GARD

Global Alliance against Chronic Respiratory Diseases

1- Needs for GARD
2- GARD
3- Estimate population needs and advocate for action
4- Formulate and adopt policy
5- GARD implementation steps
Global Alliance against Chronic Respiratory Diseases

1- Needs for GARD
Millenium Development Goals 2000

World Bank & WHO

- maternal health and perinatal conditions
- HIV/AIDS
- TB
- Malaria
- other infectious diseases
WHA resolution 53.17

The 53rd World Health Assembly, May 2000

- Recognized the enormous human suffering caused by chronic respiratory diseases (CRDs)
- And requested the WHO Director General to continue giving priority to the prevention and control of chronic diseases
- With special emphasis on developing countries and other deprived populations

Endorsed by all 191 WHO Member States
Preventing Chronic Diseases, a vital investment, WHO, 2005

**Main causes of death**
- Communicable diseases: 7%
- Maternal/perinatal
- Nutritional deficiencies
- Cardiovascular
- Cancer
- Diabetes
- Other chronic diseases
- Injuries

**Main causes of burden (DALYs)**
- Communicable diseases: 4%
- Maternal/perinatal
- Nutritional deficiencies
- Cardiovascular
- Cancer
- Diabetes
- Other chronic diseases
- Injuries

Global Alliance against Chronic Respiratory Diseases
www.who.int/gard
Burden of disease (DALYs) 2005

Preventing Chronic Diseases, a vital investment, WHO, 2005

Global Alliance against Chronic Respiratory Diseases
www.who.int/gard
Chronic respiratory diseases

- Everyone in the world is exposed to unhealthy air
  - 2 billion: biomass fuel combustion
  - Over 1 billion: outdoor air pollution
  - 1 billion: tobacco smoke
  - Everyone: allergens

- Hundreds of million of people suffer from CRD and allergies

- 4 million die prematurely each year
### Chronic respiratory diseases

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>300 million*</td>
</tr>
<tr>
<td>Allergic rhinitis</td>
<td>300-400 million</td>
</tr>
<tr>
<td>COPD (moderate/severe)</td>
<td>80 million*</td>
</tr>
<tr>
<td>COPD (mild)</td>
<td>&gt;150 million</td>
</tr>
<tr>
<td>Sleep apnea syndrome</td>
<td>100 million</td>
</tr>
<tr>
<td>Pulmonary hypertension</td>
<td>50 million</td>
</tr>
<tr>
<td>Occupational lung diseases</td>
<td>50 million</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>&gt; 1 billion</td>
</tr>
</tbody>
</table>

*: WHO official number
Increasing burden of diseases and Injuries: change in rank order of DALYs

1999

1. Acute lower respiratory infections
2. HIV/AIDS
3. Perinatal conditions
4. Diarrhoeal diseases
5. Unipolar major depression
6. Ischaemic heart disease
7. Cerebrovascular disease
8. Malaria
9. Road traffic injuries
10. COPD
11. Congenital abnormalities
12. Tuberculosis
13. Falls
14. Measles
15. Anaemias

2020

1. Ischaemic heart disease
2. Unipolar major depression
3. Road traffic injuries
4. Cerebrovascular disease
5. COPD
6. Acute lower respiratory infections
7. Tuberculosis
8. War
9. Diarrhoeal diseases
10. HIV
11. Perinatal conditions
12. Violence
13. Congenital abnormalities
14. Self-inflicted injuries
15. Trachea, bronchus and lung cancers

DALY = Disability-adjusted life year

Source: WHO
Evidence, Information and Policy, 2000
In 2030

- Tobacco > 8 million deaths (Plos Med 2006)
- Biomass fuel combustion > 10 million deaths (Ezzatti, Science 2005)
Global Alliance against Chronic Respiratory Diseases

1. Needs for GARD
2. GARD
Global Alliance against Chronic Respiratory Diseases

GARD is a voluntary alliance of national and international organizations, institutions, and agencies committed towards the common goal to improve global respiratory health.

GARD is part of the WHO global work to prevent and control chronic diseases.

Because most of the chronic respiratory diseases are under-diagnosed, under-treated and the access to essential medications in many countries is poor, a global effort is needed.
Role of WHO in Alliances

- coordination
- link with countries
- monitoring quality
- support secretariat
Examples of WHO Alliances

- International Agency for the Prevention of Blindness
- Vision 2020: The Right to Sight
- GAVI: The Global Alliance for Vaccines & Immunization
- RBM: Roll Back Malaria
- The Child Survival Partnership

Global Alliance against Chronic Respiratory Diseases

www.who.int/gard
GARD

Vision: A world where all people breathe freely

Mission: To reduce the global CRD burden

Objectives: To initiate a comprehensive approach to fight CRD
  • Develop standard way to obtain data on CRD burden and risk factors
  • Encourage countries to develop prevention
  • Make recommendations of simple strategies for CRD management

Added value:
  • Coordination of existing tools and new tools in a network (WHO)
  • Links with governments

Specific focus: developing countries, deprived populations
Des centaines de millions de personnes souffrent de maladies respiratoires chroniques. Actuellement, 300 millions de personnes sont asthmatiques, 80 millions ont une bronchopneumopathie chronique obstructive (BPCO) modérée à sévère, tandis que des millions d'autres souffrent de BPCO légère, de rhinite allergique et d'autres maladies respiratoires chroniques qui ne sont souvent pas diagnostiquées.

L'Organisation mondiale de la Santé estime qu'en 2005, environ quatre millions de personnes sont mortes de maladies respiratoires chroniques. Les décès augmenteront dans l'attente proportion de 30% dans 10 ans, si aucune mesure n'est prise. L'Alliance mondiale contre les affections respiratoires chroniques (GARD) a été constituée pour contribuer à mettre un terme à cette épidémie mondiale.
Comprehensive and integrated action is the means to prevent and control chronic diseases
GARD action plan

Global Alliance against Chronic Respiratory Diseases

1- Needs for GARD
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3- Estimate population needs and advocacy for action
Estimate population needs and advocate for action

WG.1- Burden, risk factors and surveillance (G Viegi, S Buist, Y Fukuchi)

WG.2- Awareness and advocacy (C Lenfant, A Turnbull, P van Cauwenberge)
• GARD promotional flyer (available in English, French, Spanish, Russian, Chinese and Portuguese)
GARD-WHO co-brand web site

- Up to date web site with events and news from GARD collaborating parties
- Available in English, French and Spanish

www.who.int/gard
Global Alliance against Chronic Respiratory Diseases

STOP THE GLOBAL EPIDEMIC OF CHRONIC DISEASE

What is the Global Alliance against Chronic Respiratory Diseases (GARD)?

GARD is a voluntary alliance of national and international organizations, institutions, and agencies committed towards the common goal to improve global lung health.

The Global Alliance is part of the World Health Organization’s (WHO) global work to prevent and control chronic diseases. Because most of the chronic respiratory diseases are under-diagnosed, under-treated and the access to essential medications in many countries is poor, a global effort to improve the diagnosis and the medical care is needed.

The Global Alliance was officially launched on 23 March 2006 in Beijing, People’s Republic of China.

Do you share GARD vision?

As an interested individual you can show your support by signing up on the “A world where all people breathe freely” page on this website.
• GARD Beijing Meeting Report is ready and printed
Newsletter for GARD is in the process. First number February 2007.
GARD action plan

Global Alliance against Chronic Respiratory Diseases

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• Global surveillance, prevention and control of chronic respiratory diseases: a comprehensive approach
(document in process)
GARD Basket

A package of information, tools and guidelines to be offered to countries joining GARD in a brief publication coupled with a CD-Rom

• Topics: burden and risk factors, awareness and advocacy, prevention and health promotion, diagnosis, control and paediatrics

• Labels: information, tools, guidelines, web pages and articles (WHO documents and other)

Sent to GARD collaborating parties for analysis and suggestions.
INTERAIRWAYS
Interactions between the upper and lower airways

WHO Workshop, March 2007
GARD Stepwise approach

Step 1
GARD priorities

Step 2
Integrated GARD action plan

Step 3
Pilot studies in countries
Integrated NCD/GARD action plan
GARD action plan in countries

2005 2006 2007 2008 2009 2010

Global Alliance against Chronic Respiratory Diseases
www.who.int/gard
Formulate and adopt policy

WG.3- Prevention and health promotion (M Boland, A Custovic)

WG.4- Diagnosis of CRD and allergy (K Rabe, S Wenzel, GW Canonica)

WG.5- Control of CRD and allergies, Availability and affordability of drugs (J Bousquet, E Bateman, L Fabbri, C van Weel, N Zhong, N Aït-Khaled)

WG.6- Pediatric asthma (C Baena-Cagnani, E Mantzouranis, FER Simons, E Valovirta)
Economic status areas in countries

- Low income area
- Middle income area
- High income area

- Sub-urban areas

Low-income country → Middle-income country → High-income country

« Inner city asthma »
## PAL implementation models

**PAL Report, 4-6/09/2002, Rabat**

<table>
<thead>
<tr>
<th></th>
<th>Chile</th>
<th>Morocco</th>
<th>Nepal</th>
<th>South Africa</th>
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</thead>
<tbody>
<tr>
<td><strong>Disease morbidity</strong></td>
<td>TB CRD ARI HIV</td>
<td>Declining Increasing</td>
<td>Still frequent Increasing</td>
<td>High prev. Undetected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Old age Low prev.</td>
<td>Young &amp; old Low prev.</td>
<td>Young age Low prev.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Increasing Young age</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>High prev.</td>
</tr>
<tr>
<td><strong>Respiratory case</strong></td>
<td>ARI SS+ PTB SS- PTB CRD</td>
<td>ARI SS+ PTB SS- PTB CRD</td>
<td>ARI SS+ PTB</td>
<td>ARI SS+ PTB CRD HIV</td>
</tr>
<tr>
<td>management (RSM)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NTP scope</strong></td>
<td>TB and RSM</td>
<td>TB and RSM</td>
<td>TB control</td>
<td>TB/HIV control</td>
</tr>
<tr>
<td><strong>PAL implementation</strong></td>
<td>Country-wide</td>
<td>Country-wide</td>
<td>Operational research</td>
<td>Operational research</td>
</tr>
</tbody>
</table>

Global Alliance against Chronic Respiratory Diseases

www.who.int/gard
In high income countries
- patients can receive adequate diagnosis and treatment
- but they are insufficiently diagnosed and treated
- a disease-specific approach is mostly needed
- the goals of GARD are to better diagnose, treat and educate patients

In upper-middle income countries
- few patients can receive adequate diagnosis and treatment
- the first goals of GARD are to reduce under-diagnosis
- the second goals of GARD are to provide accessible and affordable treatment for all patients
- a syndromic approach (PAL/PALSA) is needed in many places

In lower-middle and low income countries
- very few patients can receive adequate diagnosis and treatment
- the first goals of GARD are to reduce under-diagnosis
- the second goals of GARD are to provide accessible and affordable treatment for all patients
- a syndromic approach (PAL/PALSA) is mostly needed

In all countries, health promotion and prevention are essential

The arrows indicate the goals of GARD

control by disease-specific approach
control by syndromic approach (PAL/PALSA)
no control
GARD action plan

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GARD national action plan

- GARD Action plan
- MOH
- National Coordination

Members of national societies
- respiratory
- allergy
- ENT
- gps
- pharmacists
- others

Members of NGOs
Patients
Member of Health Ministry
Others if required

GARD National Action plan endorsed by Ministry of Health

Test in the country

*with indicators of success*

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<table>
<thead>
<tr>
<th>phases</th>
<th>tangible indicators</th>
<th>means for measuring</th>
<th>assumptions</th>
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<tbody>
<tr>
<td>baseline situation</td>
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<tr>
<td>GARD process</td>
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<tr>
<td>GARD output</td>
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<td></td>
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<tr>
<td>outcome</td>
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</tbody>
</table>
Ultimate goals

The cost of inaction is clear and unacceptable

We work for and with the patients for

A world where all people breathe freely