



Allergologia et immunopathologia

Sociedad Española de Inmunología Clínica,
Alergología y Asma Pediátrica

www.elsevier.es/ai



ORIGINAL ARTICLE

Knowledge on asthma, food allergies, and anaphylaxis: Assessment of elementary school teachers, parents/caregivers of asthmatic children, and university students in Uruguaiiana, in the state of Rio Grande do Sul, Brazil

M. Urrutia-Pereira^a, L.P. Mocellin^b, R.B. de Oliveira^c, L. Simon^c, L. Lessa^c, D. Solé^{d,*}

^a Department of Medicine, Federal University of Pampa (Unipampa), Coordinator of Children's Asthma Prevention Program (PIPA), RS, Brazil

^b Division of Biomedicine, Epidemiology and Biostatistics, Department of Medicine, Federal University of Pampa (Unipampa), RS, Brazil

^c Department of Medicine, Federal University of Pampa (Unipampa), RS, Brazil

^d Division of Allergy, Clinical Immunology and Rheumatology, Department of Pediatrics, Federal University of São Paulo, SP, Brazil

Received 24 August 2017; accepted 14 September 2017

KEYWORDS

Students;
Teachers;
Parents;
Caregivers;
Knowledge;
Asthma;
Food allergies;
Anaphylaxis

Abstract

Introduction: Allergic diseases have become an increasingly common reality in the last years, extending beyond the family context.

Objective: Assessing the level of knowledge on asthma, food allergies and anaphylaxis of asthmatic children's parents/caregivers (PC), elementary school teachers (EST) and university students (US) in Uruguaiiana, RS, Brazil.

Method: 577 individuals (PC – N = 111; EST – N = 177; US – N = 299) took part in the study, answering the Newcastle Asthma Knowledge Questionnaire (validated for Portuguese) and another questionnaire on Food Allergy (FA) and anaphylaxis.

Results: Although PC have asthmatic children, their asthma knowledge level was average, slightly above that of EST and EU. The lack of knowledge on passive smoking, use of medications and their side effects should be highlighted. US have shown to be better informed about FA and anaphylaxis. However, even though a significant proportion of respondents know the most common symptoms of FA and anaphylaxis, few named subcutaneous adrenaline as the drug of choice for treating anaphylaxis. Although a significant number of respondents know about the possibility of anaphylactic reactions happening at school or in activities outside the school, we were surprised by the absence of conditions in schools to provide emergency care to such students.

* Corresponding author.

E-mail address: sole.dirceu@gmail.com (D. Solé).

<https://doi.org/10.1016/j.aller.2017.09.018>

0301-0546/© 2017 SEICAP. Published by Elsevier España, S.L.U. All rights reserved.

Please cite this article in press as: Urrutia-Pereira M, et al. Knowledge on asthma, food allergies, and anaphylaxis: Assessment of elementary school teachers, parents/caregivers of asthmatic children, and university students in Uruguaiiana, in the state of Rio Grande do Sul, Brazil. Allergol Immunopathol (Madr). 2018. <https://doi.org/10.1016/j.aller.2017.09.018>

Conclusion Despite the high prevalence of allergic diseases in childhood, asthmatic children's parents/caregivers, elementary school teachers and university students have inadequate levels of knowledge to monitor these patients.

© 2017 SEICAP. Published by Elsevier España, S.L.U. All rights reserved.

Introduction

According to the World Health Organization, allergic diseases are the sixth most common group of childhood diseases and represent one-third of all paediatric chronic illnesses.^{1,2} Besides health-related deficiencies, allergic diseases have a significant impact on children's daily life, particularly at school, leading to school absenteeism, reduced participation in sporting activities, diminished ability to concentrate, poor school performance, as well as stigmatisation and social exclusion.³

Among allergic diseases, asthma is one of the main reasons for seeking primary care, and it has been reported to cause over 13 million lost school days/year, compromising the development and acquisition of new knowledge and skills while performing school tasks.²⁻⁵

The prevalence of food allergies (FA) is estimated at 4-7%. These allergies predominantly appear during the first year of life, although they may manifest at any age, depending on the specific food to which the child becomes allergic. Clinical manifestations of FA are diverse, and they may occur at school if the child is exposed, accidentally or not, to the food to which she is allergic. The reactions may be very intense or even manifest as anaphylactic reactions in some cases.^{2,5}

Anaphylactic reactions are severe and potentially fatal allergic reactions. It is estimated that 82% of all anaphylactic reactions occur at school age, the main aetiological agents being food and hymenoptera insect stings.^{5,6}

As children stay at school for hours each day, it is vital that the environment to which they are exposed is well known, particularly if they are allergic.⁵ Evidence indicates that the professionals working at schools have insufficient knowledge about the negative impact of allergic diseases on the life of children and their relatives.^{7,8} Furthermore, most educational centres lack health professionals among their staff, the responsibility of caring for and supervising allergic children during acute episodes at school lies with teachers (9). Along with failures to communicate the child's condition to the school and/or with the lack of an action plan setting out the guidelines of how to proceed in case of emergency, this often puts allergic children at great risk.^{2,5}

Better self-management and knowledge on allergic diseases by both the child and those around her allow a reduction in exacerbations, urgent care, possible hospitalisations and school absenteeism, as well as improving participation in school activities, the child's integration with her peers, and her and her family's quality of life.^{5,10}

Taking this important situation into account, the aim of our study was to assess the level of knowledge on asthma,

FA and anaphylaxis among elementary school teachers, parents/caregivers of asthmatic children and university students in the municipality of Uruguaiana, RS, Brazil. The other objective was to evaluate the need to implement joint, complementary action involving families, teachers and health professionals in an attempt to improve the knowledge, training, information and management of allergic diseases in the school environment and in primary care, as well as in universities.

Patients and methods

The study included 299 university students (US) involved in the health sciences (medicine, nursing, physiotherapy, pharmacy and physical education) at the Federal University of Pampa (Uruguaiana Campus) with ages between 18 and 37 years (average: 30 years old), interviewed randomly. These students were grouped according to the course attended: medicine + nursing + physiotherapy (MNP), and pharmacy + physical education (PPE). All 183 teachers (EST) in Uruguaiana's State elementary school system were invited to take part in the study, 177 of whom actually participated in interviews (81.4% women, 65% over 45 years old). Besides these groups, 111 parents/caregivers (PC) of asthmatic children included in the Program for the Prevention of Childhood Asthma (PIPA)¹¹ (90% women, average age 35 years old) also took part in the study, having been interviewed when entering the program.

All participants answered the Brazilian Portuguese version of the *Newcastle Asthma Knowledge Questionnaire* (NAKQ),¹² which covers knowledge on asthma and has been translated and adapted to Brazilian culture,⁸ as well as a questionnaire about respondents' knowledge on FA and anaphylaxis.⁹

This research has been approved by the local ethics committee, and all students and parents/caregivers agreed to participate and signed a Declaration of Free and Informed Consent after being informed about the objectives of the study.

The answers obtained were transferred to an Excel database by double entry and presented as simple frequencies. Statistical analyses used non-parametric tests with a fixed 5% rejection level for the null hypotheses.

Results

University students

Ninety percent of the US reported knowing at least one symptom of asthma, 71% named an asthma attack trigger,

Download English Version:

<https://daneshyari.com/en/article/8735894>

Download Persian Version:

<https://daneshyari.com/article/8735894>

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