

# The Pregnancy-Related Dreams Of Pregnant Women

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**Abstract: Background:** This study examined the frequency and nature of pregnancy-related dreams in pregnant women in a family practice center and assessed the extent such dreams were discussed with providers of prenatal care.

**Methods:** Pregnant women 18 years of age or older who were receiving prenatal care at the University of Missouri–Columbia Family Medical Care Center responded to a two-page self-administered questionnaire. The major variables measured were frequency of pregnancy-related dreams, frequency of frightening dreams, content of dreams, and discussion of dreams. Health professionals providing prenatal care to these women were also surveyed.

**Results:** Eighty-eight pregnant women, 41 family physicians, and 3 nurse practitioners participated in the study. Dreams about their pregnancy or baby were reported by 59 (67 percent) of 88 pregnant women, of whom 22 had experienced at least one frightening dream. Seventeen women reported being upset by a dream. The frequency of dreams increased with advancing gestational age. The content of the most common dream involved conflict with the father of the baby. Most women had talked to another person about their dreams, usually the baby's father. Only 2 women told their physicians about the pregnancy-related dream. One-half of the providers of prenatal care reported discussing pregnancy-related dreams with a pregnant patient at least once during their careers.

**Conclusion:** Dreams about their pregnancy or baby occurred frequently in pregnant women and could be a neglected source of information about the psychological state of the patient. (*J Am Board Fam Pract* 1993; 6:117-122.)

For many women pregnancy is an intensely emotional experience. Although dreams can reflect conscious and unconscious emotions,<sup>1</sup> there is little in the scientific literature relating to the dreams of pregnant women. The published studies have been primarily psychoanalytical in nature and involve in-depth descriptions and analyses of a few selected cases.<sup>2-5</sup> Several studies have compared the content of dreams of pregnant and non-pregnant women.<sup>5-7</sup> The dreams of pregnant women were more likely to involve an infant, small animals, the dreamer as either befriender or aggressor, and feelings of anger and anxiety.<sup>7</sup> Harm and environmental threat commonly characterized the dreams of pregnant women.<sup>2,8,9</sup> In our review of the literature, we found no study

that assessed the frequency or the nature of dreams in a population of pregnant women.

While receiving prenatal care during a several-year period numerous pregnant patients mentioned to one of the authors (RLB) that they had experienced vivid dreams, some of which were of a frightening nature and were very upsetting to them. These anecdotal reports were consistent with the findings of others that fear is the emotion most commonly provoked in pregnant women by their dreams.<sup>8</sup> There has been speculation in the nursing literature that discussing the dreams with a health professional can help relieve the woman's fear and anxiety.<sup>10</sup>

This study was motivated by an interest in determining the frequency of frightening dreams during pregnancy. The study assessed the frequency of dreams about the pregnancy or baby in women receiving prenatal care in a university family practice center and nature of the frightening dreams. The study also explored the frequency with which women discussed their dreams with their physicians. We surveyed providers of

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prenatal care in the family practice center to determine how frequently they discussed dreams with pregnant patients and to describe provider characteristics associated with such discussions.

### Methods

Pregnant women, 18 years of age or older, receiving prenatal care at the Family Medical Care Center of the University of Missouri in Columbia were eligible for the study. Women attending the clinic during a 2-month period in the summer 1991 were offered an opportunity to participate in the study. Those who agreed and provided informed consent completed a two-page questionnaire either before (usually) or after (occasionally) the prenatal encounter. Those who reported on the questionnaire as having experienced a pregnancy-related dream were queried about their willingness to be interviewed by a second-year medical student (JR) at a time and place convenient to them. The semistructured interview was designed to obtain more in-depth information about the dreams and the reactions and feelings they elicited. Because only 3 women were interviewed, this report focuses only on the patient information obtained by questionnaire at one point in time during the pregnancy.

The two-page questionnaire was designed specifically for this study and was pretested on 12 women attending a childbirth class during their third trimester. The questionnaire took 10 minutes to complete; demographic and socioeconomic information and obstetric history were collected. The relationship with the father of the fetus was assessed with the following options: no contact with him; unmarried, not living together but have contact; unmarried, living together; married, not living together; and married, living together. In separate questions, the emotional support received from the father and the amount of communication with the father were characterized as "as much as I want," "more than I want," "less than I want." The questionnaire inquired about the presence of any of the following during the pregnancy: nausea or vomiting, trouble sleeping, and emotional problems. The respondent was asked to describe her reaction when she first learned that she was pregnant with the following response options: happy, partly happy and partly unhappy, unhappy, neither happy nor unhappy.

Her current feeling about the pregnancy was assessed using the same response options.

The questionnaire contained a series of questions relating to "dreams about your pregnancy or your unborn baby." The presence and frequency of such dreams were ascertained, and information about pleasant dreams and frightening dreams were elicited. Each woman was specifically asked whether she had dreamed the following: that the baby died, the baby was deformed or sick, something bad happened to the baby after birth, the baby was born too early, something bad happened to her (the respondent), something bad happened to the baby's father, she was pregnant with or gave birth to an animal, and she had conflict with the baby's father. The woman was asked whether a pregnancy-related dream had made her emotionally upset and whether she had talked about her pregnancy-related dreams with her mother, the baby's father, a friend, her physician, or someone else. Finally, the woman was asked whether she believed that dreams frequently come true, sometimes come true, are very unlikely to come true, or never come true.

Health professionals who provided prenatal care in the Family Medical Care Center were surveyed after completion of data collection from pregnant women. A single-page questionnaire was distributed to the 34 family practice residents, 10 physician faculty members who provided prenatal care, and 3 faculty nurse practitioners. Third-year residents were surveyed at the end of June, and the others were surveyed near the end of July. Health care providers were asked whether they had ever discussed pregnancy-related dreams with a pregnant patient and, if so, with how many different patients. Female providers were asked whether they had been pregnant and, if so, whether they had dreams about the pregnancy or baby while pregnant, and whether any of these dreams had been frightening. Each male provider was asked whether he had been a prospective father and, if so, whether his wife or partner had experienced pregnancy-related dreams, whether he had dreamed about the pregnancy or baby, and if so, whether any of the dreams had been frightening.

Data collected from the patient and provider questionnaires were analyzed using SPSSPC.<sup>11</sup> The chi-square statistic or Fisher exact test was used to assess differences involving categorical variables, whereas analysis of variance was applied

to comparisons involving continuous variables. Differences with  $P \leq 0.05$  were considered statistically significant.

### Results

Of 93 pregnant women who were approached about the study, 88 (95 percent) agreed to participate and completed the questionnaire. The mean age was 24.1 years; range, 18 to 37 years. The mean gestational age at the time of participation was 27.9 weeks; range, 7 to 42 weeks. Most (77 percent) of the women were white, 53 percent had more than a high-school education, 28 percent had health insurance, and 56 percent were covered by Medicaid.

Pregnancy-related dreams were reported by 59 (67 percent) of the women. Such dreams occurred at least once a week in 60 percent of these women. Of women with pregnancy-related dreams, 53 (90 percent) reported having had a pleasant dream, whereas 22 (37 percent) reported having at least one frightening dream about the pregnancy or baby. Thus, 25 percent of the respondents recalled having a frightening pregnancy-related dream. Fifteen (17 percent) reported having had the same frightening dream more than once. Three women reported being very upset and 14 women were somewhat upset about the pregnancy-related dream. Six (7 percent) women reported dreaming that the baby died. Ten (11 percent) reported dreaming that the baby was sick or deformed. Thirteen (15 percent) reported dreaming that something bad happened to the baby. Nine (10 percent) reported dreaming that the baby was born too early. Nine women (10 percent) dreamed that something bad had happened to them. Eight (9 percent) reported dreaming that something bad happened to the father. Seventeen (19 percent) dreamed of having a conflict with the father. No woman dreamed of being pregnant with or giving birth to an animal.

Of the 59 women reporting at least one pregnancy-related dream, 12 (20 percent) told no one about the dreams, 19 (32 percent) talked to their mothers about the dreams, 34 (58 percent) talked to the baby's father about the dreams, 20 (34 percent) talked to a friend about the dreams, and only 2 (3 percent) talked to their physicians about the dreams.

Table 1 provides a comparison of women with pregnancy-related dreams with women without

such dreams. Compared with women without pregnancy-related dreams, women with dreams were further along in their pregnancy and were more likely to report receiving less emotional support than they wanted from the baby's father. There was a tendency for women with pregnancy-related dreams to be primiparous and to report trouble sleeping. No woman was unhappy about the pregnancy at the time of the study. None of the measured characteristics clearly distinguished the 22 women who had frightening pregnancy-related dreams from the 66 women who did not. There was a tendency for women with frightening dreams to have more advanced gestational age. There were no differences between women who had frightening dreams and those who reported

**Table 1. Characteristics of Women with Dreams Compared with Women without Dreams.**

Characteristic	With Dreams (n = 59)	Without Dreams (n = 29)	P Value
Age (years, mean)	23.9	24.6	0.60
Gestational age (weeks, mean)	29.2	25.1	0.05
	%	%	%
Gestational age (weeks)			
< 20	14	34	
20-29	36	28	0.07
≥ 30	51	38	
Primiparous	49	29	0.07
Parity ≥ 1	48	68	0.09
Previous miscarriage	24	18	0.51
Married	51	66	0.19
Living with baby's father	49	62	0.25
Less emotional support from baby's father than she wants	35	11	0.02
Less communication with baby's father than she wants	22	11	0.20
Education beyond high school	56	48	0.50
Health insurance	27	31	0.70
Race: white	86	75	0.24
Nausea during pregnancy	76	79	0.72
Trouble sleeping during pregnancy	60	41	0.09
Emotional problems during pregnancy	46	41	0.71
Initial reaction to pregnancy happy	53	35	0.11
Belief that dreams frequently or sometimes come true	61	50	0.33

no pregnancy-related dreams or those who reported only nonfrightening dreams.

In a series of subgroup analyses, we explored possible correlates of the propensity for the pregnant woman to discuss her dreams with another person and of the likelihood that she discussed them with the father of the baby. The following factors were examined: marital status, satisfaction with emotional support from the father, satisfaction with communication with the father, payment source (insurance versus other), belief about dreams, and race. There was a tendency for married women ( $P = 0.09$ ), white women ( $P = 0.08$ ), and women who believed that dreams frequently or sometimes come true ( $P = 0.06$ ) to have talked about their pregnancy-related dreams with someone. Women who had as much communication with the baby's father as they wanted were more likely to talk to the father about their dreams than women who had less communication than they wanted ( $P = 0.02$ ). White women ( $P = 0.09$ ) and women who were satisfied with the emotional support from the baby's father ( $P = 0.09$ ) tended to be more likely to discuss their dreams with the baby's father. These findings must be interpreted cautiously; small subgroup sizes increase the risk of type II errors, whereas the multiple comparisons increase the risk of type I errors.

The numbers of women reporting specific types of frightening dreams were few. We explored possible associations of several characteristics with the dream content that was reported most frequently: conflict with the baby's father. Dreams about conflict with the baby's father were more common in women who were not married to the father ( $P = 0.002$ ), who did not live with the father ( $P = 0.006$ ), who had no health insurance or had Medicaid ( $P = 0.07$ ), and who had less communication with the father than they wanted ( $P = 0.09$ ). Women who dreamed about conflict with the father were much more likely to report being upset by a dream ( $P < 0.0001$ ).

Provider questionnaires were completed by the 3 faculty nurse practitioners, the 10 faculty physicians, and 31 of the 34 family practice residents. One-half (50 percent) of the providers had discussed pregnancy-related dreams with at least 1 pregnant patient. Of these providers 23 percent had discussed such dreams with only 1 patient, and 27 percent had discussed such dreams with 5 or more patients. Faculty members were more

likely than residents (77 percent versus 39 percent,  $P = 0.02$ ) and female providers were somewhat more likely than male providers (63 percent versus 43 percent,  $P = 0.21$ ) to have discussed dreams. Of the 16 female providers, 6 had been pregnant, and all reported experiencing pregnancy-related dreams; 5 reported frightening dreams. Of the 28 male physicians, 13 had been a prospective father (wife or partner pregnant). Seven of the 13 reported having a pregnancy-related dream during the pregnancy, and 4 had a frightening dream.

### Discussion

Two-thirds of the women aged 18 years or older receiving prenatal care in a university family practice setting reported experiencing at least one pregnancy-related dream. The frequency of such dreams increased with advancing gestational age. Of those with dreams, 90 percent reported having a pleasant dream and more than one-third (37 percent) had experienced at least one frightening dream. Most women told someone about the dream, most commonly the fathers of their babies. Only two women mentioned their dreams to their physicians. To our knowledge this study is the only one that has examined the frequency of these events in a population of pregnant women.

Our questions about the specific content of frightening dreams were based on findings from previous studies.<sup>5-8</sup> Frightening dreams experienced by women in our sample frequently involved harm or threat to the baby or to the pregnant woman. This finding is consistent with the findings of others.<sup>2,8,9</sup> The most specific content of frightening dreams, however, involved a conflict between the pregnant woman and the baby's father. Interestingly, in our study, no woman reported dreaming that she was pregnant with or gave birth to an animal. Findings from another study suggest that such dreams are not uncommon during pregnancy.<sup>5</sup> Knowledge of the nature and variety of frightening dreams is limited to the specific subjects addressed by the questionnaire and by the absence of interview information from most of the women.

Previous studies have found that pregnancy-related dreams frequently produce fear and anxiety in the pregnant woman.<sup>2,6,8</sup> Seventeen women in our study reported being very or somewhat upset by their dreams. One woman who was inter-



viewed described occasionally waking up crying because of intense frightening dreams, and another reported changing her behavior during the day because of fears engendered by dreams. It is noteworthy, however, that many women with pregnancy-related dreams, including some with frightening dreams, denied being upset by them. Subgroup sizes are insufficient to assess the possible effect of discussions about dreams with others on negative emotional reactions to dreams.

The prominent role played by the father of the baby emerges as an important finding of this study. The rate of pregnancy-related dreams was higher in women who were dissatisfied with the amount of emotional support from the father. The father was the person most frequently told about dreams, and conflict with the father was the most common subject of frightening dreams. Women who dreamed of such conflict were less likely to be married to the father, less likely to be living with the father, and more likely to indicate discontent with the amount of communication with the father. These findings suggest that pregnancy-related dreams encompass emotions generated by problematic intimate relationships.

The association between pregnancy-related dreams and trouble sleeping is not surprising. Dreams can interfere with sleep. Also, women who wake up frequently might remember their dreams better. Sleep tends to be more troubled in the later stages of pregnancy, which could account for part of the association of dreams with increasing gestational age. This association of increasing number of dreams with longer duration of pregnancy reflects a greater opportunity to experience and remember dreams. The increase in dreams as pregnancy progresses, however, could also reflect psychological anticipation of labor, delivery, and motherhood.

Deficiencies of the study should be recognized. The study was limited to women receiving prenatal care from one family practice. The Institutional Review Board restricted the sample to patients who were at least 18 years of age. Virtually all of the eligible pregnant women in the practice were approached about participation in the study, and 95 percent agreed. Thus, the findings are applicable to the practice population of pregnant women in this age group, but the extent to which they are generalizable to any larger population of pregnant women is unknown. In addition, the relatively small sample size results in low statisti-

cal power for some of the comparisons shown in Table 1.

The accuracy of the measurement of pregnancy-related dreams is problematic for several reasons. This study was cross-sectional in the sense that the presence or absence of dreams was assessed at one point in time. Thus, pregnancy-related dreams that occurred after participation in the study obviously were not included. In addition, dreams, even those that are very recent, are incompletely recalled. It is highly likely that the rate of pregnancy-related dreams was underestimated by this study. Problems related to the cross-sectional measurement of dreams and difficulty with recall of dreams could be diminished with a longitudinal design that used diaries or logs to record dreams.<sup>12</sup>

Although approximately one-half of the practice providers reported discussing dreams with a pregnant woman at least once, it is clear from the experiences of the women in this sample that such discussions are infrequent. To avoid introducing a bias, the provider questionnaire was distributed to faculty members and first- and second-year residents after completion of the study and to third-year residents at the completion of their residency. Some providers, however, were aware of the study while it was in progress, and some patients, having just responded to the questionnaire, could have introduced the subject of dreams during the prenatal encounter.

A few studies have addressed the intriguing question of whether dream experiences during pregnancy and the woman's responses to the dreams are associated with particular pregnancy outcomes.<sup>13-15</sup> These studies have been afflicted with methodological problems, and the results are inconclusive. To assess pregnancy-related dreams as possible predictors of pregnancy outcome, a study would require a larger sample size and a more accurate appraisal of dreams throughout the pregnancy than our current study.

Despite the limitations, this study demonstrates that many pregnant women dream about the pregnancy or baby and that some of these dreams are frightening and upsetting to the women. The clinical implications of these findings remain to be determined, however. The study does not address the question of whether it is valuable for a health professional to ask pregnant women about their dreams during the course of providing prenatal

care. Based on the view that dreams are a potentially important source of information about the psychological state, there is speculation that dreams can reveal fears and other emotions of which the woman is only vaguely aware but which could affect her adjustment to pregnancy and impending motherhood.<sup>10</sup> If this is true, awareness of patient dreams by health providers can provide opportunities for reassurance, education, and counseling. This exploratory study primarily addressed questions of rate and content of pregnancy-related dreams. Determining the clinical meaning and relevance of these findings awaits additional research.

### References

1. Hall CS, Van de Castle RL. The content analysis of dreams. New York: Appleton-Century-Crofts, 1966.
2. Colman AD, Colman LL. Pregnancy: the psychological experience. New York: Herder and Herder, 1971.
3. Colman AD. Psychological state during first pregnancy. *Am J Orthopsychiatry* 1969; 39:788-97.
4. Lester EP, Notman MT. Pregnancy, developmental crisis and object relations: psychoanalytic considerations. *Int J Psychoanal* 1986; 67:357-66.
5. Schroer T. Archetypal dreams during the first pregnancy. *Psychological Perspect* 1984; 15(1):71-80.
6. Van de Castle RL, Kinder P. Dream content during pregnancy. *Psychophysiology* 1968; 4:375. Abstract.
7. Krippner S, Posner NA, Pomerance W, Barksdale W, Fischer S. An investigation of dream content during pregnancy. *J Am Soc Psychosom Dentistry Med* 1974; 21(4):111-23.
8. Maybruck P. An exploratory study of the dreams of pregnant women. *Dissertation Abstracts International* 1986; 47(1-B):362.
9. Gillman RD. The dreams of pregnant women and maternal adaptation. *Am J Orthopsychiatry* 1968; 38:688-92.
10. Sherwen LN. Fantasies during the third trimester of pregnancy. *Matern Child Nurs J* 1981; 6:398-401.
11. Norusis MJ. SPSS/PC+ Advanced statistics 4.0. Chicago: SPSS, 1990.
12. Hobson JA. The dreaming brain. New York: Basic Books, 1988:228.
13. Cheek DB. Significance of dreams in initiating premature labor. *Am J Clin Hypn* 1969; 12(1):5-15.
14. Winget C, Kapp FT. The relationship of the manifest content of dreams to duration of childbirth in primiparae. *Psychosom Med* 1972; 34:313-20.
15. Lismay JV. Dreams and dream work during pregnancy: their relationship to birth outcome. *Dissertation Abstracts International* 1981; 41(12-B):4674.