

BRIEF COMMUNICATION

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Family Functioning and Illness Perception of Parents of Children with Atopic Dermatitis, Living without Skin Symptoms, but with Psychosomatic Symptoms

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ABSTRACT

Emotional factors and a recurrent psychosomatic environment, have been implicated in the evolution of atopic dermatitis. These, in turn, affect the disease.

This study was under taken to evaluate the functioning of families with a child that has atopic dermatitis without skin symptoms and the parents' perceptions of their child's disease.

Semi-quantitative and cross-sectional study in which questionnaires were applied: one to study family functioning (Espejel et al. scale) and the second to determine aspects of parental perception of their child's atopic dermatitis. Pearson's correlation was used to analyze the correlation between the categories of the Family Function Scale.

The most affected categories of family functioning were authority, handling of disruptive conduct, communication, and negative affect. The most significant positive correlations between the categories of family functioning were: authority and support, $r=0.867$, $p<.001$; disruptive conduct and communication, $r=0.798$, $p<.001$; and support and communication, $r=0.731$, $p<.001$. Of the parents, 66.4% thought that the pharmacotherapy used for their child's atopic dermatitis was not effective, and 33.3% of parents stated that the disease had affected their child's daily activities.

In families of children with atopic dermatitis, various family environment factors facilitate the recurrence of symptoms even when no cutaneous lesions have been found on the child. The identification and use of family resources to face this disease are aspects that should be taken into consideration during the psychotherapeutic management of these families, putting emphasis on the most affected functional categories of these families in a strategy that should be implanted in a multi-disciplinary context.

Key words: Atopic Dermatitis; Family Functioning; Illness Perception; Psychosomatic Disease

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INTRODUCTION

Currently, it has been estimated that nearly 10% of children in the United States have atopic dermatitis¹. In Morelia, Mexico, prevalence rates of 10.1% have been reported in children aged 6 to 10 years and 5.4% in adolescents aged 11 to 14 years.²

The child with Atopic Dermatitis (AD) has a strong impact on the emotional and social well-being of his/her parents,³ but little is known about family functioning of the child who suffers from this disease but is free of “skin” symptoms. Studying this group of children and their family will aid in the characterization of family functional categories that are targets of psychotherapy action in these families, even when skin symptoms are not present, which is important when characterizing the recurrent psychosomatic environment that feeds the disease.

The current study had the objective of characterizing the functioning of families of a child with AD without skin symptoms and the parents' perceptions of their child's disease. The study was contextualized in the family and had a systemic orientation.

PATIENTS AND METHODS

Subjects

The Institute of Scientific Research on Family, Allergies, and Immunology (ICFAI) in Morelia, Mexico, maintains a database of 357 children (between the ages of 6 and 12) with allergic diseases. Of these children, we selected those with a confirmed diagnosis of AD by an allergist with at least one episode of disease activity in the previous two months and without any disease symptoms at the time of recruitment, who was living with his/her parents, and whose family agreed to participate in the study, with informed consent signed by the parents. The children with other chronic diseases were not included. The final sample included 12 families, and the study was conducted from January to April 2007. The research protocol was approved by the Ethical Institutional Commissions and the Investigations of the ICFAI.

Procedures and Instruments

This is a semi-quantitative and cross-sectional study. To evaluate family functioning, we used the scale of family functioning by Emma Espejel Acco et

al.,⁴ which is a validated instrument in the Mexican population and has a sensitivity of 0.91 for the discrimination between functional and dysfunctional families.

This instrument is composed of 40 items that measure aspects of the dynamic function and structural system of the family, such as territory, roles, hierarchies, limits, forms of conduct control, alliances, communication, affect, and pathology. The information collected was structured in nine categories: authority, control, supervision, affect, support, disruptive conduct, communication, negative affect, and resources. Each of these categories was evaluated and classified as functional, moderately functional, poorly functional, or dysfunctional. The Espejel et al. scale was validated (Cronbach's $\alpha=0.775$) in this study prior to its use.

To study parental perception with regards to their child's disease (AD), we administered a questionnaire that contain questions concerning triggering situations of the crisis, family history of AD, medical attention received by the child, impact of the disease on daily activities of the child with AD, and the diagnosis and treatment of the allergic disease.

Statistics

A confidence level of 95% was accepted for the measurements and Pearson's correlation was used to analyze the correlation between categories of the Family Function Scale.

RESULTS

Evaluation of Family Functioning

Table 1 shows the distribution of families according each category of the Espejel et al scale of family functioning. According to the average reached by the studied families the following categories of family functioning were considered at moderately functional level: control, supervision, affect, support and resources. They were placing at a poorly functional level in categories: communication, disruptive conduct and authority, and the average reached in negative affect category placing it between a poorly functional and moderately functional level. Taking into account the global scoring of the Espejel family functioning scale, the studied families were found as moderately functional and poorly functional at a proportion of 2:1. Table 2 shows correlations between family functioning categories that were explored in the Espejel et al scale.

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Table 1. Family functioning in families with a children with atopic dermatitis within skin symptoms

Category	Dysfunctional (%)	Poorly Functional (%)	Moderately Functional (%)	Functional (%)	Average (%)
Authority	-8	59	33	-	46
Control	-	58	42	-	51
Supervision	-	25	75	-	55
Affect	8	25	59	8	54
Support	-	17	59	33	60
Disruptive Conduct	-	92	8	-	45
Communication	8	42	50	-	49
Negative Affect Level	8	42	50	-	50
Resource	-	33	67	-	51

AUTHORITY CATEGORY: Evaluates its efficiency inside the family; considers as most functional those families in which authority resides in the parental sub-system and is shared by both parents

CONTROL CATEGORY (order): Evaluates how limits and methods of conduct control are handled.

SUPERVISION CATEGORY: Evaluates the functionality of rules and behavior surveillance.

AFFECT CATEGORY: Evaluates how the demonstration of feelings and emotions are presented amongst family members.

SUPPORT CATEGORY: The way in which members of the family provide social support inside and outside of the familiar group.

DISRUPTIVE CONDUCT CATEGORY: Evaluates the handling of socially unacceptable conduct such as addictions, problems with authority, or other emergent situations.

COMMUNICATION CATEGORY: Evaluates the type of verbal and non-verbal relations that occur within the family.

NEGATIVE AFFECT LEVEL: Evaluates the functionality of the presence of negative feelings and emotions inside the family.

RESOURCES CATEGORY: Refers to the existence of instrumental and affective potentials and the capacity of the family to develop and use them.

Disease Perception (Atopic Dermatitis) of Parents of Children with Atopic Dermatitis

When asking parents what their family believes contributes to their child's disease, 49.8% said environmental factors, 41.5% stress, and 8% genetic factors. Parents reported that the allergy manifestations appears after exposure to an environmental factor 66.4% or to a stimulus that leads to emotional stress 25%.

Although symptoms appeared during the first year for 41.5% of the sample and before 5 years of age for 67%, the diagnosis of atopic dermatitis was late in 34% of children, leading to delayed treatment of the disease. With respect to family history of AD, 16.7% of mothers and 25% of maternal relatives were diagnosed with the same disease.

Table 2. Correlations found between the categories of family functioning (Espejel et al. scale)

	Authority	Control	Supervision	Affect	Support	Disruptive Conduct	Communication
Supervision		0.629*					
Support	0.867**	0.647*	0.639*				
Disruptive Conduct		0.662*			0.665*		
Communication		0.610*		0.666*	0.731**	0.798**	
Negative Affect							0.736*
Resources		0.626*					

** Highly significant $P < 0.001$, * Significant $P < 0.05$. Pearson's correlation was used to study the correlation between categories of family functioning.

Only 83% of children with AD had received medical attention. Of the parents, 66.4% considered the treatment ineffective, and 41.5% stated that his/her child “had not changed” as a result of this disease; however, 33.3% of parents stated that the disease had affected their child’s daily activities.

DISCUSSION

It has been demonstrated that the psychological functioning of the caregivers of children with psychosomatic diseases is predictive of familiar adaptation and the child’s treatment adherence.⁵

With respect to the results obtained with the application of the Espejel family functioning scale, the majority of the families were found to be “poorly functioning” in the category of authority. We observed that in these families, authority was not shared by both parents even though it fell under the parental subsystem. In these families, the inadequate management of authority decreased the quality of relationships and deteriorated progress and family functioning, which was related to the absence of clear well-established and respected limits and to the poor functionality reached in the category of control. On the other hand, supervision of the observance of limits, norms, and the behavior of members were not adequate.

In terms of affect, we observed that families were “moderately functional”, and this was related to the poor functioning found in the category of authority. When the authority does not fall on both parents, this affects the amount of contact that the parents have with the child.

With respect to the category of support, families were “moderately functional”. This was the category in which the highest score was found. Support is one of the resources that a family depends on to pull through when faced with disease and daily problems in life. Furthermore, support is related to mutual hyperprotection and the need to show a solid union between family members, which is characteristic of families that display psychosomatic behavior.

For the handling of disruptive conduct, the families denied the existence of addictions, violence, or delinquent problems in the family. However, families were found to be “poorly functioning” in this category, which is related to the fact that these conducts are repressed by one member of the parental subsystem

(with little or no support of the other member of the parental couple). In the category of negative affect, families were also found to be poorly functional on average as anger was present among the members of the familiar subsystems and problems were only occasionally solved.

These families must strengthen the weak and often non-functioning communication to facilitate the sharing of affection and appropriate expression of emotions in a way that solution of conflict is less difficult. With respect to the category of resources, families were found to be moderately functional on average. This indicates that they used their instrumental and affective potentials as resources to pull through even when this effort was insufficient to accomplish the objective and often did not recognize the tools available to handle conflict.

Examining the global score and taking into account each of the categories, the moderately functional categories were twice as common as the poorly functional categories, which are related to the weak attempt of these to achieve family homeostasis.

With respect to the relations found between the categories of family functioning, authority had a highly significant correlation with support. In the studied families, authority was typically not shared by both parents, and this was related to the fact that the quality of support provided by family members inside and outside the family was weak. On the other hand, the control category had a significant correlation with supervision, communication, disruptive conduct, and resources.

This indicates that if the limits were not correctly established, there was poor surveillance of normal adherence and behavior, socially unacceptable behaviors were not effectively corrected, and the quality of verbal and non-verbal relationships among members led to the incorrect interpretation of messages, and the methods available for facing the crisis were not used.

The category of support showed a highly significant correlation with communication, which suggests that a higher quality of social support offered between family members was associated with the emission and reception of comprehensible messages by family members. We also found a highly significant correlation between the categories of disruptive conduct and communication, which is related to the fact that families in which communication was most

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effective faced inadequate behaviors such as addictions and daily emergent problems. These families were less rigid and had a more efficient psychotherapeutic relationship with the mental health team that conducted this investigation.

It caught our attention that half of the studied families attributed their child's dermatitis to environmental factors (sun, grass, dust, etc.) and to stress (particularly school-related stress). However, some families also noted that "allergies" may appear when such factors are not present.

When families were asked to participate in the study, the majority of the parents were eager to receive external help. Even though parents stated that their child had not changed as a result of the disease in 41.5% of the families, a third (33%) of them believed the disease had affected their child's daily activities. The child is not only affected in his/her daily activities but also in personality, as mentioned Lewis-Jones, 2006, embarrassment, comments, teasing and bullying frequently cause social isolation and may lead to depression or school avoidance in children with AD, this author also comment the use of the health-related quality of life (HRQoL) of children and their family for measuring among others psychosocial functioning of the child and their family.⁶

Even when the evaluated families were on average functional and moderately functional, considerable problems in the categories of communication, disruptive conduct, and authority were detected in their family functioning evaluation. This indicates that even though there were no cutaneous symptoms of the atopic dermatitis in the child, family factors may lead to psychosomatic behavior and the chronic state of the disease through the existence of an emotional environment that facilitates the recurrence of symptoms. This keeps the progenitors involved in the attempt to help the child.^{7,8}

The studied families had resources to face the problem, but they typically did not note their existence during periods of family crisis, such as when new lesions appear on the skin of the child with atopic dermatitis. Making use of these resources during psychotherapy sessions, with emphasis on the management of the affected categories of family functioning, is a strategy that should be analyzed in the context of a multidisciplinary approach to atopic

dermatitis. The burden of atopic dermatitis can be improved by targeting parents and caregivers with education, psychosocial support, and specialty care.⁹

We accept as limitation of the study that at the time of recruitment we had not patients under six years old in our data base, when atopic dermatitis was more frequent, and the small size due to a little number of families that fixed our inclusion criteria from above mentioned data base, but this preliminary results are currently used by our research team to design both further studies focused on the family and psychological treatment strategies to face the problem with emphasis in family therapy and placed on units of family medicine.

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