CHAPTER 1

PORTS OF ENTRY AND THE DYNAMICS OF MOTHER-INFANT INTERVENTIONS

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This book is about relationship problems, but more broadly it is about infant mental health. There are still many for whom the topic of infant mental health seems ridiculous. What would lead someone to believe that a baby could have a mental health problem? Infants are seen as too young to have such troubles or, if early problems do exist, they are believed to be physical ones that can be dealt with by physicians. This view is being replaced as modern understanding of human development has discovered much greater capacities for feeling and knowing in babies than were thought possible only a generation ago when not only parents but also pediatricians believed that newborns could not see and hear. But more importantly, these infant abilities are expressed in a context. Early social and emotional problems are inextricably connected to the relationship between babies and their caregivers. This topic was fully explored in a pioneering book edited by Sameroff and Emde (1989) where early relationships were given clinical, empirical, and theoretical reality.

Treating early relationship problems is important from two aspects, the relief of current suffering and the prevention of long-term consequences. But both of these aspects raise complex questions. In the current situation, who is suffering? And with respect to the future, who will be carrying the seeds of later happiness or unrest, the child or the caregivers? Among adult clients the sufferer is generally clear; it is the patient who self-refers for the alleviation of some psychological distress. Treatment is generally directed, for better or worse, at the self-identified patient. Increasingly the importance of treating relationships is being recognized even for adult psychotherapies. In the case of children, especially young ones, the referral comes from others, most often the parents. It is others who are concerned that a child is too sad, too active, or too oppositional. It is others who are suffering and need relief. In this light infant mental health problems are always relational, they are always caregiver—child mental health problems. Stern (see Chapter 2, this volume) has identified this as the new "prototypic patient" for clinical attention.

Even when parents may not be sufficiently concerned or knowledgeable about their infant's psychological health to seek help, others in the child's world may be. For example, during the newborn period a nurse may become concerned with the effects of a mother's depression and make a psychiatric referral (see Bruschweiler-Stern, Chapter 8, this volume). In cases of abuse or neglect, neither the child nor the parent self-refers. It is the legal system that makes that determination and has the additional task of getting the parent to see that there is a problem in the caregiver–child relationship. The complicated nesting of infant and maltreating caregivers in a therapeutic milieu is described by Larrieu and Zeanah (see Chapter 10, this volume), with protective services, the judicial system, lawyers, biological parents, and foster parents all considered as significant influences on the child's welfare.

More commonly, infant mental health concerns are raised in the context of pediatric appointments in which parents express anxiety about an infant's behavior. Their worries typically relate to functional regulation problems around issues of excessive crying, sleeping, or feeding. If the problem has a physiological basis, it is typically treated in the medical context. If not, the pediatrician or nurse practitioner makes active or passive recommendations, and often this is sufficient. Active recommendations would be suggestions that the parents' change their behavior, such as letting infants go to sleep in their crib instead of in a parent's arms. Passive recommendations would be reassurances that the child's behavior was in the normal range and that the situation would improve over time with no change in parents' behavior. These three interventions—physiological, active, and passive—fit into categories of

remediation, redefinition, and reeducation (Sameroff, 1987; Sameroff & Fiese, 2000) that will be more fully explored below.

However, there are parents for whom these strategies are not enough, either because of special problems in the child, in the parents' personality, or in the resources available to support their caregiving efforts. In these cases further referrals become necessary either by the primary care physician or the parents themselves. The variety of treatments available for such referrals is the topic of this book. The range of services available can be delivered by psychologists, psychiatrists, social workers, occupational therapists, physical therapists, or other infant mental health specialists, each with a different slant on how best to help the patient. With these different professional orientations come different perspectives on who the "real" patient is and what is the best way of affecting the system.

THE REAL PATIENT

The title of our book makes it clear who—or rather what—we believe the real patient is. It is the parent–infant relationship. As Sameroff and Emde (1989, p. 221) remind us, "Human existence is social existence." Infants' physical existence is tied to the care provided by other human beings. The same can be said for their psychological existence. In the first book to have the words "infant psychiatry" in its title, Rexford, Sander, and Shapiro (1976) observed that infants and their caregivers are part of an interactive and regulative system, mutually influencing and regulating each other. Sameroff and Emde (1989) focused on the issue of diagnosis. They acknowledged that infants are individuals and make contributions to the behavior of their caregivers, but argued further that that individuality must be considered in context and that diagnosis must include those around the infant as well. From this initial focus on diagnosis of infants in relationships, it follows that the treatment of infants must also be relationship oriented.

A text on the treatment of relationship problems in early childhood must be situated in an understanding of infant development. At one extreme are those who believe that a child's future is determined by early behavior. Consequently making sure that the infant has positive mental health is important for everything that will follow. At the other extreme are those who believe that infancy is a passing period that will have little relation to what follows (Lewis, 1997). In this view the foundation of

later mental health will be found in later stages of development, with each period's good and bad experiences determining concurrent mental health. In the first view infancy is the most crucial period of development, and in the second view it is only of transient interest. A third view takes elements from both perspectives and sees each developmental stage as laying a foundation for the next. If the foundation is one of competence, the following stage will proceed more easily than if the foundation is problematic, but the outcome of each following stage will be a product of not only what the child brings to the situation or only what is experienced from caregivers but of the interplay between these two domains (Sameroff & Chandler, 1975).

Identification of the real patient will depend on what is believed to be the source of current problems. If one cannot separate the infant from the caregiving context, then the patient must be the relationship. But, as we shall see, repairing a relationship can be accomplished in many different ways. Because relationships are dynamically interacting systems, changing parts of the relationship should affect the totality of the relationship and, most importantly for our interests, the current and future mental health of the child.

THE TRANSACTIONAL MODEL

Planning effective interventions requires a sophisticated view of environmental action that includes attention to many factors. A developmental frame that has been useful for understanding and prescribing treatment options is the transactional model (Sameroff & Chandler, 1975). In this approach how a child turns out is neither a function of the infant alone nor of experience alone. Successful development is a product of the combination of an individual and his or her experience. Although we must know the experiences available to the infant, we cannot lose sight of the important role individual differences in the child play in terms of what the child elicits from the environment and what the child is able to take from the environment.

The birth of an infant is a separation that appears to produce an independent individual who will mature into a psychological adult. This physical independence from other family members gives rise to the idea that there is a psychological independence so that whatever levels of achievement and health the child attains can be attributed to personal resources. Dramatic advances in molecular biology have fostered a view

that genes play deterministic roles in the growth process. Such a perception leads to a maturational view of development in which there is an unfolding of intrinsic characteristics. From this perspective individual differences in intelligence or personality or more categorical differences such as retardation or mental disorder can be explained by differences in initial circumstances, the genetic endowment of the individual. But the study of genes has led to the equally dramatic biological advances demonstrating the important role of context in gene expression. Each somatic cell of the body has the same genes, yet each cell is different because of different experiences and even relationships with other cells. Similarly, by analogy, whatever characteristics the infant may have been born with, in different families with different sets of experiences the infant would have developed differently.

Progress within molecular biology has shown the necessity of studying multiple interacting systems if the goal is to understand the processes of development. The path from the fertilized egg to the newborn infant is one of the most complex phenomena in biology. Earlier misconceptions that perinatal brain development reflects rigidly deterministic genetic programs are being replaced by current knowledge that experience has a critical role in the development of the infant's brain. Moreover, neural plasticity can be found even in human adults (Nelson & Bloom, 1997). Positive or negative life experiences can alter both the structure and the function of the brain. This intimate relation between the developing organism and experience is extended into the behavioral domain where a transactional model is used to understand cognitive and social-emotional functioning during infancy. Fox, Calkins, and Bell (1994) compared three models of development: an insult model, where early brain deviations lead to later problems; an environmental model, where the brain is seen as completely plastic; and a transactional model, where genetic programs for developmental processes interact with environmental modifiers. They found much evidence for brain plasticity in response to new experiences but constrained by the developmental status of the nervous system, fitting the transactional model. These studies of neurobiology and behavior support a view of mutual influence between the child and the caregiving context.

Within this transactional model the development of the child is seen as a product of the continuous dynamic interactions of the child and the experience provided by his or her family and social context (see Figure 1.1). There is an equal emphasis placed on the effects of the child and of the environment. The experiences provided by the environment are not

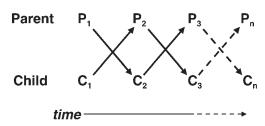


FIGURE 1.1. Transactional process with reciprocal effects between the child and the parent across time.

viewed as independent of the child. The child may have been a strong determinant of current experiences, but developmental outcomes cannot be systematically described without an analysis of the effects of the environment on the child.

Before the recent ascendance of genetic explanations, there were many retrospective studies reporting that children's cognitive and social—emotional difficulties were the result of birth complications. But when later researchers prospectively followed the development of infants with perinatal problems they found that most of them had perfectly normal developmental outcomes. This is not to say that some children with birth complications, especially severe anomalies, did not end up with developmental disabilities but so did some children without birth complications. The research seemed to support the idea that children with birth complications ended up with later developmental problems, not because of changes in the brain but because of the negative impact such children had on their caregivers. An example of such a process can be seen in Figure 1.2.

A complicated childbirth may have made an otherwise calm mother somewhat anxious. Her anxiety during the first months of the child's life may have caused her to be uncertain and less appropriate in her interactions with the child. In response to such inconsistency the infant may have developed some irregularities in feeding and sleeping patterns that give the appearance of a difficult temperament. This difficult temperament decreases parenting pleasure so the mother spends less time with her child. If she or other caregivers are not actively interacting with the child, and especially not talking to the infant, the child may score poorly on later preschool language tests and be less socially mature.

What determined the poor outcome in this example? Was the poor

verbal performance caused by the complicated childbirth, the mother's anxiety, the child's difficult temperament, or the mother's avoidance of verbal and social interaction? If one were to design an intervention program for this family, where would it be directed? The most proximal cause is the mother's avoidance of the child, yet one can see that such a view would oversimplify a complex developmental sequence. Would treatment be directed at eliminating the child's difficult temperament or at changing the mother's reaction, or at providing alternative sources of verbal stimulation for the child? Each of these would eliminate a potential dysfunction at some point in the developmental system.

This series of transactions is an example of how developmental achievements are rarely sole consequences of immediate causes and even more rarely sole consequences of earlier events. Not only is the causal chain between perinatal problems and early childhood problems extended over time, but it is also embedded in an interpretive framework. The mother's anxiety is based on an interpretation of the meaning of a complicated childbirth, and her avoidance is based on an interpretation of the meaning of the child's irregular feeding and sleeping patterns. To understand the effects of interventions on the way parents behave toward their infants, there is a need to understand this interpretive framework.

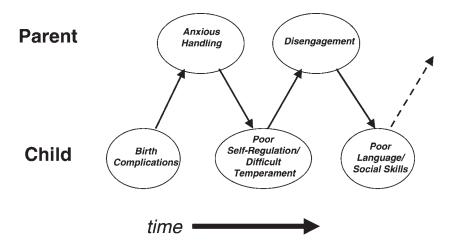


FIGURE 1.2. Transactional process linking perinatal complications and preschool language delays.

THE REPRESENTED AND PRACTICING FAMILY

In addition to the developmental significance of the behavior of the infant and the caregivers clinicians must attend to the meaning system which parents use to understand their children. The influence of families may be understood through the two ways in which they organize experiences: first, through the beliefs that they hold, their family representations; second, through the ways in which they behave toward each other, their family practices (Reiss, 1989; Sameroff & Fiese, 2000).

The represented family highlights the internal representation of relationships and how working memories provide a sense of stability. Working models of relationships develop within the context of the family are retained in memory and guide the individual's behavior over time. To study this represented family, we must explore how families impart values and make sense of personal experiences. One dimension of these representations are family narratives that deal with how the family makes sense of its world, its relationships, and its rules of interaction. Fiese et al. (1999) document how such family meaning making is associated with adaptation to illness, alcoholism, and the identity formation of adolescent offspring.

The *practicing family*, in contrast, stabilizes and regulates family members through observable interaction. The interaction patterns are repetitive and serve to provide a sense of family coherence and identity. Family life resides not only in the minds of individuals but is evident in the observed coordinated practices of the group (Grych & Fincham, 1990; Reiss, 1981).

From a transactional perspective, the practicing and represented family both organize behavior across time and both affect each other. Family practices come to have meaning and are translated into the symbolic aspect of the represented family. The represented family, in turn, may affect how the family members regulate and interpret their practices. As an example, consider negative emotion at the dinner table for a parent who experienced abuse and neglect as a child. Because of his or her history the parent does not expect relationships to be rewarding and has created a representation of family as unfulfilling and disappointing (Cicchetti & Toth, 1995). Negative affect at the dinner table confirms the parent's expectation for unrewarding family interactions in the present. Exposure to negative affect may then lead to acting-out behaviors by the children (Katz & Gottman, 1993). This then reinforces the parent in the belief that he or she cannot expect offspring to behave. A family story is created labeling the children as "bad" and uncontrollable. This

transactional process results in escalation of problem behavior and an entrenchment of beliefs that make it more difficult to alter maladaptive patterns of interaction. The storied representation of family behavior becomes tainted with expectations for unfulfilling family relationships confirmed in the directly observable interaction among family members (Fiese & Marjinsky, 1999).

As with other transactional systems there is no direct causal link between parental expectations for unrewarding relationships and child problem behavior. The relation is mediated by a chain of reciprocal events that could lead to many other outcomes with appropriate interventions. Changing parental behavior at dinnertime, negative expectations of the child, or family stories may significantly alter the outcome for the child. A transactional understanding of such processes helps the therapist to identify both problematic developmental processes and potential interventions.

SELF-REGULATION AND OTHER-REGULATION

Understanding how infants and their parents influence each other over time is a necessary prologue to the understanding of developmental problems and recommendations for appropriate treatment. Once we have an overview of the complexity of the systems involved, we can turn to the search for nodal points at which intervention strategies can be directed. These points will be found in the interfaces among the child, the family, and the cultural systems.

Despite a tendency to see infants as objects existing in a physical world where their talents unfold in some maturational sequence, the reality is that from conception the infant is embedded in relationships with others who provide the nutrition for both physical and psychological growth. The developmental changes in this relationship between individual and context can be represented as an expanding cone (see Figure 1.3). The balance between other-regulation and self-regulation shifts as the child is able to take on more and more responsibility for his or her own well-being.

At birth the infant could not survive without the environment providing nutrition and warmth. To enhance the child's social—emotional self-regulation, the parenting role is to provide a model by helping to quiet the infant when he or she is overaroused and to stimulate the infant when he or she is underaroused. Later the child is able to find a blanket when cold and go to the refrigerator when hungry, although

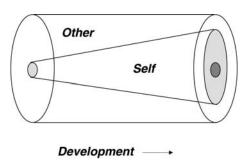


FIGURE 1.3. Changing balance between other-regulation and self-regulation as a child develops into an adult.

someone else still has to buy the clothing and food for the family. Eventually the child reaches adulthood and can become part of the other-regulation of a new infant, beginning the next generation. Parents too are regulated, at one level by the laws and customs of their society, but also by the relationships in which they are involved. An interesting intervention aspect of this is regulation of the mother during pregnancy and then of the mother and infant after delivery provided by the doula program. A doula is a professional who provides emotional, physical, and informational support to the family just before, during, and just after delivery (Kennell, Klaus, McGrath, Robertson, & Hinkley, 1991).

The importance of parent characteristics relative to child characteristics during early childhood is because of the large asymmetry between self-regulation and other-regulation. As development progresses the asymmetry will become more balanced, and then a new asymmetry will emerge during adolescence with the burgeoning of adult capacities for thought and action. As a consequence intervening with the family rather than the infant alone is the most efficacious therapeutic strategy during infancy and toddlerhood.

TARGETING INTERVENTION EFFORTS

A sensitivity to the complexities of child development has encouraged the implementation of intervention strategies to include multiple members of the child's family (see Fivaz-Depeursinge, Corboz-Warnery, & Keren, Chapter 6, this volume), as well as multiple disciplines concerned with early childhood (see Larrieu & Zeanah, Chapter 10, this volume).

Increasingly, early intervention programs designed today are based on a team approach that addresses the many facets of childhood problems (see Egeland & Erickson, Chapter 9, this volume). As it becomes less acceptable to focus on isolated aspects of developmental disorders, the total environmental context of the child needs to be considered (Sameroff, 1995). Once the multiple determinants associated with childhood problems are recognized, a more targeted approach to implementing intervention is in order, based on the specific determinants identified in a specific situation.

A frequent problem in planning treatment is deciding where to concentrate therapeutic efforts—what has been called the "port of entry" (Stern, 1995). Problem areas may include individual, family, community, and cultural factors, but economic and personnel limitations preclude global interventions across all these systems. A careful analysis of the involved systems for a particular family is necessary to define what may be the most effective avenue and form of therapy. A basic point that emerges from this perspective is that there will never be a single intervention strategy that will solve all developmental problems. Cost-effectiveness will be found in the individuation of programs that are targeted at the relevant nodal points for a specific child in a specific family in a specific social context.

PORTS OF ENTRY I: THE THREE R'S OF INTERVENTION

The transactional model has implications for the treatment of relationship problems, particularly for identifying targets and strategies of intervention. The nonlinear premise that continuity in individual behavior is a systems property rather than a characteristic of individuals provides a rationale for an expanded focus of intervention efforts. In the model there is an emphasis on the multidirectionality of change while pinpointing regulatory sources that mediate change. By examining the strengths and weaknesses of the childrearing system, categories of targets can be identified that minimize the necessary scope of the intervention while maximizing cost-effectiveness. In some cases small alterations in child behavior may be all that is necessary to reestablish a well-regulated developmental system. In other cases, changes in the parents' perception of the child may be the most strategic intervention. In a third category are cases that require improvements in the parents' ability to take care of the child. These intervention categories have been labeled *remediation*,

redefinition, and reeducation, respectively, or the "three R's" of intervention (Sameroff, 1987; Sameroff & Fiese, 1990).

An abstraction of the transactional model that focuses on the three R's of early treatment can be seen in Figure 1.4. In the model, development is an iterative process between child and parent. The baby by its activity or appearance stimulates the parent, who makes an interpretation and then responds in turn. For example, a baby's smile elicits a good feeling in the parent, who then reciprocates by smiling back, speaking warmly to the infant or cuddling. Problems arise when one of these links produces a maladaptive or negative response. In our earlier transactional example a crying baby leads to anxiety in the parent, who avoids the infant. The three R's are directed at creating a happier parental reaction and an improved developmental outcome.

Remediation changes the way the child behaves toward the parent. For example, in cases where children present with known organic disorders, intervention may be directed primarily toward remediating biological dysregulations. Such an improvement in the child's physical status will better enable him or her to elicit caregiving from the parents. Redefinition changes the way the parent interprets the child's behavior. Attributions to the child of difficulty or willfulness may deter a parent from positive interactions. As the parent is refocused on other, more acceptable attributes of the child, positive engagement may be facilitated. Reeducation changes the way the parent behaves toward the child. Providing training in positioning or stimulating techniques for parents of developmentally delayed children is an example of this form of

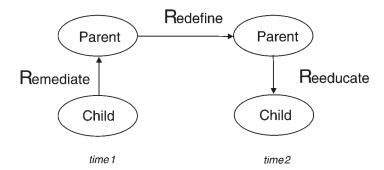


FIGURE 1.4. The three R's of treatment within a transactional model.

intervention. Examples of these strategies will be found in the ensuing chapters.

Remediation

The strategy of remediation is the class of intervention techniques designed to change the child, with eventual changes occurring in the parent, depicted by the upward arrow in Figure 1.4. Remediation is not aimed at changing the childrearing capacity of the family. The intervention goal is to fit the child to preexisting caregiving competencies that are already adequate if the child behaves as expected. Remediation is typically implemented outside the family system by a professional whose goal is to change an identifiable condition in the child. Once the child's condition has been altered, intervention is complete.

The most clear-cut examples of remediation are those in which there are possibilities for structural repair of a biological condition, for example, short-term medical interventions such as nasogastric feedings for underweight infants. The child is presented to the parents as cured, and they proceed to engage in the normative childrearing appropriate to a healthy infant. Such direct solutions are excellent interventions for a number of early problems, but they occasionally involve controversial applications. The surgical alteration of the appearance of children with Down syndrome would be such a questionable procedure (Pueschel, 1984). In this example, the transactional hypothesis is the basis for the surgeon's belief that if the child looked more like a nonhandicapped child, he or she would be treated more like a nonhandicapped child and consequently would have a developmental outcome more like a nonhandicapped child. Another questionable practice is the medication of infants with diphenhydramine (Benadryl) or young children with fluoxetine (Prozac) equivalents for temperament problems. More accepted is the large number of children given drugs for hyperactivity where, rather than have parents or teachers adapt to the individuality of the child, the child is changed to fit in with existing parent and teacher expectations and behavior.

According to the principles of the transactional model being presented here, there are circumstances where interventions directed toward the child alone may result in changes in the parent. In cases where the child's dysfunction is easily identified and successful intervention techniques are available, remediation of the child may lead to adaptive changes in the parent's representations and responses.

The case of treating malnutrition in infancy highlights how remediation with the child may influence the parents' behavior. Craviotto and DeLicardie (1979) found that the behavioral effects of malnutrition were most prevalent in families where mothers were more traditionally passive in their child care and provided little stimulation to their children. Malnourished infants, on their part, have less energy to smile and vocalize, behaviors that serve to elicit positive parental responses. Moreover, where malnutrition is a social problem, the parents themselves have less energy. In an effort to change this dynamic Barrett, Radke-Yarrow, and Klein (1982) gave a caloric supplementation to malnourished children. The infants who received the nutritional supplements demonstrated greater social responsiveness, more expression of affect, greater interest in the environment, and higher activity at school age. Nutritional supplements increased the infants' energy level, which led to increases in their school-age social, emotional, and intellectual competence. Owing to this increase in their energy level, the nourished infants were better able to participate in the family and were better able to elicit a wide range of behaviors from their parents, including feeding. Their parents, by providing more socially responsive stimulation, facilitated their children's interpersonal behavior. Pollitt et al. (1993) enlarged this developmental model to posit that the effects of malnutrition, especially for low socioeconomic groups, contribute to the formation of styles of social-emotional and behavioral interactions between the malnourished infant and the environment that slow cognitive development.

Remediation is an intervention aimed at changing the child, with the expectation that the child will become a more responsive interaction partner. In this regard, remediation allows the child to be more acceptable to the family. Remediation is indicated when there is a reasonable expectation that the child's condition can be altered and the family and cultural code do not prevent implementation of the intervention. Remediation is most effective when there is a time-limited intervention aimed at the child with the support and assurance that the family can take over routine caregiving activities once the intervention is complete. There are instances, however, where the infant's appearance or behavior cannot be changed or the parents have other problems and a second strategy might be appropriate—the strategy of redefinition.

Redefinition

Redefinition as an intervention strategy is indicated when existing family

representations do not fit with the child's behavior (Sameroff & Fiese, 1990). Redefinition is represented by the horizontal arrow in Figure 1.4, linking the infant's input with the parents' output. Redefinition strategies are directed primarily toward the facilitation of more optimal parenting through an alteration in parents' beliefs and expectations. These are warranted when the parents have defined the child as abnormal and are unable or unwilling to provide normal caregiving. Difficulties in caregiving may arise from a variety of sources including a failure of parents to adapt to a disabling condition in the child, failure of the parents to distinguish between their emotional reactions to the child and the child's actual behavior, and maladaptive patterns of care that extend across generations (Sameroff & Fiese, 2000). Examples of the first kind of problem are parents who disqualify themselves as adequate caregivers by automatically translating a child's physical or mental handicap into a condition that can only be treated by professionals, as in the case of physical anomalies or very-low-birthweight (VLBW) babies. Examples of the second kind are parents who become disenchanted with childrearing because they find a poor fit between their expectations of child behavior and the child's actual performance as in the case of excessive crying. The third situation is marked by caregiving that is constrained by childhood experiences of the parents that prevent them from distinguishing current caregiving demands from their past experiences.

In the case of an atypical condition in the child, redefinition interventions are directed toward normalizing the parents' reactions to their child. An infant born with Down syndrome, for example, may be defined as abnormal because of differences in appearance or developmental pace or merely the label itself, leading the parents to believe that they are incapable of rearing such a child. Redefinition would be directed toward emphasizing to the parents the normal aspects of the child's behavior in order to facilitate caregiving behaviors that are in the parents' repertoire. Such normal child behaviors would include communication efforts like eye contact and emotional responsivity like smiling and laughing.

When a deviant condition in the child is not identified, redefinition interventions directed toward parents focus on the their misperceptions of the child. Redefinition is directed toward changing interactions in the context of immediate experience rather than past events. Low-birthweight (LBW) infants are often sent home in a biologically vulnerable state. Parents may be called upon to continue massage techniques provided in the neonatal intensive care unit, monitor the child's sleep patterns, and adjust feeding practices to meet the needs of their small in-

fant. Whereas parents may feel competent to care for a healthy infant, they may feel overwhelmed by the demands of caring for a vulnerable LBW infant. In this instance the parents define caregiving as an extraordinary experience that they are unable to manage. Redefinition interventions may be aimed at normalizing the care of the infant and decreasing the emphasis on "special care" the child demands. Highlighting the normal developmental tasks of sleeping, eating, and play would redefine the parents' role as one that is familiar and consistent with the parents' image of caregiving. Once the parent considers the normative aspect of raising an LBW infant, they may be able to proceed with their intuitive parenting (Barnard, Morisset, & Spieker, 1993; Papousek & Papousek, 1987).

Occasionally, parents are unresponsive to programs aimed at redefining the child's behavior because of beliefs that are entrenched across generations. The recent work of attachment researchers has demonstrated that current caregiving activities are framed in light of the parent's relationship with their caregivers (Main & Goldwyn, 1984). Mothers whose working models of attachment are tempered by inconsistent, unreliable, and/or abusive relationships are more likely to form insecure attachments with their children. The current relationship between the mother and the child is proposed to be a partial reenactment of the mother's relationship with her mother and current behavior is guided by generational patterns of relating. Attachment relationships are malleable, however, and interventions aimed at redefining the attachment relationship have been found to be effective in a sample of highrisk infants and their mothers. Lieberman, Weston, and Pawl (1991) conducted infant-parent psychotherapy sessions with mothers and infants who had been classified as anxiously attached. Anxious attachments are overrepresented in LBW infants and characterized by inconsistent parental response to infant distress and a resistance on the part of the infant to be soothed by familiar caregivers (Easterbrooks, 1989; Wille, 1991). Infant-parent psychotherapy aimed at redefining the current caregiving relationship improved mother's responsiveness to her child's signals and increased active engagement between mother and child. Redefinition interventions are aimed at distinguishing the current relationship between the mother and the child from the mother's own upbringing.

Fraiberg, Adelson, and Shapiro (1975) were pioneers in describing how past experiences of being parented influence current caretaking behaviors. As parents engage in routine caretaking activities with their children, past experiences of their own childhoods are recalled. Individuals who experienced nurturant parenting recall these positive experiences as they parent their own children. However, individuals who have experienced inadequate parenting often repeat the same nonoptimal interactions. Mothers of "failure-to-thrive" infants often recount their own upbringing as inadequate in nurturance (Altemeir, O'Connor, Sherrod, & Vietze, 1985). In such cases, interventions may be directed to the parents' memories of past experiences. Redefining the baby as the mother's own, rather than as a symbol of past parenting experiences, has been effective in the treatment of infants failing to thrive (Chatoor, Dickson, Schaeffer, & Egan, 1985).

The mother, the father, or the entire family may be the source of inappropriate attributions concerning the infant. In fact, recognizing how a family may contribute to dysfunctions in the child is central to adapting the family's representations to fit the child's behavior. It is possible to redefine the current relationship in order that more sensitive forms of interaction may be maintained. Mothers who feel that their current caregiving interactions will be appreciated are more likely to engage in positive and reciprocal interactions than mothers who believe that their child is unlikely to be a source of reward and positive esteem.

Redefinition interventions are aimed at altering parents' beliefs and expectations about their child. If beliefs that the child is deviant are changed, then normative caregiving can begin or resume. The parents are freed to use the skills that are already in their repertoire. There are cases, however, where the parents do not have requisite skills or knowledge base for effective parenting. In this case reeducation is indicated.

Reeducation

Reeducation refers to teaching parents how to raise their children and is represented by the downward arrow in Figure 1.4. It is directed toward parents who do not have the knowledge or experience to positively regulate their child's development. Reeducation is typically aimed at families and individuals who are considered at risk due to environmental conditions or characteristics of the parents, for example, teenage mothers or alcoholic parents. Public health initiatives have been used on occasion to reeducate large segments of society to change their caregiving behaviors. Instructional materials such as *Keys to Caregiving* (Spietz, Johnson-Crowley, Sumner, & Barnard, 1990) are aimed at instructing parents as to what to expect from infants at different ages in terms of their behaviors, cues, state modulation, and feeding interactions.

The majority of reeducation efforts are directed toward the family

or individual parent and serve to provide information about specific caregiving skills. The Infant Health and Development Program (IHDP; 1990) was one such reeducation intervention aimed at enhancing the development of LBW and VLBW infants. This multisite clinical trial combined family and home-based educational interventions with childfocused center interventions, but for the purposes of illustrating reeducation we will limit our discussion to the home-based educational component. Home visits over a 3-year period provided parents with information on child development, instruction in the use of age-appropriate games, and family support for identified problems. Intervention effects improved the quality of maternal assistance, the child's persistence and enthusiasm, and dvadic mutuality in a laboratory setting (Spiker, Ferguson, & Brooks-Gunn, 1993). Such parent support components are characteristics of the STEEP program (i.e., Steps Toward Effective, Enjoyable Parenting; see Egeland & Erickson, Chapter 9, this volume) among whose goals are to encourage sensitive, predictable parental responses to the baby's cues and signals and to facilitate the parent in efforts to create a home environment that is safe, predictable, and conducive to optimal child development.

In contrast to community-centered reeducation interventions are interventions tailored to meet the needs of individual families. McDonough (2000; see also Chapter 4, this volume) describes the use of feedback to parents while viewing videotapes of family interactions to guide positive family interactions in an Interaction Guidance (IG) program. The feedback portion of the IG session serves to facilitate the parents' understanding of child development and to identify interactive behaviors that are reinforcing to the parents as well as patterns of interaction that lead to less enjoyable exchanges. The IG treatment approach focuses on enhancing existing adaptive patterns of interaction and builds on the family's strengths.

Such reeducation therapies are typically aimed at the practices of the family. These interventions focus on the immediate and momentary exchanges between the parent and the child that are associated with optimal development. It is assumed that once parents have the requisite knowledge about their child's behavior, caregiving will proceed to facilitate development in accord with the cultural code.

Specificity of Interventions

Remediation, redefinition, and reeducation have been described as ports of entry for targeting specific aspects of the transactional process. How-

ever, development is part of a system that includes influences from multiple aspects of the cultural, family, and parental context. An examination of instances where interventions do not work or are more or less effective points to how choosing a form of intervention needs to be aligned with resources and characteristics of individual families and children. Educational interventions may be more effective for some mothers than for others. Spiker et al. (1993) propose that there are likely to be at least two types of mothers involved in early intervention programs: those who provide inadequate affective and instructional support to their children, and those who lack instructional skills but possess positive affective qualities. In the first case reeducation would not be sufficient and would warrant redefinition interventions to alter the parents' affective response to their children. In the same regard, redefinition efforts aimed at reframing current interactions between the parent and the child may stimulate childhood experiences and require a more historical consideration of caregiving (Lieberman & Pawl, 1993).

Spillover effects from one area of functioning to another, such as between family practices and family representations, have been documented in therapeutic interventions with families (Zuckerman, Kaplan-Sanoff, Parker, & Young, 1997). For example, it would be difficult to imagine that increasing the satisfaction of parents in their interactions with their infant through reeducation would not also redefine their attitudes and beliefs about the child. Stern (see Chapter 2, this volume) argues that intervention through any port of entry affects the whole system, emphasizing that infants and parenting figures are inextricably connected.

When one is faced with limited resources for early intervention programs it is beneficial to consider the most cost-effective form of intervention that would affect multiple domains of adaptation. If education efforts aimed at parents also influence how they interact with their children and the beliefs they hold about development, then focused education programs may be offered to large groups of parents. However, if the parents are unable to make use of the educational efforts because of a past history of poor caregiving or lack of social support, more intensive redefinition programs might well be warranted. The three forms of intervention can be placed in a transactional diagnosis scheme.

Transactional Diagnosis

We have argued that it may be helpful to focus intervention efforts according to problem identification. Such categorization would not only lead to better program design but to better evaluation models and research designs as well. In the case of remediation, the child is defined as developmentally atypical and interventions would be necessary with any parent. The focus of remediation is to change the child, and there is little alteration directed at the parents. Redefinition interventions are prescribed when the parents' relationship with the child inhibits the child's normal growth and development. Treatment is necessary because of the particular maladapted relationship between the parent and the child and does require changes in the parents (most notably their representations). In the case of reeducation, the parent has been identified as being deficient in certain skills or knowledge and the child's condition may not need changing. Here the purpose of intervention is to change parents' knowledge and skills.

A decision tree can be described for choosing the appropriate form of transactional early intervention (Sameroff & Fiese, 1990). The first decision to be made is whether remediation is appropriate or viable (see Figure 1.5). Remediation cannot be achieved in at least two instances: a case where there is no procedure to modify the condition of the child, or a situation where nothing can be found in the child that needs changing. In such cases, the parents' knowledge of the developmental agenda and their reactions to the child must be examined. When parents show evidence of caregiving skills but are not using them with their child, redefinition is necessary. When the child's problems can be identified as a re-

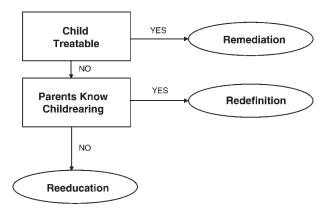


FIGURE 1.5. Transactional diagnosis decision flowchart based on the three R's intervention model.

sult of the parents' lack of knowledge about adaptive childrearing, reeducation is indicated.

PORTS OF ENTRY II: THE MOTHERHOOD CONSTELLATION

Where the transactional model is a description of the processes by which individuals are transformed over time through their mutual involvement, with infants changing parents and then the changed parents reciprocally changing infants from birth onward, a model that focuses on the structure of the interacting systems is also necessary. Such a model for relationship therapy has been proposed by Stern-Bruschweiler and Stern (1989) and elaborated by Stern (1995) and labeled the motherhood constellation. In the constellation model the practicing family is depicted as the mother and infant's behaviors and the represented family or working models is depicted as the mother and infant's representations (see Figure 2.1, Chapter 2, this volume). What Stern adds is to place the parent-infant relationship into a clinical context where the therapist's behavior and representations are also depicted. Representations of the infant, parent, and therapist have in common that they are the repositories of the subjective experiences of each. What is different is that the infant is not yet able to reflect on his or her experience, whereas the parent and therapist have the capacity to reflect on both the infant's and mother's experience and behavior. The parent and therapist differ in that the parent may not use the reflective capacity, where such reflection is the therapist's profession.

The three R's described earlier centered on the transactional developmental process between the parents and the child with an implicit but not explicit place for the therapist within the model. Stern makes the therapist's role explicit and then moves to what this role might encompass specifically in terms of answering the question, "Who is the patient?" There are three answers in this model: the infant, the parent, or their interaction. Determining which is the patient is to be guided by two considerations, the target of the therapy and the port of entry into the system. These may be the same or different. The target would be homologous to the three R's, the child's behavior as in remediation, the parent's representation as in redefinition, or the parent's behavior as in reeducation. The port of entry could be quite different. If the goal is redefinition, that is, changing the parent's meaning system, the port of en-

try may be the behavioral interaction, with the expectation of spillover effects into changing the representational target. The three R's conceptualization allows for spillover from one intervention to the other two, but the motherhood constellation conceptualization reframes spillover effects into an optimal port of entry for some relationship problems. In addition, ports of entry are possible through therapists' representations and behavior as they gain knowledge through experience with a specific family.

Stern also adds a different twist to remediation and redefinition as targets. One can change the way babies affect their parents in less drastic ways than making physical changes through surgery or medication. One can demonstrate the variety of behavior in the child's repertoire to the parents to alter (redefine) their perceptions of the child's normality. Such an approach is at the core of the neonatal interventions described by Bruschweiler-Stern (see Chapter 8, this volume). When parents are shown that their child is less fragile than they imagined or that the child has the capacity for alert attention to their faces, redefinitions can occur.

TREATING RELATIONSHIP PROBLEMS

This book is devoted both to enlarging the scope and reducing the focus of therapists' reflections and representations with the goal of improving the treatment of relationship problems. The enlargement of scope is carried out by placing the infant and parent in a transactional *process* model for understanding how developmental influences move through time and a parent constellation *structural* model to appreciate the multiple behavioral and representational levels that have to be considered at any specific point in time. Both the three R's and the motherhood constellation models are devoted to embedding parent–infant problems in a broader context. An appreciation of the breadth of influences on healthy child development does not mean that the therapist must intervene with each influence. Rather, these models provide a diagnostic basis for choosing a therapeutic target and point of entry that would be the most effective for each family at a specific point in time.

There are multiple perspectives for identifying the real patient, but the two of most salience for our purposes are the diagnostic and clinical. The clinical perspective is the focus of most of this book and is captured by the three R's and motherhood constellations as ports of entry. The diagnostic perspective is the focus of Chapter 3, where Rosenblum critically evaluates existing diagnostic schemes for their overemphasis on disorders in the individual and lack of emphasis on disorders in relationships, our specific area of clinical concern.

Each therapy chapter in this book expands on one or more specific port of entry. In Chapter 4 on Interaction Guidance McDonough focuses primarily on strategies for changing parent-infant interactions, whereas in Chapter 5 on child-parent psychotherapy Lieberman focuses primarily on changing parent representations. In Chapter 6 Fivaz-Depeursinge, Corboz-Warnery, and Keren expand a dyadic motherinfant approach into a triadic one where the behavior and representations of both mother and father are taken into account. The infant's behavior becomes the port of entry for the next two chapters, but all three R's come into play. In Chapter 7 Dunn brings the skills of an occupational therapist to helping parents deal with challenging individual differences in infant sensitivities. By showing parents how to be appropriately responsive to hyper- or hyposensitive and over- and undergroused infants, their interactions are modified to be more satisfying to both the parent and the child. Similarly, in Chapter 8 Bruschweiler-Stern uses a neonatal behavioral assessment scale to show parents the range of normal responses to be found in any infant. This enlarged perspective of their newborn allows the parents to be more accepting of their roles as mothers and fathers.

The last two therapy chapters expand the domain of clinical concern from the healthy development of the infant to include the healthy development of the parents and place them in their community and legal contexts. As Harris (1996) documented, concentrating on mothers' mental health and parenting behavior may be appropriate and essential for most clinical situations, but such delimited interventions are inadequate for multiproblem families. In Chapter 9 Egeland and Erikson describe an intervention model that adds a focus on support networks, life management skills, and parent empowerment to traditional concerns' about the family interactions with each other. In Chapter 10 Larrieu and Zeanah use an integrated systems approach that in the special case of child maltreatment involves foster parents, state protective services agencies, and the legal system as additional ports of entry for resolving parent—infant relationship problems.

How does one summarize these multiple models and multiple ports of entry? In Chapter 11 Emde, Everhart, and Wise focus on a theme that is a common thread throughout the book—the effect of relationships on relationships. From a developmental perspective they implicate not only the dyadic and triadic relationships between the mother, the father, and the infant, but also the relationships between each of these and other

siblings or primary caregivers. More important from a clinical perspective is the influence of the therapist–parent relationship on the relationship between the parent and the child.

Although the therapies presented in this book do not constitute a complete compendium of what therapists do with parents and infants, they not only are all exemplary in their quality but also exemplify the process and structural model we are using to help understand early relationships. They provide a guide that should enable a clinical and developmental audience to judge how best to improve the lives of infants, toddlers, and their families.

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