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Antepartum Bed Rest: Effect Upon the Family

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Objective: To identify the effects of antepartum bed rest upon the family.

Design: Descriptive, retrospective survey.

Participants: A national random selection of 89 women who had been prescribed antepartum bed rest in the hospital or at home and who contacted a high-risk pregnancy support group for information.

Main Outcome Measure: An open-ended questionnaire.

Results: Families experienced difficulty assuming maternal responsibilities, anxiety about maternal-fetal outcomes, and adverse emotional effects on the children. Child care was managed by various people across time. Child care problems included negative reactions from the children, concern about the quality of the provider, and maternal worry about care. Families also experienced financial difficulties, the majority of which were not compensated by insurance or work benefits. Almost all, 96.6%, families received some type of support during bed rest. Instrumental support was the most commonly received; however, emotional support was considered the most helpful. The least helpful type of support was that which was unreliable. The primary providers of support to the family were parents and family, followed by friends. The women reported that health care providers offered minimal support to the family.

Conclusion: Despite support, antepartum bed rest creates difficulties that affect the entire family and its finances. *JOGNN, 30*, 165–173; 2001.

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Although no evidence supports the effectiveness of antepartum bed rest in preventing preterm birth, it is prescribed by 90% of obstetricians for approximately 700,000 pregnant women per year (Enkin, Keirse, Renfrew, & Neilson, 1995; Goldenberg et al., 1994; Maloni, 1996; Maloni, Cohen, & Kane, 1998; Maloni & Kasper, 1991). Bed rest, however, may not be a benign treatment. It is associated with adverse physiologic and psychologic effects, which persist into the postpartum period (Curtis, 1986; Heaman, 1992; Maloni et al., 1993; Maloni et al., 1998; Monahan & DeJoseph, 1991; Schroeder, 1996).

The adverse effects of bed rest are not limited to the woman but extend to the family. The family is a dynamic system. Illness of a member affects the entire family (O'Malley et al., 1991). Parental illness and/or hospitalization pose a threat to the family, especially the children. Researchers have found that when a nonpregnant parent is ill, increased family and marital stress, difficulties with communication, disruption of routines, and alterations in roles are common (Hymovich, 1993; Lewis, Hammond, & Woods, 1993; O'Malley et al., 1991; Titler, Cohen, & Craft, 1991).

The impact of bed rest on the family has not been the focus of previous research. Several researchers, however, have provided insight into the potential of bed rest to adversely affect the family. In a comparison of high- and low-risk pregnant women, Mercer and colleagues reported that increased obstetric risk induces uncertainty about maternal and fetal health and increases anxiety that can affect interpersonal relationships (Mercer, Ferketich, DeJoseph, May, & Sollid, 1988). Part-

ners of the high-risk pregnant women reported less optimal family functioning during the woman's hospitalization than partners of pregnant women who were low risk and not hospitalized (Mercer et al., 1988). Bed rest is likely to compound family problems. Bed rest necessitates reallocation of maternal roles in the home and also may necessitate maternal absence because of hospitalization. May (1994) and Maloni and Ponder (1997) documented that partners of women on bed rest report high levels of stress from assuming increased responsibilities at home and worrying about maternal and fetal health and their own emotional and physical health.

Additional researchers have shown that women on bed rest at home or in the hospital experience increased negative emotions, such as anxiety, depression, hostility, and emotional and intellectual lability (Curtis, 1986; Heaman & Gupton, 1998; Mackey & Coster-Schulz, 1992; Maloni et al., 1993; Maloni & Kutil, 2000; Monahan & DeJoseph, 1991). Increased anxiety, depression, or emotional lability across weeks or months of bed rest is likely to strain family relationships and alter family dynamics. Indeed, Mackey and Coster-Schulz (1992), Maloni and Kutil (2000), and Schroeder (1996) report that spousal relationships become problematic during bed rest. In a qualitative study of 12 married women prescribed either home or hospital bed rest, Schroeder (1996) found that wives perceived husbands as uncooperative with domestic and child care tasks. However, researchers with larger studies have found that husbands are helpful (Heaman & Gupton, 1998; Monahan & DeJoseph, 1991).

Antepartum bed rest also may adversely affect the children in the family. Most children of women on bed rest are quite young and unable to fully comprehend maternal inability to function, the need to reallocate child care, or maternal absence during hospitalization. Although no studies of the impact of antepartum bed rest on children have been conducted, studies have been conducted on the effects of other types of parental illness. Titler et al. (1991) interviewed nine parents hospitalized in critical care, their spouses, and their children to determine the impact of hospitalization on both the family and individual members. Adults reported efforts to protect children from anxiety-provoking information. Children were affected by alterations in child care arrangements, meal patterns, school attendance, interaction with friends, and after-school activities. Household responsibilities were taken over by older children who were expected to act like adults. In a longitudinal study of the effects of maternal breast cancer on the family, Lewis, Hammond, and Woods (1993) found that parents were preoccupied with the woman's health status. Children assumed increased responsibility for household tasks of both the ill and healthy parent and reported that parents had limited time and energy to attend to their needs. In another study, 13 sets of parents in which one parent was ill with cancer reported changes in their children's behavior including increased crying and clinging and decreased sleep (Hymovich, 1993).

Data support the idea that families are concerned about children's responses to maternal bed rest. Women who are prescribed bed rest worry about their children's welfare and about child care management (Heaman & Gupton, 1998; MacMullen, Dulski, & Pappalardo, 1992; Maloni & Kutil, 2000). Schroeder (1996) reported that children were forced to become more independent and missed their mothers. MacMullen et al. (1992) found that mothers on bed rest reported occasional behavior problems and emotional distress among their children.

Family financial problems during bed rest are likely. Goldenberg et al. (1994) estimated the annual cost of bed rest in the United States to be approximately $1.03 billion per year. Costs include medical bills not covered by insurance, lost earnings, and out-of-pocket expenses for child care, prepared meals, and household help. Researchers have found that a recurring theme in antepartum support groups is financial difficulty (MacMullen et al., 1992; Maloni & Kutil, 2000), but whether family financial difficulties actually occur or are only a worry is unknown.

Social support is thought to buffer or mediate family stress (Thompson, 1990). Little evidence exists, however, about social support during antepartum bed rest. The woman's partner, family, and friends have been identified as sources of support in two studies (Heaman & Gupton, 1998; Monahan & DeJoseph, 1991). Heaman (1992) examined the impact of social support on mood disturbances. Three groups of 20 middle-class Canadian women were studied: two groups with pregnancy-induced hypertension treated in either the hospital or home and a normal control group (Heaman, 1992). In that study, social support was ineffective in buffering the effect of stress upon mood disturbance. No study has been undertaken of the types of social support available to families during maternal antepartum bed rest and whether those supports are perceived to be helpful.

Research with families in which one parent is ill suggests that antepartum bed rest may adversely affect many aspects of family life, including the children and finances (O'Malley et al., 1991). Social support may positively affect the family and lessen the impact of maternal bed rest. Knowledge of the effects of bed rest upon the family, the types of support commonly available to families, and the kinds of support that are useful can assist nurses in planning interventions or maximizing available support. Therefore, the purpose of this study was to detail (a) the most difficult aspect of

maternal bed rest for the family; (b) how child care was managed; (c) whether problems became manifest in the children; (d) whether financial difficulties were incurred; and (e) the kind(s) of support families received during antepartum bed rest, the sources, and the types of support that were helpful or not helpful, as reported by women across the United States who were prescribed antepartum bed rest.

Method

The sample for this descriptive, retrospective study consisted of 89 women who had been prescribed antepartum bed rest. Women were randomly selected from a nonrandom sample of persons who had contacted a national high-risk pregnancy support group (Sidelines) for information. The investigators obtained a list of random numbers generated by computer by the Wisconsin Survey Laboratory. The list of random numbers was then used by Sidelines to select the potential respondents from the organization's computerized list of 1,280 names. Sidelines then mailed out the questionnaires and stamped addressed return envelopes along with two cover letters. The first letter, from Sidelines, explained that the organization was cooperating with the investigators to conduct the study. The second letter, written by the investigators, explained the purpose of the study, following a consent form format, and assured participants of anonymity. The study was approved by the university institutional review board. Individuals were informed that return of a completed questionnaire was considered consent to participate in the study.

A sampling limitation was that there was no way of knowing which of the l,280 people who had contacted Sidelines had actually been prescribed bed rest and thus were eligible for the study. Therefore, to ensure that an adequate sample size was obtained, we oversampled and mailed questionnaires to 400 women. A stamped addressed return envelope was provided. The Sidelines organization mailed the prepackaged envelopes, and thus the identity of the respondent remained unknown to the investigators. Of the 147 questionnaires returned, 89 were completed. Of the remaining 58 questionnaires, the post office returned 45 with no forwarding address (54/400). Eleven envelopes were returned because the individual had requested information from Sidelines for someone else, and two people declined to participate because of fetal death. Maternal response rate was 26% (89/342).

Women were primarily white (94.4%), married (92.1%), and had some college education. Their diagnoses included preterm labor (n = 41), placenta previa (n = 7), incompetent cervix (n = 6), or identified cervical abnormality (n = 5), pregnancy-induced hypertension (n = 3), premature rupture of membranes (n = 2), or a combination of these diagnoses. Fifty-two percent of the women had at least one previous fetal or neonatal loss.

Analysis of the Hollingshead Two-Factor Index of Social Position (Hollingshead, 1991) revealed that both the women and their partners tended to be middle class (see Table 1). Families were from 28 states as determined by the envelope postmark (17 from CA; 10 from TX; 6 from MN; 5 from MI; 4 each from IL, NJ, and NY; 3 each from CO, LA, and VA; 2 each from AZ, FL, MD, OH, OR, PA, and WV; 1 each from AL, CT, GA, IA, KY, MO, NC, NV, SC, TN, and UT; 5 were unknown). Overrepresentation of women from California and Texas was due to a greater number of Sidelines chapters started by volunteers in these two states.

The mean total length of bed rest was 90.5 days (SD = 51.4; range = 17–217). Most women had been prescribed both home and hospital bed rest (n = 47, 52.8%). The mean length of hospital bed rest was 19.8

TABLE 1
Demographic Characteristics of the Sample (n = 89)

	Mean	SD	*Range*
Age (years)			
Maternal	31.2	4.18	23–40
Paternal	33.75	5.9	22–56
Education (years)			
Maternal	14.8	2.3	10–23
Paternal	15.91	2.85	

	Hollingshead Social Position			
	Mother (n = 89)		*Father (n = 58)*	
	n	%	n	%
Class I	13	14.6	10	16.9
Class II	32	36.0	18	30.5
Class III	21	23.6	18	30.5
Class IV	15	16.9	6	10.2
Class V	8	9.0	0	—
Unknown	0	—	7	11.9

Note. The Hollingshead Two-Factor Index of Social Position uses years of education and type of occupation to estimate social position. Class I = higher executives and major professionals; Class II = business managers and professionals; Class III = administrative personnel and owners of small businesses; Class IV = clerical and sales workers, technicians, and owners of little businesses; Class V = skilled manual employees; Class VI = semiskilled employees; Class 7 = unskilled employees and unemployed.

days (*SD* = 29.9, range = 1–180), and the mean length of home bed rest was 81.8 days (*SD* = 53.5; range = 6–217). Comparisons of the effects of home versus hospital bed rest could not be made because only 6 women had been prescribed solely hospital bed rest.

Instruments

Questions for the Bed Rest Questionnaire were generated from the literature (May, 1994; Monahan & DeJoseph, 1991; Schroeder, 1996) and from investigator contacts with mothers either in a previous study (Maloni et al., 1993) or in a bed rest support group (Maloni & Kutil, 2000). Questionnaire construction was assisted by a national expert in interpretive research (B. Bowers). A pilot test of the questionnaire was conducted with 4 women who found the questions easy to understand and responded appropriately.

The questionnaire contained 22 open-ended questions that focused on the antepartum bed rest experience. The results of 8 questions are reported in this article. The women were asked to describe (a) the most difficult problem for your family while you were on bed rest; (b) how the care of your child or children (if any) was managed; (c) any problems that concerned you; (d) any financial problems that occurred while you were on bed rest, including problems with job/career interruptions; (e) support you received while on bed rest; (f) support that was the most helpful; (g) support that was the least helpful; and (h) who provided the support.

When a woman is placed on bed rest, family members assume increased responsibilities and suffer monetary losses.

Data Analysis

Content analysis (Holsti, 1968) was used to analyze the open-ended questions. The principal investigator provided content analysis training to the coauthors before conducting the analysis for this study. Mothers most often answered the questions by writing phrases or a paragraph. Each response was written verbatim on an index card and then reviewed by the coders (coauthors) and the principal investigator to determine the possible number of answers. Responses containing more than one topic were placed on additional cards. Responses were then sorted into categories by one coder who named and defined each category. Cards were then re-sorted independently into the identified categories by a second coder. Discrepancies concerning the clarity of a category definition were resolved through discussion, and the definitions were refined as needed. Next, responses on the cards were categorized independently by one coder and then the other, each of whom assigned a category number to the responses. Interrater reliabilities were determined by percentage of agreements and ranged from 97–99%. Frequencies were obtained by counting the number of times each category was cited. Demographic and perinatal data were analyzed using descriptive statistics. Finally, after the manuscript was drafted, a woman and her partner who were not included in the sample but who had recently experienced a long-term bed rest reviewed the manuscript. Both stated that the descriptions accurately represented their experience.

Results

Family Difficulties

Women wrote at length about the difficulties their families experienced while they were on bed rest. The majority of responses (84%) could be grouped into four categories. The most common family difficulty was "doing it all" (i.e., assuming tasks that the mother usually did, such as domestic activities and child care, in addition to usual responsibilities) (see Table 2). Women reported,

> My husband had to bear the brunt of any discipline issues as well as keep him [the child] entertained, the house in order, as well as make me feel confident and positive. I think it is just as hard on the dads. They get very little support and no time off.
>
> For my husband, leaving me breakfast, snacks, and lunch, taking my daughter to school, working, picking her up, and then coming home and making me dinner—it was all very hard on his routine . . . too much for one person.

The second most common problem mentioned was the emotional difficulty the children experienced. The children were frightened or confused by bed rest and were upset about not being cared for by their mothers. Women wrote, "I had a 2½-year-old who was very upset to have his mom in bed all day. He couldn't understand why I couldn't play physically with him or tuck him in bed." "My son was confused because he had to stay with so many different people and his mommy wasn't home." Another woman reported that her 3½-year-old had problems but "became very adept at hooking me up to the electronic uterine monitor."

Other areas of difficulty for families included anxiety about maternal and/or fetal health (11.7%) and maternal irritability and moodiness (10%). Financial concerns, having the mother hospitalized at a distance from the home, observing maternal discomforts during the

TABLE 2
Family Problems Associated With Antepartum Bed Rest

	n	%
Family difficulties (88 women provided 120 answers)		
None	1	0.8
Doing it all	54	45.0
Child's emotional problems	21	17.5
Anxiety about outcomes	14	11.6
Maternal mood variations	12	10.0
Maternal distance from home	7	5.8
Observing maternal discomfort	4	3.3
Maternal inability to participate in important events	4	3.3
Financial concerns	3	2.5
Childcare management (45 women provided 62 answers)		
Combination of people	31	50.0
Paid assistance	18	29.0
Self-management	11	18.0
Unclear answer	2	3.0
Childcare problems (26 women provided 34 answers)		
No problems	2	5.8
Negative child reactions	14	41.2
Caregiver quality	8	23.5
Maternal worry	8	23.5
Other	2	5.8
Financial difficulties (84 women provided 91 answers)		
No problems	10	11.0
No problems due to compensation	16	17.6
Partial compensation	26	28.6
No compensation	32	35.2
Career setbacks	7	7.7

pregnancy, and maternal inability to participate in family events also were problematic.

Children's Difficulties

Women who had children (n = 45) were asked about child care management and problems that arose. Child care was managed in one of three ways. The primary source came from a combination of family and friends (50%), who went to elaborate lengths to provide care. One woman wrote, "We had to import my mom from out of state to care for our 2½-year-old daughter. Otherwise I don't know what we would have done." Another wrote,

> I had 3 children while on bed rest: a 5th and 4th grader, and one in kindergarten. Friends drove the kids to and from school, and I managed them from my bed until Dad got home. Friends and neighbors pitched in for emergency hospital runs. Mostly my husband managed the house and children. We needed a large calendar to keep track of everything.

Child care problems were manifested in adverse effects on the child or children, concern about the quality of caregivers, and maternal worry about the care.

Twenty-nine percent of families used paid assistance, such as day care or babysitters, to manage child care. However, not all families could afford child care. One woman wrote, "I sought [child care] assistance through our insurance and the county. There was no help unless you had the finances available." Despite health care providers' assumptions that women on bed rest should not or do not take care of children, 18% of these women managed their children's care by themselves. They described self-management as follows:

> We put all his toys in my room and he spent all afternoon playing by my bed. We also ate dinner and lunch, picnic style on my bed and that was fun for him.
>
> When I got up to use the bathroom and passed the fridge on the way. Then, I would get my daughter drinks and food.

Twenty-six women wrote about child care problems. Problems concerning child care could be grouped into three categories: adverse effects on the child, concern about the quality of the caregivers, and maternal worry about child care. Primary problems concerned the children's feelings, needs, and coping abilities (41.2%). Problems arose with children of all ages. Women wrote, "It bothered me that my son [3 years] saw me so sick so often. He was real depressed and showed other signs of stress." Another woman stated,

> We tried to keep his routine the same to make it easier, but he resented the caregivers because he wanted his mom to do it for him. The situation was hard on him. He started acting up at school. It's very hard for a child to understand weeks, let alone months of having to wait.

Another woman wrote, "We had children ages 13, 12, and 10. They became very frustrated because I was not

able to be up and around. Their fights with each other were terrible. They knew I couldn't get up to stop them."

Eight mothers (23.5%) had concerns about the quality of the care. One woman reported that she "didn't know the babysitter very well." Another woman, who left the baby's father because of domestic abuse and was subsequently hospitalized, wrote, "My daughter was placed in my mother's custody, who told her that I wasn't going to be her mother anymore. It was either my mother or foster care." Finally, one woman expressed concern for the effect on her own mother. "She came on a daily basis—but the hours were very demanding and she has severe lung disease (chronic obstructive pulmonary disease). I could see that my mother's health was declining due to the rigorous demands."

Eight women (23.5%) were concerned about their own lack of involvement in child care. A mother wrote, "I was most upset that I couldn't take care of my son myself and that I missed most of his day." Another stated, "I had 100% faith in the care she [the 2-year-old] received, but I felt that she and her father were closer at that time and I wasn't a part." Another stated, "My 15-month-old did surprisingly well, but I didn't. I worried constantly about his care and [whether] he was getting treated well." Only two women reported they had no difficulties with child care.

Financial Difficulties

Seventy-one percent of families incurred financial difficulties related to loss of income or savings, lost jobs, incurred debts, and out-of-pocket expenses associated with treatment (see Table 2). More than one third of the families received no compensation for their losses. One woman wrote,

> I had absolutely no income. I finally got food stamps for 1 month so that helped. I had to call all my creditors and tell them that I couldn't pay them. I felt humiliated. My father sent me money to help with rent and I used up my savings. It was very difficult relying on others to support me financially.

Another woman wrote, "We lost all our savings. My husband stopped working to take care of me. My insurance didn't cover the home health care that I needed, so we still have a medical bill of $10,000."

Twenty-eight percent received partial compensation for financial losses. One woman reported, "Our financial earning power definitely took a hit. I was put on disability, which paid a fraction of my usual income but it was better than nothing." Another woman reported,

> I had to stop work ($60,000/yr). Thank goodness I had a disability policy. But we did not have money coming in for 60 days during the waiting period. Also, after coming off bed rest it took me longer to get back to work [because of] fatigue.

Some women (7.7%) experienced career setbacks. One woman wrote, "I stayed within the company but I lost that job. I'm now working for $40,000 in a job I did 10 years ago." Only 28.6% of families were able to maintain their financial status because they had adequate income or sick leave benefits.

Support

Only 3.3% of families had no support while on bed rest. Various people provided support to families (see Table 3). Help was provided by the immediate family (44.2%); by friends (28.8%); and by others such as coworkers, neighbors, and fellow church members. Health care professionals were reported to provide support to the family on only 10 occasions (6.1%). Families received various kinds of support, including instrumental, emotional, organizational, and diversional support. The most common type of support provided was instrumental support (42.9%), defined as help with household and family responsibilities. This support took the form of preparing meals, doing laundry, cleaning, shopping, running errands, and providing child care, as well as other tasks. One woman wrote, "My mom, friends, and colleagues made and brought meals. When I ran out of sick leave, my colleagues donated 3 months worth of their own annual leave."

Although instrumental support was the most common type of support received during bed rest, emotional support was perceived as the most helpful.

Emotional support, attempts to provide psychologic assistance, concern, or empathy, was the next most frequently received type of support (27.5%). Emotional support occurred in either personal interactions or via the phone or written communication. For example, one woman wrote of the emotional support she received as "knowing people cared about us so much and could realize how difficult the situation really was." Another woman received "constant encouragement that I was doing a great job and that everything was going to be all right. They also reassured me that when the babies arrived they would all help me take care of them."

Organizational and diversional support was the next most common type of support. Organizational support

TABLE 3
Support Received by Women on Antepartum Bed Rest

	n	%
Types of support received (87 women provided 149 answers)		
Instrumental	64	43.0
Emotional	41	27.5
Organizational	14	9.3
Diversional	13	8.7
Professional	10	6.7
Little or none	5	3.3
Other	2	1.3
Most helpful support (75 women provided 97 answers)		
Emotional	41	42.3
Instrumental	28	28.9
All types	9	9.3
Professional	8	8.2
Organizational	6	6.2
Other	5	5.1
Least helpful support (62 women provided 65 answers)		
Unreliable support	16	24.6
Unhelpful support	16	24.6
Stressful support	12	18.5
None	12	18.5
Lack of understanding	4	6.2
Other	5	7.6
Providers of support (87 women provided 163 responses)		
Parents/family	72	44.2
Friends	47	28.8
Organizations	14	8.6
Professionals	10	6.1
Neighbors	9	5.5
Churches	5	3.1
Coworkers	4	2.5
Other	2	1.2

Note. Because women often gave more than one answer to each question, percentage refers to the proportion of answers given for each category divided by the total number of answers given for the question.

was received from groups specifically created to provide assistance to high-risk pregnant women. Sidelines, the national high-risk pregnancy support group, was most frequently mentioned. One woman reported that "[Sidelines] gave me two names. Each [person] called me once a week to let me vent frustration. I found myself watching the clock when I knew they should be calling." Diversional support was the provision of recreational material or gifts that helped the women keep busy and make time pass more quickly. Reading material and videos brought by friends were common examples. One woman stated, "One friend brought by a bag of novels and her cocker spaniel to keep me company during the day."

Emotional support, followed by instrumental support, was perceived by families to be the most helpful. Support perceived to be least helpful was that which the giver considered assistance but the family found to be not helpful, unreliable, stressful, or insensitive. One woman stated, "I was very hurt by friends who called and said that [they] would come visit and never did." Another woman wrote about unhelpful support as "Listening to my mother whine about what she wasn't doing at home while she was helping me. She got so bad at times that I had increased contractions." Yet another described unhelpful support when people "came to visit, brought their children and dogs and made a mess in the house and then left."

Discussion

While only 3.3% of the sample received little or no support, family difficulties encountered during the mother's antepartum bed rest were extensive. The difficulty experienced in assuming the tasks that the mother used to do is consistent with published studies of partners of women on bed rest (Maloni & Ponder, 1997; May, 1994). Children's emotional and behavioral difficulties associated with maternal bed rest have not been previously reported but are consistent with results reported for other types of parental illness (Titler et al., 1991). Only 26 of 45 women who had children answered this question, however. Therefore, caution must be used in interpreting the findings. Also, maternal report of child care problems may be underestimated in this sample because an earlier study of these women's partners revealed that only 16% talked with the woman about the difficulties associated with bed rest (Maloni & Ponder, 1997). Thus, some mothers may have been protected from the knowledge of child care difficulties. An in-depth assessment of children's responses to maternal bed rest conducted across differing income groups may provide a more comprehensive description of child care problems associated with maternal bed rest.

The use of multiple providers for child care across the long periods of bed rest is disturbing. Inconsistent child care across time, concomitant with disruption of usual routines, can be stressful for children (Hymovich, 1993; Titler et al., 1991). Such problems can have long-term consequences. Furthermore, family stress is likely to be created when there is a persistent need to obtain child care from a variety of sources across a long peri-

od of time. A number of women managed the child care themselves, indicating that some mothers are unable to reduce this activity. Self-management of child care can leave the woman ambivalent about whose needs to meet first, the fetus or the sibling(s). Nursing assessment of child care management and assistance with planning the care is indicated. Temporary child care can be obtained when bed rest is first initiated. If bed rest is prolonged, however, parents may need help with making permanent arrangements so that the child(ren) can receive consistent care and parental worry about such arrangements can be reduced.

Although the current sample consisted of economically advantaged families, financial strain was reported. Reduced income is likely to create emotional strain as well. Comprehensive work compensation that becomes effective as soon as the woman is prescribed bed rest is needed to help avoid family financial strain. At least one-third of families received no monetary assistance or compensation for their losses. Families often compensate for financial losses by using postpartum leave during the antepartum period. Although this strategy relieves the immediate stress, it postpones financial difficulties until the postpartum period. Antepartum referral to an appropriate counselor can help the family discuss ways to manage financial problems. During the postpartum period, women who are deconditioned by bed rest often are unable to return to work quickly. Thus, financial losses may create a long-term problem from which the family is unlikely to recuperate quickly. The impact of bed rest upon less advantaged families is likely to be more traumatic. Further research is needed in this area. Additional research is needed to address the limitations of the study (i.e., the retrospective design and the low return rate). Prospective study under conditions that allow easier identification of a national sample of appropriate participants is needed.

The paucity of support provided by health care providers indicates a lack of understanding of the impact of antepartum bed rest on the family. Results provide insight into the types of interventions that health care providers can develop to assist families. First, nurses could include screening for family difficulties with support, finances, and child care in routine assessments. Also, support groups, telephone networks, and visiting programs could be created to provide emotional support. A list of community agencies available to assist parents should be kept on every high-risk antepartum unit. Referral to social service and other agencies may then assist the family in acquiring increased instrumental support, sources of child care, and professionals to assist with children's emotional or behavioral problems.

Nurses are placed in a dilemma when a client is prescribed antepartum bed rest. Bed rest continues to be prescribed by physicians even though it is ineffective and produces adverse side effects (Enkin et al., 1995; Maloni et al., 1993; Maloni et al., 1998; Schroeder, 1998). Nurses need to advocate for greater integration of evidence into practice, for the establishment of protocols to guide practice, for the practice of family-centered maternity care as opposed to woman-focused care, and for broader insurance coverage so that women, their partners, and children do not suffer from the iatrogenic effects of treatment for high-risk pregnancy.

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