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# Sharing Experiences of Illness and Effectiveness of Asthma Therapy in Children

*This research deals with relationships between openness and opportunities to share asthma experiences between an ill child and close family, and effectiveness of medical therapy of asthma. Subjects were 58 children, between the age of 12-14, from the allergic outpatient clinic with a diagnosed bronchial asthma and under pharmacological therapy. Each child answered questions on frequency and satisfaction with talking with parents, or other close family members, on his or her experiences related to asthma. A doctor conducting the therapy was asked to evaluate results of therapy, and intensity of the asthma, for each child. The data support the hypotheses that degree of sharing own asthma-related experiences with close persons correlates positively with effectiveness of therapy. This effect appears stronger among children with more severe asthma.*

***Key words:*** *sharing experiences, narrative, narrative therapy, asthma, asthma therapy, health psychology, Pennebaker*

## Introduction

The research concerned relationships between intensity of sharing own asthma-related experiences with closest family members and effectiveness of asthma therapy for children. There is abundant evidence that writing or talking about bad past experiences may have therapeutic effects /Frattaroli, 2006/. However, there is a lack of convincing data on positive influence of sharing not the past, but ongoing critical experiences on a person's well-being and somatic functioning. In our study we tried to explore this possible effect by observation of the effectiveness of asthma therapy of children in dependency on ongoing communication between the ill child and the parents on asthma related daily issues. We have expected that expected results might provide practical recommendations how to support the therapy process.

Many studies by Pennebaker and his collaborators show that sharing with others facts as well as own thoughts and feelings on significant and difficult past experiences might have positive consequences for the psychological and somatic functioning of a person. (Pennebaker, 1993; Nederhoffer & Pennebaker, 2002; Frattaroli, 2006). There was a hypothesis made by Frattaroli (2006) that the above effect does not apply only to past experiences but also to experiences taking place actually and that in the second case, this positive effect may be stronger. In our research, the shared experiences were related to ongoing, daily ailments and problems that occur due to the child's sickness. There is also another important difference between our research and the mainstream researches on consequences of sharing experiences. In Pennebaker's studies, telling about difficult experiences was an experimental factor: the subjects were asked to express in writing or talking their experiences and this kind of activity was contrasted with writing or talking about neutral facts, e.g. TV serials watched last time. In that case, the crucial activity was taken out of natural contexts of events and habits of a person. In our study we tried to observe, however indirectly, the relation between the intensity of sharing experiences by a sick child within his or her natural family context and in natural individually shaped ways of communication between family members. Moreover, it is interesting to observe if sharing experiences with a close person has the

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same revealing effect as in an experimental disclosure. For example, the ones who were revealing their stories in an experiment were not given a return answer – their narratives did not have active recipients (Niederhoffer & Pennebaker, 2002).

Another difference between our study and the majority of research on this topic deals with consequences of expressive writing. In the mainstream research observed were consequences not related directly to the kind of past bad experience. Typical difficult past events which the subjects expressed were the death of a close person, physical and sexual abuse, and bad interpersonal situations. The dependent variables were mainly different aspects of well-being and somatic processes. In our study we observed an asthmatic child and the effect of sharing his or her experiences on the progress of medical therapy of the asthma. Finally, until now there has been little research on the therapeutic role of sharing difficult experiences by children (Frattaroli, 2006). The closest to our study was an early one by Pennebaker (1984) where widows and widowers after one year after the sudden death of a partner were filling a questionnaire about how often they were telling others about this event. It turned out that the more a person was talked about it, the less he or she was reporting somatic ailments.

Traumatic and difficult experiences during childhood are especially devastating for quality of future life of a person. Studies on the therapeutic role of sharing experiences and their narratization by a child seem to have therefore a particular importance for theory as well as for practice, including medical service.

Asthma is a worldwide problem and number of people with asthma is estimated at 300 million (GINA,2006) and affects from 1% to 18% of the population depending on the country. Frequency of its occurrence is still growing, especially in children. Asthma causes decrease of productivity and limits participation of sick people in social and professional life. Asthma attacks make breathing difficult and the decreased amount of oxygen during the attacks can be dangerous to life. According to a NHLBI report (2007), asthma attacks can be caused by strong negative emotions, including anxiety over an approaching asthma attack. Severely sick children are less popular in their peer group, more often then others are socially isolated, and they tend to withdraw from relationships. For children and youth, asthma means a handicap in school activities and blocks participation in sport activities so important for people at that age. (Sawyer & Couper, 2003). Severe asthma often requires hospitalization or treatment in a sanatorium. It requires separation of a child from parents and strengthens negative emotions. A child suffering from asthma needs psychological help.

On the basis of Pennebeker's studies we have proposed a hypothesis that the degree of sharing with family one's own experiences related to the sickness is positively correlated to the effectiveness of a medical therapy of asthma. Children with asthma suffer physically and psychologically. Daily attacks of coughing and shortness of breath not only cause physical discomfort, but also make contact with the surroundings more difficult, decrease self-evaluation, and strengthens the tendency to isolate oneself from others, preventing the activities that are expected from a child of a certain age (GINA, 2007). Sharing those experiences, the possibility of talking with close persons about events and social situations that are connected with symptoms of his or her sickness and resulting emotions can create a syndrome of positive effects that lead to increased well-being. In a consequence it may alleviate somatic symptoms as well as give psychological support for physiological processes triggered by medical treatment. Besides, it helps develop a positive attitude to the therapy, and this may enforce therapy effectiveness. The mediating processes in the expected interdependences might be: (1) the increased acceptance from important persons with whom a child is sharing experiences, most frequently from the parents, (2) the increased self-evaluation, (3) the increased feeling of control over uncomfortable asthma symptoms and the events that cause them. Cognitive control of events, including interpersonal situations, increases a feeling of safety and decreases a paralyzing anxiety. It facilitates adaptive interpretations of one's own failures and negative reactions of others caused by asthma symptoms.

## Method

### The Subjects

There were 58 participants in the study: children between 12-14 years of age, of both sexes, treated for bronchial asthma at one allergist at the capital, a well known medical institute. There were also 10 children examined in a pre-study aimed at construct a questionnaire for children. They were all at the same age and from the same medical center.

### Procedure and Questionnaires

Participants were sick children, during an asthma treatment and a doctor conducting a therapy of all children taking part in this research. Children's parents – according to regulations, were informed about the study as well as were asked to agree to the child's participation. Tests were made individually, during a visit of the child at a clinic, without the participation of parents, while the child was waiting for the doctor. Answers to a short questionnaire took about 5 minutes. The questionnaire was distributed and collected with a help of hospital's personnel, after it was filled in a closed envelope.

*The Questionnaire for the Child*

Prior to constructing a questionnaire for children, a pre-study was carry out. It had a character of individual conversation with a child, in a form of a casual interview. It took place in a hospital wards, with chronically sick children, being under observation and treatment. Examiner explained to a child that he/she is conducting a research on sick children. Contact with a child lasted approximately 10 minutes and was based on giving questions connected with child's sickness in his/her home. Questions were dealing with circumstances of conversations with parents, theirs frequency, their subject and feeling of openness and satisfaction. Child's answers were recorded on a tape and then re-listened. A content of questions given by an examiner was being changed during a study. Content and vocabulary were gradually fitted to the realms of sharing experiences of children from an studied population as well as the way of speaking about it. The final product was a questionnaire for children containing questions about sickness and episodes of sharing with parents the feelings of discomfort and related emotions and thoughts.

A questionnaire consisted of 9 statements. Under each statement there was a 4 point scale measuring compatibility of a statement with child's experiences, from 1 (I disagree) to 4 (I fully agree). Questions were as follows:

1. When I am experiencing difficulties connected with my sickness, I always share them with a relative\ close person.
2. If – because of the sickness – I am sad, upset or angry, I talk about it.
3. Each time I want to talk about problems, I have an opportunity to do so.
4. There is someone who will always listen to me, when I am in a bad mood.
5. When I reveal my sorrows connected with my sickness, I feel better.
6. When I talk about problems with my parents, siblings or friends, they laugh at them (-).
7. I often have to deal with my problems on my own (-).
8. I rather don't have to hide before relatives the fact that I am feeling bad.
9. It is embarrassing for me to start talking about a sickness (-).

The questionnaire – beside questions – had a short information about a study, an instruction and a space where the subjects could insert remarks concerning questions. There had been made a general index measuring a degree of sharing experiences connected with asthma. It was based on a sum of answers to all questionnaire items. Cronbach Alfa estimated for all items was satisfactory = 0,75. In data analysis, beside the index, individual items were taken into consideration.

*Questions to a Doctor*

A doctor was asked to estimate a size of each child's progress in treatment of asthma. He was using a 5 points scale. A question was as follows: "On a 5 points scale, characterize patient's progress in treatment; where 1 means – no progress, and 5 – large progress.

Moreover, the doctor was asked to estimate, also on a 5 points scale, "what is the intensity of bronchial asthma of a certain child, where; 1 means gentle course, 5 – acute escalation of symptoms".

A doctor was asked to make estimations of a child, soon after a consultation with him or her.

## Results

Analysis of a connection between a degree of sharing experiences and effectiveness of treatment (evaluated by a physician), showed expected positive correlation: $r = 0{,}34$, ($p<0{,}05$); n= 56, (Figure 1). More intense is sharing experiences with own sickness, more effective is treatment.

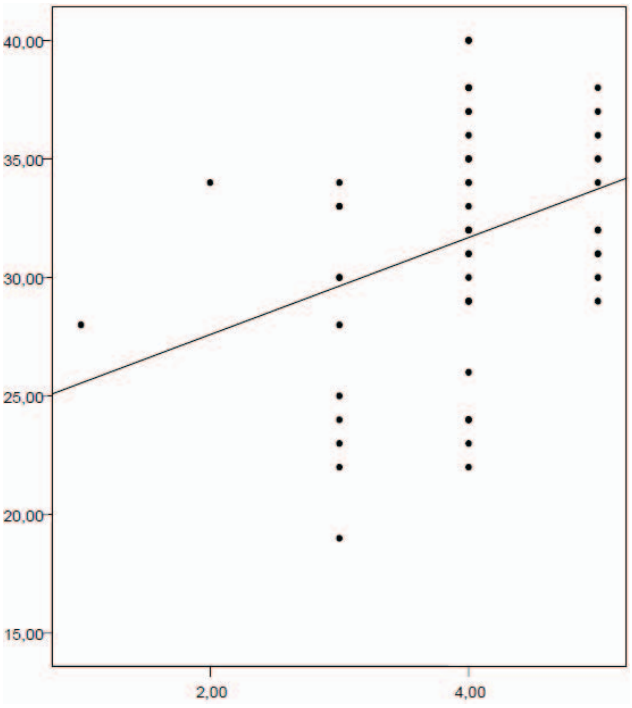
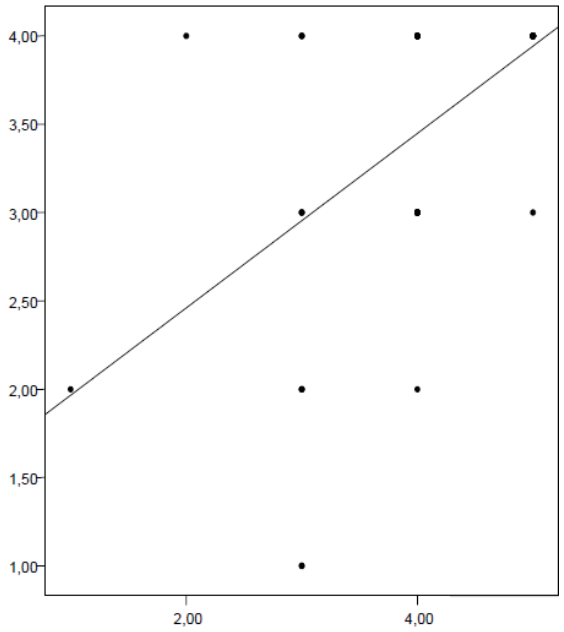



Figure 1. Correlation between intensity of sharing experience and treatment effectiveness (scale 1–5)

Figure 2. Correlation between answers to a question: "Each time I want to talk about problems, I have an opportunity to do so", (scale 1-4, the higher value, the more the item was evaluated as expressing own feeling) and effectiveness of treatment (scale 1-5)




In case of item analysis, a significant correlation was found for the question "Each time I want to talk about problems, I have an opportunity to do so": r = 0,49; p < 0.001; n = 58 (Figure 2).

In a case of an item "I often have to deal with my problems on my own" there was an expected negative correlation with treatment effectiveness: r = -0.38; p < 0,01; n = 56 (Figure 3).

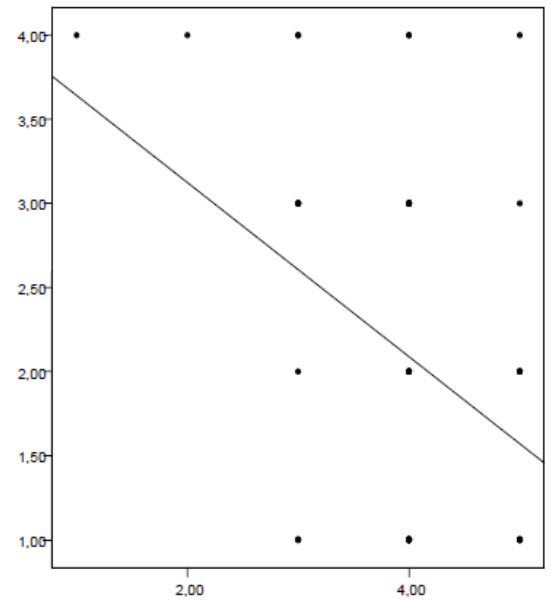



Figure 3. Correlation between a statement: "I often have to deal with my problems on my own." (scale 1-4, the higher value, the less item was evaluated as expressing own feeling) and effectiveness of the treatment

No other significant correlations were found.

There was no significant correlation between escalation of asthma and intensity of sharing experiences. (r= 0,09; p> 0,05, n=56) However, it was found that escalation of asthma moderates strength of the relation between a degree of sharing experiences and treatment effectiveness. Analysis of regression taken separately for people with a stronger (N=25) and weaker (N=31) escalation of asthma, in which a predictor was the degree of sharing experiences and a dependent variable was the effectiveness, showed significant correlation only for children with stronger asthma escalation: beta=0,43 p<0,05 versus beta for children with weaker escalation = 0,19; p>0,05.

The results suggest that the degree of sharing by a child his or her experiences connected with asthma, enforces effectiveness of pharmacological treatment, especially in a case of stronger escalation of the asthma.

## Discussion

Our results confirm that there is positive relationship between a child's degree of sharing with relatives, usually parents own experiences of a sick child and the effectiveness of medical treatment. It may suggests causal dependence: among children suffering from asthma, more frequent, open and safe sharing experiences with own asthma enforce somatic processes initiated by a medical treatment. This finding fits in some way with the results of Pennebaker's studies, in which persons were encouraged to describe their difficult experiences and – as a consequence – observed was an improvement in well-being and in somatic functioning (Pennebaker & Glasser, 1988; Esterling et al., 1994; Pennebaker, 2001).

In our study we were able to observe – although indirectly – that intensity and openness in sharing experiences might facilitate physiological processes caused by medical treatment, which heals asthma. The observation was taken within the natural, family context of communication between the child and closest persons. We did not observe processes due to which chronic sharing of difficult experiences supports the influence of pharmacological drugs in reducing asthma attacks. The matter of future research will be verification of our hypotheses about these mediating processes. It may be assumed that they include an increase in feeling of safety and approval from the most important persons for a child, an increase of self-evaluation and self-acceptance, as well as an increase of the feeling of cognitive control over the asthma episodes, its conditions, consequences and ways of alleviating them. Self-reflection may also be an important mediating factor. Communicating and negotiating with a family daily stories of asthma dificulties may teach a child how to interpret more rationally, and in a more realistic way, other's reactions to its own sickness, and better understand own l responsibility for the asthma ailments and its

unavoidable physiological consequences, such as quicker fatigability or periodic lack of concentration.

The results of research also shows that a positive relation between sharing experiences and treatment effectiveness seems to be stronger among children with more severe asthma symptoms. Strong and frequent symptoms of illness strengthen distant consequences of asthma: difficult interaction with friends, worse results in school, decrease of self-evaluation and decreased feeling of safety, and lastly – an increase of anxiety and aggression together with its interpersonal consequences. The above difficulties and failures engage a child's attention and thoughts. Therefore possibility of sharing experiences matters much more for children with severe asthma.

This explanation needs a more detailed analysis in further studies, for there are possible other, probably complementary to the above one, paths of dependencies. It appears that persons with strong symptoms of asthma characterize with higher self-control of reactions and with smaller impulsiveness. The existence of these characteristics indicate suppression of emotions. At the same time, the data suggest that the biggest profit from sharing experiences gain persons who - in normal circumstances - have no possibility or readiness to tell others about their experiences (Niederhoffer & Pennebaker, 2002). Taken together, these results may suggest that children who would not normally have a need of telling about their own asthma, because its escalation, but gaining strong positive support from the family, reveal their difficulties. This fact brings big benefits, in somatic sphere for expamle, in comparison to children raised within less caring and empathic family members.

Another line of explanation may be based on data showing that severity of asthma among youngsters correlates with a higher level of anxiety (Kosmala, 2001). This is a very dangerous relation because a high level of anxiety appeared to by one of the main restraining factors in medical treatment of asthma (Pilecka, 2000). On the other hand, an important consequence of sharing past bad experiences is anxiety reduction (Frattaroli, 2006). If anxiety is higher among persons with more severe asthma symptoms, sharing experiences that reduces anxiety seems to be a more important event for those persons, in comparison to persons with less severe asthma.

In our research, measurement of the degree of sharing experiences had an indirect character. This degree was concluded from the child's answers to the questionnaire. However, an advantage of this observation – in comparison to the experimental paradigm – was reaching (although indirectly) real, daily coping with the sickness, and participation of the family in that process. Surely, supplementing our approach with the experimental paradigm would allow us to examine more directly expected causal relationship. Such a study would include measurement of severity of asthma before and after the experimentally triggered sharing with others experiences about the sickness.

As in discussion of data from Pennebaker's studies, we need to ask an important question: What forms of sharing difficult experiences with close persons, taken from the content and structural perspectives, are especially positive in the healing process.

It has been noted in many studies that, in the case of personally important emotional situations and events, we understand them as stories and communicate others as stories. It is worth examining, to what degree positive effects of communicating with others about one's own sufferings and difficulties result from their narrative form. Encouraging someone to write or tell own experience as a story may have several important consequences. They include narrative structuralization of own emotions, gaining a cognitive control over a course of events and their possible future, and also facilitating planning actions that are responses to events, making reflexive decisions, and then gaining control over their realization.

It is also worth analyzing the content of self-narrations. The same sequences of life events can be understood by people in a frame of different stories. Some types of life-stories have important consequences for the real course of human life and for the quality of life (Burton & King, 2008; Fivush, 1994; Gregg, 1991; McAdams, 1993; 2001; Trzebiński, 2005). Therefore, it is possible that building specific stories in processes of sharing experiences and joint negotiations of their meaning is a crucial factor in recovery or healing.

Of course, beside content and narrative way of structurizing about experiences, another factor is very important. This is partners participation in sharing experiences. The natural way of that participation is joint negotiation of a story content and its future development. It can be specifically important in relations between a child and his or her parents.

Results of our study open promising possibilities of psychological support in treating asthma and probably other somatic disorders. Realization of these possibilities needs more elaborate studies on causal relationships, both experimental and naturalistic. Nevertheless, the discussed results and their conclusions can provide a preliminary basis for building a program of psychological support for medical treatment of many somatic disorders. Besides, existing and future data on social sharing and narratization of personal experience may result in development of therapeutic techniques and psycho-educational programs aimed to cure persons, as well as to develop their potentials. Core components of these methods would be sharing experience with close persons, within a personal story form.

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