SELF-REPORTED NON-ADHERENCE TO ASTHMA MEDICATION IN PORTUGAL

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Introduction

- Patient adherence compromises the efficacy of asthma maintenance treatment, with studies showing that nearly 50% of adults and children fail long-term medication, at any given time [1,2].
- There are many reasons and associated factors for poor adherence to asthma medication, such as those related to beliefs about medication, patient knowledge about the disease and economic reasons, among others [3].
- Knowing the extent and type of non-adherence behaviour is a first requirement for the design of effective and long lasting interventions.

Objectives

This study aimed to evaluate patient self-reported non-adherence to anti-asthmatic treatment, among Portuguese subjects with active asthma.

Methods

A cross-sectional national survey was carried out in 2011, to identify asthma prevalence, control and related determinants and health care utilization. Based on the methods of the Asthma Insights and Reality in Europe (AIRE) study [4], 401 subjects with active asthma were identified by systematic phone screening of a random digit dialing sample of households and mobile phone numbers.

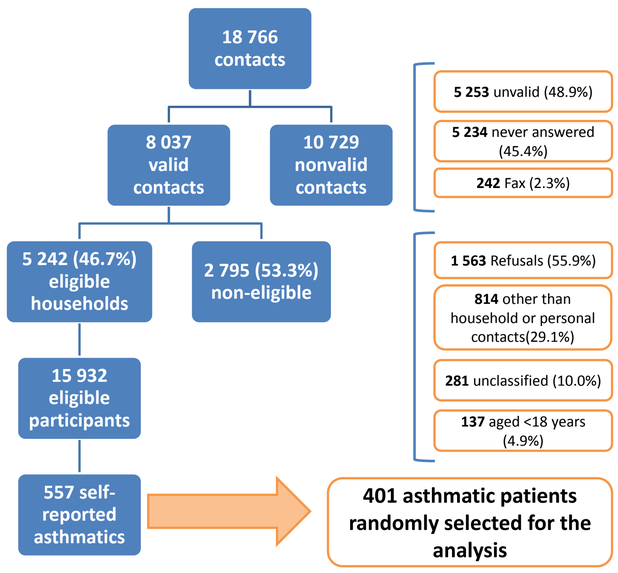

Figure 1. Study flowchart

Data collection addressed asthma control, use and adherence to anti-asthmatic medication, besides socio-demographic characteristics and other variables. Patients were classified as non-adherents when answering yes to at least one question of the 4-item Morisky scale [5]. An additional question concerning non-adherence due to running out of medication was also considered.

Table 1. Adherence questionnaire (adapted from Morisky et al [2,5]

In the last 4 weeks…	
1. Did you ever forget to take your asthma medicine?	Non-intentional non-adherence
2. Did you ever have problems remembering to take your asthma medication?	
3. If you felt better, did you sometimes stop taking your asthma medicine?	Intentional non-adherence
4. If you felt worse when you take your asthma medicine, did you stop taking it?	
5. Did you sometimes run out asthma medication? (additional question)	

Descriptive and bivariate analyses were performed to characterize non-adherence and association with asthma control. Statistical significance was set at <0.05, and analyses were conducted in R software.

References:

1. From the Global Strategy for Asthma Management and Prevention, Global Initiative for Asthma (GINA) 2014. Available: www.ginasthma.org
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4. Rabe KF, et al. Clinical management of asthma in 1999: the Asthma Insights and Reality in Europe (AIRE) study. Eur Respir J. 2000;16(5):802-7.
5. Demoly P, et al. Prevalence of asthma control among adults in France, Germany, Italy, Spain and the UK. Eur Respir Rev. 2009;18(112):105-12.

Acknowledgements: To the patients and research colaborators. The study received a competitive grant from the Portuguese Directorate-General for Health and Astrazeneca Foundation (Portugal).

Results

Study sample

Among the 401 patients with active asthma, 358 (89.3%) have done at least one asthma medication in the last 4 weeks, and 225 (56.1%) were prescribed with at least one controller medication. A total of 195 patients were currently on daily medication, with 86 (44.1%) men, mean age 39.7±23.1 years (21.5% aged <16 years) and 145 (74.4%) had their asthma controlled or partially controlled.

Frequency of self-reported non-adherence

Regarding self-reported non-adherence, 59 (30.4%) patients acknowledged that they used to forget to take medication. In the last 4 weeks, 37 (19.0%) patients said they had not done daily medication, and 10 (5.1%) admitted not having done medication for more than 7 days. Furthermore, 49 (25.3%) recognized that sometimes have they have run out of medication (Figure 2).

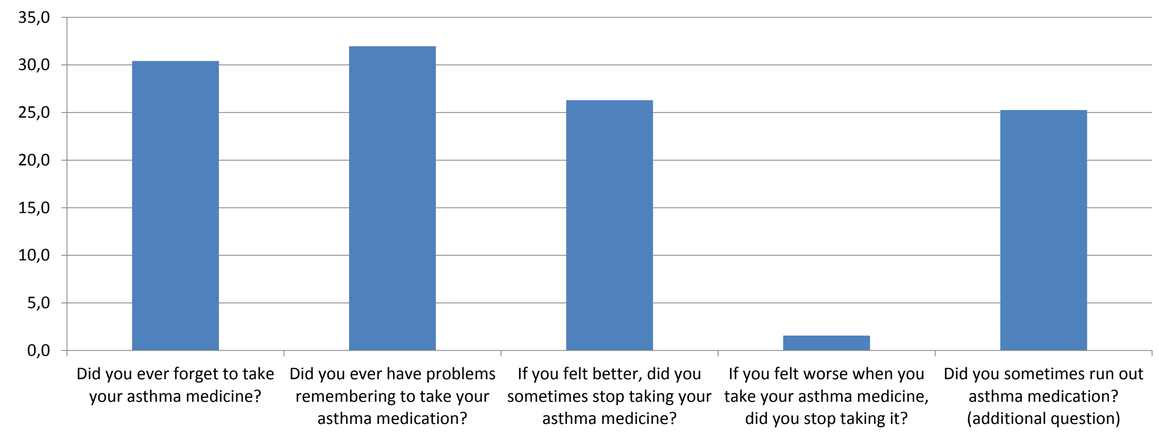

Figure 2. Frequency of self-reported non-adherence to asthma medication.

Based on the Morisky scale, self-reported non-adherence was 50.3% (n=98), from which 54 (55.1%) patients were intentional non-adherers, the majority 51 (94.4%) as a result of having interrupting medication when feeling better.

When considering the question related with running out of medication, non-adherence increased to 58.5% (n=114), especially among adults (63.4% vs. 40.5% among children <16 years, p-value = 0.01).

No association was found between asthma control and non-adherence (p=0.15 for both non-adherence classifications).

Reasons for self-reported non-adherence

From a defined list of possible reasons for non-adherence, the five reasons most often reported were the *lack of symptoms* (50.7%), the *difficulty to establish a routine for taking medication* (33.3%), *only needed relief medication* (22,7%), *cost with medication* (21.2%), and *being afraid of medication dependence* (20.9%).

Conclusions and recommendations

- Self-reported non-adherence was high and mainly due to intentional decision.
- Patient preferences and knowledge about treatment objectives should be assessed at medical visits, in order to maximize the benefit from prescribed medication.