# The global alliance against chronic respiratory diseases Portugal: 10 years of experience

# José Rosado-Pinto<sup>1,2</sup>, Pedro Carreiro-Martins<sup>3,4</sup>

<sup>1</sup>Global Alliance against Chronic Respiratory Diseases (GARD) Portugal Coordinator, <sup>2</sup>Immunoallergy Department, Serviço de Imunoalergologia, Hospital da Luz, Lisboa, Portugal; <sup>3</sup>Portuguese Society of Allergy and Clinical Immunology (SPAIC), Lisboa, Portugal; <sup>4</sup>CEDOC, Integrated Pathophysiological Mechanisms Research Group, Nova Medical School, Campo dos Mártires da Pátria, Lisboa, Portugal *Correspondence to:* José Rosado-Pinto, MD. Immunoallergy Department, Hospital da Luz, Lisboa, Portugal. Email: rosadopinto@mail.telepac.pt.

Submitted Sep 12, 2017. Accepted for publication Sep 20, 2017. doi: 10.21037/jtd.2017.10.48 **View this article at:** http://dx.doi.org/10.21037/jtd.2017.10.48

The Global Alliance against Chronic Respiratory Diseases (GARD) is a voluntary alliance of national and international organizations and institutions supported by the Wold Health Organization (WHO). The implementation of the GARD national structure was recognized officially in September 2007 by the Portuguese Ministry of Health (MOH). For the first 5 years it was headquartered at the Portuguese Society of Allergy and Clinical Immunology (SPAIC) which supported the structure and secretariat. After 2012 GARD Portugal was integrated in the National Programme for Respiratory Diseases under the responsibility of the Portuguese Directorate General of Health (PDGH-MOH).

Back to the first 5 years period of GARD in Portugal, the main activities developed were: implementation of the GARD Alliance in the country; nomination of a GARD country coordinator; identification of partners; definition of the Terms of References and definition of an organized structure. After the nomination of the National Coordinator, the GARD Portugal collaboration parties were definedwithin the MOH: the National Asthma and chronic obstructive pulmonary disease (COPD) Programmes; outside of the MOH: representatives from professional associations and scientific societies (medical, pharmacists, pathophysiologists and nursing), chronic respiratory diseases (CRD) and public health experts, representatives from patient groups, nongovernmental social organizations, other institutions (professional representative and research scientific organizations). In total, 18 organizations were included in the project plus observers from the private pharmaceutical industry sector. To link all the information and activities,

GARD Portugal website was created in a period where GARD Portugal mission was to promote national and international collaboration in order to improve surveillance, prevention and control of CRD. The GARD objectives were then focused on: increasing in the general population awareness about the importance and the burden of CRD; promoting the surveillance, prevention and control of CRD in collaboration with other national and international partners; improving the quality and affordability of care to patients; improving the education and training of health care workers and personal dealing with CRD; coordinating the different initiatives of partners. During this period a strong collaboration was established between GARD and the Portuguese MOH.

The Portuguese translation of the GARD book: "Chronic Respiratory Diseases: a comprehensive approach" (1) was sent to all the MOH of the Portuguese Speaking Countries. This book is the support of the GARD strategy, and includes four chapters: (I) overview about the burden of chronic diseases, CRD as a major global health problem and the GARD as a mechanism for action; (II) characterization of four major CRD: asthma, COPD, sleep apnoea syndrome and pulmonary hypertension; (III) risk factor factors for CRD: causes and consequences, the role of tobacco smoking, indoor and outdoor air pollutants, allergens, occupational exposure, diet and nutrition, and post-infectious CRD; (IV) stepwise framework for action: the GARD approach, burden estimate, advocate for action, implement prevention and health promotion, diagnosis and control of CRD and allergies, identification of policy implementation steps.

GARD Portugal collaborated also in the document

which provided the main guidelines for the Portuguese MOH participation in the "Chronic Diseases" UN Summit in 2011. During this period GARD Portugal was a very active partner in the activities of GARD International with reports and presentations at the General Assembly annual meetings and the leadership of a GARD demonstration project in Cabo Verde. This project joined to an 18 years cooperation program between Portugal and Cape Verde MOHs in the field of CRD and allergic diseases. The program was focused in three main areas: (I) clinical assistance-primary health care (PHC) centers were equipped with nebulisers and spacers. Essential drugs and supporting guidelines were provided. At hospital level, Departments were equipped with spirometers and more than 4,000 patients were followed; (II) training-doctors, nurses and technicians were trained in Cape Verde and Portugal. The first allergologist in Cape Verde (the GARD Cape Verde Initiator) was recognized according to the national rules; (III) researchdifferent scientific papers were published, at national and international level (2,3). Officially the program finished in 2009, but informal cooperation still continues.

In 2012 GARD Portugal joined the new Portuguese National Programme for Respiratory Diseases (PNPRD) under the responsibility of the MOH, Directorate General of Health (4). The Action Plan of GARD Alliance was adopted as the first line of the PNPRD Vision. It aimed to establish a network of partnership and alliances at national level in order to obtain data on the prevalence of CRD and its risk factors and to collect information about sick and affected population. GARD is its main NPRD strategic referential and includes the most important CRD diseases: Asthma, Allergic Rhinitis, COPD, Sleep Apnoea Syndrome and also Pulmonary Hypertension, Interstitial Lung Disease and Cystic Fibrosis. The main objectives in these 5 years were to achieve a mortality decrease of 2% in CRD and a reduction of 10% in the hospitalization rate. In this sense, guidelines at PHC and Hospital levels, new legislation as the spirometry national network at PHC were implemented.

In 2015, at national level, respiratory diseases were the  $3^{rd}$  cause of mortality and were responsible by 11.8% of total deaths. The standardized mortality rate per 100,000 population was 0.5 for asthma and 12.2 for COPD (5). The prevalence of asthma in Portugal is around 10% and for COPD 14.2% (5).

In 2015, GARD Portugal in collaboration with the Portuguese MOH and the Portuguese Society of Pneumology (SPP) was in charge of organizing the 10<sup>th</sup> GARD General Assembly meeting, with the participation of delegates from 31 countries representing more than 60 organizations (6). The meeting was focused on the GARD global activities and was structured in four sessions: NCD prevention and control, CRD Regional and multinational collaboration activities, GARD integrated multidisciplinary activities and GARD education experience from other initiatives.

In April 2017, GARD Portugal promoted a seminar at the Portuguese Institute of Tropical Medicine about "Chronic Respiratory Diseases and Tuberculosis" with the participation GARD Executive Committee members and delegates from Angola, Brazil, Cabo Verde, Mozambique and Portugal. The seminar was organized with the following objectives: to increase the visibility and importance of CRD in Lusophone and international area; to advocate the integration of prevention and control of those diseases at PHC level; to provide an opportunity of discussing science in Portuguese Language; to lay the foundations for a future Lusophone GARD. The project will be presented during the next GARD General Assembly Meeting in Brussels (November 2017).

In conclusion: GARD Portugal activities over the last 10 years were focused on the specific needs at national level, dissemination of the information about the activities done in Portugal in connection with the MOH, the NPRD, SPAIC, SPP and other national organizations related with CRD. At international level an active collaboration with WHO and GARD Secretariat, international partners and Portuguese speaking countries representatives was developed. For ten years GARD Portugal contributed actively for the improvement of CRD outcomes and for a reduction of its burden at country level.

## Acknowledgements

None.

## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

#### References

 Khaltaev N, Bousquet J. Vigilância global, prevenção e controlo das doenças respiratórias crónicas: uma abordagem integradora. Lisboa, Portugal: Ministério

### Journal of Thoracic Disease, 2017

da Saúde - Direção Geral de Saúde de Portugal, 2008. Available online: http://www.who.int/gard/publications/ GARD\_Portuguese.pdf

- Martins P, Rosado-Pinto J, do Céu Teixeira M, et al. Under-report and underdiagnosis of chronic respiratory diseases in an African country. Allergy 2009;64:1061-7.
- Carreiro-Martins P, Rosado-Pinto J, do Céu Teixeira M, et al. Distribution and etiology of chronic respiratory diseases in primary healthcare departments in Cape Verde. Rev Epidemiol Sante Publique 2015;63:305-13.
- 4. Fonseca Antunes A, Bárbara C, Melo Gomes E.

**Cite this article as:** Rosado-Pinto J, Carreiro-Martins P. The global alliance against chronic respiratory diseases Portugal: 10 years of experience. J Thorac Dis 2017. doi: 10.21037/ jtd.2017.10.48

Portuguese National Programme for Respiratory Diseases/2012-2016. Lisboa, Portugal: Ministério da Saúde - Direção Geral de Saúde de Portugal, 2013

- Programa National de Doenças Respiratórias Relatório 2017. Lisboa, Portugal: Ministério da Saúde - Direção Geral de Saúde de Portugal, 2017.
- World Health Organization. Global Alliance Against Chronic Respiratory Diseases. 10th General Meeting. Geneve, 2015. Available online: http://www.who.int/gard/ GARDGMreport2015.pdf?ua=1