

SOME PSYCHOLOGICAL CONTRIBUTIONS
TO THE CLINICAL TREATMENT OF
THE ASTHMATIC CHILD

By

AIDYL MACEDO DE QUEIROZ¹
& ANNE LISE STRAUSS²

The present study focuses some psychological aspects encountered in asthmatic children in our country. We hope to give some practical suggestions to pediatricians and allergists who specialise in the clinical treatment of these children. Our study deals with the psychological factors influencing the treatment and outlines a program for educational and psychological guidance for these patients.

The problem of the relationship between personality make-up and asthma has been studied from various aspects, including the study of the asthmatic child. We will only mention some of the most important contributions in this field: Experimental studies testing the influence of psychological factors on respiratory membranes (*Wolf & col.*-13); personality disorders, emotional components, typical behaviour traits of the asthmatic patient (*Cohen*-6, *Mitchell*-12, *Bakwin*-4, *Escardo*-7,

¹ Psychologist of the Children's Mental Hygiene Service of the Pediatric Clinic (Prof. Pedro de Alcantara) of the Hospital das Clinicas of the Sao Paulo University School of Medicine, and of the Psychological Institute of the Catholic University of Sao Paulo, Brazil.

² Pediatrician of the Allergy Service (Dr. Ernesto Mendes) of the 1st Clinic of Internal Medicine (Professor A. Ulhoa Cintra) and of the Pediatric Clinic (Prof. Pedro de Alcantara) of the Sao Paulo University School of Medicine, Brazil.

Coleman Harris-5); studies about the patient and his family relationships, specially with the mother (*Mitchell-11*, *Abramson-1*); psychosomatic aspects (*Wolf-13*, *Glaser-9*); psychoanalytic studies (*Abramson-2* and *3*, *Alexander & French-8*), etc.

We undertook this study, in order to contribute to this interesting field of study, concerning psychological studies in the asthmatic child.

First, we shall consider the clinical and etiologic concept of asthma and its connection with psychological factors, focusing special problems in children.

Bronchial asthma is clinically characterized by paroxysmal attacks, of variable duration, chiefly expiratory dyspnea, accompanied by wheezing which may be heard from far and frequently also by coughing. In the small child, manifestations of general constitutional suffering, such as vomiting, abdominal pain and fever, are often encountered. Physical examination during a crisis of asthma shows signs of bronchial spasm. It is interesting to perceive that of the manifestations of anxiety in children are also expressed by respiratory symptoms, such as dyspnea, sighing breathing, changed breathing rhythm, which may also be accompanied by vomiting and abdominal discomfort. Therefore it seems that asthma and anxiety do not only operate in the same territory but also, up to a certain point, have similar characteristics.

As regards etiology, we should like to point out the influence of a series of factors most frequently encountered in children's asthma. Allergens, such as foods and inhalants, penetrating through respiratory and digestive mucous membranes, sensitise the child as they cause the production of specific antibodies. Later, the exposure to the same allergen results in a reaction between antigen and antibody followed by the liberation of histamine and other substances causing spasms of the smooth musculature, local edema and glandular hypersecretion. When the bronchial tree is seat of this antigen-antibody reaction, the result is bronchial asthma. It is necessary to note, evidently, that these patients have a hereditary

predisposition to allergy, revealed by the frequent incidence of various other allergic symptoms beside asthma (atopic dermatitis, rashes, allergic rhinitis, digestive allergy, etc.), not only in the patient but also in his family.

Beside the specific allergens mentioned above, evidently other factors also predispose the respiratory system and influence asthma. Among these non-specific agents are placed the psychological factors. Quite frequently, emotional situations contribute to the outbreak of asthma. On the other hand, repeated attacks of asthma leave the child anxious and thus more susceptible to asthma. It seems therefore, considering the close relationship between asthma and personality, that asthma is one of the chronic diseases with a considerable psychological component.

We shall now report on our investigation in this field:

MATERIAL AND METHODS

Forty asthmatic children were studied, of both sexes, 2-11 years old, enrolled in the Hospital das Clínicas of the Medical School of the Sao Paulo University. Medical allergic investigation and treatment were effected in the Out-Patient Department of Allergy of the 1st. Clinic of Internal Medicine and the psychological study and orientation was undertaken in the Department for Mental Hygiene of the Pediatric Clinic of the same hospital.

The aim of the medical-allergic investigation was to establish a clinical diagnosis and an etiologic one, too.

The clinical diagnosis was based: 1) on the medical record which showed the occurrence of asthma and, frequently, of other allergic manifestations, such as allergic rhinitis, atopic dermatitis, rashes, etc., in the patient as well as in other members of his family.

2) On the clinical examination which revealed typical symptoms of bronchial spasm during attacks, but which was normal during intervals, when there were no complications.

3) On para-medical examinations such as roentgengrams

of the lungs, blood counts, blood sedimentation rate and other laboratory tests indicated in order to arrive at a differential diagnosis.

The etiologic diagnosis searched:

A) For specific allergenic factors by means of:

- 1) a specialized medical record,
- 2) trial diets in case of food allergy,
- 3) skin tests by scratch and intradermal tests, when inhalants and foods were suspected.

B) The influence of non-specific factors such as infection and psychic factors. Infection was evident when asthma was preceded or accompanied by fever, infection of the nose, nasopharynx, tonsils, etc. Moreover, physical examination, the blood count and sedimentation rate indicated the existence of a chronic focus of infection. In these cases antibiotics and sulfa improved asthmatic symptoms. Psychological factors were investigated by brief interrogatory which aimed elucidate the relationship between asthma and anxiety states, strong emotional tensions, jealousy, etc.

Results of our medical investigation concerning the etiology of asthma in the 40 children submitted to the study are given below:

a) specific allergenic factors:

1. inhalants	31 cases
2. inhalants and foods	6 cases
3. foods	1 cases
Total	38 cases

b) non-specific factors:

1. infection	23 cases
2. psychological factors	8 cases

Note: — It was not possible to diagnose specific allergenic factors in 2 cases, which showed only the influence of infection.

Thirty children presented, besides asthma, other allergic manifestations caused by food (10), and drugs (4) as well

as the above mentioned factors. We obtained allergic family record of 28 children.

Psychological components were not always clearly evident during the first brief interview conducted by the physician. Frequently, also, the existence of other important behaviour problems was suspected, which, however, could not be investigated thoroughly during the medical interview.

Aware of the close relationship between asthma and the personality of children, we decided to submit this group of patients to a specialized psychological study. The only factor in common to all children in this group was the clinical diagnosis of allergic asthma. Whilst the medical treatment was being undertaken (consisting of removal of specific allergenic factors and, when indicated, hyposensitization with allergenic extracts and autovaccines) the psychological investigation was begun.

The psychological study consisted of interviews with the patient and his relatives, observation of the patient in free activities and application of psychological tests. The interview concentrated specifically on facts related to the occurrence of asthma, considering the attitude of the child-patient and his relatives towards the disease, psychological determinants, educational and disciplinary measures used toward the child, emotional environment at home, personality make-up of the parents and psychological problems of the patient. Psychological tests included intelligence and personality measures. The battery applied to each child differed according to the necessities of the individual patient. Based on the results of the psychological case-study, we indicated a specific child-guidance program, which included play-therapy, parental orientation, etc.

RESULTS OF THE PSYCHOLOGICAL INVESTIGATION

The results of the psychological investigation clearly pointed to the existence of three groups of factors: 1) psychological factors directly related to asthma as causative agents, 2) psy-

chological factors indirectly related to asthma and 3) behaviour problems frequently encountered in asthmatic children.

Direct Influences: we include here factors which clearly influence the onset of asthmatic attacks. Most frequently we found a) emotional tensions, resulting from conflicts at home, punishments, school exams, parties and other important events in the life of the child and his family; b) new surroundings and situations such as entering school or playgrounds for the first time; c) the feeling of being unwanted or having lost affection (birth of a sibling, departure of a beloved person, a mother beginning to work outside the home, temporary absence of a member of the family, especially the mother, etc.).

Less frequently we noticed that older children who had suffered from chronic asthma for some time used the dramatic effect of asthma as a means to obtain specific ends, such as a mother's special care and attention, escape from responsibilities, etc. The "use" of the asthmatic attack has therefore also been considered as a factor directly influencing the disease.

Indirect Influences: we considered indirect factors those related to the emotional environment of the home and due to wrong educational attitudes, thus influencing the child's personality, increasing his tensions and consequently, intensifying his asthma. A specially tense emotional environment of the home frequently preceded the onset of the disease and intensified its symptoms. We frequently encountered overanxious and depressive parents, some of them alcoholics. In some cases other members of the family suffered from chronic disease, such as cancer or encephalopathy, others were worried with diseases in general. In some homes marital conflicts or unstable financial situations were found. Wrong educational attitudes most frequently encountered were over-protection and constant vigilance of the asthmatic patient. Parents often trained their asthmatic children differently from other children, being either very lenient or specially restrictive. These inadequate educational attitudes influenced the sick child directly as well

as indirectly. The healthy children would often turn against them. In some cases, the attention of parents was so unevenly divided that the healthy children developed behaviour problems of their own. The most common restrictions imposed upon the asthmatic child were: remaining always near his mother, not to go bare-footed, not to run or take off his hat and clothes, forbidding certain foods regardless of the physicians prescription. The most common privileges were: sleeping in his parent's bed, sitting for long periods on mother's lap, not being punished in situations in which other children would be, granting everything wanted, specially during an asthmatic crisis.

Behaviour Problems Accompanying the Asthmatic Symptoms: the behaviour problems encountered in our study will be mentioned as they were actually met and no attempt will be made to classify or diagnose them. We observed the following:

	Frequency
1. Aggressiveness (repressed or exteriorized, directed principally against mother)	39
2. Anxiety	32
3. Overdependence on mother or other family members	28
4. Eating problems (anorexia)	23
5. Fears	23
6. Negativism and stubbornness	18
7. Jealousy	15
8. Withdrawal tendencies and shyness	13
9. Temper tantrums	13
10. Sleep disturbances (restlessness, lack of sleep, nightmares and terrors, sleep-walking)	12
11. Speech disturbances (speech retardation, baby talk, faulty articulation, stammering and stuttering, etc.)	11
12. Thumbsucking and nail-biting, prolonged use of pacifiers	11
13. Difficulties of adjustment to schools and other institutions (irregular attendance, difficulties of adjustment on entering school, poor learning progress, grade repetitions)	11
14. Feeling of insecurity	10
15. Conduct problems (lying, running away from home, etc.)	10
16. General restlessness, excitability and hypersensitivity	9
17. Depressive tendencies	8
18. Feeling of guilt	8

19. Enuresis	7
20. Sexual behaviour problems (masturbation, sexual preoccupations and sexual play with other children)	6
21. Excessive phantasy	6
22. Exhibitionistic tendencies	6

These problems reflected clearly emotional and educational situations, as the majority of children (34 out of 40) had normal intelligence levels.

One of the points that we considered in our study was the establishment of a differential diagnosis between retarded children and those with emotional problems. We know that these pictures tend to become confused, as both groups of children present problems similar to those registered in our study group. The coincidence of the problems indicated greater accuracy and care in the psychological study. Often enough we got the impression that we were dealing with a retarded child, and a re-examination of the facts would lead us to the conclusion that poor results in the tests were due to his personality problems and small experience of life, caused by educational limitations and concessions.

ORIENTATION, PSYCHOLOGICAL TREATMENT AND RESULTS

Each case was considered individually. We always gave etiologic orientation and treatment and, in some cases, symptomatic treatment. A follow-up was made of all the cases presented during a period varying from several months up to 3 years.

Often we appealed for help to other Clinics and to the Social Service for improvement of the family environment.

Referring to asthma, most frequently the following psycho-pedagogical orientation was given to the family:

1. Consider the patient with asthma as a normal child; try to give him, as to any normal child, sound psycho-pedagogical orientation. Avoid emotional tension; substitute, as far as possible, physical punishment by objective explanations of

what is wanted from the child or by other suitable means of gaining the child's collaboration.

2. Always, when possible, the child should lead a normal every-day-life, both during periods of asthma and in the intervals: his habits should not be changed and he should get moderate and constant affection.

3. Accept and include in the child's daily routine the real limitations peculiar to his illness; however, try to direct the child's interests towards certain fields of activity, in which he can act with greater liberty and satisfy the necessities of his developmental phase.

4. Avoid hyper-protection, combatting this natural tendency derived from the existence of a chronic illness. Separate the child gradually from adults and increase his independence by teaching him the little habits of daily life and giving him a chance at social activities (kindergarten, school, etc.).

5. Avoid too much commenting and excessive worrying above the illness, so that the child will not concentrate too much on the symptoms he discovers.

6. Alert the family about the eventual "use" which the child might make of asthma, in order not to increase the use or this weapon for escaping responsibilities, obtaining more attention or to other ends.

7. Know exactly what to do, from the medical and psychological point of view, at the time of an attack of asthma, thus lessening anxiety and tension.

8. A calm environment at home is vital. However, in order to face and accept certain unavoidable facts that may cause strong emotions, the child should always be adequately prepared.

9. Suggest physical exercises especially respiratory and relaxation, in order to render the exteriorization of emotional tensions easier and, at the same time, to lessen muscular contractions and spasms. Also, painting, music, sculpture, etc., were recommended as means of projection. These activities were mostly carried out in specialized educational institutions.

10. Explain to the family the necessity for correction of

inadequate educational attitudes towards these children, specially considering educational. It is important to give balanced attention and affection to the different members of the family, thus trying to diminish exaggerated worry about the asthmatic child.

Referring to the child's necessities and his psychological problems, we focused: enrichment of his experiences (see situations found in regular mental level), canalization of aggressivity or elimination of its causes, (such as reprimands, punishment and exaggerated limitations), elimination of causes of fear (generally originating from anxiety and insecurity), found in these cases, support of achievements and small tasks of responsibility at home.

Concerning the result of orientation and psychological treatment we shall only register some interesting aspects. The benefits of a psychological study were already noticeable at the start of the investigation, when the children themselves showed a better acceptance of their situation in the Hospital and accepted medical treatment more readily. They would spontaneously get up earlier in the morning due to their eagerness to receive their "reward" at the Mental Hygiene Section, consisting of pleasant activities, which were absolutely indispensable for a good psychological examination. Moreover, the family, as well as the children, began to consider the illness itself in right terms. The support given to the parents, by means of the above suggested orientation, lessened their state of anxiety bringing about an improvement in the child itself. We had the clear impression that, in the case of an overwhelming psychological component, the association of psychological and medical-allergic treatment not only brought real benefit to the child's personality, but also caused a more rapid improvement of asthma.

CONCLUSIONS AND SUGGESTIONS

In the 40 children studied we encountered psychic components influencing asthma directly or indirectly. Also there

were psychological problems of educational and emotional nature. The mental level was normal in this group. All children improved under associated medical and psychological orientation and treatment. Therefore psychological investigation seems absolutely justified.

As an immediate suggestion we should like to mention that the facts considered above could constitute a starting point for the anamnesis and psycho-pedagogic orientation of the pediatrician and allergist. A specialized psychological examination would seem perfectly justifiable in cases with large psychological interference and when the family environment permits it.

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