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A Descriptive Correllational Study of Patient Satisfaction in Labor and Delivery

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A DESCRIPTIVE CORRELATIONAL STUDY
OF PATIENT SATISFACTION
IN LABOR AND DELIVERY

BY

Holly B.O. Estes, R.N.

A THESIS

Submitted to

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Thesis Committee Members:

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Frances McCrea, Ph.D.

ABSTRACT

A DESCRIPTIVE CORRELATIONAL STUDY OF PATIENT SATISFACTION IN LABOR AND DELIVERY

By

Holly B.O. Estes

The concept of patient satisfaction continues to be one of the main concerns in the health care arena today. The purpose of this study was to investigate patients' perceived satisfaction level regarding their labor and delivery at one large Midwestern teaching hospital.

Satisfaction was measured using the Labor and Delivery Satisfaction Index by Lomas, Dore, Enkin, & Mitchell, and the Labor and Delivery Evaluation Scale by Humenick. Roy's Adaptation Model provided the conceptual framework for this study. The study sample was 33 primiparas, seventy-six percent reporting overall satisfaction with their labor and delivery experience.

Sixty-one percent reported the labor and delivery nurse as the one person who made the biggest difference in their labor and delivery experience. Labor and delivery nurses can utilize the valuable information gained from patients' self report of satisfying aspects of labor and delivery to increase patients' perceived satisfaction.

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CHAPTER #1

INTRODUCTION

In the growing arena of health care competition and increasing competitiveness for "health care dollars," patient satisfaction with periodic hospitalization is recognized as an important factor. Hospitals are finding it necessary to cater to the desires and demands of the consumers to attract business (Stevenson, 1981). Revenues generated by consumers using hospital services will in turn allow health care institutions to continue to expand and improve the services offered.

In today's competitive market for hospital healthcare service, there is a heightened interest in determining patient satisfaction with services (Hildman & Ferguson, 1990). Ultimately, the health care system will be able to increase the satisfaction of its users by obtaining information from the health care consumers themselves regarding their needs and desires. By looking at overall satisfaction in relation to a given hospital experience, it is possible to develop an understanding of what consumers view as important and to eventually increase the patients' perceived level of satisfaction.

The nurse-patient relationship is recognized as an

important influence on the satisfaction a patient perceives during a given hospital experience. Nursing care appears to be the most accurate predictor of overall hospital satisfaction (Pettit & White, 1991). It is easy to infer, on a much larger scale, that patient satisfaction is an important factor that must be recognized by any hospital or similar health care provider. In this era of intense competition and aggressive marketing, studies are being conducted to understand what are essential consumer demands for quality health care services and what elements promote a high level of satisfaction.

As early as 1956, research regarding nursing care for laboring patients suggested inadequate emotional care and support were being provided for the experience (Field, 1987). Consumer pressure for more information, more choices, and greater parental involvement in childbirth have stimulated many changes in maternity care in recent years.

Since that early research, the importance and the related effects of patient satisfaction have been recognized and continue to be a concern for both professional nurses and hospitals. Understanding consumer expectations is an important ingredient in making childbirth a safe and satisfying experience. This knowledge can lead to improved communication and relationships between consumers and providers of maternity care, and eventually lead to greater satisfaction with the childbirth experience

(Stevenson, 1981).

The purpose of this research study was to determine whether or not patients are generally satisfied with their labor and delivery experience, and to describe the extent of satisfaction patients experience in relation to labor and delivery. Knowledge gained from this study will assist nurses to identify aspects of care that produce a high degree of patient satisfaction. Maternity care is viewed as very important in terms of satisfaction, because for many families it is their first hospital experience. When a future need may arise, patients will seek health care from that provider with whom they are the most satisfied (Stevenson, 1981).

CHAPTER #2

REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

Review of Literature

A review of relevant nursing literature provides a basis for further inquiry into the subject of patient satisfaction with the labor and delivery experience. Only a few consumer surveys of maternity care have been conducted in the United States, but generalizability of findings is limited due to sampling techniques or restricted content (Sullivan & Beeman, 1982). Several studies describe consumer satisfaction related to medical care suggesting the relevance of this subject matter. Most of the research reviewed suggests the need for further investigation into this issue.

A major Canadian research study was conducted in 1987 by Dr. Peggy Ann Field. Her study was designed to examine several factors related to the birth experience. One factor she looked at was the satisfaction with nursing care received by laboring women. Field (1987) was able to conclude that patients' perceptions of the labor and delivery nurse had a direct correlation to satisfaction with their delivery experience.

Other correlations in the Field study (1987) were made between satisfaction during labor and delivery and

supportive measures provided by the nurse; satisfaction and the nurse's response to patient's needs; satisfaction and comfort measures; and satisfaction was also related to the physical attributes of the health care setting.

Along the same lines, Simkin (1991) reported on a group of twenty women who had experienced childbirth in the late 1960's and early 1970's. The purpose of the study was to investigate the relationship of satisfaction with the birth experience with perceptions of other life experiences.

Simkin (1991) revealed that those women with the highest satisfaction ratings of their birth experience felt that it had contributed to their self-confidence and self-esteem during their parenting years. The women who had reported high levels of satisfaction had positive memories of their doctors' and nurses' words and actions. The birth experience was found to have a powerful effect on women with a potential for permanent or long-term positive or negative impact (Simkin, 1991).

Research in the area of patient satisfaction with labor and delivery has also been reported by Danzinger (1979). She looked at the relationship of positive interaction between staff nurses and new parents with regard to the successful transition into parenthood. This study also demonstrated the importance and possible implications of patient satisfaction with labor and delivery. The findings suggested that the more positive the labor and delivery

experience, the more successful the transition into parenthood for new parents (Danzinger, 1979).

Filshie, Williams, Osbourn, Senior, Symonds, & Backett (1981) reported a study which examined supportive interventions provided by nurses during the post-natal care period in the hospital. Significant outcomes were found to be due to interventions initiated by the staff nurses during this period. For example, many patients expressed a desire to have more time available to spend with the nurses to ask questions, receive support, and get guidance for their new roles as parents. Again, these findings support the importance of the nurse-patient relationship.

A study conducted by Nunnally & Aquiar (1974) reported on patients' evaluations of their prenatal and delivery care. Patients were asked to retrospectively examine the care they received and evaluate it in terms of helpfulness and importance, as well as any areas that could be improved. This study reported that there were significant areas identified where nursing care was lacking or inadequate. Some of these issues were related to the prenatal period of care and the knowledge gained from or lacking from their prenatal education. This too supports the need for further research into patients' desired services in the area of maternity nursing care.

Satisfaction with maternity care was reported by Sullivan and Beeman in 1982. The purpose of their study was

to determine the level of satisfaction with maternity care and to relate satisfaction to the patterns of communication between caregivers and patients, and to specific clinical procedures used during the labor and delivery experience. It was found that the level of satisfaction was related to both the quality of communication and the fulfillment of preferences about the management of their labor and delivery (Sullivan & Beeman, 1982). In other words, the more input the patient had into her labor and delivery management, the higher the degree of satisfaction she reported. Again, this finding shows support for the importance of fulfilling consumer demands to increase satisfaction.

Continuing to look at communication as one of the key areas of patient satisfaction or dissatisfaction, Kirke (1980), reported on mothers' views of obstetrical care. She found that there was a significant association between satisfaction with communication and overall satisfaction with care. Concern was expressed about the increased use of technology in obstetrics and the lack of attention to the mothers' emotional needs. If the high level of technology is utilized with a high degree of effective communication, the level of satisfaction will also be high (Kirke, 1980).

Lochman (1983) studied factors related to patients' satisfaction with medical care. He felt as though a measurement of patient satisfaction served as an intermediate method for evaluating the quality of health

care provided. This study primarily pertained to care provided by a physician, but related many of the same findings as the studies regarding nursing care. Patient satisfaction was defined as a positive appraisal by the client that the client's goals and expectations regarding health care have been achieved (Lochman, 1983).

Further investigation into the role of satisfaction in consumers was revealed in a study by Fisk, Brown, Cannizzaro, & Naftel (1990). This study explored the relationship between patient satisfaction and loyalty. The group proposed that hospitals, like all enterprises, thrive only if they create satisfaction and loyalty in clients at an affordable price. They reported that there are several major links between patient satisfaction and continued prosperity for health care providers worthy of further investigation. Some of the issues examined by Fisk, et al. (1990) were things such as admissions procedures, doctor's attitudes, and nursing care provided. Yet another supportive finding of the importance of patient satisfaction.

In a randomized, controlled study, Waldenstrom and Nilsson (1993) reported on women's satisfaction with care at an in-hospital birth center and satisfaction with standard obstetric care not in hospitals in Stockholm. Twelve hundred thirty women participated in this study. Overall, birth center participants expressed greater satisfaction

with antenatal, intrapartum, and postpartum care, especially psychological aspects of care (Waldenstrom & Nilsson, 1993).

The objectives for birth centers are to provide personalized care with a minimum of medical and technological interventions in a homelike setting, and to enable parents to maintain control over their childbirth experience (Waldenstrom & Nilsson, 1993). Birth centers have been developed in many countries and across the United States as a result of identified patient dissatisfaction with the typical practices associated with obstetric services in hospitals. This is an example of how patient satisfaction has contributed to notable changes in healthcare delivery systems.

Green (1993) reported on patient's satisfaction related to expectations and experiences of pain during labor. Seven hundred women participated in a prospective study in England. Green found that women who preferred to avoid drugs were more likely to do so, and were more satisfied with the birth overall than women who used drugs during the birth. These findings demonstrate the impact that childbirth preparation can have on satisfaction of a birth experience.

Green (1993) also reported that anxiety about the pain of labor was a strong predictor of negative experiences during labor, lack of satisfaction with the birth, and poor emotional well-being postnatally. This information is

particularly useful when planning for expectant parent classes and in determining aspects of labor and delivery to concentrate education on.

Several areas of satisfaction and dissatisfaction related to the labor and delivery experience were identified by Lomas, Dore, Enkin & Mitchell (1987), using the Labor and Delivery Satisfaction Index (LADSI) as the tool for investigation. This study reported several particularly influential areas of patient care during the labor and delivery experience such as pain control, the number of different people providing care, the explanation of procedures, and an overall feeling of control over the labor and delivery process. Further studies are needed to be able to support the findings and the reliability of the LADSI as an effective measurement of labor and delivery satisfaction.

Satisfaction with the childbirth experience measured by the Mastery Model was reported on by Humenick and Bugen (1981). Using the Labor and Delivery Evaluation Scale, they found that childbirth satisfaction was positively related to the mother's prenatal attitude toward active participation in the birth process.

In addition to the above named research, there are unpublished studies both completed and in process that have suggested the importance of patient satisfaction with maternity care. The majority of the research reviewed suggests there is a need for further investigation in this

area. In this particular research, the Labor and Delivery Satisfaction Index (LADSI) developed by Lomas, Dore, Enkin, and Mitchell (1987), was utilized as one measure of satisfaction with labor and delivery. A second measurement of satisfaction was obtained by utilizing the Labor and Delivery Evaluation Scale (Humenick, 1981).

The data collected from the two assessments was then correlated in order to compare the effectiveness of the two instruments for measuring satisfaction with labor and delivery. The purpose of this research study was to increase the body of knowledge related to patient satisfaction with a hospitalization, primarily through measuring satisfaction with the birth experience.

Conceptual Framework and Definition of Terms

Satisfaction is a term that has both a conceptual definition as well as an operational definition for the purpose of this research study. Satisfaction as defined by Field (1985) is: a feeling of contentment on the part of the mother, with the care that has been received. Satisfaction reflects a patient's values and expectations regarding different aspects of medical care (Hall & Dornan, 1988).

Satisfaction represents a positive appraisal by the client that the client's goals and expectations regarding health care have been achieved (Lochman, 1983).

Satisfaction with childbirth is complex, deceptively simple, and multidimensional. A women's response is shaped by many aspects of labor and birth; the presence of others and their way of being there, her control of person and environment, the interventions she experiences, and the way in which she copes with pain (Bramadat & Drieger, 1993).

To operationalize the concept of satisfaction for the purpose of this research study, the participants were asked to determine and report their own level of satisfaction with their labor and delivery experience, by completing two research tools in survey format. Satisfaction was reported as a perception of consistency with the patient's own desires and expectations for the labor and delivery experience.

To structure the thorough examination of patient satisfaction, the Adaptation Model developed by Sister Callista Roy was utilized as a framework for this investigation. Roy's Adaptation Model implies four basic values, which together point to the desirability of the model's goal content. Roy (1984), describes the four values of her model as follows:

1. Nursing's concern with an individual as a total being in the areas of health and illness is a socially significant activity.
2. The nursing goal of supporting and promoting patient adaptation is important for patient

welfare.

3. Promoting the process of adaptation is assumed to conserve patient energy; thus nursing makes an important contribution to the overall goal of the health team by making energy available for the healing process.
4. Nursing is unique because it focuses on the patient as a person adapting to those stimuli present as a result of his position on the health-illness continuum.

The goal of the Roy Adaptation Model is an individual's adaptation in the four adaptive modes (Roy, 1984). The four adaptive modes as described by Roy are the physiologic mode, the self-concept mode, the role function mode, and the interdependence mode. All four of the adaptive modes are important to the patient experiencing labor and delivery.

The patient is affected by many physiologic processes during labor and delivery, therefore, the physiologic mode is important. The self-concept mode plays a large role in the patient's perception of the labor and delivery experience. The patient's previous interpretation of herself will affect the childbirth experience. Role function is also being affected by the onset of labor and delivery, both at the immediate time, as well as for the future role changes. A patient in the laboring phase will

be concerned with her role at that particular point in time, as well as beginning to plan for the changes in her role as she becomes a mother. Finally, the interdependence mode plays a large role during labor and delivery with regard to the patient's relationships with nursing and medical staff, as well as the relationships with support people during labor.

Man is conceptualized as an adaptive system (Roy, 1984). This conceptualization is important when considering the patient during the labor and delivery experience. The patient during labor and delivery receives inputs that come from both external (the environment outside the person) and from internal (the patient herself) sources. These inputs are called stimuli by Roy (1984, p. 37) and are classified in three categories:

1. Focal Stimuli, or stimuli immediately confronting the person.
2. Contextual Stimuli, or all other stimuli present, either within persons as their internal condition or coming as input from the environment.
3. Residual Stimuli such as beliefs, attitudes, or traits which have an indeterminate effect on the present situation.

In the case of the patient experiencing labor and delivery, it is easy to relate the three types of stimuli to the experience. The focal stimulus is the actual labor and

delivery itself, including the physical and the physiological aspects. The contextual stimulus is the surroundings of the patient, including the nursing care, the medical care, the monitoring equipment, and other aspects of the physical environment. The residual stimulus is anything the patient brought with her related to her attitudes, perceptions, expectations, and knowledge level.

All three types of stimuli are important factors when looking at the overall satisfaction with the labor and delivery experience. Positive adaptation can be directly related to perceived satisfaction with a given experience. In maintaining the goal of nursing through promoting adaptation, the nurse would assess the patient's responses and adaptation to all three types of stimuli. Interventions would be utilized when a patient's adaptation to these stimuli was not effective (Roy, 1984).

It can be inferred that a patient who experiences an effective adaptation to the stimuli of labor and delivery will be more likely to be satisfied with the labor and delivery experience. Ultimately, the interventions used to promote an effective adaptation will involve the patient in some type of active participation in the process. Women have described increased childbirth satisfaction with active participation, self-control, and self-reliance during the labor and delivery (Humenick & Bugen, 1981). This idea relates to Roy's concept of humanism that is also part of

the adaptation model. Roy's concept of humanism focuses on a person's creative power, thus encouraging the nurse to help the patient use her own abilities whenever possible (Roy, 1984).

Roy's Adaptation Model can be utilized to better understand the possible sources of patient satisfaction with the labor and delivery experience. It provides a basis for nursing care and interventions related to the multiple stimuli that confront a woman during labor and delivery.

Research Hypothesis and Questions

The following was the research hypothesis presented for this investigation:

1. A majority of the patients examined will report satisfaction with their labor and delivery experience as measured by the Labor and Delivery Satisfaction Index (Lomas et al. 1987).

In addition to the above hypothesis, the following research questions were also considered:

1. How satisfied are patients with their labor and delivery experience as measured by the Labor and Delivery Satisfaction Index (Lomas et al. 1987).
2. What is the relationship between perception of care

received as measured by the score on the Labor and Delivery Satisfaction Index (Lomas et al. 1987) and the perception of the labor and delivery experience as measured by the score on the Labor and Delivery Evaluation Scale (Humenick, 1981)?

3. What is the relationship between the level of satisfaction with the labor and delivery experience and the likelihood of returning to the same health care provider should the need arise, as measured by the Global Rating Scale (Lomas et al. 1987)?
4. What is the relationship among the variables of the length of labor and the type of pain control used related to the satisfaction with the labor and delivery experience as measured by the Labor and Delivery Satisfaction Index (Lomas et al. 1987)?
5. What aspects of care during the labor and delivery experience are important to consider when describing the overall satisfaction score as measured by the Labor and Delivery Satisfaction Index (Lomas et al. 1987)?
6. What could staff have done to have made the labor and delivery experience more satisfying?

Summary and Implications for the Study

Satisfaction, as perceived by patients, is an important consideration for any health care provider. Nurses, in particular, can have a direct impact on patients' satisfaction with a given experience.

Using the Roy Adaptation Model (Roy, 1984), the nurse can assist the patient to effectively adapt to the confronting stimuli of labor and delivery. Ultimately, this adaptation would result in a higher overall satisfaction with the labor and delivery experience.

A high degree of satisfaction with the hospital experience of labor and delivery serves as positive reinforcement for patients to again seek health care from that provider. Patient satisfaction is essential for attracting patients in the highly competitive healthcare environment of the 1990's (Ludwig, Ryan, Johnson, Hennessy, Gattwoo, Epsom, & Czurylo, 1993).

CHAPTER #3

METHODOLOGY

Study Design

A descriptive correlational study design was used. The objectives of this study were to investigate patients' perceived level of satisfaction with their labor and delivery care and to describe the relationship between the overall satisfaction scores on the Labor and Delivery Satisfaction Index (Lomas et al. 1987), and the Labor and Delivery Evaluation Scale (Humenick, 1981).

This investigation was conducted during June, July, and August of 1993. The descriptive correlational study design was appropriate for this particular inquiry due to the nature of the desired outcome information. It was intended that the participants would report on their overall labor and delivery experience, looking specifically at their perception of overall satisfaction with their labor and delivery experience.

As a result of the descriptive correlational study design and the sample of convenience, it was necessary to acknowledge several inherent internal and external threats to validity. The following internal threats were acknowledged and taken into account when evaluating the study results (Polit & Hungler, 1987). They were:

1. history; data was collected over a period of three months when the patients were one to two days post-delivery, possibly affecting the dependent variable of satisfaction.
2. selection; subjects were chosen as a sample of systematic convenience.
3. maturation; data was collected at one to two days post-partum, possibly leading to changes in perceptions among the subjects over time.
4. mortality; natural attrition was a factor as subjects had the right to withdraw from the investigation at any time.
5. nursing staff; no attempt was made to control the particular nursing staff involved in the care of the subjects, nor were nursing staffing levels controlled.

External threats to validity were also considered. The following threats were acknowledged and accounted for when evaluating the results of this investigation (Polit & Hungler, 1987). They were as follows:

1. sample characteristics; the sample was relatively small (50 subjects), and was one of convenience, therefore the findings will not be generalizable to a much larger target population.

2. Hawthorne Effect; it was possible that the subjects responded in a certain way because they knew they were involved in a research study, and because the data collector is also affiliated with the labor and delivery department.
3. experimenter effects; the performance of the subjects may have been affected by certain characteristics of the researcher.
4. measurement effects; the subjects were exposed to data collection regarding several different aspects of their background.

Study Site and Subjects

The subjects for this investigation were drawn as a systematic convenience sample from parents who delivered their baby at one large Midwestern teaching hospital. Every second patient that met inclusion criteria during periods of data collection was approached for consent to participate. (For example, if on a day when data collection took place there were five deliveries that met inclusion criteria, the first, third, and fifth patient were approached). In an attempt to create a homogeneous group and to control for extraneous variables among the subjects, the following criteria were used for subject selection:

1. primigravida.
2. over eighteen years of age.

3. married couple with father present for the labor and delivery.
4. mothers considered low risk for maternal or fetal complications during labor and delivery (as defined by the physician's prenatal history).
5. all couples had some form of prenatal education.
6. labor resulted in a normal spontaneous vaginal delivery.
7. baby was not experiencing any medical complications at the time of the data collection.

The study was conducted on the post-partum unit of the hospital. Data collection took place one to two days after the delivery. A form of chart review was utilized to obtain information regarding certain demographics such as age, class attendance, marital status, gravida, risk factors, pain control utilized, and length of labor.

No particular hospital space was necessary for the interviews or for data collection in general. The patients were interviewed in their postpartum rooms, many of them having their husband present during part or all of the survey completion process. No cost was incurred by the hospital. All necessary materials were provided by the researcher.

The nursing staff in the labor and delivery unit and

the post partum units were informed about the study and its purpose. The results of the study will be shared with the nursing staff during staff meetings and/or inservices after completion of the project. The target hospital records on average five to six hundred deliveries each month, so there was not a problem with subject recruitment. Written approvals for this study were obtained from the University Human Subjects Review Committee and the study site research committee.

Instruments

The first questionnaire used for this investigation was taken with verbal permission from the 1987 study by Lomas et al. (see Appendix A). The Labor and Delivery Satisfaction Index was used as an interview guide for the investigator to conduct the personal interview at one to two days post-partum. The questions were asked exactly as written to decrease the chance of bias in obtaining this information from the subjects.

The second questionnaire was taken with written permission from the 1981 study by Humenick (see Appendix A). It was handed to the subjects during the time of the interview and they were asked to complete this questionnaire independently and return it to the investigator when completed. Specific details were provided to the subjects as to where and when to return the questionnaire.

The third questionnaire used was the Global Rating Scale. The Global Rating Scale is an additional component of the Labor and Delivery Satisfaction Index (Lomas et al. 1987) that was utilized for data collection related to overall satisfaction, the likelihood of the patient returning to the target hospital, and the likelihood of the patient recommending the target hospital for services to friends and family. The subjects were also asked to complete this Global Rating Scale at the time of the interview and to return it to the investigator when completed as directed.

The structure of the LADSI was based on the Rand Medical Interview Satisfaction Scale. It contains statements requiring ratings of agreement and disagreement on a six-point Likert-type scale. Using existing information in the literature, clinical opinions of the investigators, and discussions with mothers who had recently given birth, Lomas et al. (1987), constructed an initial index of forty-one items (Appendix A, LADSI). There are twenty-three items thought to be concerned with the "caring" component of satisfaction, fifteen items concerned with the "technical" component of satisfaction, and three items to assess the mood of the respondent at the time of completion of the interview.

Twenty-one items are framed "positively" and eighteen are framed "negatively". This index was then circulated

among sixteen obstetricians and nurses with a form to assess face validity and appropriate wording. The responses were collated and some changes were made in some wording, but all technical and caring items remained in their original classification.

An assessment of the LADSI was conducted to test for stability, internal consistency, and validity by Lomas et al. (1987). Using the two day and four to six week responses of the subjects who returned the LADSI, Lomas et al. (1987), calculated an intra-class correlation for test retest reliability. This value was .67 and highly significant ($p < 0.01$, d.f. = 34), indicating that the LADSI is a stable measure over time.

Internal consistency for the LADSI was measured using a minimum possible score of thirty-eight and a maximum possible score of two hundred twenty-eight. The mean score was 203 (s.d. 19.75). This indicates a significant ceiling effect with most respondents clustered around individual item scores of 5 or 6 and only rare occasions when respondents used the response score of 1, 2, 3, or 4. Hence, the Index did fail to overcome the common satisfaction problem of low variability in the response range. With such low variability, any demonstration of an absence of internal consistency may be due more to the small amount of variance available for partitioning than to the real absence of internal consistency (Lomas et al. 1987).

The measures of internal consistency found by Lomas et al. (1987) do indeed show less than satisfactory internal consistency. Item-total correlations based on just the first administration were largely significant. Cronbach's Alpha was 0.35 for all items on the LADSI, 0.11 for the caring items, and 0.78 for the technical items. These values are low and suggest poor internal consistency. However, it is important to recall the low item variance which would equally explain the apparent low internal consistency.

The appropriateness of dividing items into "technical" and "caring" components was assessed using factor analysis. There was difficulty assessing the thirty eight items on the LADSI with factor analysis when Lomas et al. (1987) had fifty-eight respondents (optimally they should have had 380 respondents, i.e. 10 respondents per variable), (Lomas et al. 1987). None of the attempts at factor analysis produced major factors that could be identified with either the technical or the caring components, leading the group to conclude that, with the low item variance, the division of items into technical and caring was not meaningful (Lomas et al. 1987).

Lomas et al. (1987), concluded from these results that there is no value in using either individual item scores or subscale scores for all technical or all caring items as an outcome measure. However, because of the low

item variance and ceiling effect, they did not feel that it was warranted to reject the use of the total score on all items as a measure of satisfaction. Lomas et al. (1987), could not be confident that the apparently low internal consistency was real unless they had demonstrated that the total score was unable to discriminate meaningfully between groups. If such a discriminative ability was present based on the total score, the LADSI could still prove to be a worthwhile outcome measure (Lomas et al. 1987).

Validity of the LADSI was also considered by Lomas et al. (1987). The three "mood" items on the index were used to divide the respondents into quartiles. The bottom quartile was defined by the respondents who scored less fourteen (out of a possible eighteen), and the top quartile was defined by the respondents who scored higher than seventeen. It was hypothesized that those with the lowest mood would have lower satisfaction scores than those with the highest mood (Lomas et al. 1987). In the absence of a gold standard, this was thought to be a reasonable measure of the validity of the LADSI. It also assessed the ability of the LADSI to discriminate meaningfully between groups (Lomas et al. 1987).

The mean total score for the "low mood" group was statistically significant using the t-statistic ($t=4.2$, $p<0.0003$, $df = 26$). Therefore, despite the ceiling effect and the low item variances, the total score was capable of

discriminating between meaningfully different groups.

Verbal permission for use of the Labor and Delivery Satisfaction Index was obtained from its authors.

The second tool for this investigation is the Labor and Delivery Evaluation Scale developed by Humenick (1981), (see Appendix A). The scores from this ten-item semantic differential scale are also used as an indicator of overall satisfaction with the childbirth experience. A possible raw score of seventy would indicate a very positive perception of the labor and delivery experience. It can be inferred that a positive perception of childbirth would relate to high satisfaction.

Humenick (1981) established content validity for this scale by deriving items from pairs of adjectives on the evaluative scale by Osgood (1962). Humenick (1981) reported a Cronbach Alpha score of 0.91 (n=129) when testing the inter-item reliability. Twenty dichotomous pairs of adjectives were originally tested on sixty subjects. The scale was then reduced to the ten pairs scoring the highest on an item analysis. Written permission for use of the Labor and Delivery Evaluation Scale was obtained from its author.

Procedure

The recruitment of subjects was done by the principal investigator. First, the labor and delivery and/or the post-partum nurses were approached for information regarding potential subjects who may fit the inclusion criteria. Potential subjects were then approached and a preliminary invitation to be a part of the study was given with a brief description of the study intent. When a possible subject agreed to participate, informed consent was obtained (see Appendix B).

Second, a chart review was conducted for gathering the initial demographic data regarding criteria for inclusion (see Appendix C). These data were also reviewed with the patient to verify correct information from the chart review. Subjects who fit the inclusion criteria and gave informed consent were then utilized as the study participants.

Two possible very minimal risks to the subjects were identified. The first was that of confidentiality. To reduce the risks of breach of confidentiality, the subjects signed a written consent form that insured them of confidentiality and listed the methods used to insure this. The subjects were not identified in the reporting of the data for this study, and all data has been coded.

The second potential risk identified was that of interpersonal stress. It is possible that when a subject

begins to reflect back on the labor and delivery process there could be an element of psychological stress or negative feelings could arise and cause stress. In an attempt to handle this potential risk, social service referrals were available to all study participants should the need have arisen. It has also been supported over time that discussing negative feelings and/or experiences can be therapeutic for people. Social workers were available at all times in the target hospital. Incidentally, no subjects required this intervention during this study.

Initially, data was to be collected on fifty subjects who had their labor and delivery experience at the target hospital, met the inclusion criteria, and agreed to participate. During the period of data collection, there were 17 subjects who did not return their surveys to the investigator, therefore disqualifying them from the study. The final sample was 33 subjects.

CHAPTER #4

RESULTS/DATA ANALYSIS

This study's purpose was to describe patients' overall satisfaction with their labor and delivery experience. Interviews were conducted with patients during their first or second postpartum day in the hospital, and surveys were given to the participants to complete independently and return to the investigator.

Data were collected over a three month period during June, July, and August of 1993. Fifty patients who met study criteria were invited to participate in the study. Sixty six percent (N=33) of the subjects returned completed questionnaires. All data were analyzed using descriptive statistics available through the Statistical Package for the Social Sciences (1990).

Description of Sample

The sample consisted of 33 subjects who had given birth to their first baby at the target hospital. Subjects ranged in age from 18 to 37, with a mean age of 25.9, standard deviation 4.8. The age distribution is shown in Table 1.

Table 1

Distribution of Age

| Age | Frequency | Percentage |
|-----|-----------|------------|
| 18 | 2 | 6 |
| 19 | 1 | 3 |
| 20 | 1 | 3 |
| 21 | 2 | 6 |
| 22 | 5 | 15 |
| 23 | 2 | 6 |
| 24 | 2 | 6 |
| 26 | 2 | 6 |
| 27 | 3 | 9 |
| 28 | 3 | 9 |
| 29 | 3 | 9 |
| 30 | 3 | 9 |
| 33 | 2 | 6 |
| 36 | 1 | 3 |
| 37 | 1 | 3 |

All subjects had some form of prenatal education. It was the original intent of the investigation to differentiate in descriptive analysis between prenatal education that was obtained in the physician's office, the community or the hospital. Data collected from chart review did not allow a differentiation due to the documentation system utilized in the charts where no differentiation is made between sources of prenatal education. For this reason, it was assumed that all education was obtained in the community. (This assumption based on anecdotal experience with this patient population in this geographic area).

Criteria for inclusion was a normal spontaneous vaginal delivery process. Also included in this category per commonly accepted definition in obstetrics would be the assisted vaginal

delivery processes of vacuum and/or forceps extraction. The majority of the subjects had vaginal deliveries without assistance. There was a percentage of vacuum assisted deliveries, and a percentage of forceps assisted deliveries. The findings from the study group are fairly consistent with approximately 20% of all primiparous deliveries being assisted in some way. The distribution for type of delivery is shown in Table 2.

Table 2

Distribution by Type of Vaginal Delivery

| Type | Frequency | Percentage |
|---------|-----------|------------|
| NSVD | 26 | 79 |
| Vacuum | 4 | 12 |
| Forceps | 3 | 9 |

Another demographic descriptor used was the length of labor. Subjects' labors ranged in length from 3 - 25 hours, with a mean length of 9.82 hours and standard deviation of 4.45. The distribution for length of labor is shown in Table 3.

Table 3

Distribution of Length of Labor in Hours

| Hours | Frequency | Percentage |
|-------|-----------|------------|
| 3 | 1 | 3 |
| 4 | 1 | 3 |
| 5 | 4 | 12 |
| 6 | 3 | 9 |
| 7 | 1 | 3 |
| 8 | 2 | 6 |
| 9 | 7 | 21 |
| 10 | 1 | 3 |
| 11 | 2 | 6 |
| 12 | 2 | 6 |
| 13 | 4 | 12 |
| 14 | 2 | 6 |
| 15 | 1 | 3 |
| 17 | 1 | 2 |
| 25 | 1 | 3 |

The last descriptive item examined was the type of pain control used during the labor and delivery process. At the hospital where data were collected the patients are routinely given the same pain control options, including nonpharmacologic pain control techniques, narcotics, and epidural anesthesia. There were no attempts made to control for this variable in the study sample. Distribution for pain control methods is shown in Table 4.

Table 4

Distribution of Pain Control Methods

| Method | Frequency | Percentage |
|------------------|-----------|------------|
| Nonpharm. | 2 | 6 |
| Narcotics | 7 | 21 |
| Epidural | 14 | 42 |
| Narc. + Epidural | 10 | 30 |

The above descriptive demographic data was obtained during the chart review portion of the data collection. This information was reviewed with the study subject at the time of the interview to confirm the correct data had been documented in the chart.

The first tool used for this investigation to measure satisfaction with labor and delivery was the Labor and Delivery Satisfaction Index (LADSI)(Lomas et al. 1987). Reliabilities were done on this scale (38 items) with a Chronbach's alpha of .91. The three items used by the original group of investigators to assess mood were not used in this study.

An investigation was conducted for reliabilities regarding the 13 items that had content related to the nursing staff in particular. A subscale reliability pertaining to the nursing staff yielded a Chronbach's alpha of .86. Another point of interest was the content specifically related to pain. There

were 4 items in this subscale which produced a Chronbach's alpha of .75.

Reliability was also calculated on the Maternal Global Rating Scale (the 3 item subscale, part 2 of the LADSI). Chronbach's alpha was .76. Lastly, reliability analysis was performed on the Labor and Delivery Evaluation Scale (LADES)(Humenick, 1981). The LADES yielded a Chronbach's alpha of .80.

Research Hypothesis

A majority of the patients examined will report satisfaction with their labor and delivery experience as measured by the Labor and Delivery Satisfaction Index.

Consistent with the original study reported by Lomas, et al., (1987) a total score for satisfaction was obtained. The possible range for scores was 38 to 228. For this investigation in order to be satisfied, the subjects would have to report an overall score of equal to or greater than 190 on the LADSI. The range for total scores in the subjects studied in this investigation was 152 to 228 with a mean score of 200, standard deviation 18.6. Seventy six percent (n=25) of the subjects in the study group scored 190 or above. Table 5 describes the overall satisfaction scores.

Table 5

Overall Satisfaction Scores

| Score Range | Frequency |
|-------------|-----------|
| 150-169 | 3 |
| 170-189 | 5 |
| 190-209 | 15 |
| 210-228 | 10 |

The majority of the subjects were satisfied with their labor and delivery experience. Therefore, the research hypothesis is accepted.

Research Questions

Research Question 1

How satisfied are patients with their labor and delivery experience as measured by the LADSI?

Satisfaction was determined for this investigation to equal an item score of "5" or above on the LADSI, which is equivalent to "agree". Of the twenty five subjects who reported overall satisfaction, fourteen subjects had overall scores of 190-207, equalling an average item score of between 5.0 and 5.5, or "satisfied." Eleven subjects had overall scores ranging from 208-228, equalling an average item score of between 5.6 and 6.0, or "very satisfied" with the labor and delivery experience.

Research Question 2

What is the relationship between perception of care received as measured by the score on the LADSI and the perception of the labor and delivery experience as measured by the score on the LADES?

The Pearson Product Moment Correlation was calculated to answer this research question. There was no significant

relationship between the scores for care and the scores for perceptions $r=.14$, $p=.48$. This suggests that satisfaction could be perceived with their care during labor and delivery and that may not have an impact on how they perceived the actual labor and delivery experience.

Research Question 3

What is the relationship between the level of satisfaction with the labor and delivery experience and the likelihood of returning to the same health care provider should the need arise, as measured by the Maternal Global Rating Scale?

A Spearman correlation was done and a significant relationship was found between the overall satisfaction and the likelihood of returning to the same health care provider $\rho=.41$, $df=31$, $p=.02$. This suggests that a person satisfied with a given experience (in this case labor and delivery), is more likely to go back to the same hospital for future health care needs.

Research Question 4

Is there an interaction between the variables of the length of labor and the type of pain control used related to the satisfaction with the labor and delivery experience as measured by the LADSI?

There was no significant interaction found between the variables of length of labor and type of pain control related to the satisfaction with labor and delivery. Data was analyzed using a two way ANOVA and grouping hours of labor into two groups; less than or equal to 12 and greater than 12.

Of the subjects who had labors that were less than or equal to 12 hours, 2 of them used nonpharmacologic pain control methods, 4 used narcotics, 7 used epidurals, and 6 used narcotics and epidurals. Of the subjects who had labors greater than 12 hours, there were none who used strictly nonpharmacologic pain control methods, 1 who used narcotics, 3 who used epidurals, and 4 who used narcotics and epidurals. No significance was found, $F = 1.31$, $df = 2$, $p = .29$.

Research Question 5

What aspects of care during the labor and delivery experience are important to consider when describing the overall satisfaction scores as measured by the LADSI?

The aspects of care examined by this investigator included the items related to the nursing care, the medical care, and pain control. Thirteen items on the LADSI pertained to nursing care. The mean score for this group of items was 5.30, suggesting overall satisfaction with the nursing care received. Only three items on the LADSI pertained directly to physician care. The mean score for this group of items was 5.04, indicating an

overall satisfaction with the care received from physicians.

The last aspect of care examined was the pain control during labor and delivery. Four items on the LADSI pertained directly to pain control. The mean score for this group of items was 4.82. This suggests that overall, patients were less than satisfied with pain control during labor and delivery.

Research Question 6

What could staff have done to have made the labor and delivery experience more satisfying?

As part of this investigation, subjects were asked this open-ended question regarding their labor and delivery experience. Thirty one subjects responded to this question. Seventy one percent (n=22) responded "nothing". Thirteen percent (n=4) of the subjects made reference to wanting more pain control. Two participants felt there were too many interruptions or distractions during their experience. Two subjects responded that they would have liked their nurse to have been with them more. One subject responded that she would have liked more explanation regarding the labor and delivery process as it related to her experience.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

Discussion of the research findings, followed by application to practice, limitations, and recommendations for future research will be addressed in this chapter.

Discussion

The major finding of this research study was that the majority of patients studied were satisfied with their labor and delivery experience. The satisfaction scores were obtained by using the overall scores on the LADSI (see Appendix A). The reliability coefficient of .91 for the LADSI indicates internal consistency of measurement for the overall level of satisfaction.

Seventy-six percent of the subjects were satisfied with their labor and delivery experience. It is difficult to measure satisfaction, understanding that a report of satisfaction is a perceived notion, something very individual by definition. Greeneich, Long, & Miller (1992) defined patient satisfaction as a match between expected care and the care they actually received. The satisfaction scales used in this study ranged from 1 to 6, with 1 being very dissatisfied and 6 being very satisfied. It was determined for this investigation that a subject must average a score of at least 5 or greater in order to

be satisfied.

No significant relationship was found to exist between the perception of care received (satisfaction) as scored on the LADSI, and the perception of the labor and delivery experience as scored on the LADES. The LADSI is thought to score satisfaction with care received due to the nature of the items that ask specifics about the nurses, the physicians, the attention, the pain control, etc. The LADES is thought to describe an overall perception of the patient's labor and delivery experience due to the nature of the ten item semantic differential scale design.

In previous studies, the LADES has been reported to describe satisfaction (Humenick, 1981). However, based on this study, it would not be recommended to be used in that way in future research. It would better be utilized to describe the perception of the experience versus the satisfaction with the experience.

Continuing to remain as an area of concern for most health care institutions in the competitive era of the 1990's is the issue of future well-being (Fisk et al. 1990). Some projection can be made by considering the likelihood of current consumers to continue to seek care from the same health care institution (Stevenson, 1981). Measures to increase patient satisfaction can contribute to a more positive health outcome for patients, as well as increasing the likelihood that satisfied patients will return (Hildman & Ferguson, 1990).

In this study, a significant relationship was found between the overall satisfaction and the likelihood of that patient to

return to the same health care provider. This becomes a very important factor to consider for health care institutions in general, but specifically for instances when the labor and delivery experience is the first experience for an individual at a particular hospital. Nurses and all health care providers must remember the impact of that first experience.

No significant relationship was found between the variables of length of labor and type of pain control used related to the overall satisfaction with the labor and delivery experience. The mean length of labor for this study group was 9.78 hours, which is fairly similar to the average length of labor reported in the literature for primiparas. The range reported is usually from 8 to 12 hours depending on the source.

Of the 33 subjects that pain control data was collected on, 72% (n=24) of them used an epidural anesthesia either alone or in combination with narcotics. The overall average epidural rate at the target hospital is approximately 50%. However, this number includes the multiparous patients as well, who typically have shorter than 9.78 hours of labor. Again, it is important to remember the patient's perception of adequate pain control may be very different from the health care provider's.

As part of this investigation, the subjects were asked two open-ended questions. One of the questions related to what the staff could have done differently. The results are discussed in the application to nursing practice section to follow. The second question was: please identify the one person who

made the biggest difference in your labor and delivery experience.

Thirty one subjects responded to this question. Sixty one percent (n=19) stated that their labor and delivery nurse was the one person who made the biggest difference. Six subjects stated that their husband made the biggest difference. One stated the nurse and her husband together, one stated the nurse and the doctor together, one stated her doctor, one stated the anesthesiologist, and one stated it was her nurse midwife who made the biggest difference in her labor and delivery experience.

The impact of the nurse during the labor and delivery experience is obviously significant. Filshie et al. (1981) reported on the significance of the nurse-patient relationship during labor and delivery. Field (1987) also examined the nurse-patient relationship and reported that the nurse has a significant impact on the overall satisfaction during the labor and delivery experience.

Application to Nursing Practice

It has been demonstrated through the aforementioned findings that nurses do have a significant role in the patients' perceptions of the labor and delivery experience. Regardless of length of labor, type of pain control used, assisted delivery or spontaneous delivery, the subjects studied have indicated nurses' importance related to satisfaction of care.

Based on the theoretical framework for this research, Roy's

Adaptation Model, the nurse also has a responsibility to promote adaptation to the labor and delivery experience. When successful adaptation is achieved, the patient will more likely perceive a higher degree of satisfaction.

Nurses, as the principal caregivers during labor, play a major role in structuring the social context of childbirth (Beaton, 1990). Nurses need to recognize that the process of caregiving proceeds via nurse-patient interaction. Nurses must also recognize that, through their interactions with women in labor, they are one of the major determinants of the quality of each women's birth experience (Beaton, 1990).

The nurse to some extent can promote patient satisfaction by finding out from the patient what things are going to be most important to her during the labor and delivery experience. For example, some patients are looking for a high level of self control during their delivery, and others would prefer to have the health care professionals lead the way. Some patients may want to be left alone during their labor and delivery to concentrate on the events, and others may feel more secure with the nurse at their bedside as much as possible.

This type of information can easily be obtained as the nurse is establishing her rapport with the patient and establishing a mutually determined plan of care. It is only natural that the more "like" the experience is with the expected experience, the more satisfied the patient will be. Nurses must always keep in mind the individuality of patients and the uniqueness of their

experiences.

As nurses continuously interact with women in labor, they can influence women's abilities to structure the nature of their childbirth experience. In this way, nurses play a major role in determining women's perceptions of their birth experience (Beaton, 1990).

When considering an aspect of labor and delivery such as pain control, the nurse has the responsibility to ensure that the patient is aware of her choices and that she has adequate information to make informed decisions regarding selection of an option. From the data collected in this study, it is important to recognize that pain control was an area of dissatisfaction for this group of subjects. Also noteworthy is that only 2 of the 33 subjects utilized strictly nonpharmacologic methods of pain control during their labor and delivery. This particular finding suggests an area that can be improved on in order to increase patient satisfaction with labor and delivery.

Understanding that patient satisfaction is a relative measure dependent upon expectations, it is generally considered to be an integral part of the assessment of quality of nursing care (Bond & Thomas, 1992). Patients are satisfied when organizational representatives (nurses) are responsive, showing a willingness to serve; when they inspire trust and confidence; and when they show empathy through caring, individualized attention (Blancett, 1992).

Nursing is but one service received by patients in a

hospital environment, yet it is through nursing and nurses that patients experience many different features of hospital care (Bond & Thomas, 1992). When patient satisfaction is measured, nursing care delivery is a major element that affects overall patient satisfaction. Consumer demands for quality care require an increasing sensitivity to patient needs by nurses (Bond & Thomas, 1992).

Despite the natural limitations of the physical environment inside a hospital, the nurse can also creatively manipulate the environment to resemble the patient's desires. For example, the lights could be bright or dimmed, the door left open or closed, family members permitted at bedside or encouraged to wait outside the room, quiet music playing or quietness. Again, the nurse has the responsibility to meet the patients needs, whatever they may be. As more needs are met, the potential is there for increasing the perceived satisfaction.

Findings from patient satisfaction surveys can contribute to nursing care quality assurance/improvement activities in a variety of ways. Allowing nurses to collect data from patients will serve to increase participation in outcome driven care delivery changes for nurses. Then encouraging nursing staff to develop ways in which to incorporate results from such studies will continue to promote an interest in outcome oriented changes.

Nurses need to be very creative in this day of shortened hospital stays to find ways in which to meet the growing demands from the healthcare consumers and to insure satisfaction with

services provided. Nurses are often in a position to informally collect data from patients regarding what kinds of experiences they are looking for, and need to continue to use this information as wisely as possible regarding patient, professional, and institutional goals.

Limitations

There are several considerations that should be recognized when reviewing this study. The first is the small sample size. Fifty subjects were initially included, but due to a lack of response, only 33 could be included in the final study group. Second is the homogeneity of this study sample. Many of the criteria for inclusion were purposely chosen to make the group more homogeneous, however this limits the generalizability of the study findings.

The third limitation is the inability to be able to control for other variables that may have affected responses but that were not a part of this study. For example, how rested the mother was at the time of the interview, the impact of the husband's perceived satisfaction with the labor and delivery experience, the amount of pain the subject was experiencing at the time of the interview, how many hours after the labor and delivery the interview was conducted, the number of different nurses that patient had interacted with, and other unknown

factors.

The fourth limitation was that this study was the first to compare the scores of the two tools, the LADSI and the LADES. Therefore, no comparisons can be made to previous studies comparing these two tools.

Recommendations for Future Research

This study supports the hypothesis that the sample patients were satisfied with the care they received during their labor and delivery experience. However, it has also been revealed that there are areas in which satisfaction could be improved. The findings also support the notion that the nurse plays a very important role in a patient's labor and delivery experience.

The findings from this study will be shared with the nurses on the unit where the patients experienced their labor and delivery. Recommendations will be made that the nurses review the data collected and discuss amongst themselves how they would propose to increase patient satisfaction with care received during labor and delivery.

Future research should also examine relationships between other demographic variables such as the time of day or night the delivery occurred, the sex of the baby, the age of the subject, the number of nurses involved during the labor and delivery

experience.

It will also be recommended that future research on this unit utilize this tool to measure satisfaction of other types of patient populations that were excluded from this study. For example, single patients, cesarean deliveries, multiparous patients, patients who did not receive prenatal education, and patients who are younger than eighteen. Satisfaction levels for these populations would be equally as important to those described by the study group in this investigation.

In conclusion, it is hoped that this study on patient satisfaction during labor and delivery will increase the knowledge of the labor and delivery nurses who care for these patients with respect to the importance of their nursing care related to overall satisfaction. From there it is hoped that nurses will continue to seek creative and individual ways to increase patients' satisfaction during labor and delivery.

APPENDIX A

LABOR AND DELIVERY SATISFACTION INDEX

On the following pages are some statements about the care you received during your recent labor and delivery.

Please read each statement carefully. With some statements, you may mildly agree (M.A.), agree (A), or strongly agree (S.A.). With other statements, you may mildly disagree (M.D.), disagree (D), or strongly disagree (S.D.). On the line next to each statement CIRCLE the number which best corresponds to your opinion.

For example:

| | S.A. | A | M.A. | M.D. | D | S.D. |
|---|------|---|------|------|---|------|
| 1. My baby is the most beautiful baby in the world. | (1) | 2 | 3 | 4 | 5 | 6 |

In the example above, the person strongly agrees with the statement that here baby is the most beautiful in the world, shown by the circle around the "1". If she disagreed with that statement, she would have circled "5", under disagree.

Some statements look similar to others but each statement is different. You should consider each statement by itself.

There are no right or wrong answers. We are only interested in how you feel about this statement right now.

Your answers are completely confidential, and will be used for statistical purposes only. You will not be identified in any way.

Please answer all the statements, and circle only one number for each statement.

Thank you for your help.

Days Post-partum _____
Code Number _____

LABOR AND DELIVERY SATISFACTION INDEX

| | <u>S.A.</u> | <u>A.</u> | <u>M.A.</u> | <u>M.D.</u> | <u>D.</u> | <u>S.D.</u> |
|--|-------------|-----------|-------------|-------------|-----------|-------------|
| I was very satisfied with the care we received during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| Sufficient attention was paid to the safety of mother and baby during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| The staff gave us all the care and attention they could during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| Some unnecessary interventions were carried out on mother or baby during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| Our wishes were always respected during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| I feel happy about this labor and delivery experience. | 1 | 2 | 3 | 4 | 5 | 6 |
| I felt in control of what happened during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| I felt that some mistakes were made in the care received from the staff during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| If the staff had been more capable during labor and delivery, I would have been happier with the care received | 1 | 2 | 3 | 4 | 5 | 6 |

| | S.A. | A. | M.A. | M.D. | D. | S.D. |
|---|------|----|------|------|----|------|
| I would be feeling better now if the staff had been more considerate during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| The nurse gave us all the care and attention I wanted during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| The doctor gave us all the attention needed during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| I would have liked the staff to have responded to me differently during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| Sufficient attention was paid to comfort during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| I would have liked the management of labor and delivery to have been done differently. | 1 | 2 | 3 | 4 | 5 | 6 |
| There was too much equipment used during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| The staff were sometimes rude to me during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| There were too many staff or students involved in the labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| Staff treated me as if this was just one more delivery. | 1 | 2 | 3 | 4 | 5 | 6 |

| | S.A. | A. | M.A. | M.D. | D. | S.D. |
|---|------|----|------|------|----|------|
| The staff helped me to feel like this was a very special event. | 1 | 2 | 3 | 4 | 5 | 6 |
| The appropriate amount of equipment was used to monitor the labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| There were occasions when no one explained to me what was going on. | 1 | 2 | 3 | 4 | 5 | 6 |
| There were unnecessary restrictions on mother walking around during the labor course. | 1 | 2 | 3 | 4 | 5 | 6 |
| The most comfortable position was used for the actual delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
| The things done to the baby immediately after birth were all necessary. | 1 | 2 | 3 | 4 | 5 | 6 |
| I held the baby as soon as I wanted. | 1 | 2 | 3 | 4 | 5 | 6 |
| They tried to deliver the placenta too quickly. | 1 | 2 | 3 | 4 | 5 | 6 |
| I was given all the information needed about the progress in labor. | 1 | 2 | 3 | 4 | 5 | 6 |
| The nurse was with me as much as I wanted. | 1 | 2 | 3 | 4 | 5 | 6 |
| I saw the doctor as often as I wanted. | 1 | 2 | 3 | 4 | 5 | 6 |
| I was satisfied with the way pain was relieved during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |

S.A. A. M.A. M.D. D. S.D.

| | | | | | | |
|---|---|---|---|---|---|---|
| I was dissatisfied with the way my pain was relieved during labor and delivery. | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| There were too many vaginal examinations. | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|

| | | | | | | |
|-------------------------------|---|---|---|---|---|---|
| Our birth plans were ignored. | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------------------|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Recovery time in labor and delivery was too rushed. | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|

| | | | | | | |
|--|---|---|---|---|---|---|
| The nurse made the labor and delivery a better experience. | 1 | 2 | 3 | 4 | 5 | 6 |
|--|---|---|---|---|---|---|

| | | | | | | |
|--|---|---|---|---|---|---|
| I wish all doctors were as good as mine. | 1 | 2 | 3 | 4 | 5 | 6 |
|--|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| The doctor made the labor and delivery experience better. | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|

*1A Please identify the one person who made the biggest difference in your labor and delivery experience.

*1B Please explain why you chose this person.

*2 What could staff have done to have made your labor and delivery experience more satisfying?

MOTHERS GLOBAL RATING SCALE

We are interested in the general impressions of patient's experience with labor and delivery at this hospital. This information is being collected for a research study. The information you provide will not be reported in any way with your name or personal identifying information attached to it. The information you give will be reported only as part of a group.

For the questions below please CIRCLE the response that best represents how you feel. For instance, if you were mildly unhappy about your labor and delivery experience your response would look like this:

| | | | | | |
|-----------|---------|---------|--------|-------|-----------|
| extremely | | mildly | mildly | happy | extremely |
| unhappy | unhappy | unhappy | happy | | happy |
| 1 | 2 | 3 | 4 | 5 | 6 |

1. Overall, how happy were you with the care you got during your labor and delivery?

| | | | | | |
|-----------|---------|---------|--------|-------|-----------|
| extremely | | mildly | mildly | happy | extremely |
| unhappy | unhappy | unhappy | happy | | happy |
| 1 | 2 | 3 | 4 | 5 | 6 |

2. Assuming you are still living nearby and you became pregnant again, how likely are you to come back to this hospital?

| | | | | | |
|-----------|----------|----------|--------|--------|-----------|
| extremely | | mildly | mildly | likely | extremely |
| unlikely | unlikely | unlikely | likely | | likely |
| 1 | 2 | 3 | 4 | 5 | 6 |

3. If one of your friends or relatives asked for your advice about where to go for their labor and delivery, how likely are you to recommend this hospital?

| | | | | | |
|-----------|----------|----------|--------|--------|-----------|
| extremely | | mildly | mildly | likely | extremely |
| unlikely | unlikely | unlikely | likely | | likely |
| 1 | 2 | 3 | 4 | 5 | 6 |

LABOR AND DELIVERY EVALUATION SCALE

Think about your overall labor and delivery experience and relate it to each of the pairs of words opposite each other on the page. For each pair of words, place an "X" in the column that best describes your experience. The first pair of words is marked as an example for someone who described their labor and delivery as "slightly related" to cheerful.

VCR = Very Closely Related
 CR = Closely Related
 SR = Slightly Related
 N = Neutral

| | VCR | CR | SR | N | SR | CR | VCR | |
|-----------|-----|-----|-----|-----|-----|-----|-----|------------|
| Cheerful | ___ | ___ | X | ___ | ___ | ___ | ___ | Gloomy |
| Fast | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Slow |
| Dangerous | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Safe |
| Heavenly | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Hellish |
| Rough | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Smooth |
| Pleasant | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Unpleasant |
| Good | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Bad |
| Difficult | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Easy |
| Ugly | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Beautiful |
| Realistic | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Idealistic |
| Fair | ___ | ___ | ___ | ___ | ___ | ___ | ___ | Unfair |

APPENDIX B

A DESCRIPTIVE CORRELATIONAL STUDY OF PATIENT SATISFACTION IN
LABOR AND DELIVERY

Investigator: Holly B.O. Estes R.N.
M.S.N. Candidate
Grand Valley State University

I have been asked to participate in this research study being done to look at sources of satisfaction during my labor and delivery experience. Fifty women will be interviewed.

I will be asked a series of questions by the investigator and will be given two questionnaires to complete during my post partum stay in the hospital. It will take approximately thirty minutes to complete the interview and the questionnaires. I will place the completed questionnaires in the envelope given to me and will return them to the investigator.

I understand that I am able to refuse to answer any of the questions at any time, and may withdraw from the study at any time without jeopardizing my health care.

I understand that although this study will not directly influence my care received during this experience, the findings may provide information to improve the quality of patient care delivered in the future.

All data collected from me or my record regarding my stay at Butterworth Hospital will be kept confidential with respect to my participation and my name will not appear in the research report or in subsequent research publications. (Under the Privacy Act of 1974). If I have any questions about this study or my rights as a patient, I may at any time contact Holly Estes RN, or Linda Pool at 616-774-1774.

I have read the above, have had my questions answered, and have received a copy of this consent form. I agree to participate in this research study.

Participant_____ Date_____

Witness_____ Date_____

Investigator_____ Date_____

APPENDIX C

DATA COLLECTED FROM CHART REVIEW

| SUB | AGE | HUSB PRES | LOW RISK | PREN. CLASS | NSVD | HOURS LABOR | PAIN CONT | BABY COND |
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| SUB | AGE | HUSB | LOW | PREN. | NSVD | HOURS | PAIN | BABY |
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APPENDIX D



1 CAMPUS DRIVE • ALLENDALE MICHIGAN 49401-9403 • 616/895-6611

January 25, 1993

Holly Estes
5079 Misty Creek Drive S.E.
Kentwood, MI 49508

Dear Holly:

The Human Research Review Committee of Grand Valley State University is charged to examine proposals with respect to protection of human subjects. The Committee has considered your proposal, "*A Descriptive Correlational Study of Patient Satisfaction in Labor and Delivery*", and is satisfied that you have complied with the intent of the regulations published in the Federal Register 46 (16): 8386-8392, January 26, 1981.

Sincerely,

A black rectangular box redacting the signature of Paul Huizenga.

Paul Huizenga, Chair
Human Research Review Committee

January 28, 1993

Holly Estes, R.N.
Butterworth Hospital-27
100 Michigan, N.E.
Grand Rapids, MI 49503

Dear Ms. Estes:

At the January 20, 1993, meeting of the Butterworth Hospital Research and Human Rights Committee the project, "A Descriptive Correlation Study of Patient Satisfaction in Labor and Delivery" was reviewed and given full approval. This approval does not include any budgetary items. Should you require funds from the Research and Human Rights Committee at any time, you will need to present the entire project to them.

Please submit your revised protocol and consent form to the Butterworth Hospital Research Office prior to initiation of your study.

Please be advised that any unexpected serious, adverse reactions must be promptly reported to the Butterworth Hospital Research and Human Rights Committee with (5) five days; and all changes made to the study after initiation require prior approval of the Research and Human Rights Committee before changes are implemented.

The Butterworth Hospital Research and Human Rights Committee and the F.D.A. requires you submit in writing, a progress report to the committee by December 1, 1993 and you will need reapproval should your study be ongoing at that time.

If you have any questions please phone me or Linda Pool at 774-1291.

Sincerely,



Jeffrey S. Jones, M.D.
Co-Chairperson, Butterworth Hospital Research and Human Rights Committee

JSJ/jfn

c: Jan Hodges, R.N.
Ross Thomas, R.N.

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