A Descriptive Study of "Being with Woman" During Labor and Birth

Lauren P. Hunter, CNM, PhD

The objective of this study was to learn more about women's perceptions of the nurse-midwifery practice of "being with woman" during childbirth. The descriptive, correlational design used a convenience sample of 238 low-risk postpartum women in a hospital nurse-midwifery practice, with two childbirth settings: a standard labor and delivery unit and an in-hospital birth center. The main outcome measure was a 29-item seven-response Likert scale questionnaire, the Positive Presence Index (PPI), administered to women cared for during labor and birth by nurse-midwives to measure the concept of being with woman. Statistical analysis demonstrated women who gave birth in the in-hospital birth center or who began labor in the in-hospital birth center prior to an indicated transfer to the standard labor and delivery unit gave higher PPI scores than women who were admitted to and gave birth on the standard labor and delivery unit. Parity, ethnicity, number of midwives attending, presence of personal support persons, length of labor, and pain relief medications were unrelated to PPI scores. Two coping/comfort techniques, music therapy and breathing, were found to be correlated with reported higher PPI scores than those of women who did not use the techniques. These results can be used to encourage continued use of midwifery care and for low client to midwife caseloads during childbirth, and to modify hospital settings to include more in-hospital birth centers. J Midwifery Womens Health 2009;54:111–118 © 2009 by the American College of Nurse-Midwives.

keywords: being with woman, birth center, childbirth, Hispanic, labor and delivery, Latina, midwifery, midwifery care, presence

INTRODUCTION

From a philosophic, theoretic, and practical standpoint, the midwife's presence with a woman during childbirth is central to the practice of midwifery and the care of women in labor. Hunter's comprehensive review of the midwifery and nursing literature confirmed that women during childbirth desired and valued the concept of being with woman, which was defined as "the provision of emotional, physical, spiritual and psychologic presence/support by a midwife as desired by the laboring woman." Her review of qualitative and quantitative research on the subject also documented beneficial psychologic and physiologic outcomes for women who experienced being with woman.

The specific objective of this study was to measure the concept of being with woman by nurse- midwives caring for a population of predominately Latina women in a hospital setting. The Positive Presence Index (PPI) scale developed by Lehrman² was used to measure being with woman because the scale shared the same attributes as those found in Hunter's¹ review and used for her definition of being with woman. Lehrman's definition for the PPI scale was initially based upon interviews with women who received nurse-midwires response to the laboring woman encompasses the high touch qualities of nurturance, intuitive awareness, sensitivity, personal attention, knowledge, professional expertise, presumed validity of the individual woman's subjective experience' and "reflects the one-on-one personal

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attention and constant availability of the nurse-midwife for the woman in labor."^{2(p,44)} Being with woman will be used throughout this paper as the umbrella term that encompasses other similar terms from the obstetric, nursing, and midwifery literature—social support, continuous labor support, therapeutic presence, and midwifery presence.

BACKGROUND

One essential hallmark of the philosophy of the American College of Nurse-Midwives is the importance of the therapeutic value of human presence.³ Four American nurse-midwifery studies^{2,4–6} and one metasynthesis⁷ that evaluated six qualitative studies of midwifery care identified concepts and themes that build a theoretic framework for midwifery care. All these researchers found that a midwife's being with woman was an essential component of midwifery care from both the woman's and the midwife's perspective. Thompson et al. 6 discovered that one indicator of client satisfaction with nurse-midwifery care was physical and emotional support during labor. Lehrman² learned that women perceived greater self-esteem and satisfaction with their labor experience because the nursemidwife was present. The theme of "a continuous link with the nurse-midwife," which participants perceived as "a presence that was felt and valued," was discovered in Kennedy's⁴ first phenomenological study of midwifery care. In a subsequent study, recipients of midwifery care described midwives as "being there," and the midwife participants in the study felt "being present" was important.⁵ Declerreq et al.⁸ noted that the Listening to Mothers survey found midwives to be the highest rated source of supportive care.

Qualitative studies conducted outside of the United States of women's experiences of childbirth with midwives have demonstrated that women value the caring concept of being with woman and believe it is important to the childbirth experience. Hunter found the most frequent essential elements of being with woman were a) knowledge and professional expertise, 11,15-22 b) sensitivity, c) personal attention, 18,19,22,23 d) nurturance, e support and guidance, 9,21,25-30 f) advice and information, and g) a trusting, flexible, reciprocal, and caring relationship. The women participating in the studies reviewed by Hunter valued the same attributes of being with woman as those identified by Lehrman over 20 years ago in the United States.

In addition to defining the elements of being with woman by midwives, researchers have linked further positive outcomes to this caring process. Being with woman has been found to improve laboring women's ability to "handle" childbirth and the ability to flow with labor, 29 to provide protection against negative memories of childbirth up to 2 years later, 29,31 and to increase feelings of control and confidence during labor. 27

A similar concept to being with woman by midwives, continuous labor support, (emotional support, comfort measures advocacy, information, and advice), has also demonstrated positive outcomes for those women that receive it during childbirth. A Cochrane review of Hodnett et al. found consistency in the description for continuous labor support used among 16 worldwide trials involving 13,391 laboring women: "continuous or nearly continuous presence, at least during active labor." 32(p.5) The continuous labor support was provided by a variety of persons with varied experience—midwives, student midwives, nurses, doulas, childbirth educators, female relatives, and women without any training. The review indicated that women who received continuous labor support "were likely to have a slightly shorter labor, were more likely to have a spontaneous vaginal birth, and less likely to have intrapartum analgesics or to report dissatisfaction with their childbirth experiences." $^{32(\hat{p}.1)}$

Because most of the previous studies of midwifery care by midwife researchers in the United States have focused on outcomes, safety, patient satisfaction, and efficacy, less is known about the individual processes of midwifery care. ^{33,34} This study sought to learn more about one concept of midwifery care—being with woman—and its relationship to other childbirth variables.

The purpose of this study was to measure women's experience of being with woman while being cared for by nurse-midwives in a hospital setting. The primary research question was designed to determine whether or not pre-

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dominately Latina women who were attended by nursemidwives in a hospital-based nurse-midwifery service perceived the midwife as being with woman during their childbirth experience. The second research question was to determine if there was a relationship between women's perceptions of being with woman and various demographic and labor characteristics.

METHODS

A descriptive, correlational, design employed a convenience nonprobability sample of 238 postpartum women who were recruited prior to hospital discharge. A minimum of 100 women from two birth settings, an in-hospital birth center and a standard labor and delivery unit, was estimated to achieve a power of 80, with a medium effect size of 0.5. To be eligible for inclusion in the study, women had to speak and read Spanish or English, have a minimum gestational age of 37 weeks at time of admission for labor, and be considered a low-risk patient who did not require comanagement by a physician for medical or obstetric complications during labor and birth. Physician consultation was allowed for routine matters such as oxytocin augmentation or epidural request; however, comanagement for medical conditions such as pregnancy-induced hypertension or multiple gestation was a disqualifying factor. Women must have had a nurse-midwife as the primary caregiver during labor and birth and have birthed vaginally without forceps or vacuum assistance. Two institutional review boards, one at the principal researcher's university and one at the hospital clinical site approved both the study protocol and the informed consent process.

PPI Instrument

The PPI scale is a 29-question seven-step response Likert scale (Appendix A) developed by Lehrman² to measure a woman's perception of being with woman in the nurse-midwives care during labor and birth. Lehrman² first developed the PPI scale through qualitative interviews of women who had received nurse-midwifery care and then validated it using theoretic indexing from nursemidwifery literature. Women who verified that the PPI scale reflected issues that were pertinent to their own childbirth experiences and four nurse-midwife experts who reviewed the instrument assessed content validity. The PPI scale was designed to be administered to women after childbirth. For this one-dimensional summative scale, a higher total score with a possible maximum of 203 points (strongly agree) indicated a greater amount of perceived being with woman. A reliability analysis using Cronbach α (.9161) to measure internal consistency among items and the entire scale was conducted. Construct validity confirming a one-factor scale was conducted via a principal components analysis on which the theta coefficient (.92) was based. The item-to-item correlation matrix ranged from .42 to .69. Test-retest reliability was .99, and the Spearman-Brown prophecy formula for the PPI scale was .90.

The sample for Lehrman's² initial pilot test of 20 women and a second test of 89 women consisted of low-risk, almost exclusively Caucasian, insured women with an annual income that suggested middle to upper-middle income population. They received care from one of four nurse-midwives and gave birth in either an out-of-hospital birth center or a local hospital in a Southwestern city. During data collection, construct validity was obtained with the use of a simultaneous visual analog scale that measured perceived positive presence. The correlation between the total scores of both instruments was initially .77 (P = .001) and then .64 (P = .001) on the final sample. The Cronbach α coefficient remained .92. for both samples.²

For this study, two nurse-midwife experts reviewed the PPI instrument and demographic/variable form for contemporary content validity and colloquialisms. A certified bilingual translator translated into Spanish all materials used in the study protocol that were originally written in English. A second certified bilingual translator performed back translation to ensure conceptual and cultural equivalence. Two groups, one of four English-only speaking and another of six Spanish-only speaking recently postpartum women, who were representative of the sample, assessed the instrument for cultural currency and relevance, and content validity in terms of their own recent childbirth experiences.

The nurse-midwives who provided the care were not involved in the data collection nor were they aware of the dates and times of data collection. A bilingual research assistant (RA) used both a bilingual flyer and a verbal description of the study purpose and procedures to recruit eligible women. Women were approached after birth but prior to discharge from the hospital. Data collection occurred within 72 hours of birth. Women were informed that participation would require approximately 30 minutes to complete the instruments and that medical records and delivery log information would be assessed for demographic statistics and eligibility verification.

The RA obtained written informed consent for participation. Confidentiality was maintained by using coded study numbers instead of names or medical record numbers.

Paper data collection by the RA of the questionnaire, demographics, and study variables occurred two or three times per week over a 6-month period. Demographic data was first collected through each woman's self-report form and then verified as possible by medical chart and delivery logs. Data were entered into SPSS version 14.0 (SPSS Inc., Chicago, IL).

Nurse-Midwifery Care

Women were recruited from a full-scope nurse-midwifery service in a large Southwestern metropolitan city. Approx-

imately 75% of patients received federal or state funding, and 25% were private pay patients. The nurse-midwifery service provided labor and birth care to 100 to 125 women per month. The service consisted of eight full-time and four part-time nurse-midwives who provided prenatal care in eight outpatient community or hospital-based clinics. Nurse-midwives consistently serviced the same clinic or clinic day except for vacation or staffing difficulties. Each full-time nurse-midwife typically worked two 12-hour intrapartum shifts and two 8-hour clinic shifts per week. Policy dictated that a second nurse-midwife be called in for postpartum rounds if a woman was in active labor or if more than two women were in labor.

Low-risk women, defined by written hospital policies and procedures for the nurse-midwifery service, had the choice of birthing in either the in-hospital birth center or the standard labor and delivery unit. Women who desired epidural or spinal analgesia, women who did not meet the in-hospital birth center low-risk eligibility criteria, and those requiring transfer for fetal or maternal reasons (i.e., oxytocin augmentation, worrisome fetal status) still received primary nurse-midwifery care on the standard labor and delivery unit. Women in either setting were able to request a trained volunteer doula for support, based upon availability. All women also received routine nursing care with either a 1:1 or 1:2 ratio, depending upon the patient census and unit policies and procedures. None of the rooms in either setting had their own shower.

The in-hospital birth center had five large rooms for births in a homelike environment, which included standard double beds, a private restroom, rocking chairs, showers, birth balls, and birth chairs. A portable hydrotherapy tub was available. Women were encouraged to ambulate, to eat and drink freely, and have support persons of their choice and number. Fetal status was determined by intermittent Doppler auscultation and labor contractions evaluated by manual palpation. Based upon availability, women were allowed to remain in the same room for labor, birth, and postpartum care. If unable to remain in the in-hospital birth center, women were transferred to the Family Maternity Care Center with their infant.

The standard labor and delivery unit was a 10-room hospital birth environment with standard obstetric beds. Each room had one recliner chair; four of the rooms were quite small with shared bathrooms. Six rooms were larger, with a private bathroom. Standard labor and delivery unit policies included continuous fetal monitoring, nothing by mouth or clear liquids only, intravenous hydration, and a limit of two support persons in the room at a time. Women were routinely transferred with their infant 2 hours after birth to the Family Maternity Care Center.

RESULTS

Two hundred sixty-one women were solicited for the study. The final sample consisted of 238 postpartum

women, as 31 chose not to participate. The two most common reasons for declining to be in the study were getting ready for discharge or having visitors at the time of recruitment. There were no differences in demographics between those who declined and those who agreed to participate. Table 1 lists the participant characteristics.

Prior to conducting the main analyses, PPI scores were tested to determine if the assumptions for the ensuing statistical techniques were met. The PPI scores were found to violate the assumption of normality, with a distribution skewed to the high end of presence scores. To address this issue, a logarithmic transformation³⁵ (application of a mathematic modification to the values of a variable) was conducted. This procedure reduced nonnormality by reducing the relative spacing of the high PPI scores on the right side of the distribution more than the low PPI scores on the left side, yielding a distribution of scores reflecting a more normal distribution. Analysis of variance (ANOVA) procedures were used to determine differences in PPI scores for all independent variables.

The mean PPI score for all participants was 186.22 (SD 21.79), which fell between the moderately agree PPI score of 174 and strongly agree PPI score of 203. It was used to determine possible relationships for each variable. PPI scores by ethnicity were not significant ($F_{1.226}$ = . 690, P = .41).

Table 1. Characteristics of PPI Respondents (N = 238)

Characteristics	Value ^a
Age, mean (SD), y	25.3 (5.9)
Length of labor, mean (SD), h	8.5 (6.8)
Number of prior births, mean (SD)	2.6 (1.6)
Ethnicity	170 (70 0)
Hispanic	176 (73.8)
Caucasian	46 (19.4)
Other	16 (6.8)
Place of birth	100 (40 0)
In-hospital birth center	100 (42.2)
Standard labor and delivery unit	100 (42.2)
In-hospital birth center to standard labor	38 (15.6)
and delivery unit	
Coping/comfort measures used during labor	150 (67 1)
Warm compresses	159 (67.1)
Breathing techniques	124 (52.1)
Music therapy Back rub	114 (48.1)
24011.42	109 (46.0)
Visualization	87 (36.7)
Massage Shower	71 (30.0) 65 (27.4)
Therapeutic touch	51 (21.5)
Birthing stool	50 (21.1)
Hot water tub/spa	42 (17.7)
Aromatherapy	38 (16.0)
Cold compresses	28 (11.8)
Birth ball	24 (10.1)
Position changes	21 (8.9)
Other	13 (5.5)
Hypnosis	3 (1.3)
1134110010	5 (1.5)

PPI = Positive Presence Index.

Table 2. Variables and PPI Results for Being With Woman

Variable	No.	PPI score ^a	<i>P</i> value
Place of birth			
In-hospital birth center	100	189.9 (15.3)	.03
Standard labor and delivery unit	100	180.5 (27.8)	.03
In-hospital birth center to standard	38	191.5 (12.9)	.03
labor and delivery unit			
Gravida			
Multiparas	135	187.9 (15.6)	>.05
Primiparas	103	183.8 (27.8)	>.05
Number of nurse-midwives attending			
labor and birth			
1—2 nurse-midwives	152	187.4 (23.0)	.055
>3 nurse-midwives	86	183.9 (19.2)	.055
Coping/comfort techniques			
Breathing techniques	124	189.8 (16.7)	.007
Without breathing techniques	114	182.2 (25.7)	.007
Music therapy	114	191.6 (12.8)	.007
Without music therapy	124	181.3 (26.5)	.007
Medication			
Not medicated	140	187.9 (18.9)	.08
Medicated	98	183.2 (25.8)	.08

PPI = Positive Presence Index.

Table 2 shows the mean PPI scores. Women who birthed in the in-hospital birth center and women who transferred from the in-hospital birth center to the standard labor and delivery unit gave higher scores on the PPI scale than women who labored and gave birth in the standard labor and delivery unit. The birth environment was found to be a significant factor in explaining PPI scores ($F_{2,221}$ = 3.69, P < .03). There was no difference in the ratings of primiparas compared with multiparas or when women had one to two nurse-midwives in attendance versus ≥ 3 nurse-midwives over the course of their labor and birth. A large percentage of women reported the presence of their husband/partner during labor and birth (81%). Doulas were used by 21% of the women, and 74% of women had a female relative present. No significant differences were found in PPI scores based on the type of support persons accompanying the woman during labor and birth.

Women used a number of coping/comfort techniques during labor. Due to the large number of coping/comfort techniques, a stepwise regression analysis was conducted. Results identified music therapy, breathing techniques, warm compress, and backrub as contributors of the most variance within PPI scores. Using these coping/comfort techniques as independent variables, ANOVA was conducted. Results of the analysis indicated statistically significant influence on PPI ratings for breathing techniques $(F_{1,224} = 7.46, P = .007)$ and music therapy $(F_{1,224} = 3.83, P = .05)$, with the mean scores shown in Table 2. Those women that used these coping/comfort techniques had higher PPI scores than those that did not.

A narcotic epidural or spinal was received by 33.3% of the women, whereas 21.9% reported receiving Nubain and

^aValues are number (percentage) unless otherwise indicated.

^aValues are mean (SD) unless otherwise indicated

3.8% morphine. Since many of the women reported receiving more that one type of pain medication, it was not possible to analyze data for those who received an epidural and those that did not. When comparing those women who received medication analgesia and/or anesthesia during labor (n = 98) versus those who did not (n = 140), the PPI scores were only five points apart. The ANOVA scores were not significant ($F_{1,208} = 3.06$, P = .08).

DISCUSSION

The results of this study demonstrate that women cared for by nurse-midwives during childbirth experience a high level of being with woman. Being with woman was perceived despite the fact that some women birthed in a standard labor and delivery unit; had an epidural; received support from a doula, significant other, or female support person; or that the nurse-midwifery service employed a large number of nurse-midwives. This is especially encouraging because Lehrman's study was conducted 20 years ago within a small nurse-midwifery service and prior to emergence of the high-tech birthing phenomenon.

The Cronbach α for reliability of the PPI scale in this study (.856) was slightly less than that for the original data (.92) reported by Lehrman.² This small difference could be due to the fact that in this study, a non–nurse-midwife RA collected the data instead of a nurse-midwife known to the participants as was the procedure in the original study, thus providing a potential bias.

This study can be generalized to other populations of term pregnant women who are low-risk, young, primarily low income, and Latina. It was clear that there was a higher degree of being with woman for those women who experienced the in-hospital birth center setting, even if they were transferred to the standard labor and delivery unit, compared with the standard labor and delivery unit alone. The study by Hundley et al. ³⁶ of women's preferences for intrapartum care included a homelike environment, and Melender reported that women thought the environment was important for childbirth if it had special characteristics, similar to those characteristics of the in-hospital birth center for this study.

The Cochrane review of homelike versus institutional birth settings, in six trials involving 8677 women conducted by Hodnett et al.,³⁷ found that those who birthed in a homelike setting had a consistent pattern of decreased medical interventions, higher maternal satisfaction with their intrapartum care, and a preference to give birth in a similar setting the next time. Singh and Newburn³⁸ conducted surveys from 2620 anonymous and self-selected women who gave birth in the United Kingdom to learn what they valued most about their in-hospital childbirth environment. The most highly rated environmental features in ranking order were cleanliness; ability to remain in the same room for labor, birth and

postpartum: the ability to walk about freely: a private bathroom; an adjustable bed; a comfortable chair for the significant other; and having a birth pool. Seventyseven percent of women who took the survey and received one-to-one midwifery care stated that they received excellent midwifery care. Important supportive care from the midwife included those attributes defined in Hunter's definition of being with woman—trust and respect of women, reassurance, advocacy, guidance, and competence. Women's satisfaction with their birth environment may be linked to increased levels of perceived being with woman. However, care provider behaviors depend on the context within which the care provider practices. Therefore, it is also possible that women may perceive more being with woman from a midwife in a birth center where the philosophy of care is that birth is a normal and healthy process.

This study found music therapy and breathing techniques to be correlated with higher PPI scores; women who did not use these techniques scored lower. Music therapy and breathing techniques are two common comfort/coping techniques that have been found to be successful in the relief of physical sensations of pain and the enhancement of relaxation and psychoemotional status during childbirth.³⁹

Studies of music therapy as a nonpharmacologic comfort and coping technique have been found to be effective in enhancing coping, decreasing pain sensations, and reducing distress/stress in labor. ^{40,41} Brown et al. described music therapy as "an effective intervention to promote physical, emotional and spiritual health." ^{40(p.273)} Singh and Newburn³⁸ discovered that access to music was considered a desired part of a relaxing comfortable environment for childbirth for one of six women (n = 471) surveyed.

Rhythmic breathing patterns have long been promoted in childbirth education as a basic strategy to promote relaxation and distract laboring women from labor pain. Childbirth education expert Nichols⁴² presented a detailed description of the positive physiologic and psychologic effects of controlled breathing based upon research in disciplines that concentrated on stress and perceived threat reduction, pain relief, mental state regulation, religion, and sports performance. Brown et al., 40 in a small retrospective descriptive study, found breathing techniques to be one of the four most effective nonpharmacologic relaxation techniques for laboring women. Simkin and Bolding³⁹ believed breathing techniques contributed to an increased sense of control, decrease in anxiety and fear, and an enhanced mood-all factors that can assist in distraction from pain.

It is believed that the use of both of these comfort/coping techniques contributed to higher PPI scores because they provided some of the same qualities of care, reassurance, guidance, and support as being with woman.

"Continuity of care," a midwifery concept that has been studied most often by European and Australian

midwives, bears some discussion here because the number of midwives caring for each woman during childbirth was a variable in this study. Continuity of care has been defined as the ability of a woman to develop a relationship with a midwife or midwife team to work in partnership for the provision of her care during pregnancy, labor, birth, and the postpartum period. 43,44 The literature is unclear regarding the preference by women to have continuity of care or the ability to have "known" their midwife prior to labor and birth. 44 For some women, continuity of midwifery care has been more important antenatally than during childbirth. 43 Proctor 45 discovered that it was most important for prenatal pregnant women to have an established professional relationship with the midwife prior to childbirth, and more important for laboring women and postpartum women to have had continuity of care (i.e., the same midwife providing the care during the labor and birth). Women in van Teijlingen et al.'s study⁴⁶ preferred fewer providers during childbirth and felt more satisfied with care with fewer providers. More recently, Freeman's 47 critical and comprehensive review of the literature found that continuity of care 1) was not a high priority for women, 2) was not a predictor of childbirth satisfaction, and 3) that there was no association between a "prior known" care provider during childbirth and the development of a partnership relationship with a midwife.

The mean number of nurse-midwives caring for an individual woman during childbirth in this study was 2.32 (SD 1.12). It was surprising that there was no significant difference for being with woman between those women who had one to two nurse-midwives present versus three to six over the course of their labor and birth.

Studies have shown that pregnant Puerto Rican/Dominican and Mexican women most often rely on husbands/partners and female family members, especially the maternal grandmother, mother, and mother-in-law for advice, reassurance, and emotional and social support. He study found similar types of family members present, especially husbands/partners, mothers, and sisters during labor and birth. Campero et al. Teported that women who had hospitalized childbirth in Mexico were not usually allowed to have relatives present for companionship. The presence of a familial support person in this study, either male or female, may reflect either acculturation to American society or the fact that in America, family members have the freedom of choice to be present during childbirth. Social support from relatives had no effect on PPI scores in this population.

There are some limitations to this study. The convenience, nonprobability nature of the sample raises the possibility of potential bias. It is not possible to assume that the women in the in-hospital birth center setting and the standard labor and delivery unit setting were similar. Therefore, preexisting differences could be responsible for group differences. Correlational research is unable to reveal causal relationships.

IMPLICATIONS FOR PRACTICE

This study sought to learn more about one aspect of midwifery care—being with woman. It was meaningful to discover a strong and high level of perceived being with woman within a large midwifery hospital setting among a predominately Latina population. Of note was the fact that women still perceived being with woman in the modern childbirth milieu that included epidural anesthesia, doula support, and multiple family members for social support.

A meaningful relationship between the midwife and the women being cared for is clearly an important aspect of care during pregnancy and childbirth. ^{1,8,52} Freeman ⁴⁷ concluded that women did not "focus on the model of care [italics in the original] but instead on the content of the care [italics in the original] provided." Ultimately, we might discover that it is not the amount of actual time that the midwife spends being physically present with laboring women but the quality of the interaction and personal approach that is most important. The basis for the essence being with woman may also hinge not on what midwives do nor the time midwives spend with each woman in labor but the fact that midwives are trusted providers with a shared philosophy about childbirth.

CONCLUSION

Data from this study can be used to embrace and encourage the continued use of midwifery care and to modify hospital settings to include more in-hospital birth centers and smaller caseloads for midwives caring for women during childbirth. Breathing techniques and music therapy can be considered helpful adjuncts in midwifery care. Future research should examine the PPI scale in other populations, different midwifery services and settings, and examine the relationship of being with woman to overall satisfaction with labor and birth and to other variables of midwifery care, as well as to women's' perceived needs during pregnancy and childbirth.

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Appendix A. Positive Presence Index^a

Prior to discharge, postpartum subjects were asked to answer the following questions using a seven-response Likert format

Strongly Agree	Moderately Agree	Slightly Agree	Undecided	Strongly Disagree	Moderately Disagree	Slightly Disagree
Maximum Scores						_
203	174	145	116	87	58	29
During my lahor and	hirth					

- 1. The nurse-midwife explained what she was going to do before she did things to me.
- 2. The nurse-midwife seemed to know what I needed before I asked.
- 3. The nurse-midwife gave me confidence in my own abilities.
- 4. The nurse-midwife should have paid more attention to me.
- 5. The nurse-midwife confirmed that what I was feeling was normal.
- 6. The nurse-midwife helped me to cope with my labor contractions.
- 7. The nurse-midwife seemed to know what would work best for me.
- 8. The nurse-midwife listened when I expressed my concerns.
- o. The nurse-influence instelled when I expressed my concerns.
- 9. The nurse-midwife was out of the room too much of the time. 10. The nurse-midwife helped me to work with what I was feeling.
- 11. The nurse-midwife was considerate of my family and friends.
- 12. The nurse-midwife gave me reassurance when things got tough.
- 13. The nurse-midwife's touch was comforting.
- 14. The nurse-midwife did not understand what I was saving at times.
- 15. The nurse-midwife took care of everything else so I could concentrate on my labor.
- 16. The nurse-midwife understood what I was saying even when the words came out all jumbled up.
- 17. The nurse-midwife helped me to tell the other people around me what I needed.
- 18. The nurse-midwife encouraged me so that I could do the best I was capable of doing.
- 19. The nurse-midwife just did things without first asking me how I would like things to be done.
- 20. The nurse-midwife helped me to understand how my body works.
- 21. The nurse-midwife helped me to be as comfortable as was possible.
- 22. The nurse-midwife responded to my concerns in a way that was familiar to me.
- 23. The nurse-midwife was an expert at what she did.
- 24. The nurse-midwife did not help me to relax with my labor.
- 25. The nurse-midwife's words were soothing.
- 26. The nurse-midwife seemed to understand what was happening to me.
- 27. The nurse-midwife helped my labor coach to work with me.
- 28. The nurse-midwife prepared me for what to expect next.
- 29. The nurse-midwife did little to ease my pain and discomfort.

^aFrom Lehrman.² Used with written permission.