Mental Health

MENTAL HEALTH

Psychologic Sequelae of Early Infancy Health Crises

WILLIAM B. CAREY, M.D.

Although others had discussed the phenomenon previously, Green and Solnit first coined the useful term, the "vulnerable child syndrome." They described 25 children who had behavior problems and who in their backgrounds had the common feature of an illness or accident, mostly in early infancy, from which they had fully recovered although their parents had expected them to die. The authors offered the hypothesis that the illness experience itself left the parents with the feeling that the child was henceforth unusually vulnerable to serious illness or accidents and might well die during childhood.

A recent paper, "The Vulnerable Children Revisited," concluded that severe illness in infancy does not by itself predispose the child to behavior problems unless the family reacts abnormally. Before anyone accepts either of these apparently conflicting views as the last word on the subject, he should be fully acquainted with the great complexity of the problem. No investigation to date has studied properly the many variables longitudinally.

This report reviews the pertinent literature that is published and some that is unpublished, constructs a more complete theoretical framework of the elements involved, and makes some suggestions as to how the practitioner can best manage the situation until we have better data.

There are four main conclusions to be drawn from the information currently available.

1. The most important etiologic factor in any subsequent behavioral disturbance is the variable maternal reaction to the baby's illness—not the physician's opinion as to the objective severity of the illness.

   It is the mother's reaction to the illness, not the doctor's, that affects the way she handles her child afterwards. Her concerns are not necessarily the same as the doctor's in either quality or extent.

   Various Reactions to Major Problems

   Reports have been published on postpartum reactions to prematurity, gross mental defect, cleft palate, congenital heart disease and erythroblastosis. All conditions have common
features such as grief and guilt but they also have particular variations.

It seems that the more dramatic or early the illness the greater is the problem of adaptation for the mother. For example, few newborn health crises have the emotional impact of erythroblastosis fetalis which requires exchange transfusions. Rose has reported on a group of 88 mothers of such babies, interviewed when their children were four or five years old. Most of the mothers recalled traumatic emotional reactions beginning in the neonatal period with persisting distorted perceptions of the child.

Yet some major problems seem to present greater emotional hazards than others. Gibson found this in studying the behavioral sequelae of various gastrointestinal abnormalities that required surgery in early infancy. The greatest disturbance, as determined by four projective tests, followed prolonged food intake problems and postsurgical anal manipulations.

Overreacting to Minor Problems

There is evidence, furthermore, from clinical experience and research that objectively trivial medical problems also can prove to be a real threat for the postpartum mother. For example, through ignorance and inadequate medical support she may conclude that the use of forceps for delivery made her "instrument baby" somehow special and less than normal.

One study has suggested that even the threat of neonatal illness may be associated with behavior disturbance. Of 1,000 newborn infants 105 were placed in special nurseries for observation because of a variety of reasons such as possible infection and after Caesarean sections. None had any pregnancy complications, and none developed any neonatal illness. All were judged completely normal by physical examination on discharge and at one year. Yet, at one year of age 11.6 per cent had behavior deviation as compared to 4.1 per cent of those with a completely uncomplicated neonatal course, a highly significant difference. Even though this study did not appraise maternal attitudes in the neonatal period, its findings do raise the question of whether an illness needs to be life-threatening for the postpartum mother to be upset in an enduring way.

In a related investigation of 62 infants with pregnancy or neonatal complications, the 23 mothers who expressed distress about the complications and feared death or defect in the infant were "more apt to be high in controlling behavior, (excessive) closeness and hostility." Their infants exhibited significantly more behavior deviation at 18 months. It is not clear why these women reacted differently from the others.

A dramatic parallel appears in the recently reported "PKU Anxiety Syndrome." Acute or chronic anxiety that their babies are or will become mentally retarded may persist in some of the parents who have received reports of a positive PKU test later proven false, despite repeated subsequent negative tests and considerable reassurance and support from their physicians.

A possibly similar phenomenon has been noted by Waldrop et al in a group of presumably normal nursery school children. Those with several minor physical anomalies, such as unruly hair or epicanthal folds, have shown more hyperkinetic, aggressive and intractable behavior, possibly because their appearance had resulted in their mothers being less supportive and more restrictive.

Underreacting to Problems

Of 19 mothers in an intensive longitudinal study of child rearing in Cleveland two expressed what was thought by the investigators to be inadequate concern or denial about rather severe problems in their babies. One can expect that this reaction might occur in several situations: (1) probably most often when parents cannot bring themselves to accept the bad news at first; (2) if the parents believe that the doctor is expressing more concern is for the problem, such as when they have had a previous good outcome from the same peril; and (3) when the physician has failed adequately to communicate his well-founded concern.

2. The maternal reaction to the health crisis is a compound of several factors beside the illness
itself and the mother's vulnerability, particularly the quality of the medical care given.

Mother's Vulnerability

The mother's vulnerability, her susceptibility to the emotional trauma of the illness, may come from having inadequate intelligence or knowledge or from her negative feelings about childrearing in general or this child in particular. Her feelings about her capacity as a mother may be affected profoundly by her own experiences while being reared. Her previous experiences with the patient and with other children may color her attitude toward him should a health crisis come.1, 16

Levy17 pointed out that maternal overprotectiveness often followed illness in the children of the 20 women he studied. He viewed the illness "not as a genetic factor but as a strengthening element in an attitude already present, weighing it, however, with the measure of the external event." He was not studying the effect of the child's illness on mothers not already exhibiting overprotective behavior.

The discrepancy between the doctor's concern and the mother's perceptions of the neonatal problem is possibly partly explained in the perspective of the maturational crisis theory.18 Caplan has shown how women normally experience a disturbance of their emotional equilibrium during and immediately after pregnancy, making them capable of forming irrational attitudes in a way not found before or after. Using his terminology, we can speak of these illnesses and health threats as early infancy "health crises."

The Child's Role

The participation of the child in any pathologic interaction is overlooked too often. He may have residual damage to his central nervous system from the illness.19 He may have allergies that produce diseases such as asthma and become the focus of maternal anxiety. The child with a difficult temperament would present far more cause for concern to his mother than the one who is easy-going.20

The External Situation

The general psychosocial environment of mother and child may affect the way she responds to the illness in the child. The emotional supports from her family at the time of the illness and in the months that follow may be of critical importance in determining how well she adapts to the stressful experience. Unrelated physical, psychologic or social problems in herself or her family may weigh her down and make adjustment difficult.5, 16

Werner et al.21 have pointed out that after perinatal stress of various forms "the quality of the home environment had a significant effect on both mental and social development by age two, and the effect increased with the severity of perinatal complications." Several investigations of the mental and behavioral outcome of premature infants have yielded similar conclusions.22-24

Medical Care

If a mother has a health crisis to adjust to in her baby's early infancy, surely the understanding of it and emotional support provided by the physician are of great importance to her. He may be the deciding factor in resolving her emotional reaction in a healthy direction. If she is given insufficient information or not allowed to bring up her fears for discussion, she is likely to be left with a distorted view of her child. Pediatricians often pay insufficient attention to the way their words and actions influence the outcome of these events.

3. The variety of mother-child interactions resulting from these health crises apparently leads to a wide range of psychologic sequelae in the child.

As mentioned already, infants may sustain physical damage from early illnesses, such as impairment of the central nervous system.19 Also, behavioral symptoms may be from a combination of physical and environmental factors. This discussion is confined to nonorganic psychologic sequelae.

Adequate data are not available now to permit a statement about the frequency of the various sorts of outcomes. We only mention the possibilities.
Excellent Outcome

Eminence in adulthood can be the ultimate outcome of early infancy health crises for some individuals. Newton, Voltaire, Wesley, Keats, Victor Hugo, Pavlova and Churchill were born prematurely. Not expected to survive the immediate newborn period were: Samuel Johnson, Thomas Hardy, Picasso and Rousseau. Others who had life-threatening illnesses in infancy were Pascal and Schweitzer. Whether such prominence came because of or in spite of the early health problems is open to speculation.

Deviant Outcome

Abnormal psychologic sequelae to early infancy health crises include both behavioral and psychosomatic problems.

Green and Solnit described the vulnerable child syndrome as having the principal features of difficulty in separation, infantile behavior, bodily overconcerns and school underachievement.

Rose found that the majority of his four-to five-year-old children who had had erythroblastosis were exhibiting problems in behavior control, mostly overcontrol and unaggressiveness. He also suggested that the mother's fears might make her withdraw from normal contact with the baby and by understimulation cause him to be environmentally retarded.

Psychosomatic problems such as infantile colic and abdominal pain appear related at times to early infancy health crises.

Normal Outcome

Probably a goodly number of children emerging from health crises in early infancy evolve into children and adults who are generally considered normal by themselves and others. What the percentage and circumstances of this favorable outcome may be nobody can say at this time. It may be that most mothers and infants do all right if the crisis is not too overwhelming and if the other circumstances are not too disruptive of the mother's ability to adapt.

4. Inadequate data should not lead the pediatrician to belittle the possible importance of these health crises, nor should it deter him from conscientious attempts to manage them to the best of his ability.

Various spokesmen have exhorted pediatricians to manage more skillfully the feelings of the mother in early infancy health crises. Kennell and Rolnick give some excellent specific suggestions on discussing problems in newborn babies with their parents. Green and Solnit offer a way of dealing with the vulnerable child syndrome later on, when the child has developed symptoms, and also some principles for prevention. Little, however, is available to the pediatrician in the form of general plans of management of proven value.

Rose described the pediatrician's role as twofold: (1) to maintain the developmental capacity in the child, that is, to do anything he can for the infant's physical well-being; and (2) to provide the mother with emotional support by presenting her with the realities of the situation and by helping her adapt to these realities. To do the latter, he suggested, the pediatrician should allow her to verbalize any distorted perceptions of the child, a process which of itself should produce a healthy shift in her attitude.

In addition to this step it would seem logical to include: (1) approving her appropriate attitudes and plans; (2) trying to give insight into and suppression of her inappropriate attitudes and plans; (3) mobilizing family support to the maximum; and (4) calling for psychiatric or social work help if her own problems or social situation are getting in the way of a reasonable adjustment to the situation. The pediatrician's availability, interest, and willingness to listen may be most important. This approach does seem to make sense, though there is as yet no proof that it will improve the ultimate outcome of early infancy health crises.

References


Neurology


Another in the illuminating series of monographs by Spastics International Medical Publications in Association with William Heinemann Medical Books Ltd.

"We are not yet able to say that we can always identify the meaning of the baby's cry, but we can say that crying in newborns is purposeful. The baby is trying to communicate with the adult and it would be churlish not to respond. So far we have only identified four situations. (1) the cry of the baby who is in pain, (2) the cry of the baby who is hungry, (3) the pleasure cry and (4) the birth cry. We hope that we shall in time identify other patterns. . . . Clinical conditions where we think the cry will prove of value include cerebral insult following birth trauma (anoxia and hemorrhage), kernicterus and newborn hypoglycemia, hydrocephalus, meningitis and intracranial hemorrhage."


An illuminating exposition of the technics and diagnostic applications, directed primarily "toward the practicing doctor."