

# **Improving Asthma Symptoms in Children by Repairing the Maternal-Infant Bond**

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**ABSTRACT:** The mothers of 15 asthmatic children were treated with a therapy that repaired the bonding between their children and them. Twelve children's asthma symptoms improved; of the 10 who were regularly taking medications, 8 no longer needed them. Improvement seemed dependent upon age, with children under 9 having the greatest benefit. All 7 Mexican-American children improved, using a Bilingual Bicultural counselor to treat the mothers.

**KEY WORDS:** Asthma, children, maternal-infant bond, birth trauma, birth visualization, hypnosis, EMDR

## **INTRODUCTION**

There appears to be a robust relationship between pediatric asthma and failures in bonding (Feinberg, 1988; Schwartz, 1988; Pennington, 1992; Madrid et al., 2002). In these studies, between 70–80% of asthmatic children had pre and perinatal histories in which their mothers were physically separated or emotionally distracted from them. These histories included marital problems, deaths in the family, recent miscarriages, illnesses in the child or mother, homelessness, C-section deliveries, emotional problems in the mother, and separation from the child after birth.

These histories are compatible with the paradigm presented by Klaus and Kennell (1976) that bonding can be damaged when the mother and child are separated after birth or when the mother is emotionally pre-occupied because of some personal trauma.

Failures in bonding appear to be reparable; and, surprisingly, when this happens, most asthmatic children seem to breathe better. In a pilot study with 6 asthmatic children, we used hypnosis to alleviate the mothers' emotional traumas associated with birth and to imagine new births in their minds (Madrid et al., 2000). Five of the 6 children improved, including 2 children under the age of 2 who had a complete remission of symptoms.

The current project attempts to study this treatment in more detail. Two questions were initially asked:

1. Does bonding therapy improve the breathing of asthmatic children?
2. Do younger children have a better chance to improve than older children?

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This study was sponsored by grants from the Van Strum Foundation and the Sonoma County Children and Families Commission.

Since we had access to a group of asthmatic Mexican-American children, we asked a third question:

3. Can this treatment work with Mexican-American children?

## METHOD

### *Participants*

Fifteen asthmatic children, ages 1½ to 14, participated in this study. Of these, 7 were Mexican-American children, whose primary communication was in Spanish. Children were considered to have asthma if they were given the diagnosis by their physician, if they used asthma medication, or if their mothers said they wheezed. Children who had only one episode of wheezing were not used in this study. Thirteen children used asthma medication: 10 used medication regularly, and 3 others used it episodically.

Children's breathing difficulties were recorded for one month before therapy began and for 2 months afterwards on a health check list, adapted from NIH's symptom check list ([www.nih.asthma.org](http://www.nih.asthma.org)). The symptoms that we tracked were:

- Breathing trouble during the night
- Breathing trouble during play
- Breathing trouble at other times
- Chest tightness, coughing, wheezing, and lethargy at other times

Events which characteristically impede bonding, called by Pennington (1991) "Non-Bonding Events," were identified by the mothers with the counselors' help, using the Maternal-Infant Bonding Survey (MIBS) as a format for initial interviews (Brown, et. al., 1981). A shorthand version of the original survey was employed for this study (see Appendix A).

Non-Bonding Events (NBEs) are usually divided into physical separation and emotional separation (Klaus and Kennell, 1976). Physical separation can occur through procedures which separate a mother and child, (e.g., when a child is removed to an Intensive Care Nursery; when a child is kept in the hospital after the mother is discharged; when a mother is anesthetized; or when a child is adopted). Emotional separation can occur when the mother is experiencing some trauma so severe that it distracts her from her child. Common traumas are a death in the family, marital difficulties, homelessness, a mother's illness, or some other intense grief.

After each mother identified the trauma or traumas that seemed linked to a bonding problem, the mother was sent home with a data booklet, in which she kept a record of her child's asthma symptoms. After a month, the mother returned for treatment. Following the treatment, which typically took 2-3 sessions, she was asked to continue with the data booklet for two more months. At the end of that time, she returned for a summary session.

### *Treatment*

The method for repairing bonding is a 3-step process. First the non-bonding event (NBE) is identified. Second, the trauma from the NBE is processed and metabolized in the mother through hypnosis (other trauma therapies such as EMDR [Shapiro, 2001] can also be used). Third, a new birth history is imagined and felt (*viz.*, installed) in the mother through hypnosis. For this study, all of the therapy was done with the mother, without any therapy done with the child.

*Example (composite of several cases).*

Juanita became pregnant with her first child when she was moving from Mexico to Sonoma County. After little Juan was born, his father could not find steady work and they lived in makeshift camps. His father started drinking heavily and left the family, who then moved in with her parents. When he was 18 months old, Juan was diagnosed with asthma and put on medication. His father came back to the family at that time and has remained with them. He no longer drinks to excess. Juan is now four years old. He wheezes, even with medication; his sleep is troubled; he cannot play without having trouble breathing. His mother describes him as sickly.

The counselor identified the NBEs with Juanita:

- the stresses involved in moving here from Mexico,
- having no place to live, being frightened and hopeless
- serious marital problems,
- separation from her husband.

The theory of maternal-infant bonding was explained and the treatment was outlined. The Juanita was hypnotized, and ideomotor signals were developed (Cheek & LeCron, 1968). She was asked to remove the trauma from her pregnancy, which was still left in her mind and heart. Next she was asked to do the same regarding her marital problems. When these traumas were cleared, she was directed to retrieve the feelings from the time when the family was apart, and she was asked to clear up those painful memories.

She was then asked to create an image of a new birth, in which she was with friends and family and where her husband was working and sober. When she was able to do this, she was told that this memory could stay with her. She was asked to bring this memory from that time right up to the current time. She was asked, in hypnosis, if this memory could stay with her.

When she returned for follow-up sessions, she reported that her son was no longer asthmatic, that he was much more affectionate, and that he was no longer taking medications. He was able to play without having any breathing problems. This family was followed for two months, and the boy remained symptom free.

For a more thorough description of this therapy, you can read our article in an earlier APPPAH Journal (Madrid et al., 2002).

## RESULTS

Every mother who volunteered for this study had a history compatible with non-bonding. All mothers of the asthmatic children in this study endorsed at least one Non-Bonding Event (NBE), and 6 (40%) endorsed more than one NBE (see Table 1).

Table 1  
Age and NBEs

<b>Caucasian Child</b>	<b>Age</b>	<b>Non-Bonding Events</b>
1	14	MP
2	9	MP, E
3	2 ½	ICN, D
4	5	A
5	4 ½	ICN, IC, MP
6	3 ½	A
7	10	E
8	9	MP, S, IM
<b>Mexican-American Child</b>		
9	1 ½	MP, H
10	5	ICN, S, MP
11	8	MP, MIS, D, E
12	11	E
13	2	E
14	5	MP
15	6	E

Legend:

- A Adopted
- D Mother had a death in the family
- C C-Section delivery
- E Mother had emotional problems during pregnancy or afterwards
- H Homeless
- IC Illness in child
- IM Illness in mother
- ICN Intensive Care Nursery
- MP Marital problems
- MIS Mother recently miscarried
- S Mother and child were separated after birth

The most common trauma experienced by the mothers was Marital Problems. NBEs were telescoped into three categories: Physical Separation alone, Emotional Separation alone, and Both Types (see Table 2).

Table 2  
Types of NBEs

Physical separation alone	2
Emotional separation alone	9
Both types of separation	4

In our small sample, physical separation alone occurred in only 2 cases (13%) and in combination with emotional separation in 4 cases (27%). Emotional separation alone occurred in 9 cases, accounting for 60% of the cases. Emotional separation, then, was involved in over 87% of the cases.

All mothers but two found that it was too difficult to keep the health checklist accurately. We were left, then, with the mothers' global appraisal of their children's health and medication use as the measures of improvement.

By the mothers' reports, 12 of the 15 children improved with treatment. Of those who improved, 10 improved totally and 2 improved partially. The mothers of those children who improved totally reported that their children no longer wheezed at all, even at nighttime; that they could play without wheezing; and that they no longer needed medication even when they had a cold. Those who improved partially were substantially better, but all symptoms had not remitted all the time, or they were still taking some medication.

Of the 10 children who improved totally, 8 had taken medication. All of those 8 were no longer were taking medication after treatment. Of the 2 who improved partially, one was off all medications and the other was taking medication prophylactically.

Before treatment, 8 children became more symptomatic when they had a cold. After treatment, 5 children improved and did not get symptomatic when they had a cold. The other 3 showed no change in their asthma symptoms when they got ill with a cold.

We studied the children's responses by ages. For this part, "improved" meant total improvement; "Did not improve" meant no improvement or partial improvement.

All 10 children under 9 years of age improved totally. All 6 children 9 years or older did not improve totally (chi-square = 15.00,  $p < .001$ ). The ages of those who did not improve were: 9, 9, 9, 10, and 14 (see Table 3).

Table 3  
Total Improvement by Ages

	Improved	Did not	Total
0-8	10	0	10
9-14	0	5	5
Total	10	5	15

All of the Mexican-American children in this study improved, 6 completely and 1 partially. The Bilingual Bicultural counselor had remarkable success working with the Spanish speaking mothers to bring about bonding with their children and the resolution of asthma symptoms.

## DISCUSSION

The evidence mounts that asthma in some cases is related to the absence or impairment of bonding. In all 15 cases of this study, there were glaring non-bonding events, and most mothers experienced several events which impede bonding. In this study, most of the situations were emotional rather than physical. The incidences of marital problems and maternal emotional distress far outweighed physical separation at birth. From this small sample an important finding is that marital problems have a serious impact on a mother's ability to bond with her child.

The positive response of these children to their mothers' therapy, which focused on the bonding, still amazes us. By working with the mothers alone, without touching or talking to the child, the children's breathing improved. The evidence seems to support the hypothesis that the relationship between asthma and bonding failures is significant, that non-bonding is reversible, and that this has an immediate effect upon improving breathing in asthmatic children.

We do not know why every child does not improve. From this study, it seems that improvement may be a function of age. Older children may have more issues of their own or with their mothers. It could be that when children are trying to separate themselves from their mothers, strengthening the bond cannot work. It is clear, though, that the best results come to very young children. Other reasons may include variables that we have not studied: the severity or type of asthma, the psychological conditions of the mother and child, or other psychosocial factors in each.

The therapy with Mexican-American children was very successful--all of these children improved, regardless of age. We used a female Bilingual Bicultural counselor from Santa Rosa Junior College, who had been trained in hypnosis but had no formal experience using it. She had no substantive knowledge about maternal-infant bonding prior to the study. She had a few more hours of training in hypnosis with us, and she spent a few hours learning about maternal-infant bonding and impediments to bonding.

Armed, however, with a deep cultural understanding and sensitivity, she met with the mothers and their children in their own homes and spoke with them in their own language. The mothers were accepting of her especially since there were many familiar cultural ties and a connection with their personal lives. Because of this, the mothers were accepting of the concepts of bonding and asthma that she taught. There were dramatic changes in the mothers and their children. The mothers reported being relieved of long-standing personal issues, and the resultant improvement in their children's breathing was immediate. There was personal follow-up on a weekly basis, which was very meaningful and important to the mothers, who looked forward to this contact.

From this study and from our other clinical work, we have noticed that the bond can be broken in these newly bonded pairs. We have occasionally seen that a child will improve and then his breathing will deteriorate. This happened with 3 children in our study. Since we have seen mothers and children who were bonded at birth lose the bond later by some tragedy in their lives, it only makes sense that mother and child pairs who are bonded later should also be subject to this fracturing. However, it seems to happen more easily, perhaps because it is so new and fragile. It is important, then, to keep a close eye on the child's symptoms, because if the child relapses, it may mean that the mother is

undergoing some current extreme stress. This can be quickly remedied by addressing the issue, finding the stressor, resolving the stress, and re-connecting the pair. Education about recurrence should follow.

Other researchers are finding this link between asthma and maternal-infant problems. Klinnert and associates (2001) at the National Jewish Medical and Research Center found that asthma (diagnosed by 6-8 years of age) was associated with two predictors from infancy: high IgE levels and parenting difficulties. The parenting difficulties were a global assessment from observations that included maternal affect, coping and relationship skills, her sensitivity and responsiveness to her child, and her social support.

Klinnert asserts that the stress from "parenting problems" noted in her study was different from family stress in general. Other studies as well have shown that stressful family life does not contribute to asthma (Harwood et al., 1985; Weil et al., 1999). Klinnert writes that only the stress which is "developmentally salient" for the infant in the first year of life seems to affect asthma.

Since parenting problems described by Klinnert are the usual fall-out of failures in bonding, and since a failure to bond is certainly a developmentally salient stressor, we think that we may be seeing the same thing as Klinnert. Perhaps bonding failures may be the mediating variable the "parenting problems" that she discovered.

We are still befuddled by the question, "Why does non-bonding lead to asthma in some children?" Klinnert's team helps us with this connection:

. . . Perhaps the quality of caregiving has an effect on certain aspects of infants' immune systems. . . . It is possible that developmentally relevant stressful events and/or the quality of caregiving provided . . . could alter the hypothalamic-pituitary-adrenal system or immune functioning in the direction of increased allergic response (Klinnert, et al., 2001, p. 7).

It seems possible, then, that the developmentally salient stress of non-bonding can alter immune functioning in children, thereby making them susceptible to allergies, respiratory infections, bronchial inflammation, constriction, and wheezing.

By manipulating the bonding variable alone, children's asthma seems to improve. We have manipulated other variables: hypnosis, education, and counseling. None of these makes any difference in the child's asthma. Until we work on the bond itself, nothing much improves; and when the bond is repaired, the child gets better. In one case, however, the Mexican-American counselor just talked about the traumas in the mother's life surrounding the birth of her child and linked them to the child's asthma, and that alone seemed to cause a remission of the child's symptoms, without any therapy being needed.

This study was limited by the small sample size. Despite advertisements and numerous presentations not as many families signed up as we expected. We think that this may be due to the success of asthma medication in alleviating symptoms. Another major problem was in the dependent variables used. We had envisioned that the data booklets were streamlined enough to make record keeping quite easy. This was not so. All mothers found it to be a great burden and most found it an impossible task. We were forced to rely on two variables alone: the mother's global assessment of her child's health

and medication use. Future studies must insure that data collection is not an additional burden for the mother.

For this study, hypnosis was used as the vehicle to repair bonding. We have used EMDR with success in similar cases. The Non-Bonding Event is usually a traumatic experience: a divorce, miscarriage, separation from a sick infant, homelessness, etc. These events are targeted with EMDR passes until they no longer evoke negative feelings. Once done, a new birth without the traumatic event is imagined and installed. EMDR sessions are as quick as hypnosis; and in some cases, where hypnosis seems ineffective, EMDR is superior.

Notwithstanding the limitations of this study, the hypothesis gains in credibility that asthma in some cases seems to be linked to non-bonding and that this condition may be reversible. With minimal intervention, a mother can change her basic connection to her child, and this automatically improves an asthmatic's breathing.

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**APPENDIX A****QUICK REFERENCE MIBS**PHYSICAL SEPARATION

- Mother was separated from child at or after birth.
- Mother had a very difficult delivery.
- Child was sick at birth.
- Child was twin or triplet.
- Intensive Care Nursery or incubator.
- Mother was anesthetized at birth.
- Mother was very sick after the birth.
- Mother was separated from child in first month.
- Child was adopted.
- Other separation occurred.

EMOTIONAL SEPARATION

- Mother had emotional problems during pregnancy.
- Mother had emotional problems after birth.
- Mother had a death in the family within two years of birth.
- Mother had a miscarriage within two years of birth.
- Mother and father were separated before birth or soon after.
- Mother was addicted to drugs or alcohol at birth.
- Mother moved before or soon after birth.
- Severe financial problems.
- Unwanted pregnancy.
- New romance in mother's life.
- Other event which could have interfered with bonding.