



COVID-19 pandemic alert: time to focus on lung health-Beijing call to action for lung health promotion

Global Alliance of Chronic Respiratory Diseases (GARD)

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Since December, 2019, the COVID-19 has influenced global health with more than 7 million confirmed cases and more than 400,000 death (1). This contagious virus spreads from person to person through aerosol inhalation and contact, indicating that like many other infectious disease, such as influenza or SARS or MERS, it is urgent and critical to focus on lung health and promoting people stay healthy.

Global headlines on lung health are often limited to Tuberculosis. Unlike heart or liver lungs do not get their due in the global and national health agendas. More than 80% of the people living in urban areas that monitor air pollution are exposed to air quality that exceed WHO guideline limits. 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 (NCDs). In 2017, an estimated 3.2 million deaths were caused by COPD (2). Tobacco smoking, indoor and outdoor air pollution, and a rapidly aging population are likely to increase the burden of CRD and more efforts are needed for prevention and with health promotion across the life course. In addition, for COVID-19 pandemic, around 5% COPD/asthma patients coinfecting with SARS-CoV-2 with high mortality and morbidity (3). Smoking increases ACE2 expression and make the COPD patients more vulnerable to SARS-CoV-2 infection (4) together with downregulated immune response to viral infection of COPD patients. Thus, for COPD patients during the current pandemic, stay home, avoid public exposure, wash hands and keep room ventilation, as well as keeping sufficient COPD treatment medicine available is crucial strategy to maintain their healthy status.

National guidelines are not sufficiently defined, disseminated and adhered to, leading to suboptimal outcomes

of treatment. Management at the primary healthcare level is challenged by the lack of medicines and personnel.

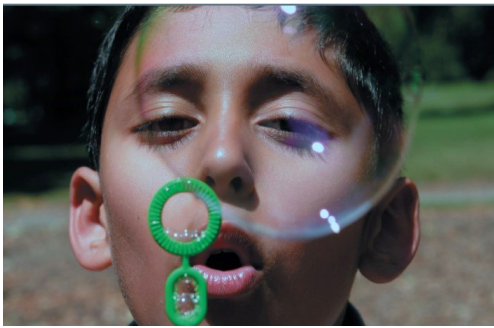
Global Alliance against Respiratory Diseases (GARD) is a voluntary alliance of national and international organizations, institutions, and agencies committed towards the common goal to reduce the global burden of respiratory diseases. The 13th general meeting of GARD was held in Beijing from the 26th to 27th of October 2019. The meeting adopted the ‘Beijing Call to Action for Lung Health Promotion’ with 4 key priority areas.

Advocating for action on chronic respiratory diseases

- ❖ Advocate at all levels of government to scale actions towards the achievement of the Sustainable Development Goal 3.4, ensuring that CRDs are firmly placed in the national response to NCDs.
- ❖ Ensure that leaders at all levels take responsibility for comprehensive local actions, together with the health sector, that can advance action for the control of CRD, as well as other NCDs.
- ❖ Acknowledge and support vulnerable high-risk populations, disproportionately exposed to modifiable risk factors, as a result of their gender, age, disability, socioeconomic status, education, sociocultural context, and any other factor that may influence their exposure to risk factors and their access to health services.

Fostering multisectoral action to reduce risk factors for CRDs

- ❖ Engage with multiple stakeholders to prioritize sustainable and long-term actions against CRD, through



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‘whole-of-government’ and ‘whole-of-society’ initiatives, and mainstreaming CRD prevention in all policies.

- ❖ Advocate for increasing excise taxes and prices on tobacco products, as well as for implementing other cost-effective interventions, to reduce the high burden of tobacco and the alarmingly rapid spread of Electronic Nicotine Delivery Systems.
- ❖ Promote intersectoral action to address indoor and outdoor air pollution, by engaging with a range of other sectors and identifying clean-energy strategies to shift away from kerosene, biomass and biofuel burning, and to reduce CO₂ emissions.

Strengthening primary health care for CRD to achieve universal health coverage

- ❖ Ensure that national Universal Health Coverage benefit packages include CRD services, including respiratory health promotion and prevention, as well as access to essential medicines and technologies, through the adaptation of the WHO Model Lists of Essential Medicines and Essential *in vitro* Diagnostics.
- ❖ Strengthen primary health services on CRD to ensure equitable coverage, including essential public health functions, such as tobacco cessation programs, pneumococcal and influenza vaccinations, with an adequate and well-equipped multi-disciplinary health workforce, based on task-shifting and task-sharing approaches.
- ❖ Identify opportunities in chronic-care platforms and promote an integrated and holistic approach to CRD, taking into account that patients often suffer from several conditions, simulating and/or exacerbating lung diseases, such as tobacco dependence, allergy, pneumonia, tuberculosis, cardiovascular diseases, obesity,

upper airway conditions, cancers, severe mental illness, depression and anxiety.

- ❖ Prioritize respiratory health and CRD prevention and control in the formal training provided to health professionals.
- ❖ Adapt standardized interventions for the management of CRDs at the PHC level, drawing from evidence-based recommendations and tools, such as the WHO Package of Essential NCD interventions.
- ❖ Empower patients with CRD in advocacy and self-care, including using appropriate tools, such as mobile health (mHealth).
- ❖ Recognize the importance of referral care and secure fast track for CRD patients who need respiratory specialist diagnoses and treatments, including pulmonary rehabilitation.

Supporting research

- ❖ Invest in identifying bottlenecks and challenges to the large-scale implementation of interventions to prevent CRD, in order to determine feasible solutions.
- ❖ Invest in translational and health system research for global application of proven cost-effective strategies especially in resource-constrained settings.
- ❖ Develop and implement internationally recognized indicators, at the health facility, sub-national, and national levels, to measure the burden of CRD and to monitor the quality of provided services and progress in averting CRD premature deaths.
- ❖ Investigate the intersection between social and environmental determinants of health and their impact on the management of CRD, with emphasis on the role of populations in conflict.

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References

1. Available online: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>
2. Available online: <https://indicators.report/targets/3-4/>
3. Guan WJ, Ni ZY, Hu Y, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. *N Engl J Med* 2020;382:1708-20.
4. Leung JM, Yang CX, Tam A, et al. ACE-2 expression in the small airway epithelia of smokers and COPD patients: implications for COVID-19. *Eur Respir J* 2020;55:2000688.

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