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## The Psychosocial Background Of Asthma And Panic Disorder

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### Abstract

Asthma, the chronic disease, shows increased prevalence in the last decades. Genetic and environmental factors also influence its development. Panic disorder (PD) is one of the most frequent anxiety disorders in asthma. Their common symptom is the difficulty in breathing. In my study I aimed to compare the family representations of asthmatic and panic disorder young adults and their family members with healthy young people's and their family members' representations to know more about the family structures and their mental processes. Gehring's (2010) Family System Test (FAST) was used by 3-3-3 families in my investigation testing all of the family members. There were four family members in all of the investigated families (parents and children). One of the children was concerned in asthma or panic disorder, while – in the control group – both of the children were healthy. I made both the quantitative- and qualitative analysis of the data to explore the differences between the subgroups. The results show that more pronounced differences are among the family members' representations in the patients' subsamples. The way we interpret the surrounding world has a powerful effect on our well-being and healthy status. The family has a particular influence on our development from birth to death. The organization and flexibility of this system and our place which is defined by the other family members' personality and communicative style collectively form the members in the level of the (sub)system(s) and teach him/her how to live and cope. Although the results seem to be remarkable, further studies are needed to explore the importance of the family representations in our life better, and the role of the other factors and their interactions also need to be researched.

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### 1. Introduction

According to the dynamic system approach, we are living in a continuous interaction with our environment. In this way, the organization of the family is one of the most significant factors that largely determines the members' bio-psycho-social state, and the members' individual characteristics also have repercussions on the operation of the

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family system. Sometimes, when the real problem of the family system cannot be shared among its members, the suppressed impulses would be expressed in a roundabout way. Thus the family member’s psychosomatic symptoms/syndrome may be the first sign(s) of the dysfunctional operation of the family. The interpretation of our state in the psychosocial environment can be understood by Figure 1.

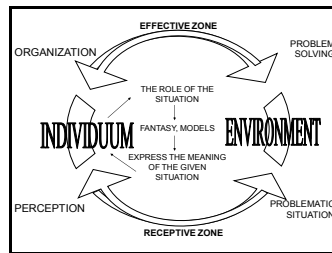


Fig. 1. “Situative cycle” by Uexküll and Wesiack (Storp, 2009, page 37)

But what are the indispensable conditions of a well-functioning family? As an open system, the appropriate level of the adaptive capacity seems to be a central element, because this ability is the prerequisite to flexibly adapting to the changing internal and external conditions. In this way, the problems with dynamic transformation and conflict management, the uncertainty of the boundaries between the subsystems, as well as the manifestation of the deficit of the communication in the interpersonal relationships are also about dysfunctional organization in the system and they can lead to symptoms (Minuchin, 1985). “The symptom... talks, communicates: it expresses a kind of symbolic meaning... combines, collects and summarizes the meaning of the characteristics and rules of its communicational and relational environment” (Onnis, 1993, page 10). „People cannot leave without communication, thus it is so important like breathing” (Buda, 1994, page 102). Heavy breathing may be the manifestation of the difficulties with communication among the family members, as well as the sign of the individual’s problems with his/her interpersonal relationships (Chiozza, Baldino, Funosas, & Obstfeld, 1998). The previous studies (Kelen, 1982; Kopp & Berghammer, 2009) are about dysfunctional and/or more rigid family structures by patients with heavy breathing, but these studies focused only on one person from the family system and did not compare the family members’ representations with one another, furthermore they did not look for optional connection between asthma bronchiale and panic disorder. This study is the first step to fill these deficits and try to highlight these phenomena from a new perspective.

## 2. Asthma bronchiale and panic disorder

Asthma bronchiale (AB) is one of the “classic seven” known psychosomatic disorders. The most frequent psychiatric disorder among patients AB is panic disorder (PD) with 6.5 to 24% prevalence (Peski-Oosterbaan, Spinhoven, Van der Does, Willems, & Sterk, 1996; Szendi, 2009). Thus both of the signed illnesses can be characterized by heavy breathing, and stress is also a major factor in AB and PD. However – based on Bárdos’ (2003) four-dimension coping model -, asthma is really a psychosomatic disorder, while PD is partly regarded as a somatic disorder. So while AB is a pure inwardly oriented, suppression-based disease, PD is rather an outwardly oriented disease with some elements of awareness (see Figure 2).

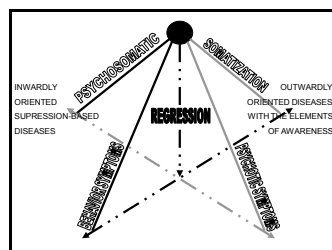


Fig. 2. Bárdos' four-dimension coping model (Bárdos, 2003, page 197)

### 3. Methods

#### 3.1. Participants

There were four family members in all of the three investigated families. All of the children were young adults (age: 18 to 26 years) and one of them was concerned in asthma or panic disorder, while – in the control group – both of the children were healthy. The parents' were middle-aged persons (age: 41 to 54 age), whose social-cultural background was similar to each other.

#### 3.2. Materials

I used Gehring's (2010) Family System Test (FAST) to know more about cohesion and hierarchical relationships in connection with the families that were involved in my study (see Figure 3). My aim was to compare the family members' representations about their family and its subsystems to one another.



Fig. 3. The test material of Gehring's (2010) Family System Test (FAST)

#### 3.3. Procedure

In this study FAST was used by the persons in an individual form. There were three represented situations: (1) a typical (2) an ideal and (3) a conflict one. The participants represented their family members on a rectangular board using natural coloured wooden figures (6 male and 6 female figures) to symbolize the family members and the cohesion between them. Then the respondents put height extension discs under the figures family to show the members' power and influence in the given situation. In the subtest, the family members' personal attributes were also expressed by changing the natural coloured wooden figures for orange, blue or pink characters.

### 4. Results

The results explored more differences among the family members' representations in the investigated subsamples. The asthmatic group's representations gave characteristic perceptual patterns. The next – randomly chosen – three families' results from the involved nine illustrate well the different mental representations of the given situations and organization of the family system in the demonstrated verified situations. While the PB-patient and her family members perceived the structure of their family in different ways, people with AB were prone to think about their family structure in a similar way as it was demonstrated by his family members, which tendency could be observed in all the levels of the family system (see Figures 4, 5, 6).

STATIC FAMILY REPRESENTATIONS	Healthy people			Sibling			Mother			Father		
	T	I	C	T	I	C	T	I	C	T	I	C
Level of the family system			■		■	■	■	■	■	■		■
Level of the parents' subsystem	■	■	■		■	■	■	■	■		■	■
Level of the siblings' subsystem	■	■	■	■	■	■	■	■	■	■	■	■

BalancedUnstable-balancedUnbalanced

Fig. 4. An example for the possible family structure representations in a healthy family (T: typical situation; I: ideal situation; C: conflict situation)

It is remarkable that the similarity of the typical and ideal situations was demonstrated more frequently by AB-patients, while the other families' members rather felt similar to one another in the conflict situation and in the typical or/and ideal situations.

STATIC FAMILY REPRESENTATIONS	Asthmatic patient			Sibling			Mother			Father		
	T	I	C	T	I	C	T	I	C	T	I	C
Level of the family system			■		■	■	■		■			■
Level of the parents' subsystem	■	■	■		■	■	■	■	■	■	■	■
Level of the siblings' subsystem	■	■	■	■	■	■		■	■	■	■	■

BalancedUnstable-balancedUnbalanced

Fig. 5. An example for the possible family structure representations in a family with an AB-patient (T: typical situation; I: ideal situation; C: conflict situation)

Actually, the PD-patient's mental representations about her family structure demonstrated the largest difference to her elder sister's, mother's and father's family structure representations.

STATIC FAMILY REPRESENTATIONS	Patient with panic			Sibling			Mother			Father		
	T	I	C	T	I	C	T	I	C	T	I	C
Level of the family system	■					■	■	■	■			■
Level of the parents' subsystem	■			■		■	■	■	■		■	■
Level of the siblings' subsystem	■	■			■	■		■	■	■	■	■

BalancedUnstable-balancedUnbalanced

Fig. 6. An example for the possible family structure representations in a family with a PD-patient (T: typical situation; I: ideal situation; C: conflict situation)

The qualitative analysis of the data showed difference really (1) between the current and previous typical situations in the life of the family, (2) in the associations that were connected to the use of the colour figures by the participants. While healthy people expressed a wider range of their emotions linking to the given family members and associated more diversified characteristics to them, patient were rather prone to say fewer features. In this way, AB-patients preferred the female blue figure to symbolize their mother and their ambivalent relationship with her and PD-persons often used the orange wooden figure to express their mother's actual mood and angeriness.

## 5. Discussion

In my study I aimed to compare the family representations of asthmatic and panic disorder young adults and their family members with healthy young people's and their family members' representations to know more about the family structures and their mental processes. Gehring's (2010) Family System Test (FAST) was used by 3-3-3 families in my investigation. There were four family members in all of the families (parents and children). One of the children was concerned in asthma or panic disorder, while – in the control group – both of the children were healthy. The presented cases illustrated well the involved families' results and highlighted the differences among the family members' mental pictures/representations and – as a bio-psycho-social background - its role in the genesis of the given disorders.

It is unquestionable that the family has a particular influence on our development from birth to death. The organization and flexibility of this system and our place which is defined by the other family members' personality and communicative style collectively form the members in the level of the (sub)system(s) and teach him/her how to live and cope. In accordance with Kopp and Berghammer's experience (2009) and Kelen's (1982) results, I also found a more rigid family structure in asthma. The reason is that the similar representations in typical, ideal and conflict situations are about dysfunctional organization, which phenomenon could be observed by the asthmatic patient and his family members. Furthermore, open systems need to be able to change by time, that happening in the system results in different opinions and perception about the experience. In this way, the patient may change his/her organization and copy strategies and that can be also manifested in some kind of symptoms. The verified experiences were also projected by the colour figures demonstrating the general mood and statements in the given families.

Finally, not all of the people from the given social environment become ill. Although the results seem to be remarkable, further studies are needed to explore the importance of the family representations in our life better, and the role of the other factors and their interactions also need to be researched.

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