INTRODUCTION

• Peanut allergy (PA), a common type of food allergy, has become increasingly prevalent in recent years, particularly among children.1

• A recent large population-based survey estimated that 2.2% of all children and adolescents in the United States (US) have PA.2

• Individuals with PA who are exposed to peanuts can develop various symptoms that range in severity and onset. The most severe acute PA reaction is anaphylaxis, which may be life-threatening and requires immediate treatment.3

• The standard of care for PA has been to avoid peanuts and appropriately treat the symptoms of a reaction.4 With the first treatment for PA recently approved by the US Food and Drug Administration in January 20205 and other treatments under investigation, this may be changing.

• Given the potential severity of symptoms and need for close management, living with food allergies such as PA presents day-to-day challenges and concerns for allergic individuals and their families that can negatively impact health-related quality of life (HRQL).6-8

OBJECTIVE

The Peanut Allergy Burden Study (PABS) assessed the real-world burden of PA on patients and caregivers in the US. The objective was to understand the relationship between differences in demographic characteristics, PA experience, and treatment on dimensions of allergy-specific adolescent HRQL.

METHODS

Study Design and Population

Details on the PABS, a cross-sectional, online survey in the US, are shown in Table 1. The PABS survey was conducted in 2019-2020.

• Adolescents aged 13 to 17 years with self-reported, physician-diagnosed PA were recruited for the survey using commercial research panels.

• Prospective participants first completed a brief screening questionnaire.

• Those who met inclusion and exclusion criteria were eligible to complete the 20-minute survey.

• Inclusion criteria:

  • Aged 13 to 17 years
  • Agreed “completely” or “very much” with the following statement: “I avoid eating peanuts” (ie, use of emergency department, inpatient hospitalization, intravenous epinephrine, or intubation) to deal with PA reaction symptoms

• Exclusion criteria:

  • Aged 13 to 17 years
  • None of the 4 demographic and medical history variables (respondent’s age, sex, comorbidities, the number of food allergies) were found to be significantly related to FAQLQ-TF scores

Survey Measures

• FAQLQ-TF: a 23-item measure designed to capture patient experience across 3 domains: Allergen Avoidance, Emotional Impact, and Risk of Accidental Exposure (RAEI). A Total score was also calculated.

• Each item is measured on a 7-point scale of the FAQLQ-TF, with higher scores indicating poorer HRQL.

• The score on domains of allergy-specific quality of life as measured by the FAQLQ-TF are shown in Figure 1.

• Limitations imposed on daily life by their PA

• Surprisingly, the number of reactions (regardless of severity) in the last year and in their lifetime were significantly correlated with the FAQLQ-TF scores on the Emotional Impact, Risk of Accidental Exposure, and Total scores of the FAQLQ-TF.

• Correlations of FAQLQ-TF scores with demographic characteristics, PA-related medical and treatment history, and treatment experience and allergen avoidance were evaluated for their relationship with PA reaction variables.

• Correlations with the percentage of time respondents had access to an epinephrine autoinjector, medications due to PA, and treatment approaches were not significant.

• Correlations with the degree of control over PA were more significant, with the percentage of time respondents had access to an epinephrine autoinjector, medications due to PA, and treatment approaches being more significant. However, no correlation was found with the percentage of time respondents had access to an epinephrine autoinjector.

• Surprisingly, the number of reactions (regardless of severity) in the last year and in their lifetime were significantly correlated with the FAQLQ-TF scores.

• The relationships of FAQLQ-TF scores to 13 variables describing the patient’s experience with peanut reactions were evaluated. Only the severity of the most severe reaction in their lifetime was significantly correlated with FAQLQ-TF scores.

• The other variables included differences among the number of reactions they had experienced, time since reaction, and reaction severity.

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CONCLUSIONS

The PABS data indicate that adolescents experience significant allergy-specific HRQL burden due to PA. The relationships of FAQLQ-TF scores to 13 variables describing the patient’s experience with peanut reactions were evaluated. Only the severity of the most severe reaction in their lifetime was significantly correlated with FAQLQ-TF scores. The other variables included differences among the number of reactions they had experienced, time since reaction, and reaction severity.

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