

Food Allergy in Patients Seeking Mental Health Care: What the Practicing Psychiatrist Should Know

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Abstract

Purpose of Review This review provides an overview of food allergy among children and adolescents in the context of its impact on psychosocial functioning, and quality of life (QoL). **Recent Findings** The prevalence of food allergy is increasing. The burden of day to day management of food allergy is significant and can have a negative impact on QoL for both parents of those with food allergy, and the children themselves. This can impact social functioning, academic functioning, and mental health. Children with food allergy experience more bullying than peers. Greater internalizing of symptoms has been identified in adolescents with food allergy. Typical developmental considerations in the transition from adolescence to adulthood can be impacted significantly.

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Summary Those caring for children with food allergy should consider the impact of food allergy on the individual and family level within the context of social and emotional development.

Keywords Food allergy · Anaphylaxis · Anxiety · Depression · Bullying

Introduction

The purpose of this review is to highlight the clinical considerations important in the care of those with food allergies. As diagnosis of food allergy typically occurs during early childhood, this review will focus primarily on topics in childhood and adolescence. Prevalence estimates vary: approximately 4–8% of children are diagnosed with a food allergy [1–3], and the prevalence of food allergy is rising [4, 5]. During the last several years, more attention has been paid to psychosocial factors impacting children with food allergy, and their parents. Furthermore, the subject of bullying of this group of children, and potentially their parents, has been identified as a specific concern [6]. While recent literature focuses on the implications of psychosocial and mental health components of dealing with food allergy, more can be explored in terms of developing appropriate or effective interventions for these patients or these families.

Diagnosis and Course of Food Allergy Identification and Treatment

A food allergy is diagnosed based on the history of a clinical reaction after ingestion of the suspect food, with

documentation of IgE sensitization to that food by skin prick testing or in vitro laboratory testing. Due to the low specificity of IgE testing, the oral food challenge is considered the gold standard of diagnosis [7]. The physical reactions to an allergen include skin itching, hives and angioedema, oral itching, gastrointestinal distress including nausea and vomiting, coughing and wheezing, throat swelling, as well as feelings of panic. While some children may “grow out” of their food allergy, the risks continue into young adulthood for many [3]. Existing therapies to eradicate food allergy are limited. While there is growing data to support specific immunotherapy via the oral, subcutaneous, or epicutaneous route [8], primary interventions are avoidance of the trigger and carrying epinephrine auto-injectors to manage reactions acutely [3]. Federal law requires food labeling for these eight food types: peanut, wheat, soybeans, tree nuts, fish, eggs, milk, and crustacean shellfish [9], but patients find this labeling confusing [10•]. While epinephrine auto-injectors can be a life-saving intervention, individuals often do not understand the appropriate technique of injection, or when these should be used [10•].

Impact of Food Allergy for the Child and Family

Several studies have sought to evaluate quality of life (QoL) measures for those dealing with food allergy. Many find that dealing with a food allergy lowers QoL, both at the individual and family level [5, 11, 12•]. For example, management of a food allergy may make family gatherings, going out to restaurants, sleepovers at friends’ homes, traveling, and going to school anxiety provoking [12•]. Families may feel a need to limit any such activities, or may feel that other adults may not be supportive of, and responsive to, their child’s needs in the case of an emergency [12•]. Parents and children must investigate not only food labels carefully but also potential exposure from medications, toys, and personal care products. A study assessing parental feelings of empowerment in terms of management of food allergy found that mothers showed “greater empowerment” to care for their child’s food allergy than did fathers ($P < 0.001$). In the case of peanut allergy, mothers not only reported both “greater empowerment” but also lower food allergy-related QoL than fathers ($P < 0.001$) [11]. These authors note the particular concern of parents when dealing with management in settings outside of the home, where a child’s potential exposures are less known [11]. Using a cross-sectional questionnaire study to measure QoL, anxiety, and stress among parents of and children with peanut allergy, King et al. found that maternal trait anxiety and endorsed stress levels were significantly elevated, while fathers’ scores were not [13]. Children with peanut allergy in this study reported more separation anxiety than their siblings and reported that food allergy impacted their QoL at school.

Notably, King et al. also found that mothers reported that food allergy had a more significant impact on their child’s life than the child’s self-report indicated [13].

Direct social impacts of dealing with food allergy can extend beyond the limits incurred by avoiding allergen exposures intentionally in social settings and includes dealing with bullying [6]. In a study surveying patients aged 8–17 with food allergy, 45.4% of the children and 36.3% of the parents reported that the child had been bullied. Children who reported being bullied reported greater anxiety scores and lower overall QoL and social QoL [13]. Bullying may center on the fact that the child has a food allergy, may include verbal or physical aggression, and can even include purposeful exposure to the triggering food [6, 14].

Existence of Anxiety and Depression Among Those with Food Allergy and Their Families

As referenced by studies assessing QoL, the stress of managing food allergy can be associated with impairments in managing anxiety and mood symptoms. Some of this data can be conflicting, due to sample size and study methodology, but also due to discrepancy between parental and child reports of symptoms and impairment. Several studies describe increased levels of parental stress and anxiety surrounding the existence and management of the food allergy [12•, 15].

A recent study of inner city children aged 4–12 with food allergy found that the children endorsed higher levels of anxiety, but not depression, while their caregivers did not endorse higher levels of anxiety [15]. A study comparing questionnaire results in Italian 11–17-year-olds with and without food allergy found that adolescents with food allergy reported higher scores on items pertaining to internalizing problems [16]. A cohort study from Australia assessed self-report of mental health among adolescents with food allergy compared to their mother’s perception and found that mothers reported clinically elevated symptoms of depression, anxiety, and ADHD in adolescents with food allergy [17••]. Notably in this study, those with food allergy were at increased risk for symptoms of depression into adulthood [17••].

Impact of Managing Food Allergy on the Developmental Course of Patients

Balancing the need for appropriate levels of attentiveness to avoid potential exposures and allowing for the child and adolescent to engage in developmentally appropriate levels of activities are ongoing challenges for families [18]. Attending overnight camp, living away from home, and leaving for college are developmental milestones that may be more challenging for patients with food allergy and their caregivers. Due to

the potential lethality of accidental food exposure in those with true food allergy, parents may often find it difficult to leave their children in unsupervised settings. This may be especially true as adolescents begin spending more time with peers during adolescence, and transition to college and living away from home. Adolescents are at a particularly high risk of fatal allergic reactions due to risk-taking behaviors including ingestion of uncertain foods and hesitation in using epinephrine auto-injectors, but in survey data, they also report that they believe education of their peers regarding food allergy would be helpful [19]. Negotiating more independence in terms of management of appointments, refills, location, and expiration of epinephrine auto-injectors all come into play during adolescence and young adulthood [18].

Interventions and Support for Patient with Food Allergy and Their Families

Several interventions are highlighted in the literature to support children with food allergy, and their families. LeBovidge et al. utilized group intervention with structured workshops designed specifically for parents of children with food allergy, and separately for the food-allergic children. This study found significant increases in parent competence in allergy management and decrease in the “parent-perceived burden” of managing food allergy [20]. Cognitive behavioral therapy intervention targeting mothers, specifically, showed decreased anxiety, depression, and worry, and overall improved mental health and QoL [21]. Parental perceptions of self-efficacy in managing their child’s food allergy has been found to be associated with better QOL for the parent [22]. Food allergy support group models have been trialed in several centers, and support groups have been found to reduce parental anxiety about food allergies and increase comfort in managing their child’s food allergy [23].

A recent effort to assess anxiety utilizing psychosocial screening within the setting of a pediatric food allergy clinic screened all children ≥ 8 years old, as well as their parents. Investigators found that despite offering a free referral/assessment, screening did not improve follow-up with mental health care [24]. Effectively engaging those children and families who would benefit from further mental health evaluation and care is a challenge and requires further investigation to offer effective interventions, and improve outcomes.

Conclusions

It is important to acknowledge the understandable anxiety that occurs around the management of food allergies for both the child, and their parents and caregivers. The clinician must

acknowledge this in the assessment of impairments related to mood and anxiety. The idea of empowerment, as mentioned in the study by Warren et al., is an important one to consider, not just at the parental level. Empowering all adolescents through education, as food-allergic adolescents themselves may not feel comfortable educating peers, might increase their likelihood of being safe if exposed to an allergen (Sampson). Recognizing the families and food allergy patients at risk for mood disorders is important, but a further challenge is outlining effective strategies to reduce development of poor QoL and serious mood disorders.

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Compliance with Ethical Standards

Conflict of Interest Joanna Quigley declares no potential conflicts of interest.

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Resources FARE: Food Allergy Research and Education, foodallergy.org

National Institute of Allergy and Immunology: Guidelines for the Diagnosis and Management of Food Allergy in the United States, Summary for Patients, Families, and Caregivers, <https://www.niaid.nih.gov/sites/default/files/faguidelinespatient.pdf>

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