program

To create an easily acceptable practical simplified protocol focusing on the diagnosis, treatment, monitoring of asthma for clinician to fill the gap between guidelines and real practice and achieve more successful clinical outcome in asthma management.

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>symptoms based severity classification using electrical CRF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>fixed and easily remembered drug usage program</td>
</tr>
<tr>
<td>Monitoring</td>
<td>simplified monitoring tools</td>
</tr>
</tbody>
</table>
Mass Media Campaigns

Activities through various media, including TV and newspapers to increase public awareness of Asthma

- **Period**: 2004. 9~12. 2008. 05 ~
- **Contents**: messaging the seriousness of asthma and arousing effectively the awareness of the public on the importance of management and prevention of asthma
National Plan on CRD in Korea

**Nationwide Asthma and Atopic disease Prevention and Management Plan**


- The Korean government will provide US$ 3.0 million annually from 2008.
Main Fields of National Plan

- Education and public relations about asthma and atopic disease
- Asthma Friendly School
- Implementation of computer-assisted asthma management program
- Education and information center for asthma and atopic diseases
- Establishing the Asthma and Atopic disease Cohort
제7회 세계 천식의 날 기념 캠페인 마라톤 대회·금연 캠페인

“밀amment, 난, 많은

행동으로 천식의 날에 기념품을 기념합니다.”

참가자들 앞에서 열린 이벤트의 모습입니다.