



Mother-Twin Interaction During Early Childhood *

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Abstract. The components of a research program focussing on early mother-twin interaction is described. Preliminary data obtained from a questionnaire at two months post term, cross-sectional observations at the age of one year, a follow-up study involving home observation and parental interviews from birth to the age of 3, point to the specificity of this triadic situation. During the first months of life, the burden of material tasks and the increase in baby care leave little time for starting a relationship based on pleasure or play. The impossibility of responding simultaneously to the needs of two babies and the difficulty of forming relationships on an individual basis foster early concerns for egalitarianism. The degree of physical resemblance between the babies creates the problem of differentiating them. To tell twins apart, mothers rapidly tend to rely on behavioral characteristics to which they attribute a genetic basis. In contrast, differences in development between the babies that introduce the eventuality of the dominance of one of the twins are often denied. In this highly specific situation, mothers arrive at personal solutions of adjustment over the first 3 years, manifest in a certain number of psychological and educational attitudes. Analysis of these maternal attitudes may help to shed light on some of the features of later psychoemotional development in twins.

Key words: Twins, Mother-twin interaction, Psychological attitude, Upbringing

INTRODUCTION

Most models of the psychological processes involved in early mother-infant interaction are based on the assumption that infant attachment to the mother and

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maternal identity arise during the course of dyadic exchange. Although the relationships mothers develop in the case of twins cast these processes in a different light, few psychological studies have been devoted to this issue.

A recent survey of 375 families with twins is indicative of the difficulties parents must face during the first months post term. The findings show atypical depressive syndromes in the mothers, related to anxiety and overtiredness connected with the heavy burden of baby care [5]. This first factor is compounded by the mother's obligation to alternate between infants by dividing up her time and attention constantly [3].

The stressful nature of raising twins has been characterized by Goshen-Gottstein as a "real challenge to maternal abilities" [7]. That study, which included several families with twins as well as triplets and quadruplets, pointed to the ambivalence felt by mothers when confronted with multiple births. Mothers tend to oscillate between two opposing attitudes whose extremes can be characterized as either (a) viewing their infants as an indivisible unit, or (b) accentuating the infants' behavioral differences through early "personality labelling". This labelling, which can be positive or negative, directly raised the issue of the mother's preference for one twin over the other. Goshen-Gottstein reported that preference fluctuated over time and that mothers tended to reject the idea that they showed preference, arguing that they treated their babies alike. Minde et al [15] studied mother's preference in the case of severely ill highly premature twins having experienced long hospitalization during the neonatal period. In that sample, mothers showed more preference for the more sturdy infant. The preference apparently remained stable, at times up to the age of three months, but was observed to change in certain cases over the first year of life. Minde et al also cited certain mothers who apparently did not become involved with either child.

Other studies have stressed the impact of the medical status of infants on mother-infant interaction in the neonatal period [1], and showed that mothers appeared to have greater emotional bonds with the lighter twin. At the age of one year, this bond was no longer present, but there appeared to be greater maternal attachment to the less competent and more dependent twin. The author emphasized that any medical problem arising during the first year of life may bias assessment of preference taking place at the age of 1 year. In a more recent study [2] he reported on the development of the differentiation process in monozygotic twins as revealed through clinical observation, and parental expectations during pregnancy. Parental projections were strengthened after birth by the physical and perinatal characteristics of each infant, such as birth weight, sex, and medical problems.

In a preliminary survey conducted in the homes of 5 families where twins had been born, we observed features congruent with the data reported above [9,10]. However, the specificity of mother-twin interaction also stood out. The mother could not maintain two dyadic relationships simultaneously. The twin situation was always triadic, and could be expressed schematically by the fact that when the mother was involved in care of one baby, the other infant was always present, either physically when (s)he cried and waited his/her turn to be fed or held, or on a psychic level in that the mother knew that when she had finished with one infant

she had to perform the same gestures once again with the second infant.

Data from this preliminary study were the basis for the present study which was conducted at the Beclère Hospital in Clamart, France, and designed to shed light on the major features of mother-infant interaction. Two features were examined in this study:

- 1) the burden of baby care and maternal responsibilities during the first post-term months, and
- 2) the issues of egalitarianism and preference.

PROCEDURE AND METHOD

Three procedures were used concomitantly to examine the interrelationships between these factors:

- 1) A questionnaire was sent to parents of twins to obtain information on the mother, including amount of baby care, fatigue, recourse to outside help, help from the father (150 replies).
- 2) A follow-up study was conducted on 7 families observed within the home from birth of the twins to the age of 3 years involving interviews and direct observation (at 2, 4, 6, 9, 12, 18, 24, and 36 months). This sample included 5 pairs of dizygotic (DZ) twins, 3 of the same sex and 2 of opposite sex, and 2 pairs of monozygotic (MZ) twins.
- 3) A cross-sectional study was conducted when the twins were 1 year old, including an interview with the mother and an observation session of her interaction with the infants at home. This sample was composed of 21 families, made up of 14 DZ and 7 MZ. The diagnosis of zygosity was based on examination of membranes, sex, and degree of resemblance. In two cases diagnosis could not be made with assurance.

Methodology and results of these three studies will appear elsewhere. The present article focusses on the problems connected to early mother-twin interaction, and the family's solutions to these problems.

RESULTS

1. Overload of Baby Care

The amount of baby care administered to infants during the first 2 months of life is summarized in the Table.

Observations in the home indicate that the enormity of material concerns may conceal problems of a psychological nature. Moments of pleasure and play are few and far between, and mothers have no time for early exchanges with the infants.

Table - Amount of mother care (survey of 150 families)

	On discharge from maternity	At age 2 months
Percentage of breast or breast and bottle feeding	53%	16%
Number of feedings/24-hr	14'	12'
Duration of 2 feedings and 2 diaper changes	120'	90'
Percentage of mothers feeding at night	100%	54%
Duration of mother care for a 24-hr period	12 hr	10 hr
Percentage of mothers reporting fatigue or high fatigue	63%	44%

Families develop different means of coping with this burden of baby care:

- a) The mother may decide that two people are necessary to take care of two infants and has recourse to a "maternal double" who may be the father, a relative, or outside help (46% of the women interviewed had help all day long, for an average of 5 weeks after they came home from the hospital).
- b) The mother (25%) decides to handle things alone and is quick to refuse offers of assistance, including that of the father. Some women rapidly develop a mode of organization which cuts care time down to a minimum. For example, mothers will wake up a sleeping baby to feed him/her after the other has been fed, or they will try to find a means of nursing the babies together. A total of 16% of the mothers fed the infants at the same time starting from before the age of 2 months. This practice is more frequent in emergencies when both babies are crying at the same time. These infants are trained early to take their bottles alone, and for all the twins in the sample, the switchover to spoonfeeding marked the end of any one-to-one relationship during mealtimes.

2. The Need for Egalitarianism and the Problem of Preference

Given the difficulty of responding immediately not only to feeding demands but also to needs for affection, each infant must in fact be on an equal basis with respect to the lack of availability of the mother. The mother's obligation to "do the same thing" with both infants is manifest in two types of behavior: some mothers do everything at the same time for both children, whereas others do one thing with one infant and then do the same thing with the other. Our observations over the first year of life showed that some mothers develop what can be termed true "egalitarian strategies" including:

When the mother is unassisted at mealtime, she makes an effort not to start with the same infant each time (64%); each morning she reverses the order of who will be fed first; in the case of breast and bottle feeding, she alternates the baby who is breast fed and the one who is bottle fed. When someone is there to help, she tries not to hold the same infant all the time and to do so she switches systematically with the caretaker (50% of the sample). When the twins are a little older, she will attract the twins' attention or invent games which are identical for both twins regardless of their reactions or their preferences.

Many of the mothers state how difficult it is to take care of one twin while the other is watching. Thus, mothers tend to communicate with the child closeby who is not being cared for, while administering babycare to the other infant.

In a minority of cases, preference for one of the twins may emerge, generating maternal conflict and guilt. In the sample we studied, some mothers admitted that they had felt closer to one of the infants at birth. This was shown by the mothers' attempts to counterbalance relatives' interest to one of the twins, or to compensate for a defect, however minor, of any type attributed to the infant she will develop a preference for.

These compensation mechanisms were also observed in the behavior of women who breastfed. When mothers did not have enough milk to feed two infants, they kept their milk for the infant who needed it most, the smallest or the weakest.

3. Problems of Differentiation

Observations indicate the presence of a dual process: the need for early individualization of the twins, and a desire to merge them into a single unit.

a. *The need for early individualization*

Although mothers force themselves not to behave differently with the infants, they are faced with the additional complication that, as of the first days of life, they must be able to distinguish one twin from the other, especially in the case of MZ twins. Certain women gave this problem some thought during pregnancy and devised certain ways of identifying each twin, for example by giving first names related to birth rank, or by having two layettes of contrasting color which are assigned to each infant in a specific and permanent fashion. When the infants were born, parents developed a number of tricks to identify each infant more readily: some parents left the hospital identification bracelets on the infants after taking them home from the hospital, others kept a long indicating mealtime hours, the type of feeding and the amount consumed by each infant.

Certain distinguishing physical features of each infant were used for differentiation, including birth weight, difference in height, or minor imperfection such as blemishes or beauty spots. Secondly, parents tended to notice behavioral differences in the infants' personalities, at time even in utero, which are more accentuated in the months following birth.

In contrast, differences in rate of development between infants were minimized by some parents, and at time deliberately ignored. Mothers may “hold back” the more advanced twin or provide greater stimulation for the twin who is “behind”. Other mothers refused all comparisons and emphasized each infant’s progress in different developmental areas. Comparing each twin’s development leads directly to the issue of one twin’s dominance over the other and implies that one twin is more advanced than the other, an idea which mothers who tried to have egalitarian relationships with each child found difficult to accept.

b. Desire to merge the twins into a single unit

The need to differentiate the twins is not free of ambivalence. Tendencies towards non-differentiation are also present: the parents may view variations in features as two facets of a single personality. The choice of first names and baby equipment is illustrative of the need to accentuate the babies’ twinship. Furniture and baby care equipment was often identical, or arranged symmetrically, infants were routinely dressed in clothes which were identical except for color or some minor detail.

As Zazzo [19] and Lepage [12] have pointed out, twinship engenders unease and fascination: certain mothers of MZ twins refuse to recognize the physical similarity between their twins whereas others tend to conceal each twin’s identity to members of their families so as to be the only ones who can really tell them apart.

4. Variations in Maternal Adaptation to the Triadic Situation

The range of psychological and educational attitudes of the 20 families we interviewed and observed when their twins were 1 year old can be hierarchized along a continuum contrasting early twinship vs early double dyadic relationships.

a. Early twinship

Here, the twins are treated as though they were a single unit. The mother performed most baby care simultaneously and rapidly imposed a regular and identical rhythm on both infants. Women who adopted this type of organization in general are egalitarian and exhibit no preferences. Dyadic relationships between mother and infant were kept to a minimum, which produced specific reactions on the part of the twins. Twins in this type of situation rarely sought contact with the mother and did not solicit it: they showed no apparent signs of jealousy towards each other in attracting the mother’s attention and did not react with anxiety when the mother left the room or an observer entered.

Whereas this type of maternal relationship restricted mother-infant interaction and encouraged autonomy, it on the other hand facilitated interaction between the twins. The twins soon became habituated to staying in their playpens alone for relatively long periods of time without adult presence and at the age of 1 year were able to keep themselves happy and be “self sufficient”; the parents in this case considered themselves purely to be observers of the twin couple.

b. *Desire for two dyadic relationships*

Other women attempted at all costs to have a personalized relationship with each of the twins. For these women, the twins' personal rhythms were respected, the difference in periods of wakefulness and sleep were kept at a maximum so that the mother never needed to take care of both children at the same time thus enabling her to have one-to-one exchanges. These mothers wanted to adapt to the personality of each infant and exhibited no tendency for comparison or preference. They perceived the twins as two children who happened to have been born on the same day, two brothers or sisters each with his/her own rhythm of development, having a sibling relationship. This attitude was more difficult to maintain when there was a physical resemblance between infants who had an identical rate of development. Some mothers of MZ twins nevertheless adopted this type of attitude because it was their only way of differentiating their children.

5. The Father's Role

Although the present survey was not designed to investigate father-twin interaction, a certain amount of data emerged from interviews with the mothers. A number of patterns can be drawn from these data.

In some cases, the father played a "surrogate mother" role. Babycare, carried out by both parents in tandem, was individualized and made it easier to take the rhythm of each infant into consideration. The triadic situation thus become a quadratic one, which introduced new issues. The division of labor and amount of emotional investment often varied within couples. Data reflecting forms of identification pointed to tendencies in some fathers to prefer one twin whereas the mother preferred the second.

Some parents desirous to set up an individualized relationship for each twin with the mother and the father were careful to set up egalitarian rituals, and did not take care of the same infant all the time. At later stages they arranged things so that each infant could play with the father and the mother and have privileged moments with each of the parents in turn.

In other families, although the totality of babycare was performed by the two parents, no real emotional investment was present. In this case the role of the father was simply to take part in the process of early twinship.

DISCUSSION

The style of maternal care that twins receive in early infancy may shed light on the origin of differences between twins and singletons, in particular with respect to the socialization process.

Studies have indicated that at the age of 2, there is less verbal communication between parents and offspring in families having twins than in those where there are singletons [13]. This may partially explain the lag in the use of language in

twins reported in the literature [4,11,14]. According to Lytton [14] later appearance of language may be due less to biological or perinatal factors than to a reduction in verbal stimulation, which is closely associated with a reduction in emotional investment from the parents. However, the conditions under which twins acquire language are governed by a specific set of rules that are more complex than those affecting singletons. Here again, there is a triadic situation where there is one speaker for two listeners who can interact between themselves according to a well-defined code [16].

Zazzo's works [17,18] have clearly pointed to twins' bonds that may negatively affect their social adaptation by cutting them off from the outside world. One of the consequences of this dyadic relationship is the later attainment of self-awareness as compared to singletons.

Although the strength of the bonds between twins may be a handicap for their social and verbal development, the presence of a sibling of the same age can also serve a protective function that compensates for underoptimal maternal care and may help create secure attachment [6].

We have shown that it is at times difficult for mothers to invest in two infants simultaneously. This lesser investment in infants on the part of parents may derive from the burdens of nursing care which restrict moments of exchange with the infant, or may stem from parents' reaction to the cohesive nature of the dyad of twins. These two explanations suggest a third, namely that some parents may abandon the idea of establishing individualized relationships early on with both of the twins, which results in strengthening the bond between the twins themselves.

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