Why Women Choose Trial of Labor or Repeat Cesarean Section

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Despite growing interest in vaginal birth after previous delivery by cesarean section, virtually no studies have examined patient decision making in any depth. This paper examines the social content and cognitive structure of pregnant women's decisions to attempt delivery by trial of labor or for elective repeat cesarean section. Three features of childbirth care strategies are discussed. First, social goals are as central to women's decisions as are medical risks. Second, women reinforce their decisions by defining multiple benefits for the preferred alternative and multiple hazards for the rejected alternative. Third, women do not attempt to assess the probabilities of particular outcomes, but instead construct mental images of anticipated events based upon past childbirth experience and expected consequences of the preferred course of action.

In 1978, the birth rate by cesarean section in the United States reached 15.2 percent of all deliveries, a startling 27 percent increase from 1970, when the proportion was still relatively small at 5.5 percent of all births.[1] By 1981, the most recent year for which national figures are available at this writing, the overall rate had climbed to 17.9 percent.[2] Furthermore, over 98 percent of women who had had one cesarean section underwent elective repeat cesarean section in their subsequent pregnancies, despite growing evidence that vaginal birth after cesarean section was a medically safe alternative.[3] Delivery by repeat cesarean section continues to account for about one third of all deliveries by cesarean section.[2]

In response to the increasing alarm over trends in the cesarean section rate, the National Institutes of Health (NIH) sponsored a consensus development conference in September of 1980 to examine the reasons for the continuing acceleration in cesarean section rates and to seek ways in which it might be reversed. Impressed by the

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safety record of the few US hospitals conducting trials of labor after previous cesarean section delivery, and noting the long-standing success of European obstetrics with vaginal birth after cesarean section delivery, the NIH conference concluded that routine repeat cesarean section was one area in which obstetrical practice might be altered while maintaining high standards of safety. In a far-reaching recommendation, the conference's report urged all hospitals with appropriate facilities and staff to institute policies of trial of labor for vaginal birth for women with previous deliveries by cesarean section who met specific eligibility criteria.[1]

Soon after, the American College of Obstetricians and Gynecologists concurred with the NIH recommendations and issued their own guidelines for vaginal birth after previous cesarean section.[4] Despite this double-barreled attack on the 70-year-old tradition of "once a cesarean, always a cesarean," many hospitals and physicians remain reluctant to abandon routine repeat cesarean section. What are the reasons for their conservatism, and what is the evidence either in favor or against it?

The most serious concern has continued to be over the risk of rupture of the scar resulting from the previous cesarean section incision. Earlier in the century, cesarean section surgery was performed by means of a vertical incision in the contractile upper segment of the uterus, and the risk of rupture in subsequent pregnancies if labor was allowed was unacceptably high. In recent decades, the so-called classical incision has been largely replaced by the lower segment transverse incision, and less frequently, the lower segment vertical incision. In both cases, the incision is made in the noncontractile lower segment of the uterus. The incidence of scar rupture in subsequent labors is reported to average less than 1 percent, significantly lower than that for the classical incision.[3] Moreover, the risk of rupture of a previous low segment cesarean section scar does not increase when delivery is accomplished through labor and vaginal birth as opposed to repeat cesarean section surgery.[5,6]

Despite growing evidence of the comparative safety of vaginal birth after cesarean section, many hospitals do not allow trials of labor, claiming lack of adequate facilities and staff for immediate emergency cesarean section. Flamm et al[7] recently criticized this stance. They argue that other obstetric emergencies requiring delivery by cesarean section occur with greater frequency than does rupture of a previous cesarean section scar, and that if a hospital is not equipped to perform emergency surgery for repeat cesarean section, neither is it equipped to perform emergency surgery for primary cesarean section, and thus should not offer maternity services at all. Nevertheless, the debate over the risk of scar rupture continues, including the possible hazards of the more frequently occurring asymptomatic dehiscence of the previous scar, and its significance for vaginal birth after cesarean section.

Among physicians who offer trial of labor, disagreement persists regarding eligibility criteria. Some draw the line at one previous cesarean section, although the recent literature on vaginal delivery after two or more previous cesarean sections does not suggest that maternal or fetal risk increases.[3,6,8] Other conditions accompanying the previous cesarean section that remain in controversy are maternal postpartum febrile morbidity following the primary cesarean section, low vertical incision for the primary cesarean section, and, in particular, a diagnosis of cephalopelvic disproportion for the primary cesarean section. As physicians gain familiarity with vaginal birth after previous cesarean section, and as reported outcomes continue to be favorable, eligibility requirements are becoming more liberal. Many physicians now voice the opinion that a trial of labor should be managed like any other normal labor.

Why patients choose repeat cesarean section or trial of labor for vaginal delivery has thus far not been addressed in any systematic fashion. Nevertheless, it remains the major unexamined factor in research on vaginal birth after cesarean section. Patient decision making is particularly important in light of the continuing lack of consensus over risks of trial of labor for specific patients and over how labor trials should be managed. What do patients learn from their physicians about trial of labor, how does physician communication affect their choice, and how important is medical information when compared with other motives for choosing vaginal trial or repeat cesarean section? Answers to these and similar questions depend

partly on knowing how and why patients make the choices they do. To date, only one clinical study has addressed patient decision making, but the data were gathered retrospectively and presented as lists of reasons, thus compromising the usefulness of the findings.[9] In the absence of research focusing on the social and cultural dimensions of repeat cesarean section practice, physicians have little information with which to judge the full complexity of patient decision making as well as its potential significance for lowering repeat cesarean section rates.

The research to be described in this paper was undertaken to explore in depth women's childbirth care choices after a previous delivery by cesarean section. The aim is to find out what is important to women as they consider the available options and to assess their birth and postpartum experiences in relation to their decisions.

To achieve this objective, the analysis focuses on individuals in their normal social contexts making consequential decisions, that is, decisions that are anticipated to have lasting effects for the decision maker and for others.[10,11] The data are verbal. In addition to providing clues about cognition, verbal discourse produces the truest description of the self-reflective world of the decision maker and gives the most direct access to the individual's values and perceptions. In this analysis, the data comprise statements made by pregnant women in guided conversations about their choice of delivery method and their plans, goals, and expectations for childbirth.

Methods

The sample was composed of 50 pregnant women in the San Francisco Bay Area whose last child was delivered by cesarean section and who were eligible in the current pregnancy to choose trial of labor. Knowledge of the choice was a requirement for recruitment into the study. Women were excluded from participation if the previous cesarean section was by classical incision or if the type of incision was unknown, if they had more than two previous cesarean section births, if a repeating indication (such as documented absolute cephalopelvic disproportion) or other maternal or fetal condition prohibited a vaginal trial, and finally, if they did not speak fluent English or had been a resident in the United States for less than five years. The last two exclusionary criteria were adopted because many childbearing women in the San Francisco Bay Area are recent immigrants from Southeast Asia, Mexico and Central America, the Near East, and elsewhere. Their command of English and their familiarity with childbirth care norms current in the United States vary greatly, and the study was not designed either to control for this variation or explore it. Only six of 50 women interviewed were foreign born, but they were fluent in English.

Eligible women were identified through their prenatal care service at one of three major San Francisco Bay Area hospitals with liberal trial of labor protocols. Each woman who agreed to be in the study was interviewed twice, first during the last month of pregnancy and second at two months postpartum. Interviews were semistructured, tape recorded, and conducted in the homes of the respondents. Prepartum interviews ranged from 45 minutes to 2.5 hours in length, with an average duration of about 90 minutes. Postpartum interviews ranged from 20 minutes to 90 minutes and averaged about 40 minutes.

This paper is concerned with the prepartum interview only, in which previous childbirth experiences and childbirth care strategies for the anticipated delivery were explored in depth. The analysis qualitatively examines interviews with the first 50 women recruited into the study, seeking recurrent themes in women's choices, but also noting idiosyncratic strategies that are both difficult to measure and to interpret using traditional quantitative techniques. Inasmuch as the interviews took place before the birth, but after a social commitment to a choice of delivery method had been made, the data are prospective with regard to the outcome of the births in the study, yet retrospective with regard to the women's decisions. Findings are illustrated with interpretive summations of individual cases.

Data were also collected on socioeconomic status, sociodemographic background, details of respondents' social networks, and in the postpartum interview, details of the birth and other postpartum events. A multiple health locus-of-control instrument was administered at

the end of both interviews. These data have not yet been subjected to statistical analysis. To help place the following analysis in context, however, several background characteristics of the sample can be at least summarized here. Income, education, and employment for both respondents and husbands ranged widely. Most respondents were white, but some were of ethnic minority status: black (10), Filipino (2), Central American (2), and Palestinian (2). Three respondents had experienced a vaginal birth before the prior cesarean section. In addition to the variation noted in socioeconomic status and ethnicity, indication for the previous cesarean section was not controlled, but rather was treated as an analytic variable. Indications included breech presentation, fetal distress, cephalopelvic disproportion, and failure to progress. Because the analysis presented in this paper was undertaken before statistical evaluation of the above variables, it must be considered preliminary and subject to refinement.

Results

Social Expectations and Medical Knowledge

Three characteristics of women's strategies for childbirth care after a previous cesarean section were especially noteworthy. First, childbirth care plans were based on social expectations and goals as well as on medical information and advice supplied by physicians. Second, reasons supporting a plan of action were multiple and reinforcing, not single dimensional and unconnected as suggested thus far in the literature. Third, although information about medical risk influenced decisions, safety considerations were neither the sole nor even the primary reasons for respondents' choices. Women also viewed other, nonmedical, aspects of the alternatives as either risky or beneficial.[12] For example, trial of labor was viewed as emotionally risky by some women without labor coaches for support during birth. Other women perceived repeat cesarean section as hazardous because they feel that it prevented them from bonding immediately with their infants. Furthermore, women did not weigh risks in a strict linear additive fashion or remember or seek out actual probabilities of complications. Rather, they evaluated benefits and hazards as a package and projected mental images of themselves participating in scenarios of likely consequences depending upon which option they selected. In the sections that follow, each of these features of decision making will be examined more closely.

Childbirth Care Choices as Social Strategies

Several women in the study had decided on either repeat cesarean section or trial of labor based largely on expectations or goals in which the husband played a major role.

Case 1. Mrs. A. has no relatives in San Francisco. Her first cesarean section was for cephalopelvic disproportion, but was delayed because her husband wanted her to keep trying to deliver vaginally. Mrs. A. would prefer repeat cesarean section for this pregnancy but has acceded to her husband's wishes for trial of labor. He wants a large family and thinks that repeat cesarean section will prevent her from bearing more children. Mrs. A. is convinced she will fail a vaginal trial but feels she does not have the resources to prevail against her husband's preferences. (Mrs. A. had a repeat cesarean section after 24 hours of labor. Her husband was present.)

Case 2. Both of Mrs. B.'s sons were born by cesarean section, the first for failure to progress and the second by elective repeat cesarean section. She and her husband have decided that this will be their last child. She is choosing trial of labor primarily because this will also be the last opportunity for her husband to participate in the natural birth of his own child. (Mrs. B. delivered by repeat cesarean section after five hours of labor. Her husband was present.)

In the first case illustration, the respondent's options were constrained by the demands of her husband; she chose trial of labor unconvinced of its benefits and foresaw its, to her, inevitable failure. The second case illustrates a common goal in both trial of labor and repeat cesarean section choices—that the husband participate. Some women, like Mrs. B., wanted their husbands to appreciate their suffering and courage by observ-

ing the reality of labor and delivery. Others needed their husbands' emotional support, regardless of delivery method. Many respondents also felt that father-infant bonding would most easily follow if the father were present to hold his baby soon after its birth.

Husbands were major figures in women's expectations for delivery, but not exclusively so. Respondents also judged alternatives for delivery on the basis of their anticipated effects on their own recovery, resumption of child care, housework, employment, and other social activities. They cognitively structured the expected benefits and risks of alternatives in such a way that the benefits of one accrued to increase its attractiveness. This cognitive maneuver may be referred to as reinforcement.

Reinforcement

Deciding in favor of delivery by repeat cesarean section or trial of labor is for most women a "low-frequency, high-consequence" choice, that is, one that is made only rarely or occasionally but is momentous for the decision maker.[13] Women in this study considered the stakes of their choices to be high; such outcomes as plans for future childbearing, successful bonding with the infant, and plans for employment depended upon their achieving their goals. By stockpiling the anticipated benefits of one alternative, respondents reinforced its attractiveness. Also, the appeal of the other alternative was diminished by cataloguing its disadvantages. The following case illustrations describe how respondents constructed strategies in which several mutually reinforcing reasons led them inevitably toward the same alternative.

Case 3. Mrs. C.'s first cesarean section was for failure to progress and preeclampsia. She has chosen trial of labor for several reasons. She does not want to stay in the hospital for several days because she has a child at home to care for. She does not want to be drugged because it will prolong her own recovery and affect the baby. She attributes her previous postpartum depression to drugs received during the surgery. Furthermore, her sister had four cesarean sections and described her recovery from each as "terrible." (Mrs. C. had a spontaneous, unassisted vaginal delivery after 41 hours of labor. Her husband was present.)

Case 4. Mrs. D.'s prior cesarean section was for fetal distress. She wants repeat cesarean section this pregnancy because it will allow her to know beforehand the exact date of birth and thus to plan in advance for the substitute help she and her husband will need for their home business during the birth and postpartum period. In addition, Mrs. D. does not want to undergo the pain of labor again, which for her was far worse than the discomfort of the cesarean section. Mrs. D. has also decided to have a tubal ligation and thinks that it's easier to have this done during the cesarean surgery than after a vaginal birth. (Mrs. D. had elective repeat cesarean section. Her husband was present.)

Reinforcement, particularly the combining of social with medical strategies, made women's choices complex and intricate. It also increased commitment to a plan of action and allayed anxiety about the uncertainty of the coming childbirth and postpartum event.

Scripts and Scenarios

Respondents in this study did not discuss the anticipated outcomes of their decisions in the terminology of probabilities or utilities. Most demonstrated little interest in or ability to process statistical information about medical risks and outcomes associated with repeat cesarean sections or vaginal trials. Instead, they reconstructed graphic depictions of their past birth experience and projected expectations and goals for the upcoming delivery. Recollections of the previous birth may be called scripts,[14] and expectations and goals for the anticipated birth, scenarios.[15]

As mental images of sequences of events, scripts and scenarios best describe women's natural discourse on the subject of their preferences for delivery method. For example, a common script for women choosing repeat cesarean section was having suffered through a long and debilitating labor and having been rescued by cesarean section delivery. By choosing repeat cesarean section, this oppressive experience would be avoided in the future. For women who had never had a vaginal birth or even experienced labor, another script was knowing through previous experience what to

expect with a cesarean section. Scripts of the previous cesarean section or the previous two cesarean sections reassured these women that they would survive another abdominal delivery; no surprises would be forthcoming. On the other hand, other women who had never experienced vaginal birth chose trial of labor partly because they valued it as a personal, usually uniquely feminine accomplishment. They described scenarios of the sensations of pushing the baby through the birth canal and, more important, being emotionally and physically prepared to greet the new baby immediately afterward.

Scripts and scenarios as representations of cognitive structures have the distinct quality of being concrete, vivid, and immediate.[16] Statistical information is precisely the opposite. Despite probing, respondents in this study were unable or reluctant to compare repeat cesarean birth with vaginal birth after cesarean in the language of probabilities. Even women who had access to such information, through physician consultation or attendance at cesarean support groups meetings, for example, did not draw on statistical findings to make their decisions. Vivid scripts of their own past experience with cesarean section, plus its persistent affect, predominated in their discourse.

The following case summaries illustrate how scripts and scenarios characterize women's choices.

Case 5. Mrs. E.'s first cesarean section was an emergency for fetal distress. It was a frightening, painful, and demoralizing experience, worsened in Mrs. E.'s recollection by the cold response of her parents and by estrangement from her husband soon afterward. She was depressed for a year. Now, four years later, Mrs. E. and her husband have reconciled. She has moved farther away from her parents. Mrs. E. chose trial of labor to avoid the physical and emotional hardships she closely associates with her prior cesarean section. (Mrs. E. delivered vaginally after seven hours of labor. Her husband was present.)

Mrs. E.'s scripts of her first birth by cesarean section featured emotionally traumatic experiences with her husband and her parents. Elsewhere in the interview, she rejected repeat cesarean section also because of her perceptions of its medical risks, specifically the risk of surgical complications for herself, and her fear that the baby would react adversely to drugs administered during surgery. Expectations of iatrogenic hazards thus reinforced Mrs. E.'s scripts of the turmoil that followed her previous birth.

Case 6. Mrs. F.'s first cesarean section was for cephalopelvic disproportion. She was disappointed because she had prepared for a nonmedicated vaginal birth by taking Lamaze classes. Mrs. F. wants trial of labor because she is curious about what it's like, and she may not have any more children after this. She is also convinced that she will recover faster after a vaginal birth. She wants to be able to care for her five-year-old son as soon as possible, including being able within three weeks to drive him to his school 40 miles away in San Francisco. (Mrs. F. had repeat cesarean section for failure to progress after 14 hours of labor. Her husband was present.)

Mrs. F. had constructed two scenarios in which social expectations connected with successful vaginal birth predominated. First, she wanted to achieve the novel experience of vaginal delivery, a goal which involved the minor tradeoff of giving up the convenience afforded by a scheduled repeat cesarean. Second, she visualized herself resuming her child care activities soon after the birth, including driving 80 miles round trip weekdays so that her older son's private schooling might not be interrupted. Past experience convinced Mrs. F. that undertaking these tasks soon after a repeat cesarean section was an unrealistic expectation. As with most other participants in the research, Mrs. F. had at least one child at home to care for in addition to the new infant. Others planned to return to work within a few weeks or months. Vivid memories of lengthy and painful recoveries from the previous cesarean section, particularly when compared with multiple expected benefits from a successful vaginal delivery, constituted powerful motives for choosing vaginal trial for many of these women.

On the other hand, women choosing elective repeat cesarean section did not recall their previous cesarean section as having prolonged their recovery; in fact, many described the previous postpartum period as free from complications, depression or blues, and excessive pain. These women constructed scripts in which the previous labor was a totally negative experience (painful,

exhausting, frightening, even threatening to the fetus in cases of fetal distress and cephalopelvic disproportion) and in which the decision to perform a cesarean section was greeted with relief. Maternal recovery was not an issue in their current plans because it was not a problem in their past experience.

Summary and Conclusions

This paper reviews women's strategies for childbirth care after a previous cesarean section. Respondents' discursive commentary on their expectations for delivery and the postpartum period illustrates three aspects of their strategies that are difficult to examine by traditional quantitative methods. First, social motives were central to plans for childbirth care. Study respondents chose the delivery method they felt would give them the best chance to resume their normal social roles as soon and as smoothly as possible. Ramifications of the choice extended to relationships with husbands, child care plans, employment plans, and other social activities. Second, women reinforced their decisions for either repeat cesarean section or trial of labor by defining multiple benefits, both social and medical, for the preferred alternative. Because reinforcement made decisions complex as well as consequential, choices developed into strategies. The full intricacy of the choices is only hinted at in the case illustrations. Third, the cognitive procedures that women employed in making decisions for childbirth care involved, on the one hand, the processing of scripts of past childbirth experiences and those of social network members, and on the other, the construction of scenarios of future states consequential to the alternatives being presented. Women in this study did not attempt to process abstract or statistical information about medical risks in an effort to arrive at an optimal decision. Those who did express concern or fear about possible medical complications framed their anxieties in subjective uncertainties, not in objective and known probabilities. Information about medical risks was thus embedded in vivid scripts depicting usually a respondent's own past experience, and less often, experiences of network members.

By drawing attention to heretofore unexamined, yet significant, aspects of patient decision making, these findings should have immediate use for family physicians counseling women in the choice for trial of labor or repeat cesarean section.

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