MIDWIFE OR DOCTOR: A STUDY OF PREGNANT WOMEN MAKING DELIVERY DECISIONS

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ABSTRACT

Eighty-eight women from diverse educational backgrounds were interviewed as they made several important and related life decisions during their pregnancies. In this article, the focus is on the choice of birth attendant. There were few differences between those women who did and did not *consider* a midwife. Women who *selected* a midwife reported feeling more knowledgeable about birth attendants, in more control over the birth attendant decision, more satisfied about their delivery decisions, more in control of, and satisfied with, pain medication decisions, more autonomous in their pregnancy decision making, and more in agreement with "alternative birth" philosophies and less in agreement with "conventional birth" philosophies. The participants also reported receiving more approval from spouse/significant other and friends, were more likely to use "gut instinct" and previous experience or habit to make pregnancy decisions, and were more ready to make these decisions than were women who had not selected a midwife as their primary birth attendant. J Midwifery Womens Health 2000;00:000–0 © 2000 by the American College of Nurse-Midwives.

INTRODUCTION

Every year, almost 4 million women give birth in the United States (1). Although birth is a natural biologic process, advancement in technology has dramatically increased prenatal, labor, and delivery options for childbearing women. The low-risk pregnant woman now has a variety of choices ranging from a lay midwife and a home birth to a certified nurse-midwife (CNM), a certified midwife (CM),* or an obstetrician and a hospital birth. As the choices for pregnant women have grown, their prenatal and birthing decisions have become increasingly complex. How do women go about making these decisions? What types of information do they use, and how do they go about finding it? How do they sort through information that they gather? Do demographic variables affect their decision-making processes? Questions such as these are asked by psychologists and health care professionals alike in hopes that through answering them, they can aid pregnant women's decision making and learn more about real-life decisions.

The goal of this research was to examine how women from a variety of educational backgrounds gather, assess, and combine information to make several important and related life decisions. The specific decisions chosen for study were those made by pregnant women about their choice of birth attendant(s), prenatal care, and delivery options.**

This article will be restricted to the birth attendant decision. The scope of this decision was chosen for several reasons. First, it can be an important, and often difficult, life decision faced by a large segment of the population at some point in their adolescent or adult lives. It has ramifications for one's use of various health care systems as well as one's autonomy in directing a life-transforming event, the birth of a child. Second, this decision occurs during a well-delimited time period. Few other important life decisions occur on such a well-defined schedule, allowing better predictions about how far away from an ultimate decision a women is likely to be at any given point. Third, for many (especially young) women, this may be the first major financial, personal, and health-related decision they have had much responsibility for and choice in. Finally, like most complex decisions, pregnancy care decision making requires the woman to seek out and integrate information from various sources.

LITERATURE REVIEW

Making birthing decisions can be a complex process. There are many different types of considerations that may be relevant to any woman's decision making: her

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The focus here is on certified nurse-midwives (CNMs/CMs) although respondents were asked about lay midwives as well.

* CNMs/CMs as used herein refer to those midwifery practitioners who are certified by the American College of Nurse-Midwives (ACNM) or the ACNM Certification Council, Inc. Midwifery refers to the profession as practiced in accordance with the standards promulgated by the ACNM.

** Information about the other decisions is available from the first author.

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health, her previous pregnancies, her philosophy of birth are three that come immediately to mind. Several sources point out that in recent decades, women in the United States have increasingly come to see birth as a family event in which they can exercise some control, as opposed to a medical crisis in which they are relegated to a completely passive role (2,3). Many studies on attitudes toward childbirth (4–7), as well as works intended for a general audience (8), document the fact that different types of practitioners (e.g., midwives and obstetricians) have different philosophies toward the birth event and differ in their likelihood of using certain techniques or interventions (e.g., episiotomy, forceps, pain medication, or electronic fetal monitoring).

Much of the existing literature on pregnancy decision making centers around the decision of whether or not to carry a pregnancy to term (9). There have been some recent studies of women's choice of birth setting, a decision that is intimately related to the choice of birth attendant. Hodnett (10) reported that of women choosing a hospital as a birth setting, "over half chose their physicians first and therefore had no choice as to hospital," whereas for mothers opting for a home birth, 79% "decided first upon the birth setting (home) and then set out to find suitable physicians and midwives." This study's focus, however, was the degree of perceived control as a function of birth setting; it did not explore the reasons for the choice of setting in a great deal of depth. A similar case study reported on hospital patients' perceptions of control compared with perceptions of women choosing to give birth in a free-standing birth center staffed by midwives. Qualitative interview responses were the main data reported (11). Once again, there was evidence that at least some of the women made the choice of a center in order to have a certain type of provider (e.g., nurse-midwives).

McClain (12,13) conducted two studies that examined different aspects of decision making about an upcoming birth. The first examined one component of decision making—risk perception—as it applied to the decision about which type of birth service (i.e., home delivery with a lay or nurse-midwife, alternative birth center, private hospital with obstetrician) to have. The study, involving 47 women with uncomplicated pregnancies interviewed in the second trimester of pregnancy, supported the hypothesis that once they had made a decision, the women "bolster[ed] their choice by playing up the risks of rejected alternatives and discounting the risks of the chosen method" (12).

A second study reported by McClain (13) focused on the reasons for choosing a trial labor in a pregnancy subsequent to a previous cesarean section. Again, the sample was relatively small (n = 50) and the research methods consisted of semistructured interviews. Data are reported qualitatively and anecdotally, and McClain concludes that a variety of factors influence decision making, including social expectations, medical information, and risk perception. McClain asserts that reasons women give for their decisions are multidimensional and reinforcing, although little is reported in the way of specific data to support these conclusions.

Schiff and La Ferla (14) report another small-scale study of differences in decision making among women planning home versus hospital births. Ten women in each group, matched on a variety of demographic variables, were interviewed. Their conclusions echoed some of those reported above: women planning home births emphasize the issue of control, whereas women planning hospital births emphasize safety.

The studies all share the important virtue of studying decision makers in the process of making an important decision. In contrast, much existing literature on decision making comes from laboratory studies in which people are presented with hypothetical cases, often gambles, and all of the relevant information and asked to select a choice (15). In real life, people not only have to integrate information and to determine how to best satisfy their goals, but they must also seek out information and generate possible alternative choices, which by themselves can be overwhelming challenges. Hoerger and Howard (16) have found that women's search for information relevant to prenatal care is disappointingly lacking in thoroughness. Less than a quarter of the women in their study considered more than one alternative birth attendant, and less than 60% of those that did, actually visited with a second health care provider. Other researchers have reported that pregnant women often do not see themselves as autonomous decision makers, but rather defer to what circumstances such as fetal abnormalities seem to dictate (17) or to whatever their health provider recommends (16,18–21). It might be concluded, then, that the choice of birth attendant may in fact be a

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choice that either determines, or at least strongly influences, a host of other birthing decisions.

A woman may face many obstacles on her way toward making an informed and autonomous decision about her pregnancy and childbirth. Her choices may be dictated by her insurance or health plan, her disposable income, her pre-existing medical conditions, or her proximity to different health care providers or services. Callister (22) discusses how women's access to health care delivery constrains many of their choices. Besides touching on insurance coverage and other financial constraints, Callister brings to the forefront "availability of a caregiver specialty, availability of a specific caregiver, and availability of a caregiver of a certain gender" as possible other constraints on choice. Opinions and advice of others and the amount of information available and utilized by pregnant women also serve to frame the decision.

Differences in decision making may also arise from differences in knowledge, locus of control, decision-making style, education, and any number of other individual differences (23,24). One prevalent factor is socioeconomic status (25), which has been shown to correlate with different maternal health behaviors, including intentionality of pregnancy, smoking during pregnancy, and seeking prenatal care. Race and ethnicity also make a difference in some cases (26).

Another complicating factor in this decision (as in other real-life decisions) may be avoiding information overload. Information with which to make the birth attendant decision is plentiful, albeit contradictory in many cases. To complicate things even further, each source of information has its own distinct view of the subject. For example, two frequently read books about pregnancy—*What to Expect When You're Expecting* (27) and *The Complete Book of Pregnancy and Childbirth* (28)—have very different philosophies about the experience. The former advises readers to rely more on the medical profession and the newest technologies available for care. The latter advocates a more "natural" childbirth, suggesting that options such as midwives and home birth are the best choice for women with low-risk pregnancies.

The intention of this article is to examine some of the issues discussed previously as they apply to the specific decision of choosing a primary birth attendant. Determining how much this decision is constrained by external influences (e.g., insurance coverage or health plan) or influenced by demographic characteristics (e.g., level of maternal education, socioeconomic status, parity or, maternal age) was the first priority. A second goal was to explore whether the ways in which women went about making a decision—the sources of information they consulted, the factors they considered, or their tendency to be intuitive/holistic or objective/analytical—differed for women who did and did not select a midwife. A third objective was to analyze whether the demographic or decision-making styles would differ for women who did or did not even consider a midwife.

The present study builds on previous work in a number of ways. The larger sample, combined with the addition of more open-ended questions, allowed the participants to describe their decision making with fewer constraints than has previously been the case.

CONTEXT OF THE STUDY

The city of Northfield, Minnesota (from which the majority of the participants were drawn) is a rural college town. Residents differ widely in their education, socioeconomic status, and occupation. Historically, the only birth attendants locally available were family practice physicians; however, during the time of this study there were certified nurse-midwives with privileges at the local hospital. Moreover, Northfield is located about an hour's drive away from both the Mayo Clinic (in one direction) and the twin cities of Minneapolis and St. Paul (in the other), and a sizable proportion of women make the decision to deliver at one of those locations with either certified nurse-midwives or obstetricians. Finally, a few women in Northfield were choosing home births with lay midwives. Thus, at the time this study was begun the women in the sample had a variety of options from which to choose.

The specific questions focused upon in this paper are the following.

1. Are there demographic differences between women who do and do not consider using a midwife, or between women who do and do not select a midwife as their primary birth attendant?
2. How much do women who consider and/or select a midwife as their primary birth attendant differ from women who do not in the criteria they use to make the decision?
3. How much do women who consider and/or select a midwife as their primary birth attendant differ from women who do not in their attitudes toward the decision-making process?

METHODOLOGY

Participants

Eighty-eight pregnant women participated in the study. They were recruited through signs posted throughout several small towns and suburbs in Southeastern Minnesota, through word of mouth, and through newspaper advertisements. They were interviewed either at a college laboratory, their homes, or places of employment, as they wished. They were paid $15.00 for the interview, which lasted between 60 and 120 minutes (on average, about 90

minutes). Appendix A presents demographic information about the participants. This study received approval from the Carleton College Human Subjects and Institutional Biosafety Committee prior to data collection.

Materials and Procedure

A larger study addressing a variety of pregnancy decisions was conducted, and the results described here are but one part. The materials and procedures used throughout the study, however, will be described for sake of completeness.

The procedure included a mixture of interview and survey items. Women were interviewed by a female undergraduate research assistant. Because none of the research assistants had yet been pregnant, the subjects were clearly the experts on pregnancy. Sessions were audiotaped and later transcribed for coding. During the session, the research assistant also aided the interviewee in filling out a number of written surveys. The research instruments were developed iteratively and intuitively, in discussions with local health care providers and childbirth educators as well as previous research on childbirth issues.

After providing the women with a detailed consent form, the interviewer first solicited demographic information through the use of a written questionnaire that asked for the information presented in Appendix A, as well as information about the father's education and the ages and genders of biological, adopted, or step-children. Women were also asked if they had had any previous pregnancies not resulting in a live birth. Women filled out this instrument on their own after being reminded that all information would be kept confidential and that any or all questions could be skipped.

Next, women were invited to describe any previous pregnancies, the kind of prenatal care they had received, the nature of the birth attendant(s), and the nature of the delivery. Women responded enthusiastically to this chance to share their birth stories. Following this, they received a series of open-ended questions about their current pregnancy—their health during it, the tests and procedures done to date, their feelings about it, and so forth.

Embedded in the interview were three sets of questions about three target decisions of interest. These were: choice of prenatal genetic tests, choice of birth attendant, and choice of comfort/pain relief measures for delivery.† For each of these, the interviewer presented the woman with a worksheet and helped her to fill it out. Appendix B presents an example, complete with fictional responses. Worksheets contained nine columns of blanks. In the first column, women were asked to list the criteria they were using in making the decision under discussion. In the second column, women were asked to assign each factor an importance weight on a 0–10 scale (10 = extremely important). In the third and succeeding columns, women were instructed to list various options currently under consideration, and finally, to rate each potential option according to each factor, again using a 0–10 scale (10 = "extremely strong in that factor" for that option).

Last, women were given an instrument containing 49 items and asked to rate each one using a 9-point scale (1 = "not at all," 9 = "completely"). Items included such questions as "How happy are you about your pregnancy?", "How satisfied are you with the options available to you for genetic testing?" Appendix C presents a listing of all items presented.

RESULTS

The sample of 88 women broke down approximately evenly into women who had ever considered a midwife (either lay or CNM, n = 40), and those who had not (n = 46). Of the forty who had considered a midwife, three considered only a lay midwife; 36 considered only a certified nurse-midwife, and one considered both kinds of midwives. For the purposes of data analysis, the sample was divided into those who had or had not ever considered a midwife. Independent groups *t* tests were run on a variety of demographic variables for these two groups.‡ No differences were found in terms of age, education, birth order, gender birth order, family income, insurance coverage, parity, weeks along in the current pregnancy, or years of residence in the community.

The number of women who selected a midwife as their final choice was also examined. Fourteen of the 88 women did so; of these, two selected a lay midwife, and 12 chose a certified nurse-midwife. Of the remaining women, 36 chose a family practitioner and 35 an obstetrician. Once again, for the purpose of analysis, those women who selected a midwife were compared to those who did not. This time, there were no demographic differences in any of the variables tested.

Next, group differences in responses to the affective/descriptive items were examined. Again, the first com-

† Again, this article will report only on the data relevant to the birth attendant decision. Information on the other decisions is available from the first author.

‡ Because this was an exploratory study, there was no target sample size in mind. However, post-hoc power analyses were conducted on the data to see what the power to detect real effects was. In comparing the relatively equally sized groups of those who did and did not *consider* a midwife, the power to detect moderate effects (d = .50) is estimated to be .63, and the power to detect large effects (d = .80) is estimated to be .95. For the other sets of analyses (women who did and did not *select* a midwife), the power to detect moderate effects is estimated to be .40, and to detect large effects is .77. As will be seen, however, more statistically significant group differences in these latter analyses were obtained.

parison made was between women who had versus had not *considered* a midwife; the second comparison examined was between women who had and had not *selected* a midwife as their primary birth attendant.

For the 49 items, there were only four significant group differences (assessed again with independent groups *t* tests) for women who had and had not *considered* a midwife. These women were significantly ($p < .05$) more likely to agree with "alternative birth" philosophies, less likely to agree with "conventional birth" philosophies, more likely to feel approval of pregnancy choices from their spouse or significant other philosophies, and more likely to report using "gut instinct" to make pregnancy decisions than were women who never considered a midwife philosophies. There were five additional marginally significant ($p < .10$) group differences: Women who considered a midwife were more likely to feel that they had a choice over delivery location, more confident about their pregnancy choices, more likely to find pregnancy decisions difficult relative to other decisions, and more likely to feel readiness to make pregnancy decisions than were women who never considered a midwife.

Next, group differences between women who had and had not *selected* a midwife as their final choice of birth attendant were examined. Seventeen of the 49 items showed a statistically significant ($p < .05$) group difference with independent groups *t* tests,§ with another two marginally significant ($p < .10$) items as well.

Women selecting a midwife reported feeling more knowledgeable about birth attendants, in more control over the birth attendant decision, more in control over delivery decisions, more satisfied about their delivery decisions, more in control of and satisfied with pain medication decisions, more autonomous in their pregnancy decision making, and more in agreement with "alternative birth" philosophies and less in agreement with "conventional birth" philosophies. These same women reported receiving more approval from spouse/significant other and friends, were more likely to use "gut instinct" and previous experience or habit to make pregnancy decisions, and were more ready to make these decisions than were women who had not selected a midwife as their primary birth attendant. Women who had selected a midwife felt marginally more approval from their birth attendant regarding their pregnancy decisions, and anticipated a slightly more positive birth experience than did women who had not selected a midwife as their primary birth attendant.

Ratings were made by three independent raters** of various themes that characterized that portion of the interview transcript dealing with a woman's choice of birth attendant were analyzed. Interrater reliabilities, calculated with coefficient alpha, ranged from .32 (for Intuition) to .87 (for Close to Final Decision) with a median of .75 over the eleven themes coded. Appendix D presents these themes.

This time, there were more statistically significant differences for the first set of comparisons. Women who considered a midwife were rated as more thorough, more informed and knowledgeable, more analytic, having greater breadth of thinking, less likely to rely on medical advice, and more likely to rely on advice of others than were women who did not consider a midwife. Moreover, women who considered a midwife were rated as attaching more importance to the birth attendant decision than were women who did not.

Only three out of the 11 possible themes showed a statistically significant difference when the comparison was between women who had and had not *selected* a midwife. Women who had selected a midwife were rated as significantly more thorough and significantly less likely to rely on medical advice. Once again, there was a significant group difference in the dimension of the importance of the decision with women who selected a midwife being rated as attaching greater importance to the birth attendant decision than did women who did not.

The final set of data examined were the criteria the women generated in the course of the interview regarding the birth attendant decision. After reading through the criteria women listed, the authors formed a taxonomy of six major categories (attendant characteristics, availability/cost, relationship between attendant and mother, mother's characteristics, others' opinions, and safety), each of which had three to 13 distinct criteria in it. For example, in the major category "safety" were subcategories of "safety for mother," "safety for baby," "safety, unspecified for whom."†† The authors coded all the criteria a woman listed according to this taxonomy.

The number of criteria women listed did not differ significantly as a function of whether or not women considered a midwife or selected a midwife. On average, women listed 3.2 different criteria. The number of different *types* of criteria the women used also did not show any significant group differences. Women listed criteria that were categorized in 2.5 (out of a possible six) different major categories.

Finally, only one significant group difference emerged in the subcategories of criteria (of the 44 subcategories) listed by women who had or had not considered a midwife, and had or had not selected a midwife: that between women who had and had not considered a

§ Due to the unequal size, we were careful to check homogeneity of variance and to use separate variance estimates wherever warranted.

** The first and second authors, and either one of the third authors or another research assistant.

†† A copy of the complete taxonomy is available from the first author.

midwife on the criterion "Philosophy/type of care" of attendant. Thirty percent of the women who considered a midwife listed this criterion; only 9% of the women who did not consider a midwife listed it ($t[58.80] = -2.32$, $p < .05$). Given the number of t tests run, however, it may be unwise to attach too much importance to this one significant difference.

DISCUSSION

What distinguishes women who consider or opt for midwives over physicians as their primary birth attendant from those who do not? The data here suggest that in this southeast Minnesota locale there are very few demographic distinctions. Women who think about or choose midwives do not differ from other women in terms of their education, income, experience with childbirth, age or religious affiliation, or even birth order.

Attitudinally, there are a few more differences between the groups. Women who consider midwives are, not surprisingly, more likely to endorse or feel comfortable with more "alternative" than "traditional" philosophies of birth. They report feeling more approval from spouses/significant others and family members. They report themselves as making decisions more intuitively.

Women who actually selected midwives reported a greater feeling of knowledge about birth attendants, in more control over a variety of pregnancy decisions, and, interestingly, more spousal approval. Much of this may be due to the philosophic basis for midwifery: that midwives assist women to deliver as a normal, nonmedical event.

The spousal approval findings are a little less intuitive. Anecdotally, one of the interviewers recalled many of the women who did not consider midwives saying that they ruled out that option because their spouse or significant other would not be comfortable with it. It may also be that women who selected midwives were more autonomous decision makers in general, and chose to partner with people who accorded their decisions more respect generally.

One speculative interpretation of these findings is that women who consider, or especially, select midwives as their primary birth attendant, may be less satisfied with traditional medical care. Because they do not automatically follow what many perceive to be the "default" choice of birth attendant (a physician), these women may be the ones who put more effort into the decision, and as a result, are the women who feel more efficacious about the process.

In terms of their cognitive processing, women who did or did not consider or select a midwife did not differ. All groups of women cited the same number of criteria, and indeed, the same types of criteria. As far as the data show, all of the women in this study thought about the decision in similar ways, and thought about the same aspects of the decision.

Raters reading interview transcripts did rate the women who reported considering a midwife as more thorough, knowledgeable, analytic, and broader in their thinking. Moreover, raters thought that women who considered midwives attached more importance to the birth attendant decision than did women who did not consider midwives; however, a caution is in order. The three raters were not blind to a woman's consideration or selection when they rated the transcripts. Indeed, the transcripts presented this information. Thus, the possibility that the knowledge of what option a woman had or had not considered, or had or had not selected inadvertently, contaminated the raters' ratings cannot be ruled out.

Of greatest interest is the idea that women who consider or select midwives report themselves to make decisions more intuitively, and less analytically. Put another way, women who consider or select midwives might be showing a more intuitive, and less analytic style of decision making. This finding may relate to some of the themes reported by Belenky et al (29). They assert that women are more likely than men to try to understand different points of view, rather than to debate them. Further work (30) showed that men and women do differ in their characteristic approach to knowledge and understanding, however, the two different styles are not exclusively related to gender. It may be that the women in our study who considered or selected midwives are women who would be more comfortable with the "connected knowing" approach described in this research. Of course, further work is needed to see whether the women in our sample are in fact more intuitive (or simply perceive themselves that way), and if this style of decision making persists across different real-life decisions.

These findings can be helpful to midwives as they educate the public, particularly the pregnant or soon-to-be pregnant public, about their services, expertise, training, and style of practice. One speculation is that women who do not consider midwives have misconceptions about one or more of these areas. One of the authors was struck by comments pregnant women made about their fears of midwives being unprepared to handle emergencies, for example.

The major findings of this study are the facts that women who choose or select this type of attendant reported an increased potential for autonomy, used a more intuitive decision-making style, experienced greater personal attention from their attendants as well as greater time spent in interaction with midwives, relative to physicians. Most significantly, women considering or selecting a midwife had stronger and more positive views of their upcoming birth experiences. Midwives may want to emphasize these findings in advertising their services

to potential clients, especially women who have never birthed with a midwife before.

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APPENDIX A

DEMOGRAPHIC INFORMATION ON RESEARCH PARTICIPANTS (N = 88)

Age	
18–24	18
25–30	28
31–36	33
37–40	9
Race	
Caucasian	82
Latina	2
Asian	2
Not reported/other	2
Primary Language	
English	84
Other/not reported	4
Religious Affiliation	
Protestant	35
Catholic	28
Unitarian/Universalist	2
Agnostic	2
Atheist	1
Not reported/other	20
Marital Status	
Married	75

Single	10
Divorced	2
Separated	1
Education Completed	
High school	20
2-Year college/technical school	14
4-Year college	24
Professional/graduate school	29
Other	1
Birth Order of Mother	
Eldest	20
Youngest	30
Middle child	35
Only child	2
Not reported	1
Gender/Birth Order of Mother	
Oldest female	29
Youngest female	31
Middle female	10
Only female	18
Total Family Income	
Less than $10,000	4
$10,000–$24,999	11
$25,000–$49,999	29
$50,000–$74,999	21
$75,000–$99,999	9
$100,000 or more	8
Not reported	6
Covered by Insurance for Pregnancy	
Yes	81
No	6
Not reported	1
Residence in Current Community	
1 year or less	25
2–5 years	29
6–10 years	14
11–20 years	12
21 years or more	8
Weeks of Pregnancy at Time of Interview	
1–14	17
15–27	31
28–40	40
Parity	
No previous births	57
One previous birth	19
Two or more previous births	11
Not reported	1

APPENDIX B

WORKSHEET FOR LISTING AND EVALUATING CRITERIA AND ALTERNATIVES*

Factor/Criterion	*Importance Weight*	*A. Lay midwife*	*B. Certified nurse midwive*	*C. Family physician*	*D. Obstetrician*
Knowledge of provider	10	5	9	8	9
Philosophy of birth	9	10	9	7	5
Ability to handle emergencies	7	2	6	8	10
Time spent during obstetric visits	4	9	9	4	2

Note: Women received sheets with column headings and blanks everywhere else. They first listed all the factors or criteria they were using to make this decision in the first column. Next, they indicated the relative importance of each factor in column 2, using a scale of 10 (maximum) to 1 (minimum). The remaining columns were used to rate the available options (e.g., lay midwife in column 3, CNM in column 4) on each of the factors listed in column 1. Thus, in this fictional example, the respondent has rated CNM's as a '9' (i.e., very positive) on the factor of *knowledge of provider*. This factor, in turn, is regarded as of maximum importance.

* Data are fictional.

APPENDIX C

RATING SCALE SURVEY ITEMS

Question Number	*Question Text*
1	How happy are you about your pregnancy?
2	Were you intending to get pregnant at this time?
3	How informed or knowledgeable do you feel about the genetic tests that are available to you (e.g. amniocentesis, chorionic villus sampling)?
4	How satisfied are you with the options available to you for genetic testing?
5	How much do you feel you have a choice about whether or not you will have genetic testing?
6	How confident do you feel about your choice concerning genetic testing?
7	How satisfied do you feel with your choice concerning genetic testing?
8	How informed or knowledgeable do you feel about the primary birth attendant options that are available to you (e.g. obstetrician, nurse-midwife, etc.)?
9	How satisfied are you with the options available to you for your primary birth attendant?
10	How much do you feel you have a choice about who will deliver your baby?
11	How confident do you feel about your choice of a primary birth attendant?
12	How satisfied do you feel with your choice of a primary birth attendant?
13	How committed are you to following your birth plan exactly?
14	How confident are you that your birth plan will be carried out exactly as written or discussed?
15	How in control do you feel about the decisions you are making regarding your delivery?
16	How much do you feel you have a choice about where you will deliver your baby?
17	How confident do you feel about your decisions regarding your delivery?
18	How satisfied do you feel with your decisions regarding your delivery?
19	How anxious do you feel about your delivery?
20	How informed or knowledgeable do you feel about the aided birth procedures that are available to you during delivery (e.g. forceps delivery, vacuum extraction, etc.)?
21	How in control do you feel about your choice of support people (e.g. spouse/significant other, mother, siblings, etc.)?
22	How confident do you feel about your decisions regarding support people?
23	How satisfied do you feel with your decisions regarding support people?
24	How informed or knowledgeable do you feel about the pain medications that are available to you during your labor (e.g., Demerol, epidural block, general anesthesia, etc.)?
25	How satisfied are you with the pain medication options available to you?
26	How in control do you feel about the decisions you are making regarding the use of pain medication during your labor?
27	How confident do you feel about your decisions regarding the use of pain medication?
28	How satisfied do you feel with your decisions regarding the use of pain medication?
29	How confident do you feel about the choices you have made regarding your pregnancy as a whole?
30	How independently of other people have you been making decisions about your pregnancy?
31	How important is it to you that you make your own decisions regarding your medical treatment/pregnancy care?
32	How adequate is the information you have obtained about your pregnancy?
33	How much do you agree with "alternative birth" philosophies (i.e., midwives, home birth, birthing chairs, etc.)?
34	How much do you agree with "conventional birth" philosophies (i.e., obstetricians, hospital birth, pain medication, etc.)?
35	How well do you feel physically during this pregnancy?
36	How well do you feel mentally during this pregnancy?
37	How much does your spouse/significant other approve of the choices you have made regarding your pregnancy as a whole?
38	How much does your family (e.g., parents, siblings, etc.) approve of the choices you have made regarding your pregnancy as a whole?
39	How much do your friends approve of the choices you have made regarding your pregnancy as a whole?
40	How much does your birth attendant approve of the choices you have made regarding your pregnancy as a whole?
41	How stressed do you feel about the decisions you are making regarding your pregnancy?
42	How difficult are pregnancy decisions compared to other decisions you have made?
43	How much are you using specific criteria or rational procedures to make your decisions?
44	How much are you relying on "gut instinct" or intuition to make your decisions?
45	How much are you using previous experience or habits to make your decisions?
46	How anxious do you feel about your pregnancy as a whole?
47	How pressured do you feel by others to make pregnancy decisions?
48	How ready do you feel to make decisions about your pregnancy?
49	How positive do you feel your birth experience will be?

APPENDIX D

THEMES SCORED IN TRANSCRIPTS OF INTERVIEWS

How **thorough** is the woman with respect to the information gathered to date with which to make the decision?

How **informed** or knowledgeable is the woman to date regarding this decision?

How **comfortable** does the woman seem in making this decision?

How **close to a final decision** is this woman?

How much does the woman seem to be relying on **intuition** (gut feeling, holistic reaction) in making this decision?

How much does the woman seem to be relying on **analytic processes** (rationality, avoiding emotions or biases, calculating costs/benefits) in making this decision?

How **broad** is the woman's thinking about her options?

How **autonomously** (from other people) is the woman making this decision (relying on her own values, beliefs, knowledge, instead of those of someone else)?

How much is the woman relying on **medical advice** (e.g., provided by her doctor, midwife, or others with medical training)?

How much is the woman relying on the **opinions of others** without medical training (e.g., friends, family members)?

How **important** is this decision to this woman?

AQ1: Location? Publisher?

Poster presentation (not published)

→ Dallas, TX