

Original article

Distribution and etiology of chronic respiratory diseases in primary healthcare departments in Cape Verde

Distribution et étiologie des maladies respiratoires chroniques au Cap-Vert dans des structures de soins de santé primaires

P. Carreiro-Martins^{a,b,*}, J. Rosado-Pinto^c, M. do Céu Teixeira^d, N. Neuparth^{a,b},
O. Silva^e, A.L. Papoila^f, N. Khaltaev^g, J. Bousquet^{h,i}, I. Annesi-Maesano^{j,k}

^a Serviço de Imunoalergologia, Hospital de Dona Estefânia, Centro Hospitalar de Lisboa Central, EPE, Lisbon, Portugal

^b CEDOC, Chronic Diseases Research Centre - Respiratory Group, NOVA Medical School / Faculdade de Ciências Médicas, Universidade NOVA de Lisboa, Campo dos Mártires da Pátria, 130, 1169-056 Lisbon, Portugal

^c Hospital da Luz, Lisboa, Portugal

^d Agostinho Neto Hospital, Praia, Cabo Verde

^e Dr. Baptista de Sousa Hospital, Mindelo, Cabo Verde

^f Departamento de Bioestatística e Informática, CEAUL, Faculdade de Ciências Médicas (FCM), Universidade Nova de Lisboa, Lisbon, Portugal

^g WHO/GARD Secretariat, Geneva, Switzerland

^h Department of Respiratory Diseases, hôpital Arnaud-de-Villeneuve, University Hospital, Montpellier, France

ⁱ Inserm, CESP Centre for research in Epidemiology and Population Health, U1018, Respiratory and Environmental Epidemiology Team, Villejuif, France

^j Inserm, UMR-S 1136, i-PLESP : EPAR, 75012 Paris, France

^k Université Pierre et Marie Curie, Paris 6, UMR-S 1136, i-PLESP : EPAR, 75012 Paris, France

Received 11 August 2014; accepted 3 June 2015

Available online 16 September 2015

Abstract

Background and objective. – Data on chronic respiratory diseases (CRD) are scarce or unavailable in most African countries. We aimed to determine the prevalence of CRD and associated risk factors in Cape Verde, at the primary healthcare level.

Methods. – In the frame of the Global Alliance Against Chronic Respiratory Diseases, a cross-sectional study was carried out in October 2006 in 3256 outpatients (2142 women) (median age of 30 years) seeking care at primary healthcare departments, through a standardized interview questionnaire during two weeks.

Results. – The prevalence of emphysema, tuberculosis, chronic bronchitis, rhinoconjunctivitis and asthma were 0.7%, 2%, 4.5%, 12.3% and 6.2%, respectively. Current smoking was associated with emphysema (OR: 3.36; 95% CI: 0.97–11.40) and tuberculosis (OR: 2.14; 95% CI: 1.07–4.30), ever exposed to a dusty workplace with chronic bronchitis (OR: 2.20; CI 95%: 1.50–3.21) and rhinoconjunctivitis (OR: 1.56; CI 95%: 1.23–1.98) and cooking or heating using an open fire with asthma (OR: 1.59; CI 95%: 1.16–2.19). The estimates of attributable risks percent indicated that, in the sample, a noticeable part of CRD could be attributed to active smoking, exposure to dust and biomass. Results varied according to gender, particularly regarding current smoking which was more important for men.

Conclusions. – Tobacco smoking, exposure to dust at work and using an open fire were important risk factors for CRD. Our results suggest that if actions were taken in order to reduce the aforementioned exposures, an important CRD decrease could be achieved.

© 2015 Elsevier Masson SAS. All rights reserved.

Keywords: Asthma; COPD; Tuberculosis; Rhinitis; Attributable risk; Smoking; Dust; Biomass

Résumé

Position du problème. – Peu de données épidémiologiques sont disponibles sur les maladies respiratoires chroniques (MRC) dans la plupart des pays africains. Nous avons déterminé, au niveau des structures de soins de santé primaires, la prévalence des MRC et les facteurs de risque leur étant associés dans la République du Cap-Vert.

* Corresponding author.

E-mail address: pmartinsalergo@gmail.com (P. Carreiro-Martins).

Méthodes. – Dans le cadre de la Global Alliance Against Chronic Respiratory Diseases (GARD), une étude transversale a été réalisée pendant 2 semaines en octobre 2006 parmi les patients accueillis dans des structures de soins de santé primaires. Les sujets ont répondu à un questionnaire standardisé administré par des personnels de santé.

Résultats. – Au total, 3256 patients (2142 femmes) (âge médian de 30 ans) ont participé à l'enquête. La prévalence de l'emphysème, de la tuberculose, de la bronchite chronique, de la rhino-conjonctivite et de l'asthme était de 0,7 %, 2 %, 4,5 %, 12,3 % et 6,2 %, respectivement. Le tabagisme à la période de l'enquête était significativement associé à l'emphysème (OR : 3,36, IC 95 % : 0,97–11,40) et à la tuberculose (OR : 2,14, IC 95 % : 0,1,07–04,30), l'exposition professionnelle aux poussières à la bronchite chronique (OR : 2,20 ; IC 95 % : 1,50–3,21) et à la rhino-conjonctivite (OR : 1,56, IC 95 % : 1,23–1,98), et la cuisson ou le chauffage utilisant un foyer ouvert était associé à l'asthme (OR : 1,59, IC 95 % : 1,16–2,19). Les estimations des risques attribuables (%) ont indiqué que, dans l'échantillon, une partie non négligeable des MRCs pourrait être attribuée au tabagisme actif, à l'exposition à la poussière et à la biomasse. Les résultats variaient selon le sexe, en particulier pour le tabagisme actif, plus important pour les hommes.

Conclusion. – Le tabagisme, l'exposition professionnelle aux poussières et l'utilisation d'un chauffage utilisant un foyer ouvert sont des facteurs de risque importants des CRD. Nos résultats suggèrent que des mesures de réduction de ces risques conduiraient à une diminution des MRC.

© 2015 Elsevier Masson SAS. Tous droits réservés.

Mots clés : Asthme ; Biomasse ; BPCO ; Poussière ; Rhinite ; Risque attribuable ; Tabac ; Tuberculose

1. Introduction

Chronic obstructive pulmonary disease (COPD) affects more than 210 million people worldwide [1], and asthma as many as 300 million. More than 400 million people suffer from allergic rhinitis [2]. However, these diseases are often underdiagnosed and undertreated, resulting in underestimation of their burden [3,4]. Data on chronic respiratory diseases (CRD) are scarce or unavailable in most African countries.

Tobacco smoking is the single most important factor in the genesis of COPD [5,6] and it seems to have also an association with tuberculosis [7]. Besides tobacco, other environmental risk factors are also well known for COPD, e.g. occupational exposure. A number of studies in Africa have shown that COPD is associated with workplace pollution and indoor air pollution from biomass fuel, which appears to contribute to COPD in women in developing countries [8]. Asthma and allergic rhinitis risk factors in Sub-Saharan Africa are even less known [9,10], especially for adults.

The aim of our epidemiological survey on CRD and related risk factors was to assess the burden of CRD at the primary healthcare level in Cape Verde. The secondary purpose was to identify differences in CRD distribution and etiology between men and women. The survey also provided specific training for professionals, facilitating the development of prevention and treatment programs.

2. Methods

This study resulted from an official protocol between the Ministry of Health from Portugal and Cape Verde and was included in the Global Alliance Against Chronic Respiratory Diseases (GARD) initiative [11], in accordance with the previously published protocol [12].

2.1. Study design

This was a cross-sectional study carried out in Cape Verde, in order to assess the prevalence of CRD (defined on the basis of

reported asthma, chronic bronchitis, emphysema, tuberculosis and allergic rhinitis) at the primary healthcare level, by estimating their point prevalence and to identify risk factors associated with them. Spirometric results from a small sample were published elsewhere [12].

The study and analyses reporting were conducted according to the STROBE (Strengthening the reporting of observational studies in epidemiology) initiative [13].

2.2. Setting

The study took place at Primary Healthcare (PHC) and Emergency Room Departments (ER) in Santiago and São Vicente islands (Cape Verde), in October 2006 during two weeks. All the PHC and ER Departments in Santiago and São Vicente islands were included in the survey.

2.3. Participants

The target population was constituted by outpatients older than six year's old seeking care at PHC and ER Departments in Santiago and São Vicente islands. Participants were selected using a consecutive sampling scheme, logistically the easiest methodology to implement. In this sense, all the outpatients attending all the PHC in Cape Verde were invited to participate in the survey by filling in a standardized questionnaire. In 2010, the population had a median age of 22 years and 50.5% were women.

2.4. Data source

Data were collected using a questionnaire administered by staff personnel trained and certified by the Cape Verde GARD team. The questionnaire included standardized questions about respiratory symptoms and diseases and risk factors (smoking history, type of cooking, ...) from the burden of obstructive lung disease (BOLD) initiative [14].

According to the standardized definition, chronic bronchitis was defined as the presence of cough and sputum production for

Download English Version:

<https://daneshyari.com/en/article/6155162>

Download Persian Version:

<https://daneshyari.com/article/6155162>

[Daneshyari.com](https://daneshyari.com)