



Allergologia et immunopathologia

www.elsevier.es/ai



ORIGINAL ARTICLE

Prevalence of allergic diseases in a sample of Taif citizens assessed by an original Arabic questionnaire (phase I) A pioneer study in Saudi Arabia[☆]

E.Y. Sabry

Asthma and Allergy Unit, Chest department-Kasr ALAini Faculty of Medicine, Cairo University, Egypt

Received 11 February 2010; accepted 3 May 2010

Available online 7 January 2011

KEYWORDS

Allergic diseases;
Questionnaire;
Prevalence

Abstract

Background: In recent decades, the prevalence of allergic diseases has markedly increased worldwide; however, there are still many cases which remain undiagnosed. Epidemiological studies have the potential to elucidate the prevalence and risk factors for these diseases.

Objectives: This study aimed at evaluating the capability of a new original non-translated questionnaire in Arabic language to determine the prevalence and severity of these diseases in a sample from Taif citizens. Thus, it could provide a framework as an initial step towards accomplishing the first national questionnaire-based survey study determining the actual prevalence of various allergic diseases in Saudi Arabia.

Methods: A detailed seven-section questionnaire including 143 closed questions covering almost all of the usual and unusual symptoms of various allergic diseases, in Arabic language, was handed out to 1050 subjects, from whom 877 (83.52%) questionnaires were completed; however, 23 questionnaires were discarded as they were not accurately filled in. Thus, 854 (81.33%) were enrolled in this study.

Results: Urticaria, allergic rhinitis with or without other co-morbidities, and atopic dermatitis were the most prevalent allergic morbidities, however, other allergic diseases could be diagnosed by the aid of the questionnaire. Likelihood ratio-evidenced agreement between diagnosis reached by the questionnaire and that reached by doctor occurred in 50 sample cases ($p < 0.0001$).

Conclusions: The questionnaire proved its capability in aiding the diagnosis of various allergic morbidities. It evidenced a high prevalence of allergic diseases in Taif city. This is an important health issue which requires strategic application of primary health care facilities to achieve adequate control.

© 2010 SEICAP. Published by Elsevier España, S.L. All rights reserved.

Introduction

Allergic diseases are common and increasing in prevalence, resulting in morbidity and mortality in all age groups, thus a

[☆] Presented as Poster in the WAO congress- Buenos Aires 2009.
E-mail address: ehsan.fr@yahoo.fr

clear understanding of the spectrum of allergic diseases and the accurate identification of environmental triggers can enable the doctor to recommend optimal allergen specific treatment, thereby minimising morbidity and mortality.¹

“Allergy Unit”, in Taif University is the first of its kind in all Saudian Universities. Since its establishment in 2007, the lack of awareness of many allergic patients about the presence of allergic co-morbidities that affected negatively their response to therapy has been noted. Moreover, many cases lacked knowledge about the allergic nature of their long-lasting troublesome symptoms because of misdiagnosis. Thus the Unit has a primary goal of increasing the awareness of Saudian citizens about the benefits of early diagnosis and competent management of various allergic diseases which unfortunately pass undiagnosed for years; years that count for the quality of life of those patients.

In the last few decades, the instruments most used to enable the investigation of population samples have been written questionnaires (WQs), both those applied by trained interviewers and those which are self-applied. Such procedures when standardised and validated locally facilitate temporal and regional comparison of the clinical and epidemiological data obtained.^{2,3} However, the questionnaires currently available include in their content questions focusing on one or few allergic diseases. This would not be beneficial in a city where the actual magnitude of the problem is unknown.

Therefore the purposes of this study were: (1) elaborate a new original non-translated Arabic language questionnaire in simple, direct and familiar language that could be easily understood and thus self-replied by respondents of all socio-economic and educational status; (2) describe the prevalence and severity of various allergic diseases in a sample of children, adolescents, and adults in Taif city, and to detect any prevalence differences between different age and sex groups; (3) obtain baseline measures to assess future health plans effects on prevalence and severity of these diseases; (4) provide a framework for the first national questionnaire-based survey study to determine the actual prevalence of various allergic diseases in Saudi Arabia that may reveal important risk factors; and (5) provide a questionnaire that could aid family physicians in their clinical evaluation, decisions and needs for referral.

Subjects and methods

Study sample and sampling method

Taif city

The study was conducted from April 2008 till March 2009 in Taif, a city at the gates of Mecca, and is located 1700-2500m above sea levels in Saudi Arabia. It is characterised by its dry climate almost all the year round, and cultivation of roses, grapes, grenades, and olives. One characteristic of the city, as with some of the Saudian cities, is that most of its citizens are from tribes which are the original natives of the country.

Sabry's Arabic Questionnaire for Allergy Diagnosis-143(SAQAD-143)

An original non-translated Arabic questionnaire (appendix), formed by seven sections, including 143 questions cover-

ing most of the usual and unusual symptoms of various allergic diseases was developed. Development was based on international guidelines for these diseases and data from the literature together with the effects on the quality of life.⁴⁻¹¹ This study was in compliance with the Helsinki Declaration and the Ethical Principles for Medical Research Involving Human Subjects. It was not financially supported. The questionnaire was either self-applied (by 54% of studied population) or was conducted by face-to-face trained interviewers (by 46% of studied population) in the Allergy unit.

An e-mail allergyunit@yahoo.fr was provided at the end of each questionnaire for further inquiries by the studied population.

Questionnaire testing

Fifty cases selected randomly were first supplied with the questionnaire to fill out and then were interviewed by the senior Consultant in the Unit (not necessarily on the same day), who was blinded to their questionnaire replies. Thereafter, comparison was performed between the diagnosis reached by the aid of the questionnaire and that reached by the Consultant. This allowed for questionnaire testing, to help to determine problems caused by the respondent's inability or unwillingness to answer the questions; to discover poor wording or ordering of questions; to identify errors in the questionnaire layout and instructions; to suggest additional response categories which can be pre-coded on the questionnaire in the future; and to provide a preliminary indication of the length of the interview and any refusal problems.

Questionnaire quality

Certain criteria were intended to be fulfilled while preparing the questionnaire: 1) inclusion of frequently encountered allergic symptoms, provoking factors and effect on quality of life; 2) reliability in discriminating between actual allergic from non-allergic symptoms; 3) simplicity i.e. short sentences, words which are simple, direct and familiar to all respondents. Questions with two to three possible answers for each question (yes-no- do not apply); 4) questions clear and as specific as possible with an overall questionnaire flow; 5) avoidance of any leading or loaded questions; and 6) questions which should be applicable to all respondents.

Survey target population

The target population were the Saudian students, employees and staff members in Taif University; the idea of this choice was that they represent different age groups and tribes and reside in different districts in Taif city. Moreover, they were encouraged to pass copies to others, thus allowing the inclusion of subjects aged less than 17 and more than 56 years, and those with different educational and socio-economic status. Explanation of the purpose of the survey was the duty of the Unit's trainee when handling the questionnaire. Moreover, any difficulty while completing the questionnaire and time needed to fill it was reported by the trainee.

Exclusion criteria

All questionnaires from non-Saudian citizens or those from other cities of the kingdom even if they were living in Taif city were discarded from the study.

Download English Version:

<https://daneshyari.com/en/article/3340031>

Download Persian Version:

<https://daneshyari.com/article/3340031>

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