# **Issues of Concern to Mothers of New Babies**

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Although the literature reports the birth of a baby to be a time of stress for parents, their day-to-day experience with the baby in the early months is an understudied area. In this study logs were kept by 62 mothers of newborns (38 primiparas and 24 multiparas), who identified approximately 9,800 issues noted during their babies' first 91 days as well as help used in problem solving. Mothers described their days by recording stressors and supports.

Although the perceptions of mothers regarding life with their infants was highly variable from mother to mother, pattern and consistency were demonstrated. Categories of issues changing significantly in frequency over time included development, baby care, parenting, stressors, and illness, the latter dropping steadily across the baby's first three months. Approximately 6 percent of the issues concerned the mother herself in relation to the baby. Illness was the reason for 42 percent of the occasions of help seeking, with clinicians (family physicians and nurses) providing 62 percent of this help. Mothers reported as many supports as stressors and identified both stressors and supports in all categories, using the same set of categories for both. Parity did not influence numbers of issues reported. Primiparas sought help about 1.5 times as frequently as did multiparas.

Awareness by clinicians of a mother's concerns regarding her infant relates significantly to outcomes of well-child care. Chamberlin et al<sup>2</sup> presented evidence that parents' knowledge of child development was related to the amount of positive

contact parents had with their children and that the most important predictor of the child's developmental status at 18 months was the amount of positive contact between mother and child at one year. It seems important, therefore, for clinicians to learn about parents' perceptions of their children's health and developmental status. Research that has investigated the extent to which clinicians in well-child care settings are aware of parents' concerns shows that awareness varies greatly from clinician to clinician and is often low.<sup>3</sup> Both nurses and physicians are more likely to respond

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0094-3509/82/061079-07\$01.75 © 1982 Appleton-Century-Crofts to a concern that is related to a body system or function than one that is related to a psychosocial concern or issue of behavior. Korsch and her colleagues speculated that the casual manner in which parents mention concerns may lead clinicians to underestimate the importance of those concerns to the parent.

The kinds of issues concerning their children that parents have in mind have not been adequately studied. Such knowledge might make a difference in the way in which clinicians approach well-child care and in the character of the problem solving and anticipatory guidance that is offered.

The available studies of concerns of parents of well infants are surveys of the content of office visits or telephone calls that parents made to clinicians. 6,7 These surveys were limited to issues that parents identified as problems deserving a clinician's attention and may be biased by what clinicians accepted or were perceived to accept. Understanding the day-to-day issues for a parent that pertain to a new baby seems particularly important. The literature documents this period as one that is likely to present difficulties and challenges to parents and to result in consultation with clinicians.8,9 Adams<sup>10</sup> interviewed 40 mothers three times during the baby's first month in order to identify questions about infant care. The kinds of goals that mothers had for themselves as parents, as well as the kinds of things they noticed, aside from questions of infant care, were not assessed.

This study focused on an "epidemiology" of issues identified by mothers in a daily log and stated in their own language concerning their infants in the first three months after birth. Parity was examined as a factor affecting the distribution of issues and use of help.

### Methods

The 62 families (38 primiparas and 24 multiparas) in this study were patients who had received care from the three Madison, Wisconsin, teaching practices of the Department of Family Medicine and Practice. Residents in family medicine supervised by board-certified faculty family physicians provided medical care. Approximately two thirds of the subjects had access to nurse clinicians during their pregnancies or the baby's first three months. Any mother using these clinics, who was

married or living with a partner in a stable relationship, was 17 years or older, resided within a radius of 30 miles, and whose baby was healthy was eligible to participate in the study. Of the 156 families eligible to participate, 72 (about 46 percent) consented. Of mothers who refused, 56 percent gave lack of time as their reason for refusal, while 16 percent gave lack of interest. Six subjects dropped out of the study. Three families did not meet the postdelivery criteria (two infants were hospitalized in the neonatal intensive care unit for several weeks following birth, and one couple separated). One mother was unable to speak and write English adequately enough to complete the interviews, questionnaires, and log data.

The mothers ranged in age from 17 to 43 years and averaged approximately three years of education beyond high school. All but three of the mothers were married, and all but three were white. About two thirds of the sample lived in an urban area; the other one third lived in small towns, in the country, or on farms. By the end of the 91-day study period, 37 percent (23) of the mothers had returned to full or part-time work, with 43 percent of these returning during the baby's first month.

Using Hollingshead's Four Factor Index of Social Status, 11 in which education, occupation, marital status, and sex contribute to the score, the subjects' scores ranged from 27 to 66 on a scale of 8 to 66. The mean score for the subject population for socioeconomic status was 48, a score assumed to be characteristic of owners of medium businesses, "minor" professionals, and technical workers. On the whole, the subjects participating in the study were better educated than the population at large.

Multipara and primipara mothers differed in age  $(t = 2.93, 60 \, df, \, P < .01)$ , years lived together as a couple  $(t = 4.38, \, 60 \, df, \, P < .000)$ , length of labor  $t = -3.42, \, 55 \, df, \, P < .001)$ , location of home (urban or rural)  $(\chi^2 = 7.04, \, 1 \, df, \, P < .01)$ , and religious preference  $(\chi^2 = 6.51, \, 2 \, df, \, P < .02)$ . (All t tests are two-tailed.)

Mothers were requested to begin a written log, following printed instructions provided, as soon as possible after their baby's birth and to continue it until the baby was 91 days old. A project staff member visited the mother in the hospital or home on the second or third postpartum day to review recorded material and to complete the orientation to the method that was begun prenatally. Independent knowledge of whether parents wrote down

everything is not available; however, interviews with the families' clinicians did not produce any evidence of issues that parents had not included in their logs. Furthermore, the checks done of the infants' clinic records revealed no unreported issues. Parents included many more issues on their logs than they brought to a clinician's attention.

Mothers were instructed to report both "issueless days" and days during which they had been unable to keep the log ("unreported days"). The mean number of days for which the log was completed was 27.0 (SD = 5.1) for the first 31 days, 26.8 (SD = 5.0) for the next 30 days, and 26.2 (SD)= 6.2) for the last 30 days of the study. The relatively high completion rate for the log may be attributed to several factors. Mothers who consented to participate in the study may have been self-selected on the basis of interest in the project. Furthermore, the log may have helped mothers to accomplish some of their own goals. At the end of the study, 36 out of the 49 mothers interviewed for feedback regarding the study (73.5 percent) reported that keeping the log had helped them to be more aware of and to remember things that were occurring in relation to the baby. In addition, the number of contacts that the research staff member had with each subject may have contributed to a relationship that gave the log keeping added importance.

One aspect of the larger study of the problem-solving behavior of parents of new babies was to examine the effects the methods used for data collection had on the problem-solving behavior of parents. One randomly selected group of parents (interview group) received a weekly phone call to reivew the log material and to clarify issues as necessary. For a second group (the control group), the log was not reviewed after the initial phone call. Every other week, however, both groups were asked by telephone how the log keeping was going. This call served as a reminder, and an effort was made to resolve any difficulties. In general, mothers were able to resolve their own difficulties in keeping data.

Seven major categories were used to code the log material. These categories were derived from review of the literature coupled with analysis of the types of issues that provide the content of well-child visits. The subcategories for each major type of issue were further developed through pilot testing the log with 15 parents. For each major cate-

gory, two to nine subcategories were identified. The issue of validity was addressed by using the parents' own language to structure the categories. For example, if the parent wrote that the baby's stools were "watery," the issue was classified under "consistency of stools, including liquid stools." The category label "diarrhea" was applied only if the parent used that word to describe the issue. The major categories are defined as follows:

- 1. Growth and development includes questions about the adequacy of development as well as comments about developmental accomplishments.
- 2. Issues of temperament are organized in terms of the nine qualities of behavior, including regularity and adaptability, identified by Thomas et al.<sup>12</sup> In order to be designated by one of the subcategory labels, the parent must clearly be characterizing the baby's temperament as such.
- 3. *Baby care* issues are concerned with the ongoing and recurring events of day-to-day life with a new baby.
- 4. *Parenting* includes feelings and attitudes related to being a parent and to the effects of a new baby on personal and family life in general.
- 5. Stressful events refer to both anticipated and unanticipated events, including such issues as taking the baby out, leaving the baby with someone, and health care encounters.
- 6. *Illness* includes trauma, as well as physical and physiological issues (diarrhea), and concerns about health status in general.
- 7. Behavior includes day-to-day descriptions of behavior as well as references to crying and to habits such as use of a pacifier.

An eighth category, *no issues reported*, is used when the mother states that she had nothing on her mind about the baby that day.

The coding system includes a means of tagging the subject of each issue identified (baby, parent, sibling, or others). Each issue is also tagged by the characteristic of help seeking involved (urgent or nonurgent) and by the type of help (clinician, lay help, or other assistance) with problem formulation or management.

The daily occurrences perceived to be stressors and supports were coded in seven categories. These categories were developed in a similar manner to those for coding issues (ie, through literature review, clinical experience, and pilot testing). Categories of stressors and supports include the following:

Table 1. Mean Free	quency (and Standar	d Deviation) of Issues per
Subject by Categ	ory and by Time (n =	= 62 mother-infant pairs)

Category of Issue	First Month (0-30 days)	Second Month (31-60 days)	Third Month (61-91 days)
Development	7.5 (8.9)	9.6 (9.3)	8.8 (8.7)*
Temperament	2.5 (2.6)	2.2 (2.5)	3.0 (4.2)
Baby care	20.6 (13.4)	13.4 (11.9)	13.1 (13.2)**
Parenting	3.4 (3.9)	1.7 (2.6)	1.6(2.6)**
Stressful events	5.4 (4.4)	4.0 (4.1)	3.8 (3.9)†
Illness	19.8 (14.4)	13.7 (9.5)	9.9(7.7)**
Behavior	5.6 (4.5)	4.4 (4.2)	4.6 (4.6)
Days with no issues	2.0(3.2)	3.1 (4.5)	3.3 (8.7)

Note: Frequencies are corrected for number of days the log was completed for each time period.

- 1. Self, having to do with the mother's own feelings and physical status
- 2. Responsibilities and tasks, to be accomplished in relationship to home, family members, neighbors, and work
- 3. Resources, including the help of individuals and the availability of services, knowledge, and skills
- 4. Activities and plans, including visits with friends and relatives, recreation, appointments
- 5. Behaviors refer to things someone else does, including family members and friends
- 6. Conditions include how busy the parent is and the extent to which the day's activities go smoothly
- 7. Events include a move to a new home or a death in the family

Too much (or too little) help, for example, was identified by mothers as a stressor, while enough help was identified as a support. Having "too much to do" (a condition) was identified as a stressor, whereas "having one less thing to do" was identified by mothers as a support.

For each subject, two of the 13 weeks of log data were coded by a second staff person in order to check intercoder consistency. The overall mean percentage of agreement for coding the log data presented here is 80.4 percent within subcategory of issue, 85.6 percent for help source, and 74.4 percent within subcategory of stressor or support.

# Results

Table 1 presents the frequency of issues by category and by time, corrected for the number of days within each time period that the log was kept by each individual subject. For five categories (development, baby care, parenting, stressful events, and illness), the number of issues identified varies significantly with time (P = .03). Issues regarding illness drop consistently across months. Within the first month, issues in two categories (parenting and illness) were more frequently reported during the first two weeks, and issues of behavior were less frequently reported during this period. Within the behavior category, the majority of issues related to crying. While the total number of issues identified dropped over the three months, from a total of 3,787 in the first month to 2,901 in the third month, the proportion of concerns within each category remained more nearly constant.

# Subject of the Issue

For this sample of mothers, the mean number of issues reported was approximately 159 (SD, 77.1). Of the issues reported, 91.5 percent (mean, 138.1) were issues concerning the baby as such. About 6

<sup>\*</sup>P = 0.03 \*\*P = 0.00

tP = 0.00

Table 2. Percentage of Sources of Help Used for All Issues Reported by Mothers (n = 62 mother-infant pairs)

	Time Period			
Source of Help	Weeks 1-2	Weeks 3-4	Second Month	Third Month
Self, no help	56	70	81	84
Self, books, other literature	8	8	5	4
Husband or partner	7	3	3	4
Grandparent	4	3	1	1
Other relative	2	1	1	0.3
Friend or neighbor	2	1	2	1
Family physician	8	6	4	3
Nurse clinician	5	4	1	2
Other clinicians	8	1	1	1
Other	0.5	1	0.4	0.3
Total issues	n = 1,905	n = 1,882	n = 3,148	n = 2,901
Proportion of all issues identified for which external help was sought	.35	.22	.13	.12

percent of the issues (or a mean of 9.3 per subject) concerned the mother herself. The remainder of issues (2.4 percent) involved someone else (eg, father, siblings, friends, grandparents).

# Source and Urgency of Help Seeking

The percentage of all issues identified for which help was sought dropped from 35 to 22 percent in the first and second two-week periods to 13 and 12 percent in the second and third months. Table 2 summarizes the sources of help used for all issues that mothers described for the three-month period. During the first month, mothers more frequently sought help from nurses, both from the clinics and from the newborn nursery. In the second and third months the role of the clinicians decreased. In a small number of instances, mothers reported urgent need of clinician help. The mean for such calls per subject for the entire three months was 1.3. A maximum of ten such calls was reported by the individuals studied, and 45 out of 62 mothers reported two or fewer such calls.

The data allow examination of how mothers seek help for specific issues. For example, when help was sought, it was for illness 42 percent of the time, with the family's physician being consulted 36 percent of the time, the family's nurse being consulted 11 percent of the time, and another clinician (often a nurse) being consulted 15 percent of the time. Eighteen percent of the issues for which help was sought were related to feeding. Family physicians provided 23 percent of this help and family nurses 21 percent. Another clinician was consulted 21 percent of the time (eg, nursery nurse).

# Stressors and Supports

The stressors and supports identified within each category are summarized in Table 3. Overall, mothers reported as many supports as stressors. This was true in each month of the study. Mothers reported their own feelings or status to be a stressor far more often than a support. On the other hand, issues related to activities and resources were far more often seen as supports. One of the

	Reported Stressors	Reported Supports No. (%)	
Source	No. (%)		
Self	683 (15.4)	122 (3.1)	
Responsibilities	1,241 (27.9)	279 (7.1)	
Resources	276 (6.2)	1,533 (38.8)	
Activities, plans, events	596 (13.4)	1,148 (29.1)	
Behaviors	741 (16.7)	532 (13.5)	
Conditions	853 (19.2)	316 (8.0)	
Other events	54 (1.2)	17 (0.4)	
Total	4,443 (100.0)	3,947 (100.0)	

important component categories of conditions, weather, was most often perceived by mothers as a stressor. The behavior most often seen as a stressor was the baby's crying or fussiness.

# Effects of Parity

Multipara and primipara did not differ significantly in the total number of issues reported, each group having a mean of 156 (SD, 65.0) and 150.6 (SD, 60.2) issues, respectively.

Parity was a significant main effect in analysis of variance only for the category of parenting, for which multiparas identified more issues than primiparas (F = 4.27, 1 and 58 df, P = .04).

On the average, primiparas sought help about 1.5 times as frequently as multiparas. By the third month, primiparous mothers as a group sought help for about one out of five issues; for multiparas, it was about one out of eight. However, a t test showed that the difference between means for the two groups was not significant ( $t = 1.38, 60 \, df$ , P > .05, two-tailed).

### Discussion

The perceptions of new mothers regarding life with their infants are highly variable but demonstrate pattern and consistency. The changes in frequency with which the various categories of issues are identified over time indicate changes in the sa-

lience of the types of issues for parents. The clear drop of concern about illness speaks to the high level of worry about the baby's vulnerability in the neonatal period. Concern about illness drops even though babies actually encounter more minor illnesses as they grow older. Furthermore, the more frequent report of issues of parenting in the first two weeks and the more frequent reporting of behavior after the first two weeks may indicate that parents are first likely to blame themselves for being unskillful and later to blame the baby for being fussy. Although the subject of the issue was the baby in the great majority of cases, the extent to which the mother identified herself as the subject of the issue supports a need for the clinician's attention to concerns of parents about themselves as parents.

To an increasing extent over the course of the three months, mothers relied on their own resources to deal with issues concerning the baby. The infrequency with which the father (husband or partner) is identified as a source of help is noteworthy. The family physicians were used more frequently than either grandparents, other relatives, friends, or father, except in the third month. This finding may be explained by the number of hours fathers were away from home weekly (mean, 50.1; SD, 15.0; range, 8 to 72), and therefore unavailable for help with problem solving. On the other hand, mothers may have often taken the fathers' help with problem solving for granted and not recorded it. A special effort, however, was made to orient mothers to record fathers' help on the logs.

The average number of issues for which clinicians were consulted, relative to the mean number of issues reported by mothers, was small. Furthermore, very few contacts with clinicians were perceived by the mothers to be urgent in character. For the most part, if mothers contacted clinicians, it was at a time the mothers thought to be convenient for the clinicians. The findings indicate that, on the whole, the mothers of new babies perceived themselves as being capable of managing issues, at least in an interim period, until help seeking was likely to be convenient for the helper.

As sources of help, clinicians may be either more or less important than usually believed, depending on the issue to be managed. It is clear that mothers do discriminate in seeking help, the family physician being consulted to a greater extent than nurses for illness issues, and nurses (including other clinicians) being consulted to a relatively greater extent than family physicians for feeding issues. However, since "other clinicians" for the most part referred to nurses, nurses were consulted almost as frequently as family physicians for illness (31 vs 36 percent).

Although several of the categories for classification of stressors and supports were more frequently used to report stressors than supports, or vice versa, mothers identified both stressors and supports in all of the categories formulated by the investigators, highlighting the importance of assessing a mother's evaluation of activities, events, conditions (including self), tasks, resources, and behaviors of others.

Multiparas and primiparas seem to be less different than is usually expected, both in terms of the extent to which the baby is on their minds and in help-seeking patterns. Parity made little difference in the numbers of issues identified. On the other hand, the findings validate the log method used. As a case in point, multiparas identified more issues concerning parenting than did primiparas, an anticipated finding given that multiparas have other children, and are, therefore, at higher risk of parenting problems. Furthermore, multiparous mothers tended to use less help per number of issues identified, a function perhaps of both their experience and expectations of themselves. However, an unexpected finding was that, for both multiparas and primiparas, as the number of issues concerning the baby increased, the extent to which external sources of help was used also increased.

The variance within parity groups remains to be explained and is the subject of ongoing analysis.

Although the findings of this study need to be confirmed in other populations, the results clearly demonstrate that mothers have more on their minds concerning their infants than comes to the attention of the clinicians.

# **Acknowledgment**

This research was partially supported by DHHS grant No. R01 NU-00606 from the Nursing Research Branch, Division of Nursing.

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