GLOBAL ALLIANCE AGAINST CHRONIC RESPIRATORY DISEASES

A world where all people breathe freely

13TH GARD GENERAL MEETING

25-27 October 2019

Grand Hyatt Beijing Hotel

BEIJING, CHINA

REPORT

World Health Organization

GLOBAL ALLIANCE AGAINST CHRONIC RESPIRATORY DISEASES

Chinese Academy of Medical Sciences
Peking Union Medical College

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Abbreviations

ACOS	Asthma COPD Overlap Syndrome
ACOCU	Asthma and COPD Outpatient Care Unit
AIRWAYS-ICPs	Integrated Care Pathways for Airway Diseases
ARIA	Allergic Rhinitis and its Impact on Asthma
BHBM	Be He@lthy Be Mobile
CAMS	Chinese Academy of Medical Sciences
COPD	Chronic Obstructive Pulmonary Disease
CRD	Chronic Respiratory Disease
EARIP	European Asthma Research and Innovation Partnership
EFA	European Federation of Allergy and Airways Diseases Patients Associations
EU	European Union
FCTC	Framework Convention on Tobacco Control
FIRS	Forum of the International Respiratory Societies
GINA	Global Initiative for Asthma
GOLD	Global Initiative for Chronic Obstructive Lung Disease
GP	General Practitioner
IPCRG	International Primary Care Respiratory Group
ITU	International Telecommunication Union
NCD	Noncommunicable Disease
PACK	Practical Approach to Care Kit
PAL	Practical Approach to Lung Health
PHC	Primary Healthcare
PNDR	Portuguese National Programme for Respiratory Diseases
PUMC	Peking Union Medical College
SDG	Sustainable Development Goals
VAS	Visual Analog Scale
WAO	World Allergy Organization
WHA	World Health Assembly
WHO	World Health Organization
WHO EML	WHO Model List of Essential Medicines
WHO PEN	WHO Package of Essential NCD Interventions

Introduction

Chronic Respiratory Diseases (CRD) – Chronic Obstructive Pulmonary Disease (COPD) and Asthma – are a major cause of death worldwide, significantly contributing to the global burden from Noncommunicable Diseases (NCD). In 2017, an estimated 340 million people suffered from Asthma and about 3.2 million deaths were caused by COPD. The Global Alliance against Respiratory Diseases (GARD) is a voluntary alliance of more than 90 national and international organizations, institutions and agencies working towards the common goal of improving global lung health. After the United Nations Political Declaration on NCDs (2011) and adoption of the World Health Organization (WHO) Global Action Plan for the Prevention and Control of NCDs (2013–2020), GARD promotes an integrated approach focused on primary health care.

Objectives

The primary purpose of the 13th GARD General Meeting was to reiterate the commitment of GARD to conduct effective actions to fight the global burden of Chronic Respiratory Diseases. This objective was achieved through the adoption of the *Beijing Call to Action (BCA) for Lung Health Promotion*, a key starting point to build momentum and converge the international community's attention on CRDs, as one of the major causes of mortality and disability worldwide. The aims of the *BCA* are multidimensional: to promote advocacy of CRDs, foster multisectoral action against risk factors, strengthen the primary health care system, support research and encourage partnerships. In addition, during this year's meeting, the GARD General Assembly renewed the GARD Governing Bodies with a new Executive Committee (EC) and Planning Groups (PG) nominated and elected for a two-year mandate (see details in pages xx).

Preconference Workshop on Air Pollution and CRD in China

In conjunction with the 13th GARD General Meeting, a 1-day Preconference Workshop on Air Pollution and CRD in China was held prior to the GARD General Meeting. The workshop was organized and sponsored by the Chinese Academy of Medical Sciences (CAMS) and the Peking Union Medical College (PUMC). The workshop brought attention to the fundamental dimensions of one of the biggest health threats of the recent times. Workshop presenters emphasized the health impact of air pollution, outlined the pathophysiological mechanisms through which pollution affects the human body, and described interventions that target to reduce the impact of air pollution. They also highlighted that the National Programmes have recognized the importance of interventions to reduce and mitigate air pollution.

Day 1 – 26th October 2019

(All PowerPoint presentations can be viewed at https://gard-breathefreely.org/ppt2019/)

Opening Session

Dr. Cherian Varghese, Interim Director, Department of Noncommunicable Disease, World Health Organization, welcomed participants to the 13th GARD General Meeting in Beijing, China. Dr. Varghese emphasized that "now" was a very important moment to advance the fight against CRDs. The biggest threats to global health in 2019 are air pollution and climate change, noncommunicable disease, influenza pandemic, antimicrobial resistance, fragile and vulnerable settings, weak primary health care, among others. Respiratory disease relates to many items of this list. The WHO Global Action Plan for the Prevention and Control of Noncommunicable Disease 2013-2020 (extended to 2030), identifies five fundamental risk factors – tobacco use, unhealthy diets, physical inactivity, harmful use of alcohol, and air pollution – collectively causing the five deadliest NCDs – cardiovascular disease, diabetes, cancer, chronic lung disease, and mental health conditions. GARD was launched in 2006 in Beijing to catalyze the effort towards prevention and control of CRD. Since then, GARD has grown stronger and larger, and today the Alliance comprises 52 registered members from 34 countries, affiliated with 60 national and international organizations globally.

WHO and GARD are deeply involved in actions to achieve the SDG Target 3.4 and 3.8, to reduce the premature deaths from NCDs and achieve Universal Health Coverage, and thereby driving behavioral change towards healthy lifestyle. Lung health promotion is a necessary step to realize the vision of WHO - to promote health, keep the world safe, and serve the vulnerable.

Dr. Nikolai Khaltaev, GARD Chair 2017-2019, commemorated the launch of GARD, 13 years ago in Beijing, China. Since early 2000, the mortality from CRDs has dramatically reduced globally, and likely in part was attributable to the actions conducted by GARD. These GARD achievements were made through effective collaboration and engagement of partners committed to fight the NCD epidemic. The most significant GARD achievements of all were: the large number of countries that adopted CRD management guidelines, expanded the access to essential CRD drugs, and new initiatives and organizations established. Dr. Khaltaev expressed his content to see many who joined GARD 13 years ago were also present at 13th GARD General Meeting. Dr. Khaltaev closed by reiterating the importance of connections in the achieving SDG 3.4.

His Excellency Dr. Bin Li, Minister of the National Health and Family Planning Commission (NHFPC), China, emphasized the great commitment of the Chinese Government in the prevention and control of CRD. National strategies involving multi-stakeholder engagement have accomplished to reduce mortality from the four main NCDs in China. The most instrumental example of these good practices was the launch of *Healthy China Action Plan 2019-2030*, in July 2019. The action plan

comprises critical features in the realms of lung health promotion, ranging from tobacco control to CRD prevention and treatment.

Dr. Li expressed his appreciation to the return of GARD to China, 13 years after GARD was launched in Beijing. Dr. Li recapped China's commitment in supporting WHO and GARD in CRD prevention and control.

Dr. Chen Wang, President Chinese Academy of Medical Sciences (CAMS) and Peking Union Medical College (PUMC), greeted participants at the 13th GARD General Meeting. On behalf of CAMS, Dr. Wang welcomed CRD experts from all around the world and indicated that it was an honor to host the GARD General Meeting again 13 years after GARD was launched in 2006. According to recent studies, CRD and especially COPD prevalence have increased in China. COPD is estimated to affect 8.6% of Chinese adults, around 100 million people, while asthma affects almost 46 million Chinese. According to these estimates, the burden of CRD in China is comparable to that of hypertension and diabetes. China has made tremendous efforts in prevention and control of CRDs. For instance, the launch of the *White-Cover Book*, an important CRD guideline which documented epidemiological trends of CRD, major risk factors, preventive and treatment practices, as well as control strategies and policy suggestions. Furthermore, actions to tackle asthma and COPD in China have been included in the *Healthy China Action Plan 2019-2030*, integrating respiratory diseases in the health plans in China.

China's investment in CRD research has been increasing: the *China Pulmonary Health Study*, published in *Lancet*, for instance, is an extensive population study on prevalence of CRD and its risk factors.

China is devoted to strengthening the primary healthcare system for prevention, diagnosis and treatment of CRD. CRD is a serious public health threat and yet public awareness about COPD is very low. As a result, and also in part due to the lack of an adequate surveillance system, the true disease prevalence is often underestimated,.

Dr. Wang launched the *Beijing Call to Action for Lung Health Promotion*, a political document that highlighted the commitment of GARD Members in tackling CRDs globally. In keeping with the vision of WHO, the *Beijing Call to Action* aims at achieving improved control of CRD through the following initiatives:

1. Advocating for action on CRD
2. Fostering multisectoral action to reduce CRD risk factors
3. Strengthening primary healthcare to achieve Universal Health Coverage
4. Supporting implementation research
5. Fostering partnerships to scale up national programmes

Dr. Wang concluded his opening remarks by urging GARD Members to adopt the *Beijing Call to Action for Lung Health Promotion*.

Dr. Fabio Scanu, Deputy WHO Representative in China, on behalf of the WHO China Country Office, welcomed participants of the 13th GARD General Meeting. Dr. Scanu showed his appreciation to the efforts that China has made effectively in tackling NCDs, as demonstrated by the adoption of the *Health China Action Plan 2019-2030*. The focus of the

multi-stakeholder engagement was on communities and individuals. The Action Plan is a unique strategy against NCDs, which represents a global model of good practices. China is committed to combat NCDs by targeting its single most significant risk factor - tobacco smoking. The China Tobacco Survey showed that in 2019 fewer people were affected by tobacco than in 2012, which represented a first sign that progress is happening. Today, as many as 25 cities in China are tobacco-free and this accounts for more than 100 million people. Dr. Scanu was confident that China would meet its 25% target of tobacco control by 2030.

Dr. Cherian Varghese thanked all the speakers and closed the opening session of GARD General Meeting.

Panel – Asthma and COPD

Burden of Chronic Respiratory Disease in China

Dr. Weizhong Yang presented the recent results of a large national, cross-sectional study conducted in 2012-2014, the *China Pulmonary Health (CPH)* Study. The aim of the study was to provide sound estimates of prevalence and risk factors of asthma and COPD. The analysis was conducted on a representative sample of Chinese adults residing in six geographic regions in China.

According to the study, the estimated prevalence of COPD was 8.6% which corresponded to about 99.9 million adults. Smoking represented the most significant risk factor for COPD and followed by the exposure to PM2.5. Through conducting the study, researchers realized that the level of awareness of COPD and the screening rate were extremely low, especially in rural areas, which resulted in alarming underdiagnosis and therefore undertreatment of COPD. Similar results were observed in asthma. The *CPH Study* represented a first effective attempt to identify barriers to tackle CRDs, namely, the severe underestimation of their burden and the consequent lack of awareness.

China is extremely committed in the fight against CRDs, as demonstrated by many recent efforts in this area. For instance, the *White-Covered Book*, which listed recommendations to prevent and control CRDs, the above-mentioned *Healthy China Action Plan*, as well as the establishment of a WHO Collaborating Center for Tobacco Cessation and Respiratory Disease Prevention in 2016.

Asthma Management Update

Dr. Alvaro Cruz presented the latest data from the Global Asthma Report 2018. While there was a declining trend of asthma mortality, today, a significant number of people are still dying of asthma, especially those with lower socioeconomic status.

The Global Initiative for Asthma (GINA) has recently released guidelines for the treatment and control of symptoms of asthma, following the classic stepwise approach. The main update was shown in Step 2, where health professionals can choose between two options: either daily low-dose of inhaled corticosteroids (ICS), or a combination of ICS+formoterol as needed. The efficacy of the two options was demonstrated with high level of evidence. A therapy taken when needed may likely yield: an increase in adherence and a reduction in healthcare costs.

Another landmark update of GINA 2019 Guidelines was a greater attention to safety, compared to previous editions, resulting in the recommendation of ICS starting from Step 1, as opposed to the exclusive use of a short-acting beta-agonist. Not prescribing steroids relates to a higher risk of exacerbations, even in the mildest form of the disease.

COPD Management Update

Dr. Maria Victorina López Varela gave an overview of the Global Initiative for Chronic Obstructive Lung Disease (GOLD), which started in the '90s with experts gathered from all over the world to raise the awareness on COPD and to improve COPD diagnosis and management. GOLD produces a GOLD annual report, which is used as a set of guidelines for COPD management worldwide.

Recently, new evidence about young generation of people with CRDs was published. The future of COPD management is to target early diagnosis by screening individuals before the age of 40. Spirometry is paramount in the diagnosis and management of COPD. Dr. López Varela requested WHO to update the List of Essential Devices and the Package of Essential Noncommunicable Disease Intervention Toolkit (PEN), in order to include spirometers in the recommended action for COPD management.

The treatment of COPD is based on the use of long-acting bronchodilators, according to the ABCD Assessment. Recent evidence showed that even at the earliest stage of COPD, it is effective to prescribe two bronchodilators. However, in the daily practice, to define the optimal patient-specific treatment is dependent on patient-specific evaluation.

Comments were raised by the audience in regards to COPD patients who had no pulmonary obstruction nor with any chronic respiratory symptoms. Treating these patients at such an early stage of COPD may have a significant impact in reducing the risks of COPD exacerbation and/or death. In addition to focusing on environmental strategies to tackle air pollution, early diagnosis and early management is also a theme that was discussed amongst the GOLD Board of Directors.

Dr. Mina Gaga, emphasized the important role of spirometry in the diagnosis of COPD, and in the review-assess-adjust approach in the management of COPD. Furthermore, spirometry is superior to the measurement of the peak expiratory flow rate (PEFR) and it provides standardized results. Among the new trends in determining the correct treatment options, greater interest is directed to the blood eosinophil count as a proxy measure of airway inflammation. For example, a higher blood eosinophil count and a history of frequent exacerbations/hospitalizations may suggest the use of inhaled corticosteroids.

Strategies to prevent, control and manage COPD must recognize the importance of awareness, access to early diagnosis and treatment, as well as a discussion on adherence and patient self-management, through eHealth approaches.

Asthma and COPD Diagnosis and Management at PHC

Dr. Siân Williams presented the work of the International Primary Care Respiratory Group (IPCRG) and the importance of primary care in tackling CRDs worldwide. IPCRG comprises 34 member countries and reaches 150,000 primary care professionals globally. The IPCRG engages member countries and primary care professionals, the civil society and public

and private partners across the health system, to achieve better health outcomes. Their programmes range from health education, raising awareness, to implementation research.

Primary care is the first point of contact for patients and has a community-based approach, meeting 80-90% of individual needs in their lifetime. Improvements in the primary care systems may benefit the management of asthma and COPD greatly benefits, as it might lead reduction in hospitalizations, tackle inequality and other drivers of poor health outcomes. In addition, investing in primary care would result in advancing the work on universal health coverage globally.

Dr. Williams highlighted the instrumental role of primary care in preventing, diagnosing and managing (including palliative care) CRDs. Examples of IPCRG projects were given such as e-learning programmes to train primary care professionals worldwide on how to conduct spirometry correctly.

IPCRG's work on implementation research encompassed efforts to understand the needs of patients in different settings and to design the most appropriate interventions.

Finally, Dr. Williams proposed a set of recommendations for WHO and for GARD to build momentum for primary care, in order to effectively streamline the effort to fight CRDs.

Asthma and War

Dr. Yousser Mohammad discussed the impact of war on asthma, drawing on her experience in her home country, Syria. According to recent data, asthma was more prevalent in soldiers deployed in war zones, compared to soldiers serving in the US. Furthermore, surveys showed that the prevalence of asthma symptoms amongst 13-14-year-old Syrians has increased from 5% in 2003 to 20% in 2018. The situation was worsened due to the lack of access to essential medicines and diagnostics. While international donors are generous, CRD management is not considered a priority. Health systems in war zones were oriented towards emergency services with few health professionals available and health infrastructures in poor conditions, and hence national programmes for CRDs were often neglected.

The underlying reason for a higher prevalence of asthma in war zones was psychological, generated by new triggers and linked to displacement.

International parties contributed to reducing the burden of CRDs in conflict zones. For instance, the WHO recently added the area of noncommunicable disease in the Interagency Emergency Health Kit (IEHK) for natural disasters and complex emergencies. The WHO Syria Country Office and GARD-Syria have established a fruitful collaboration, which succeeded to publish national guidelines for CRD management.

However, one of the remaining problems was that IEHK and other guidelines only took into account the hot zones, and do not consider the rest of the population in a country in conflict. Dr. Mohammad urged the adaptation of IEHK, as well as other toolkit such as WHO PEN, to meet necessities, and to create regional asthma initiatives for the whole population of countries in conflict.

Tuberculosis and CRDs

Dr. Digambar Behera explained the long-term consequences of pulmonary tuberculosis (TB) and its connection to the development of chronic lung conditions. Many recent studies showed that even when TB was successfully treated, patients were at a higher risk of death from chronic pulmonary diseases, compared to those who had not developed TB. In fact, previous infection from Tuberculosis was associated with the development of chronic bronchial obstruction, restriction due to fibrotic processes, and lung impairment in general.

In a study conducted in India, a large proportion of patients treated for Multi-Drug Resistant (MDR) TB had persistent symptoms and showed residual radiological sequelae.

Among the chronic consequences of pulmonary TB, infection from *Aspergillus* was most common, and it may result in different phenotypes.

India is a country extensively burdened by TB; therefore, comprehensive strategies are needed not only to tackle the spread of the infection itself, but also to provide adequate support to patients who developed TB sequelae.

GARD Journey so far

Dr. Arzu Yorgancioglu, GARD Vice-Chair 2017-2019, walked participants through the history of GARD since it was first established in 2006 in Beijing, China. Before being officially founded, GARD was initiated as an initiative to respond to a WHA resolution to increase awareness about the growing epidemic of CRDs, in 2000. The Global Alliance against Chronic Respiratory Disease was approved by WHO in 2004 and the first General Meeting was held in 2006.

The objectives of GARD were established as follow:

1. Developing a standard way of obtaining relevant data on the burden and risk factors.
2. Advocating for action.
3. Encouraging countries to implement policies for health promotion and prevention.
4. Developing simple and affordable strategies for management.

During the first GARD Meeting in Geneva, in 2005, just before the first General Meeting, Dr. Jean Bousquet was elected GARD Chair and Dr. Nikolai Khaltaev was in the Executive Committee, as WHO-GARD Secretariat. In that occasion, 6 working groups were formed:

1. Burden, risk factors and surveillance of CRDs.
2. Health promotion and prevention of CRDs.
3. Diagnosis of CRDs.
4. Control of CRDs and access to drugs.
5. Pediatric CRDs.
6. Awareness and advocacy for CRDs.

The first elected committee had a global representation, including members from low- and middle-income countries (LMIC), to align with GARD's goal to support capacities in LMIC to fight CRDs.

According to the Terms of Reference to establish GARD in a country, some prerequisites should be satisfied, such as conducting a situation analysis on the status of the burden of CRD in the country, informing the Ministry of Health about GARD and inviting it to participate in its development, informing WHO Regional Office and WHO Representative in the country.

Dr. Yorgancioglu drew the attention to GARD resources including the "GARD Basket, a package of information, surveillance tools and guidelines, to be offered as a service to countries", in 2007.

Throughout the years, GARD has succeeded to establish powerful relationships that brought together health professionals to work on integrated CRD projects; GARD has reduced duplication of work and wasted resources. Future steps will involve preventing GARD and CRD programmes from becoming secondary to other NCDs, updating GARD Basket, and producing evidence of the achieved results during GARD's years of activity.

Dr. Yorgancioglu highlighted all success of the previous GARD General Meetings since its establishment and concluded with an overview of the objectives of the current 13th General Meeting in Beijing, China, including the *Beijing Call to Action for Lung Health Promotion*. She showed the large body of literature published by GARD and by GARD members, as a proof of the tremendous achievements of the Alliance.

Finally, Dr. Yorganciouglu thanked Dr. Jean Bousquet and Dr. Nikolai Khaltaev for leading GARD successfully for 13 years and gave good wishes to the new Executive Committee and Planning Group 2019-2021.

GARD General Assembly

Dr. Nikolai Khaltaev gave remarks as GARD Chair 2017-2019. He emphasized that it was time to make a difference. Recent analyses conducted in Geneva outlined the contributions of GARD. Mortality from CRDs has declined by 23% in high-income countries and 36% in middle-income countries, with an overall 24% reduction. GARD is present in many of the countries where mortality has been reduced, which is a proof of GARD's contribution to this important achievement. It was high time to exercise effective management to achieve the SDG Target 3.4: reduce premature mortality from noncommunicable diseases by two thirds by 2030.

GARD Governance and Office Bearers

Dr. Cherian Varghese gave an overview on the structure of GARD Governance: the main decisive body is the General Meeting, which elects the Executive Committee, with a management role, and the Planning Group, with a coordination role. Country-focus groups and Working groups have an advising role across the governing bodies. Decisions were usually made based on consensus.

For the past few months, the Executive Committee 2017-2019 and WHO have reviewed and identified candidates for the new Executive Committee and Planning Group. Dr. Varghese presented the candidates for each position:

Executive Committee 2019-2021

- GARD Chair: Dr. Arzu Yorgancioglu
- GARD Vice Chair: Prof. Chen Wang
- WHO Nominee: Dr. Mina Gaga
- General Meeting Nominee: Prof. Talant M. Sooronbaev
- WHO Representative: Dr. Cherian Varghese

Advisor to GARD Chair: Dr. Dean Schraufnagel on behalf of the Forum of International Respiratory Societies (FIRS)

Planning Groups 2019-2021

- Surveillance: Innes Asher
- Research and e-communication: Teresa To
- Treatment: GOLD/GINA
- Advocacy and partnerships: Alvaro Cruz
- Innovation and digital technology: Jean Bousquet
- Environmental health and CRDs: Giovanni Viegi
- Country support: Marina Erhola
- Patient group focal point: Letitia Harding
- Primary health care: IPCRG

- Pediatrics: Arunas Valiulis

Regional Focal Points 2019-2021 *(the following was proposed at the meeting, but subject to later confirmation and modifications)*

- Africa focal point: Elizabete Nunes
- America focal point: Sandra Gonzalez Diaz
- Eastern-Mediterranean focal point: Mohammad Reza Masjedi
- Europe focal point: Tamaz Maghlakelidze
- South-East Asia focal point: Digambar Behera
- Western-Pacific focal Point: Letitia Harding
- Portuguese speaking countries: Cláudia Conceição

Dr. Varghese asked the General Meeting if there was any objections to the proposed structure and candidates. Given no objections, the General Meeting approved the composition of the Executive Committee and Planning Group 2019-2021 by consensus. Dr. Varghese offered good wishes to the new office bearers.

Updates from the WHO

Mr. Issa Matta, Senior Legal Officer at the WHO Headquarters, provided details on the Terms of Reference of WHO partnerships and clarified about the role of GARD within WHO. Specifically, GARD is not a separate legal identity but rather, it is administered by WHO and hence its operations are subject to WHO rules, regulations and constitutions. WHO bears the political and reputational liability for GARD acts. While GARD and other WHO affiliated networks work on advocacy, mobilization of resources and dissemination, they are not tasked to develop normative technical guidelines. GARD is a platform intended to facilitate the implementation of the WHA resolution 53.17 May 2000, which led to the launch of GARD in 2006.

WHO provides technical leadership to GARD and has an enabling, facilitating and coordinating role, however, it is not a service provider to network members nor cater to individual interests.

With regard to GARD publications,, in general, WHO issues and disseminates data on GARD activities, including reports, information material and scientific work. If GARD members desire to publish about GARD activities, they must request approval from the WHO.

GARD communications are subject to WHO's authority too. Individual members cannot communicate on behalf of GARD or other members and, as a general rule, public communications should be conducted by the Secretariat (WHO).

WHO may accept funding from GARD members in accordance to its financial rules, regulations and policies. GARD members are encouraged to raise funds for network activities; these funds have to be channeled to the Secretariat.

Mr. Matta concluded by reminding members that it is important to keep focus on the original mandate of GARD and to strive to take decisions by consensus. To maximize country level impact , Mr. Matta reassured GARD members that WHO will continue to provide support and will pay a special attention to multi-stakeholder engagement involves civil society and communities.

Day 2 – 27th October 2019

(All PowerPoint presentations can be viewed at https://gard-breathefreely.org/ppt2019/)

Panel – GARD's Global Landscape

Obstructive Lung Disease – Work of NHLBI, USA

Dr. James Kiley gave examples on funded novel trials and ongoing implementation initiatives of the National Heart, Lung and Blood Institute (NHLBI), Division of Lung Disease in asthma and COPD. These projects spanned from mechanisms of disease to genotypic and phenotypic patient characterization. NHLBI activities aim at providing disease treatments tailored to an individual's unique genes and environment.

NHLBI also involves in advocacy action. For example, first COPD National Action Plan in 2017 was launched in collaboration with the Center of Disease Prevention and Control (CDC) and many COPD stakeholders, including patients and their caregivers.

CRDs in Mozambique

Dr. Elizabete Nunes summarized the status of activities conducted by GARD Mozambique in the country. Mozambique is a growing country, in terms of population, and is urbanizing rapidly. This resulted in a growing burden of NCD, including CRDs, in addition to the already existing epidemics from communicable diseases, especially TB, HIV, and Malaria. The most common risk factor for CRD was indoor air pollution. As much as 95% of households in Mozambique burn solid fuels for cooking, which contributed to high concentration of particulate matter $PM_{2.5}$. Outdoor air pollution was mainly caused by emission of CO_2 and lead by vehicles, especially in urban areas.

According to studies conducted in hospitals from different levels of care, asthma was among the most common diagnoses of CRDs. The *Mozambique Snapshot of Emerging Trends Disease Surveillance Study (MOZART)* showed that respiratory diseases accounted for a large percentage of all diagnoses made in tertiary care hospitals in several cities in Mozambique.

However, data came from narrative review, which was less reliable compared to systematic reviews of published literature. The lack of nationwide, community-based epidemiological data on CRDs, resulted in poor awareness and underdiagnosis of COPD. Furthermore, the difficult accesso to WHO Model List of Essential Medicines was another added challenge.

Future step include: implementing toolkits to strengthen the management of CRDs at the primary care level, such as WHO PEN, PAL or PACK.

CRDs in Mexico

Dr. Sandra González Díaz gave an update on the latest data on the prevalence of CRDs in Mexico. 7% of the general population had asthma, mostly developed before the age of 5; in Mexico, more than 3 million families had expenses exceeding 30% of their economic capacity due to asthma. According to the National Institute of Statistic and Geography, tobacco dependence continued to be an epidemic, affecting 9.7% of teenagers and 12.4% of adults, which accounted for almost 60 thousand deaths.

The prevalence of COPD is almost 8%, with a mortality rate of 66.3 per 100,000 population.

Since 2005, requests have been made to the Mexican Parliament to consider asthma and COPD national health priorities and to establish prevention programmes. Strategies for the detection of CRDs in Mexico included support groups for general practitioners, pediatricians, and patients, multidisciplinary joint networks between primary care doctors and specialists, education programmes, and mass awareness campaigns. Unfortunately, there remained significant challenges, such as underestimation and underdiagnosis of CRDs, limited resources for treatment in isolated regions and poor information about the issue.

Dr. González Díaz reviewed the main initiatives on CRD prevention and management carried out at the local level in several cities in Mexico. The primary objective of these programmes was to promote health education on CRDs and to engage communities and patients to work together and in joint efforts to tackle the CRD epidemic.

CRDs in Bangladesh

Dr. Kazi Bennoor presents data on the most important causes of death in Bangladesh. Chronic Respiratory Diseases account for 11% of the total mortality in the country. Given Bangladesh is a highly populated country, national mortality for CRDs made up a relatively large proportion of the global mortality for the same cause. In addition to asthma and COPD, other chronic lung diseases were also prevalent, which were associated with environmental exposures, such as tobacco smoke, indoor and outdoor air pollution, allergens, occupational hazards, and previous TB infections. Furthermore, effective actions against CRDs were hampered by health system related challenges in Bangladesh; for instance, low number of pulmonologists, lack of validated long-term respiratory training for primary care doctors, financial hardship faced by most people when accessing medical services.

According to the Global Air Report of 2017, the poor air quality in Dhaka – which was considered an 'extremely unhealthy' city – and across Bangladesh, claimed about 123,000 lives every year.

Other contributing factors of the high prevalence of NCD were of a socioeconomic nature: poverty, nutrition, misconceptions and social stigma, post infectious status.

The Bangladesh Lung Foundation (BLF) was the largest body of pulmonologists in Bangladesh, carrying out activities to tackle CRDs, in accordance to GARD priorities. BLF was committed to conducting major epidemiological surveys on CRD prevalence, disseminating knowledge, as well as organizing training programmes.

The ways to advance concrete actions against CRDs involved gradual behavioral changes from patients and physicians, the provision of validated training programmes for primary care health professionals, campaign against risk factors, linking primary care with secondary and tertiary care, encouraging patient groups for advocacy and sharing experiences.

POLLAR

Dr. Jean Bousquet presented POLLAR (Impact of air POLLution on Asthma and Rhinitis), a European Institute of Innovation and Technology Health (EIT Health) Project. POLLAR aimed at evaluating the impact of air quality on rhinitis and asthma and at promoting measures that helped people deal with problems caused by air pollution. Through emerging technologies and the use of smartphones and dedicated applications, users were able to check if air quality might represent a potential trigger of their allergies. The project aligned with EIT Health objectives of promoting healthy living, supporting active ageing and improving healthcare systems.

In the realm of eHealth on CRDs, many innovations have been and would be brought to the market. Give CRD represented a link between human health and planetary health, interventions targeted to remove risk factors of CRD would likely benefit the planet as well, with only few exceptions.

Among the most impactful initiatives in digital health technology, was the BeHealthyBeMobile, a WHO initiative that aimed at promoting mobile health (mHealth) to improve patient experience and to support patient self-management, in an effort to reduce direct and indirect costs associated with seeking medical care.

Tobacco and CRDs in China

Dr. Dan Xiao introduced the activities conducted at the WHO Collaborating Center for Tobacco Cessation and Respiratory Disease Prevention in China.

China was the world's largest producer and consumer of tobacco, accounting for 44% of the global cigarette consumption. Since 2003, smoking has remained the same among men and has increased among adolescents and young girls, with an overall prevalence of 26.6%. Tobacco was the leading risk factor of CRDs and lung cancer, as well as other noncommunicable diseases and infectious diseases (i.e. Tuberculosis).

To fight the epidemics, China has released clinical guidelines for smoking cessation treatment, which emphasized the idea that tobacco dependence was a chronic disease. Furthermore, China has ratified the WHO Framework Convention on Tobacco Control (FCTC), established smoking prevalence monitor, published many instrumental papers (including the *China Report on Health hazards of smoking)*, enacted 100% smoke-free law in more than 20 cities, initiated a vast awareness and sensitization campaign on the risk of tobacco, restricted tobacco advertising, and enforced important best buys, such as increased tobacco taxation.

In October 2019, China launched the *Healthy China Tobacco Control Action Plan*, which consisted 15 actions that the would improve health, including tobacco control to decrease smoking prevalence to 20% by 2030.

Panel – Priority Areas for Advancing the Work on CRDs

Dutch National Action Program on Chronic Lung Diseases

Dr. Emiel Rolink presented work of the Lung Alliance Netherlands (LAN) with a particular focus on air pollution and CRDs. The aim of LAN was better prevention and care for people with CRDs. LAN comprised 35 national organizations, including patients, professional, researchers, companies and corporate members.

In the Netherlands, the burden of CRDs was relatively high: of 16 million inhabitants, more than 1.5 million live with CRDs. Asthma is most common in children. The direct and indirect costs of CRDs amounted to € 4 billion per year.

The Dutch National Action Program on Chronic Lung Disease 2014-2018 led to 25% fewer hospitalizations, 25% fewer smokers among young people and a 20% increase in management of CRDs.

The vision of the Lung Health Agenda in the Netherlands was to 50% fewer new people with respiratory disease, maximal self-management with optimal support, optimal quality of life for people with respiratory diseases, including earlier and better diagnoses, better control, reduction of exacerbations.

To achieve the vision, the following actions were taken: teaching the correct use of inhalers, tackling risk factors, especially tobacco smoking in youth, strengthening the primary care system to reduce the need of hospitalizations.

The idea behind the advocacy action was to play on urgency and compassion, employing effective communication strategies to foster fruitful partnerships with partners, by showing the reality of patients' who live with CRDs.

Review of medicines for CRDs in the WHO EML

Dr. Giuseppe Troisi presented the most recent updates on the WHO Model List of Medicines (EML) 2019, focusing on the medicines acting on the respiratory tract.

The EML was a policy tool, used to promote affordable access to quality, safe and effective medicines and vaccines. With the EML, WHO aimed at supporting countries to expand access to medicines, promoting fair prices, developing solutions to shortages and stock-outs, and encouraging rational use. WHO also provided technical support for research and development of effective medicines based on public health needs. Finally, WHO aimed at strengthening the capacity of regulatory systems to fight the spread of substandard and falsified medicines.

In the 2019 list of medicines acting on the respiratory tract, WHO added *tiotropium*, a long acting antimuscarinic antagonist (LAMA). The rationale behind this modification was that LAMAs compared to long acting beta2-agonists (LABA) have a significantly greater effect in reducing risks of exacerbations and hospitalizations. Additionally, tiotropium had few side-effects and interactions with other drugs, and it was cost-effective.

The update to the EML can serve as an instrument to encourage an update to national clinical guidelines on CRDs at the primary care level. Additionally, the EML can be used as an advocacy tool to spot the light on CRDs, advancing lung health initiatives and mobilizing resources.

Dr. Troisi concluded by providing points for reflection: in the near future, the EML would likely include combinations of inhaled drugs, to promote better compliance to treatment; it would be used to update toolkits, such as WHO PEN; could be ideally expanded to incorporate biologic drugs.

CRD Management in Primary Care

Dr. Mina Gaga discussed the importance of managing patients with CRD at the primary health care (PHC) level. In the case of asthma and COPD, even though they were in the top three causes of death globally (2016), early detection, treatment and attention to prevention were often insufficient. Ideally, PHC would be the main platform that reaches the vast majority of people of the world who required primary health care. For this reason, it is crucial to equip the primary care system with the necessary skilled work force, technical capacities and medicines for respiratory diseases. In LMICs, the number of health professionals was too low to face the increasing burden of CRDs. Moreover, primary care doctors, nurses and health workers were not adequately trained in managing asthma and COPD. Therefore, it was necessary to establish linkages to specialized teams and to improve training programs for primary health care providers.

Of the resources lacked in PHC settings, spirometers were the most striking one. Spirometers were fundamental in diagnosing chronic respiratory disease, however, they were often unavailable.

An additional resource that is missing worldwide was a strong monitoring system that integrated indicators of progress for CRDs at the PHC level. As a result, data on CRDs were often just estimated rather than being systematically collected, and therefore hampered effective and/or accurate dissemination and advocacy efforts.

Digital health was a promising strategy to close the gap between NCDs and access to care, as it enabled patients to self-manage their conditions at home while having distant support from their doctors. Moreover, smartphones can be enhance with extended hardware and specific applications to transform them into a medical device, such as an ultrasound scanner.

Finally, it was fundamental to include respiratory health services in UHC benefit packages worldwide, integrating the management of CRDs with other NCDs or other chronic lung conditions like Tuberculosis. Patients with chronic diseases often live with from multiple conditions, therefore adequate management should be based on an integrated approach.

mBreathFreely

Dr. Jean Bousquet presented the Be He@lthy Be Mobile (BHBM) initiative, supported jointly by WHO and International Telecommunication Union (ITU). Since 2013, it has partnered with governments to address a global challenge around improving disease prevention by using mobile technology.

BHBM produced a comprehensive set of planning tools that were designed to improve the capacity of countries to implement sustainable mobile health (mHealth) programmes at scale. The group worked with global experts to develop handbooks for each disease area of focus, with the purpose of providing technical assistance to others who plan to implement a national mHealth programme. Each handbook contained information about programme management and operations, content development and adaptation, technology selection for message delivery, promotion and recruitment strategies for potential users, establishing systems for monitoring and evaluation, and other additional resources.

mBreatheFreely is the handbook aimed at providing guidance to governments and policy makers to develop, implement, and evaluate a mobile programme for the prevention and control of CRDs. It comprised a set of behavior change techniques to help persons at risk of, with, or caring for those with asthma and COPD, prevent and manage these conditions.

PAL Experience

Dr. Marina Erhola presented the importance of implementing integrated clinical guidelines like the WHO Practical Approach to Lung Health (PAL). PAL was a patient-centered approach to diagnosing and treating common respiratory diseases in the primary care settings. It sought standardized service delivery and promoted symptom-based and integrated management.

According to the results of PAL implementation in countries, PAL decreased the (unnecessary) referral of patients from primary care, to upper levels of care; improved the quality of the process of TB diagnosis; improved TB case detection; decreased inappropriate prescription of drugs, especially antibiotics; improved the quality of drug prescription for CRD patients; and reduced the average costs of drug prescription. Based on these results, it was reasonable to conclude that PAL was an approach not only contributed to improving the quality of life of patients with CRDs, but it was also cost-effective.

CRD Knowledge Translation

Dr. Alvaro Cruz provided the updates of the Practical Approach to Care Kit (PACK), a patient-centered toolkit, like PAL, that proposed an integrated approach to symptoms and patients. It was based on the principle of knowledge translation into practice. PACK focused on primary care physicians and on their needs; it focused on the moment of the consultation, on the educational outreach and on a 'bottom up' approach through empowering clinicians.

The PACK guide was published in 45 different editions and sold in hundreds of thousands of copies. It included more than 170 WHO guidelines with weekly updates and annual publication.

PACK was not just a set of guidelines, it also entails a rigorous training program, meant for primary care physicians to streamline the utilization of the toolkit.

To date, PACK has been successfully implemented in South Africa, and it was currently being scaled up in Brazil, Nigeria and Ethiopia.

Impact of smoking and tobacco control

Dr. Pekka Jousilahti summarized the impact of activities aimed at controlling tobacco smoking. Tobacco dependence was still a widespread epidemic, while it affected mainly men worldwide, alarmingly impacts have been observed in women, especially in very high-income countries. China and India were the countries with the highest number of daily smokers (2015), with an increasing trend from previous statistics reported in 1980.

Tobacco smoking was responsible of deaths from several chronic diseases, including heart disease, chronic respiratory disease, cancer, pulmonary infections, tuberculosis and diabetes. In addition, tobacco smoking was one of the leading causes of disability worldwide.

The beneficial health effects after stopping smoking were so striking that it was measurable and quantifiable.

The international community and the WHO, in particular, recognized that there were many communications and awareness-raising strategies to sensitize populations about the risks of tobacco. In addition, the WHO has also released technical packages to assist the implementation of anti-tobacco policies; for instance, MPOWER, based on: Monitor tobacco use and prevention policies, Protect people from tobacco smoke, Offer help to quit tobacco use, Want about the dangers of tobacco, Enforce bans on tobacco advertising, promotion and sponsorship, and Raise taxes on tobacco.

Tobacco is harmful not only for those who use it, but its effects also impact people who unwillingly inhale the smoke (secondhand smoking), as well as it contributes to outdoor air pollution.

Dr. Jousilahti reviewed interventions recommended by the World Health Organization that targeted to reduce the burden of tobacco smoking worldwide. 'Best buys' were cost-effective concrete strategies that promised a great economic return in exchange of a small investment upfront; for instance, increase the excise taxes and prices on tobacco products, or implement plain packaging or graphic health warnings on all tobacco packaging.

Tobacco is among the deadliest common health risks and it has negative impacts on the planet. Based on this, to stop smoking and eradicate tobacco is the most effective single measure to improve both public health.

GARD Plan of Action 2025 – How to advance GARD in countries?

Dr. Arzu Yorgancioglu and **Dr. Cherian Varghese** presented the methodology which would be used to guide the GARD Executive Committee and Planning Groups in the Plan of Action 2019-2021.

During the next two years, the Planning Groups will be converging into four thematic areas. These areas will be led by the focal points of the Planning Groups, and each GARD Member can express their interest to join one or more area and contribute to the activities.

The four thematic areas and their participants were established as follows:

1. Surveillance, Research and e-communications, Environmental Health and CRDs
    a. *Focal Points*: Innes Asher, Teresa To, Giovanni Viegi
    b. *Members*:
        i. Luis Taborda-Barata
        ii. Pedro Carreiro-Martins
        iii. Kazi Bennoor
        iv. Laura Carrozzi
        v. Marilyn Urrutia Pereira
        vi. Chen Wang
        vii. You-Young Kim
        viii. Elizabete Nunes
        ix. Emiel Rolink
        x. Pekka Jousilahti
        xi. Carlos Tietboehl-Filho
        xii. Lan Le Thi Tuyet
        xiii. Fabio Balli
        xiv. Yousser Mohammad
2. Treatment, Innovation and digital technology, Primary health care, Pediatrics
    a. *Focal Points*: GOLD/GINA, Jean Bousquet, IPCRG, Arunas Valiulis
    b. *Members*:
        i. Bilun Gemicioğlu
        ii. Lan Le Thi Tuyet
        iii. Ting Yang
        iv. Marylin Valentin Rostan
        v. Yousser Mohammad
        vi. Luis Taborda-Barata

vii. Pedro Carreiro-Martins
viii. Chen Yuzhi
ix. Talant Sooronbaev

3. Advocacy and partnerships, Patient group
    a. *Focal Points*: Alvaro Cruz, Letitia Harding
    b. *Members*:
        i. Emiel Rolink
        ii. Lan Le Thi Tuyet
        iii. Laura Carrozzi
        iv. Mina Gaga
        v. Carlos Tietboehl-Filho
        vi. Tonya A. Winders
4. Country support, Portuguese speaking countries
    a. *Focal Points:* Marina Erhola, Cláudia Conceiçao
    b. *Members*
        i. Rafael Stelmach
        ii. Carlos Tietboehl-Filho
        iii. Bernard Pigearias
        iv. Pedro Carreiro-Martins
        v. Marilyn Urrutia Pereira
        vi. Elizabete Nunes

Closing Ceremony

Dr. Arzu Yorgancioglu and **Dr. Cherian Varghese** thanked the Chinese Academy of Medical Sciences and the Peking Union Medical College for organizing a successful meeting and for hosting GARD Members in Beijing, China. On behalf of the newly elected Executive Committee and Planning Group 2019-2021, Dr. Yorgancioglu expressed excitement for the beginning of the work for the next two years and ambition to coordinate activities within GARD to tackle the burden of CRD. She was enthusiastic to see GARD grow with many additional countries and major respiratory societies represented within the Executive Committee and the Planning Group. Dr. Yorganzioglu and Dr. Varghese expressed their gratitude to Dr. Nikolai Khaltaev, former GARD Chair 2017-2019 for guiding GARD to this point, achieving outstanding results during his tenure.

Dr. Weijan Wang, Vice President of CAMS&PUMC gave the final closing remarks. Dr. Wang applauded the commitment of GARD members in fighting CRDs. Today, asthma and COPD have been an enormous global health challenge, therefore it was especially important to join forces to solve the issue. 13 years after contributing to the launch of the Alliance in Beijing, China once again was the host of the 13th GARD General Meeting, indicating the country's commitment to the shared mission in conquering CRDs.. Dr. Wang thanked speakers and moderators, who gave overviews and insights in crucial and fruitful topics. He especially praised the efforts made to adopt the *Beijing Call to Action for Lung Health Promotion*.

Dr. Wang concluded by thanking the GARD Secretariat at the WHO for liaising with CAMS & PUMC to organize the 13th GARD General Meeting.

Annexes

1. Programme

SATURDAY, 26 OCTOBER 2019

09.00-10.00	**OPENING SESSION** · Welcome remarks – Nikolai Khaltaev · Opening remarks – Vice Minister, National Health Commission, China · *Beijing Call to Action* – Chen Wang · Felicitations - Gauden Galea, Cherian Varghese	
10.00-10.15	**GROUP PHOTO**	
10.15-10.30	**COFFEE BREAK**	
10.30-12.30	**PANEL – ASTHMA AND COPD** ***Moderators*:** Arzu Yorgancioglu, Giovanni Viegi	
	· Burdens of Chronic Respiratory Diseases in China	Chen Wang
	· Asthma management update	Alvaro Cruz
	· COPD management update	Mina Gaga
	· Asthma and COPD diagnosis and management at PHC	Siân Williams
	· COPD and co-morbidities management	Zauerbeck Aisanov
	· Asthma and War	Yousser Mohammad
	· Tuberculosis and CRDs	Digambar Behera
12.30-13.00	**LUNCH BREAK**	
13.30-14.00	· GARD Journey so far - Arzu Yorgancioglu	
14.15-17.00	**GARD GENERAL ASSEMBLY** ***Moderators:*** Nikolai Khaltaev, Cherian Varghese, Issa Matta	
	· Remarks from GARD Chair · Updates from WHO · GARD Governance and Office Bearers · New GARD Members · AOB	
17.00-19.00	**WELCOME RECEPTION**	

SUNDAY, 27 OCTOBER 2019

09.00-10.30	**PANEL – GARD'S GLOBAL LANDSCAPE** ***Moderators:*** Giovanni Viegi, James Kiley	
	· Obstructive lung disease – work of NHLBI, USA	James Kiley
	· CRDs in Mozambique	Elizabete Nunes
	· CRDs in Mexico	Sandra Gonzalez-Diaz
	· CRDs in Bangladesh	Kazi Bennoor
	· POLLAR	Jean Bousquet
	· Tobacco and CRDs in China	Dan Xiao
10.30-11.00	**COFFEE BREAK**	
11.00-12.30	**e-POSTER SESSION** ***Moderators:*** Cherian Varghese	
12.30-13.30	**LUNCH BREAK**	
13.30-15.00	**PANEL – PRIORITY AREAS FOR ADVANCING THE WORK ON CRDs** ***Moderators:*** Pedro Carreiro-Martins, Mina Gaga	
	· Air pollution and CRDs	Emiel Rolink
	· Review of medicines for CRDs in WHO EML	Giuseppe Troisi
	· CRD management in primary care	Mina Gaga
	· mBreatheFreely	Jean Bousquet
	· PAL Experience	Marina Erhola
	· CRD Knowledge Translation	Alvaro Cruz
	· Impact of smoking and tobacco control	Pekka Jousilathi
15.00-15.30	**COFFEE BREAK**	
15.30-16.30	· GARD Plan of Action 2025 – How to advance GARD in countries? ***Moderators:*** Cherian Varghese, Giuseppe Troisi	
16.30-17.00	**CLOSING**	

2. e-Poster Session Programme

(All ePosters can be viewed at https://gard-breathefreely.org/resources-poster2019/)

1) **CRD Prevention and Control**
   a. *Building Awareness*
      - COPD in Turkey: Focus on Awareness
      - Establishing collaborations: the GARD-Community of Portuguese speaking countries (CPLP) working group
      - GARD ASBAI Report
      - CRD Prevention in Mexico
   b. *Management*
      - The feasibility and acceptability of a pulmonary rehabilitation program in patients with post-TB lung disease in Kyrgyzstan in framework of the Global RECHARGE Project
      - Change the visibility of CRDs
      - Strategy for an integrated management of respiratory failure
      - Prevention and Control of Asthma and COPD in Portugal
   c. *GARD in countries*
      - Georgia
      - Syria
      - Iran
      - Vietnam
      - Latin America
2) **Interventions on Air Pollution and CRDs**
   - The role of the Brazilian Thoracic Society combating environmental pollution
   - Air Pollution impacts on children's and adolescents' quality of life
   - The impact of Climate Change on pollination and prevention of Climate Change in Korea
   - Air quality, engagement and CRDs in New Zealand
   - Reduce air pollution through sharing responsibility
3) **CRD Knowledge translation and Research**
   - IPCRG – adding value to primary care
   - GARD initiative in Yakutia
   - Asthma-COPD Overlap Syndrome Management
   - Mutual Care Taking: Collectively Creating Our Respiratory Wellbeing With Open Sciences

3. List of Speakers

Last Name, First Name	Affiliations
Annesi-Maesano, Isabella	INSERM Research Director, France Director of Department of Epidemiology of Allergic and Respiratory Diseases (EPAR) at IPLESP, INSERM and Sorbonne University
Antó Boqué, Josep	Institute for Global Health, Spain
Aisanov, Zaurbeck	Department of Pulmonology, N.I. Pirogov Russian State National Research Medical University, Moscow, Russian Federation
Behera, Digambar	Professor, Department of Pulmonary Medicine, PGIMER, Chandigarh, India
Benoor, Kazi	Assistant Professor of Respiratory Medicine National Institute of Diseases of Chest & Hospital, Mohakhali, Dhaka, Bangladesh
Bousquet, Jean	Professor Emeritus, Pulmonary Medicine at Montpellier University, France Director, INSERM laboratory Immunopathology of Asthma Vice-President of the European Union-funded network of excellence GA2LEN (Global Allergy and Asthma European Network)
Carreiro-Martins, Pedro	Assistant Professor of Pathophysiology and Chair of Allergy Course Unit at Nova Medical School, Portugal Vice-President of SPAIC – Portuguese Society of Allergy and Clinical Immunology
Chen, Rui	Southeast University, China
Chen, Weihong	Huazhong University of Science and Technology, China
Cruz, Alvaro	Professor of Medicine, Department of Internal Medicine and Diagnostic Support, Federal University of Bahia, Salvador, Bahia, Brazil
Deng, Furong	Peking University, China
Erhola, Marina	Director General, National Institute for Health and Welfare, Finland
Gaga, Mina	President, European Respiratory Society
Galea, Gauden	WHO Representative for China
Gonzales-Diaz, Sandra	Scientific Chair Education and Training WAO GARD Coordinator Mexico
Huang, Cunrui	Sun Yat-sen University, China
Jousilathi, Pekka	National Institute for Health and Welfare, Finland
Kan, Haidong	Fudan University, China
Khaltaev, Nikolai	Chair, GARD
Kiley, James	Director of the Division of Lung Diseases at the National Heart, Lung and Blood Institute at the National Institutes of Health (NIH), USA
Liang, Xiaofeng	Deputy Director General, Chinese Center for Disease Control and Prevention, China
Mohammad, Yousser	Professor of Pulmonology, Tishreen University, Syria
Nunes, Elizabete	Associate Professor, Faculty of Medicine, University of Eduardo Mondlane

	Director of the Pulmonology Department, Maputo Central Hospital, Mozambique
Ran, Pixin	State Key Laboratory of Respiratory Disease, Guangzhou Institute of Respiratory Diseases, First Affiliated hospital, Guangzhou Medical University, China
Rolink, Emiel	Director, Lung Alliance Netherlands
Schraufnagel, Dean	Executive Director, Forum of International Respiratory Societies Professor of Pulmonary, Critical Care, Sleep, and Allergy, University of Illinois at Chicago, USA
Shi, Xiaoming	National Institute of Environmental Health, China CDC, China
Tang, Song	Associate Professor, Deputy Director, Department of Environmental Toxicology, National Institute of Environmental Health, China CDC, China
Troisi, Giuseppe	Consultant, World Health Organization
Tse, Lap Ah	The Chinese University of Hong Kong, China
Valiulis, Arunas	Professor, Vilnius University Institute of Clinical Medicine, Clinic of Children's Diseases & Institute of Health Sciences, Department of Public Health Executive Committee Member, European Academy of Paediatrics
Varghese, Cherian	Director a.i. Department of Noncommunicable Diseases, World Health Organization
Wang, Chen	President, Chinese Academy of Medical Sciences President, Peking Union Medical College Vice President, Chinese Academy of Engineering
Williams, Siân	Chief Executive Officer, International Primary Care Respiratory Group (IPCRG)
Wu, Shaowei	Peking University, China
Wu, Tangchun	Huazhong University of Science and Technology, China
Xiao, Dan	Head, WHO Collaborating Center for Tobacco Cessation and Respiratory Diseases Prevention
Yorgancioglu, Arzu	Head of the Department of Pulmonology, Celal Bayar University, Manisa, Turkey Vice-Chair, GARD

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