Stress and Anxiety in Families with Food Allergies

Amy Przeworski, Ph.D.
Assistant Professor
Case Western Reserve University
Outline

• Background on food allergies
• Child Stress & Anxiety
  o How to know if it is adaptive or maladaptive
• Child Social Impact
• Explanations for Overlap Between Child Anxiety and Food Allergies
• Parent Stress & Anxiety
• Parent Social Impact
• Therapy & Coping Techniques
Orientation To The Talk

• Based on research
  o Provides information about shared experiences—You and your child are not alone if you have these experiences.
  o Provides information about what to do to help families of children with a food allergy to cope.
So you're both allergic? I get that a lot.
Background

- 4.2% of 1-5 year olds and 3.8% of 6-19 year olds have food allergies to peanuts, milk, eggs, or shrimp (Liu, Jaramillo, Sicherer, Wood, Bock, Burks et al., 2010).

- Some children grow out of allergy by age 5 (DoH, 2006) but many allergies are lifelong (Primeau et al., 2000).
Background

• Daily threat of accidental exposure to allergen
• Extreme stress during allergy-related health crises (Cummings, Knibb, King, & Lucas, 2010).

• Level of stress may vary based on:
  o severity of allergic reaction,
  o method of exposure that leads to allergic response,
  o number and types of foods that one is allergic to.
Children’s Psychological Functioning
Psychological Functioning of Children

• Children with allergies, especially those with severe anaphylaxis, are often anxious.

• Children with food allergies report:
  • lower health-related quality of life,
  • more physical symptoms,
  • higher scores on some measures of anxiety (Lyons & Forde, 2004; Marklund, Ahlstedt, & Nordstrom, 2005; Calsbeek, Rijken, Bekkers, Dekker, van Berge Henegouwen, 2006; Ostblom, Egmar, Gardulf, Lilja, & Wickman, 2008).

• Separation anxiety, fear of negative future events, and anxiety about eating are common (Avery, King, Knight, & Hourihane, 2003; King, Knibb, Hourihane, 2009).

• Food allergies predict increases in worry and depression over time. (Shanahan, Zucker, Copeland, Costello, & Angold, 2014).

• Children with anxiety disorders have higher than expected rates of allergies (Kovalenko et al., 2002).
Child Anxiety

• Most anxiety for children between ages of 6-11 when they begin to understand their allergy (Mandell, Curtis, Gold, & Hardie, 2005).

• Some level of child anxiety may be protective, if it helps the child to be vigilant about exposure to allergens.

• But, it can also become extreme and interfere in the child’s life.
Indications of Child Anxiety

- Sleeping difficulties (nightmares, sleep walking, insomnia)
- Worry
- Physical complaints (stomachaches, headaches)
- Twirling hair, biting fingernails.
- Child looking drawn/worn down
- Repetitive behaviors (checking ingredient lists repeatedly, asking for reassurance that there are no nuts in the food, etc)
- Avoidance of situations that involve minimal risk.
Biological Explanations

• Suggested that a group of hormones (the alpha melanocyte-stimulating hormones, which are in the limbic system (the system responsible for regulating emotions)) is related to allergies and temperament (Arcus, 1994; Raap et al., 2003).

• Temperament: the degree to which a child is overwhelmed by new situations and their emotions vs relaxed and goes with the flow. Often anxious children shrink from new situations, feel emotions strongly, and struggle to regulate emotions.

• Others have suggested genetic link between allergies and anxiety (Wamboldt, Schmitz, & Mrazek, 1998).
  o One specific gene, 5HTT, a gene responsible for transmitting the neurotransmitter serotonin to and from cells in the brain, is involved in stress, depression, and immunological reactions (Timonen et al., 2003).
Psychological Explanations

- Children experience an allergic reaction and begin to fear the things that caused the allergic reaction (Feldman et al., 2000; Reznick et al., 1986).
- Parents may also model responses to possible allergens and exhibit overprotective behavior to reduce anxiety (Bender et al., 2000; Mrazek, Schuman, & Klinnert, 1998). Several studies have supported the notion that children may repeat their parents’ anxious responses to allergy-related stimuli (Butz & Alexander, 1993; Bussing et al., 1996; Slattery et al., 2002).
Anxiety or Allergic Reaction

• Children may confuse signs of anxiety with signs of an allergic reaction.
• Shortness of breath from anxiety, tingling in fingertips or toes, sweating, feeling hot or cold mistaken for anaphylaxis.
• Children may become so sensitive to physical symptoms that they become concerned that any physical change is an indication of an allergic reaction.
• Administer auto-injector when child is actually experiencing anxiety.
Anxiety is a problem if

- Interfering in child’s life
- Preventing child from doing things he/she wants to do
- Leading to poor social, family, or school functioning
- Causing a lot of distress
- Out of proportion to the level of threat
Psychological Functioning of Child: Social Impact

• If a child believes that their friends believe that asking about ingredients is not important, they are less likely to be as vigilant (Lyons & Forde, 2004).

• Bullying, teasing, and harassment related to food allergy, including being threatened with the allergen or being smeared with the allergen (Munoz-Furlong, 2003).

• Lack of understanding of others (Marklund, Wilde-Larsson, Ahlstedt, & Nordstrom, 2007); however, other adolescents have reported being in supportive environments (Marklund, Wilde-Larsson, Ahlstedt, & Nordstrom, 2007).

• Prescribing auto-injectors is associated with reduced anxiety for children with nut allergies and their mothers, but that was not associated with whether the child carried the auto-injector (Cummings, Knibb, Erlewyn-Lajeunesse, King, Roberts, & Lucas, 2010).
Discussion

- How has your child reacted since being diagnosed?
- Is your child aware of his/her food allergy?
- Any signs of worry or anxiety?
- Any social impact?
- How has your child coped with their food allergy and any associated anxiety?
- How have you interacted with your child about their food allergy and related anxiety?
Parents’ Psychological Functioning

Food Allergy Fun

Your child has a severe, life threatening nut allergy.

Oh no! What can I do?

Avoid nuts.

Does that include Grandpa?

www.foodallergyfun.com  TGF 2010
Psychological Functioning of Parents

• Parents of children with allergies have higher levels of stress (Bollinger, Dahlquist, Mudd, Sonntag, Dillinger, & McKenna et al., 2006).

• Parents of young children may experience greater distress (Williams, Para, Elkin et al., 2009).
Psychological Functioning of Parents: Initial Reaction

- Fear
- Traumatized by allergic reaction that led to diagnosis
- Parents vividly remembered their child’s early allergic reactions (Gillespie et al., 2007).
- Feel overwhelmed by the responsibility
- Desire to put your child in a bubble or never let your child leave the house
Psychological Distress Over Time

• Parents and children then adjust over time (Mandell, Curtis, Gold, & Hardie, 2005).
• Once found a way to manage allergy with a relatively high quality of life, no longer find it difficult on a daily basis (Gillespie, Woodgate, Chalmers, & Watson, 2007).
• Anaphylactic reaction-free periods lead to an reduction in anxiety levels (Mandell, Curtis, Gold, & Hardie, 2005).
• New situations, such as parties and school trips can increase anxiety (Gillespie, Woodgate, Chalmers, & Watson, 2007).
• Transition between adolescence and adulthood caused concern due to adolescent taking on additional responsibility (Gillespie et al., 2007; Rouf et al., 2011; Primeau et al., 2000)
Psychological Functioning of Parents: Too Much Responsibility

- Big responsibility (Rouf et al., 2011)
- Some reported difficulty trusting others with the responsibility or finding individuals who felt comfortable watching the child (King, Knibb, & Houirihaane et al., 2009; Rouff et al., 2011)
Psychological Functioning of Parents: Living with Risk

• Most cases of anaphylactic reactions occur outside of the home (Pumphrey, 2004): 25% in a restaurant, 15% at school or work.

• Similarly most fatalities were outside of the home (Pumphrey & Gowland, 2007).

• Reactions in restaurants were usually a result of cross contamination or unexpected ingredients (Furlong, DeSimone, & Sicherer, 2001) and people believed that the food that they were eating was safe (Sampson, Mendelson, & Rosen, 1992).
Psychological Functioning of Family: Social Impact

- Some parents restrict the family’s social activities to prevent accidental exposure (Bollinger et al., 2006).
- More than 30% of parents of children with food allergies make more than one visit per month to their child’s school to discuss their child’s allergy (Sicherer, Noone, & Munoz-Furlong, 2001).
- 10% of families in one study home-schooled their child because of their food allergy (Bollinger, Dahlquist, Mudd, Sonntag, Dillinger, McKenna, 2006).
- Those with food allergies have higher absences from school relative to healthy children (Calsbeck, Rijken, Bekkers, Dekker, van Berge Henegouwen, 2002, 2006).
Parents report frustrations related to unwillingness of others to accommodate their child’s dietary needs, inconsistent medical information, and mislabeling of foods (Mandell, Curtis, Gold, & Hardie, 2005).

Parents have reported hostility from school personnel and extended family (Mandell, Curtis, Gold, & Hardie, 2005), including some family and friends not believing that their child has a food allergy (Munoz-Furlong, 2003).

Mothers more often have the primary responsibility over their child’s food allergy (Mandell, Curtis, Gold, & Hardie, 2005) and mothers reported feeling alone and unsupported in the responsibility they take for their child’s food allergy (Mandell, Curtis, Gold, & Hardie, 2005).
Discussion

• What was your initial reaction at the time of the diagnosis of your child’s food allergy?
• How has that changed over time?
• Do you notice signs of your own anxiety or worry related to your child’s food allergy?
• Do you notice any social impact of your child’s food allergy on you?
• What steps have you taken to minimize the risk of your child’s exposure to allergens? How has this been received by others?
Therapy and Coping Techniques
Recommendations

• Should identify whether anxiety is specific to allergy or was present outside of the allergy.
• Either way, your goal is to manage the anxiety and ensure that there is a “just right” level of anxiety that maintains vigilance without interfering in life.
• Cognitive-Behavioral Therapy may help to reduce anxiety that is allergy-specific and anxiety that is present outside of the allergy.
Therapy: Cognitive Behavioral Therapy

- Cognitions, behaviors, and emotions impact one another.
Cognitive Behavioral Therapy

• Addresses anxious thoughts and anxious behaviors (such as avoidance)
• Teaches new coping techniques
• Techniques included are:
  o Relaxation such as breathing and muscle relaxation
  o Exposure to anxiety provoking situations (e.g., being separated from a parent).
  o Techniques to challenge negative thoughts (“No one will want to sit with me at the nut-free table.”) and to evaluate the accuracy of thoughts (“I can’t eat anything because it might have nuts in it.”) This includes evaluating the degree of risk.

Usually brief (16-20 sessions).

It works!!!
Risk Assessment

• Talk with your allergist about degree of risk involved in various behaviors. Use this information to remind yourself that you can’t avoid all risk or your child would never leave the house.
• Compare degree of risk to other risks (getting into a car accident, falling off of the monkey bars, etc).
• Recognize that good parents minimize risk while maximizing the child’s enjoyment of life.
• Examine your own degree of risk aversion and use that as a guide.
Parenting Behaviors to Watch for

- Subtly conveying anxiety to child (not allowing child out of the house, expressing anxiety about child being independent, nagging child)
- Directly expressing anxiety to child (“It makes me nervous when you go to parties.”)
- Overprotection conveys a lack of confidence in the child to the child.
Teach Your Child

• Important to consider developmental level
• Teach the child about:
  o their allergy,
  o signs of allergic reactions,
  o signs of anxiety vs allergic reactions,
  o accurate information about risk
  o what increases risk of exposure to allergens,
  o how to inquire about allergens in foods,
  o what ingredients to look for on labels,
  o not to be shy about asking about allergens
  o how to talk to friends, parents of friends, etc about the allergy
  o the use of auto-injectors
  o importance of carrying an auto-injector at all times
Teach Others

• School personnel
• Parents of your child’s friends
• Coaches
• Club leaders/troop leaders
• Siblings
• Grandparents, aunts, uncles, other relatives.
Remind Yourself

• You cannot shield your child from all risk. You can reduce your child’s risk while your child is young and teach your child how to reduce risk once your child is older.

• There is a very real risk involved in food allergies. But there are also very real risks involved in traveling in a car, walking down a street, going to school, playing on a playground. You teach your child how to cross a street safely but you cannot control all other drivers. Same thing with a food allergy.
Contact Information

- Amy Przeworski, Ph.D.
  Assistant Professor,
  Department of Psychological Sciences
  Case Western Reserve University

Phone: 216-368-5021
Email: axp335@case.edu
Website: http://psychology.case.edu/faculty/przeworski_amy.html
(Not those kind of peanuts!)