

AN EXPERIMENTAL INVESTIGATION INTO THE EFFECTS OF
SUPPORTIVE NURSING CARE ON PRIMIPAROUS
PATIENTS DURING LABOR AND DELIVERY

Vivian Moore by Littlefield

Vivian Moore Littlefield

B.S., Texas Christian University, 1960

Nursing

by

Margaret R. Berling

Ethel W. Ott

Date

August 6, 1964

A Thesis submitted to the Faculty of the Graduate
School of the University of Colorado in partial
fulfillment of the requirements for the Degree

Master of Science

School of Nursing

1964

ACKNOWLEDGMENTS

The author wishes to express her appreciation to the members of the thesis committee, Miss Maxine Berlinger and Mrs. Esther Ott. Special thanks is extended for their encouragement and invaluable assistance through suggestions and guidance throughout the entire study. The author also acknowledges the very valuable assistance of Miss Margaret Berry whose nursing contributions contributed greatly to the analysis of the data. by

Also, the author wishes to express her thanks to Mrs. Eleonore Curran who served with the thesis committee as one of the judges. The questionnaire utilized in collecting data from the patients utilized the encouragement and inspiration were also appreciated.

Special recognition is extended to the nurses, doctors, and patients whose participation was essential to conducting the study.

Without the patience, encouragement, and help extended the author by her husband, this study could not have been accomplished. Therefore special appreciation and acknowledgment are extended for this consideration. The patients who composed the study group. Ten of the patients received supportive nursing care about twice a week, and twelve of the patients received regular

ACKNOWLEDGMENTS

The author wishes to express her appreciation to the members of the thesis committee, Miss Maxine Berlinger and Mrs. Esther Ott. Special thanks is extended for their encouragement and invaluable assistance through suggestions and guidance throughout the entire study. The author also acknowledges the very valuable assistance of Miss Margaret Berry whose suggestions contributed greatly to the analysis of the data.

Also, the author wishes to express her thanks to Mrs. Eleanore Curran who served with the thesis committee as one of the judges in scoring the questionnaire utilized in collecting data. Mrs. Curran's encouragement and inspiration were also appreciated.

Special recognition is extended to the nurses, doctors, and patients whose participation was essential to conducting the study.

Without the patience, encouragement, and help extended the author by her husband, this study could not have been accomplished. Therefore special appreciation and acknowledgment are extended for this consideration. Twenty-two pregnant, married, clinic patients composed the study group. Ten of these patients received supportive nursing care as outlined, and twelve of the patients received regular

hospital nursing care. These patients were compared for Littlefield, Vivian Moore (M.S., Nursing) likenesses and differences by means of a fixed-alternative An Experimental Investigation into the Effects of Supportive Nursing Care on Primiparous Patients questionnaire and information obtained from their hospital records.

during Labor and Delivery

The data revealed that supportive nursing care Thesis directed by Associate Professor Maxine Berlinger increased patient satisfaction to a statistically significant. This study was conducted to determine the effects that supportive nursing care had on primiparous patients during labor and delivery. The purposes of the study were to: (1) determine the degree of satisfaction patients received from supportive nursing care; (2) determine the effects that supportive nursing care had on the course of labor; (3) determine to what extent supportive nursing care prepared and guided patients through labor when they patients had little previous preparation; (4) determine if supportive nursing care influenced the amount of medication patients needed for comfort; (5) assess the value of a definite plan of supportive nursing care; and (6) determine if the tools utilized in conducting the study would be useful in teaching students and staff nurses.

The experimental method was the research design utilized in conducting the study. Twenty-two primiparous, married, clinic patients composed the study group. Ten of these patients received supportive nursing care as outlined, and twelve of the patients received regular

hospital nursing care. These patients were compared for likenesses and differences by means of a fixed-alternative questionnaire and information obtained from their hospital records.

I. THE PROBLEM INTRODUCED

The data revealed that supportive nursing care increased patient satisfaction to a statistically significant degree; possibly decreased the length of labor; maintained patients' satisfaction regardless of the length of labor; decreased the amount of medication required without influencing satisfaction; prepared and guided patients with little preparation through labor and delivery in a satisfactory manner; was accomplished by the use of an effective plan of care; and can be carried out and evaluated through the use of the tools developed for the study.

Further studies to validate the findings were recommended. On the basis of the findings recommendations were also made for the improvement of nursing care for patients in labor.

This abstract of about 250 words is approved as to form and content. I recommend its publication.

Signed

W. R. Beilmeier
Instructor in charge of thesis

CHAPTER

TABLE OF CONTENTS

PAGE

What Mothers Have Said about Childbirth . . . 17

CHAPTER

PAGE

Supportive Nursing Care . . . 27

I. THE PROBLEM INTRODUCED . . . 1

Summary . . . 33

Need for the Study . . . 1

III. METHODOLOGY . . . 35

The Problem . . . 3

IV. Experimental Design and Its Application to

Statement of the problem . . . 3

the Current Study . . . 35

Purposes of the study . . . 3

Steps Undertaken in Conducting the Study . . . 37

Scope and limitations of the study . . . 4

Preliminaries to Conducting the Study . . . 37

Definition of Terms Used . . . 6

Selecting the Patients . . . 37

Primiparous patient . . . 6

Collecting the Data . . . 38

Supportive nursing care . . . 6

The Study Setting . . . 39

Length of labor . . . 7

Hospital Care . . . 39

Amount of medication . . . 7

Nurses described . . . 40

Clinic patient . . . 8

Medical care . . . 41

Organization of the Remainder of the Thesis . . . 8

Differences in the Care . . . 41

II. REVIEW OF THE LITERATURE . . . 9

Differences in the Nurses . . . 43

Review of the Studies Undertaken to Evaluate

The Tools Utilized . . . 43

the Effects of Various Psychophysical

The Plan of Care . . . 43

Methods of Childbirth Preparation on Labor

The Patient Questionnaire . . . 44

and Delivery . . . 9

Choice of the questionnaire as a measur-

Psychological Aspects of the Labor and

Measuring tool . . . 44

Delivery Experience . . . 17

Pretesting the questionnaire . . . 46

The questionnaire reliability . . . 47

CHAPTER	PAGE
What Mothers Have Said about Childbirth	17
Psychological Experience	22
Supportive Nursing Care	27
Summary	33
III. METHODOLOGY	35
IV. Experimental Design and Its Application to	39
the Current Study	35
Steps Undertaken in Conducting the Study	37
Preliminaries to Conducting the Study	37
Selecting the Patients	37
Collecting the Data	38
The Study Setting	39
Hospital Care	39
Nurses described by the Patients	40
Medical care	41
Differences in the Care	41
Differences in the Nurses	43
The Tools Utilized	43
The Plan of Care	43
The Patient Questionnaire	44
Choice of the questionnaire as a measur-	100
Satisfying tool	44
Pretesting the questionnaire	46
The questionnaire reliability	47

CHAPTER	PAGE
Prep The questionnaire validity	152
The Scoring the questionnaire of	153
Sum Evaluation of the Charts	154
V. SUM Statistics Used for Analysis of the Data . .	155
Summary	157
IV. ANALYSIS AND INTERPRETATION	159
The Study Population	160
BIBLIOGRAPH The Patients Described	160
APPENDIX A. Patients in the control group	60
Obtaining Patients in the experimental group	162
APPENDIX B. Comparison of the Two Groups	165
APPENDIX C. Patients' Preparation for Labor and	167
APPENDIX D. Delivery	172
APPENDIX Nursing Care As Seen by the Patient . Charts .	180
APPENDIX F Nursing Care for Patients in the Control	
Analysis Group	182
Nursing Care As Seen by the Patients in	
the Experimental Group	91
Comparison of the Two Groups' Description	
of Nursing Care	98
Satisfaction with Labor and Delivery	100
Satisfaction and the Course of Labor	111
Medication and Its Relationship to	
Satisfaction	118

CHAPTER	PAGE
LIST OF TABLES	
Preparation for Labor during Labor	125
TABLE The Effectiveness of the Plan of Care	130
Summary	132
I. Derogatory Remarks Made by Patients Con-	
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . .	134
Summary	134
Conclusions	138
Recommendations	139
BIBLIOGRAPHY	142
APPENDIX A. Letter to the Director of Nursing in	
Obtaining Permission to Conduct the Study	153
APPENDIX B. Plan of Care	156
APPENDIX C. The Patient Questionnaire	167
APPENDIX D. Questionnaire and Letter to Nurses . .	176
APPENDIX E. Outline for Evaluating Patients' Charts	180
APPENDIX F. Statistical Formulas Used for the	
Analysis	182
Control Group	83
Experimental Group	92
Satisfaction Scores Total Study Population .	102
Comparison of Satisfaction Scores (without	
Comments)	103
Comparison of Satisfaction Scores (with	
Comments)	104

LIST OF TABLES

XIV.	Mean for Individual Questions, Control and Experimental Groups	PAGE
I.	Derogatory Remarks Made by Patients Concerning Nursing Care in Two Hospitals . .	113
II.	Control Patients Described	20
III.	Experimental Patients Described	61
IV.	Comparison of the Control and Experimental Groups	63
V.	Desire for a Baby	122
VI.	The Mean, Variance, and Significance of the Difference between the Control and the Experimental Groups	66
VII.	Patient Preparation for Labor and Delivery .	68
VIII.	Comparison of Patient Preparation for Labor and Delivery	70
IX.	Nursing Care As Seen by Patients in the Control Group	76
X.	Nursing Care As Seen by Patients in the Experimental Group	81
XI.	Satisfaction Scores Total Study Population .	83
XII.	Comparison of Satisfaction Scores (without Comments)	92
XIII.	Comparison of Satisfaction Scores (with Comments)	102
		103
		104

TABLE	PAGE
-------	------

CHAPTER I

XIV. Mean for Individual Questions, Control and Experimental Groups	107
XV. Length of Labor and Type of Delivery	113
XVI. Length of Labor and Satisfaction, Contingency Tables for Control and Experimental Groups	116
XVII. Medication Scores	122
XVIII. Preparation for Labor during Labor	127

I. NEED FOR THE STUDY

Psychophysical methods of childbirth and the value of active participation in the birth process has for both parents and the unborn child are being pursued by various disciplines. However, as an increased need for top quality obstetric care is evidenced, there is a decrease in qualified obstetricians to provide this.

CHAPTER I

THE PROBLEM INTRODUCED

This means that more responsibility is continually being placed on the nurse in the field of maternal-child nursing. For instance, at the National Child Association's Work Conference, it was predicted that by 1970, the ratio

of practice There is today increased emphasis on comprehensive nursing care that meets the patient's needs and aids the patient toward a maximum level of health in so far as possible. For nurses caring for patients in labor, there is also an interest in providing comprehensive nursing care that is supportive and meets the patient's needs as well as in providing nursing care that is family centered. It was necessary, therefore, to search for nursing measures during labor that were in actuality supportive to the patients' wants and needs. This search for patient-centered nursing care should be undertaken in a systematic, objective manner. Many parents do not desire or

I. NEED FOR THE STUDY

have the opportunity to attend prenatal classes necessitates an increasingly important emphasis upon support during labor. For those patients who are not prepared before

Psychophysical methods of childbirth and the value labor begins, nursing care must be designed to do all of that active participation in the birth process has for the preparation when the mother enters the hospital in both parents and the unborn child are being pursued by various disciplines. However, as an increased need for top quality obstetric care is evidenced, there is a decrease in qualified obstetricians to provide this care.

(March, 1961), 88.

This means that more responsibility is continually being placed on the nurse in the field of maternal-child nursing. For instance, at the Maternal-Child Association's Work Conference, it was predicted that by 1970, the ratio of practicing physicians to the population may be as much as 30 per cent less than in 1961. The time given patients in some maternity services was reported to be less than two minutes per patient at each prenatal visit. Therefore, even this limited patient time may be lessened.¹

As more responsibility is being placed on the nurse in preparing parents for the experience of childbirth as well as helping them prepare for their roles as parents, there is also much more responsibility being placed on the nurse to provide support for the mother in labor. The shortness of time spent with mothers during maternity

visits and the fact that many parents do not desire or have the opportunity to attend prenatal classes necessitates an increasingly important emphasis upon support during labor. For those patients who are not prepared before labor begins, nursing care must be designed to do all of the preparation when the mother enters the hospital in

Statement of the problem. The problem of this study was to investigate the effects of supportive nursing care on primiparous patients during labor and delivery.

purposes of the study. The purposes of this study were to:

1. Determine the degree of satisfaction primiparous patients received from supportive nursing care.

¹"Maternal-Child Work Conference--Part II," Briefs, LXI (March, 1961), 88.

active labor. Support and guidance by the nurse become a necessity rather than a fringe benefit.

Because the nurse has a major role in giving the mother support, much has been written on what is assumed to be supportive nursing care. However, little has been done to determine if this nursing care is in actuality meeting patients' needs.

It became necessary to undertake a study to measure the effects of supportive nursing care because of the emphasis placed on this type of care and the obvious lack of measurement in the literature. An attempt especially seemed needed to measure nursing care per se so that the nurses would have some basis against which to compare whether or not this care was beneficial to patients.

Scope and limitations of the study. Patients who

II. THE PROBLEM

Statement of the problem. The problem of this study was to investigate the effects of supportive nursing care on primiparous patients during labor and delivery.

Purposes of the study. The purposes of this study were to:

1. Determine the degree of satisfaction primiparous patients received from supportive nursing care.

2. Determine the effects that supportive nursing care had on the course of labor.
3. Determine to what extent nursing care can prepare and guide patients through labor when patients have had little previous preparation for this experience.
4. Determine to what extent supportive nursing care can promote comfort through nursing measures as opposed to administering medication.
5. Assess the value of a definite plan of supportive nursing care.
6. Provide a guide of supportive nursing care that would be helpful in teaching students and staff nurses the value of nursing care for the patient in labor.

Scope and limitations of the study. Patients who were admitted to the labor and delivery area between April 27, 1964, and July 1, 1964, were selected from the clinic population of a state teaching hospital. Criteria for patient selection included primiparous patients who were married, had attended the clinic for at least two months, and had no obvious problems which would prevent a normal birth. Patients were assigned to a control or experimental group depending on when they entered the hospital in labor. Nursing care for the experimental group was provided by the investigator, and nursing care for the

control group was given by the staff nurses of the hospital where the study was conducted. The patients were then compared for differences in their course of labor or satisfaction with their labor and delivery experience.

In pursuing such a study, various limitations exist. Limitations included the fact that all of the patients did not have the same doctor, and medical care was frequently given by medical students who were in the process of learning.

A limitation in providing family-centered nursing care was that the father could not usually be present at any time during labor due to hospital policy.

Another limitation was that, due to the nature of the study and the amount of time required, only a small number of patients could be included.

Also, variables that might influence the patient's course of labor or attitude toward the birth process were present and uncontrolled. These were (1) differing race, cultural factors, educational background, and religious preferences; (2) fears, superstitions, and previous ideas about childbirth; (3) differing levels of pain tolerance; (4) various degrees of preparation for the birth experience; (5) difficulties that arose in the birth process; (6) acceptance or rejection of pregnancy; (7) age as it might influence the course of labor or the patient's

emotional stability; and (8) temperament, expectations, or desires of the individual patient.

Variables also existed in the personnel caring for patients. These were (1) varying effectiveness of the nurses in the control and experimental groups; (2) varying effectiveness and skill of the doctors caring for patients; (3) personality of the nurses and doctors; and (4) the changing environment of the labor and delivery area in relation to patient population or an unusually accepting or rejecting staff.

It was felt that when these variables did influence patient satisfaction or the course of labor, they would more than likely be present in equal amounts in the two groups.

Length of labor. The length of labor was deter-

III. DEFINITION OF TERMS USED

Primiparous patient. A primiparous patient in this study was a patient who was pregnant for the first time, or who aborted before the third month of pregnancy and whose labor would be conducted in the manner of a patient who was giving birth to her first baby.

Supportive nursing care.

Supportive nursing care . . . is a blend of head, hand and heart, applied with understanding, skill

and judgment to the care of the mother in labor. It recognizes the individuality of each mother and respects her worth. It endeavors to sustain her and to inspire her confidence; to encourage her and to give her comfort. It calls upon the mother's inner strengths and enables her to try to maintain her dignity and self-respect as well as to attain a sense of achievement in the effort she is making.

. . . It combines vigilance with nursing skill based on knowledge of what to do as labor progresses normally, and as or if deviations from the normal threaten or occur. It is carried on always within the frame of medical care and not only implements but also supports the doctor in his management of the mother's labor. . . . Its purpose is to insure maximum safety, comfort and well-being for each mother and coming babe. . . . It is a flexible service purposefully rendered, adapted always to the nurse knowledge of the course of normal labor; ability to recognize deviations from the normal; judgment to cope with emergencies or special situations; and mastery of special skills which may be appropriately applied to meet demands of the moment.²

Length of labor. The length of labor was determined from the beginning of regular contractions to the complete birth of the baby, not including the time taken for the delivery of the placenta and membranes.

Amount of medication. The amount of medication indicated a drug given to the mother in labor or delivery for increased comfort and represents the type, dosage,

Chapter V contains the summary, conclusions, and recommendations based on the findings.

² Ernestine Wiedenbach, Family-Centered Maternity Nursing (New York: G. P. Putnam's Sons, 1958), p. 216.

and time of administration in relation to the mother's length of labor.

CHAPTER II

REVIEW OF THE LITERATURE

Clinic patient. A clinic patient was a pregnant, primiparous woman who had received her medical care through the clinic of the teaching state hospital where the study was conducted. The clinic and hospital services were provided mainly for patients who could not afford private medical and hospital services.

IV. ORGANIZATION OF THE REMAINDER OF THE THESIS

Chapter II consists of a review of the literature which relates to this study. Literature describing and outlining supportive nursing care as well as reports of studies conducted concerning the effects of various childbirth preparation methods on the course of labor; Section II, a review of the literature which concerns the psychological aspects of labor and delivery; Section III, an outline for supportive patient care; and Section IV, a summary of the chapter.

I. REVIEW OF THE STUDIES UNDERTAKEN TO EVALUATE THE EFFECTS OF VARIOUS PSYCHOPHYSICAL METHODS OF CHILDBIRTH PREPARATION ON LABOR AND DELIVERY

Chapter III presents the steps which were followed in conducting the study. This includes a discussion of the experimental method, the questionnaire, the development of a plan of care, and the approach to the analysis. In Chapter IV, the findings are analyzed and interpreted. Chapter V contains the summary, conclusions, and recommendations based on the findings.

disciplines have placed much stress upon the importance of support during labor.

CHAPTER II

Thoms reported that the first half of the twentieth century will be remembered as a time of progress and change.

REVIEW OF THE LITERATURE

This chapter contains a review of the literature on the subject of the experience and needs of patients during the process of labor. The chapter is divided into four sections: Section I, a review of the studies that have been undertaken to evaluate the effects of various psychophysical childbirth preparation methods on the course of labor; Section II, a review of the literature which concerns the psychological aspects of labor and delivery; Section III, an outline for supportive patient care; and Section IV, a summary of the chapter.

I. REVIEW OF THE STUDIES UNDERTAKEN TO EVALUATE THE EFFECTS OF VARIOUS PSYCHOPHYSICAL METHODS OF CHILDBIRTH PREPARATION ON LABOR AND DELIVERY

Much has been written about the importance of support during labor, preparation for childbirth, and the psychological implications that the birth process has for the entire family. Throughout this literature, various Herbert Thoms, Our Obstetric Heritage, The Story of Safe Childbirth (Hamden, Conn.: The Shoe String Press, Inc., 1960), p. 144.

disciplines have placed much stress upon the importance of support during labor. as valuable to all patients.²

Thoms reported that the first half of the twentieth century will be remembered as a time

... when doctors, nurses, sociologists and others were beginning to realize the great opportunities inherent in obstetrical science for furthering human welfare. . . . Not only is childbirth safe today, but efforts are being made to make it more satisfying and rewarding as a human experience.¹

In an attempt to determine the value of various long or difficult. The patients themselves chose the type childbirth preparation programs, such as Natural Childbirth, Hypnosis, Educated Childbirth, Autogene Training, study revealed that those patients prepared through hypnosis had a labor just over half the average length of the other two groups. This was true even though the patients particular method attempted to substantiate the effect in the autohypnosis groups were on the average five years that the preferred method had on the course of labor. and the average baby's birth weight was almost the

In one study that included 118 patients, 83 who were prepared by hypnosis and 86 who had no training in greater than the 0.05 level of confidence. This reduction hypnosis were compared. Findings indicated that in the in the length of labor occurred in the first stage. It primiparous patients, length of labor was decreased by was also found that a larger number of patients in the three and seven-tenths hours. Concerning patient satisfaction, the authors reported that for those patients who less anesthesia during delivery.

¹Herbert Thoms, Our Obstetric Heritage, The Story of Safe Childbirth (Hamden, Conn.: The Shoe String Press, Inc., 1960), p. 144.

delivered under hypnosis, regardless of the depth of hypnosis, this method was valuable to all patients.² Another study reported by Davidson was conducted with seventy patients, forty-five primiparous and twenty-five multiparous patients. In this study the patients were in one of three groups--autohypnosis trained, physiotherapy trained, or a control group with no training. The group who received training in autohypnosis was heavily weighted with patients whose labors were expected to be long or difficult. The patients themselves chose the type of training they would receive. The findings of this study revealed that those patients prepared through hypnosis had a labor just over half the average length of the other two groups. This was true even though the patients in the autohypnosis groups were on the average five years older, and the average baby's birth weight was almost the same in each group. This was statistically significant at greater than the 0.05 level of confidence. This reduction in the length of labor occurred in the first stage. It was also found that a larger number of patients in the autohypnosis group used less medication during labor and less anesthesia during delivery.

²L. D. Cullan, "Can Hypnosis Be Used Routinely in Obstetrics?" Rocky Mountain Medical Journal, LVIII (August, 1961), 28-30.

As to patient satisfaction, 70 per cent in the hypnotically trained group stated that labor was pleasant as compared to 23 per cent of those trained by physiotherapy methods and 33 per cent of those who had no training. No significant difference was found in the amount of third-stage blood loss among the groups. Episiotomy, or tear rate, was less in the hypnotically relaxed patients-- 51 per cent, as compared to 73 per cent in the physiotherapy prepared group and 64 per cent in the control group.³

A third study, reported in 1950, found different results when comparing those prepared by physiotherapy and a control group. This study, presented by Helen Heardman, had a patient population of 1,000, 500 in the control group and 500 in the group trained by the physiotherapist. The findings at this time revealed a mean length of labor in the control patients of twenty hours and forty-two minutes as compared to a mean of seventeen hours and ten minutes in the trained patients. In the control group, (Baltimore: The Williams and Wilkins Company, 1950), p. 85. 487 patients had some medication for pain, and in the trained group, 285 patients had medication to relieve

⁶Mary M. Kline, "The Effects of Fathers upon Direct Nursing Care" (unpublished Master's thesis, The University of Colorado, 1960), p. 44.

³Josephine E. Davidson, "An Assessment of the Value of Hypnosis in Pregnancy and Labour," British Medical Journal, II (October 13, 1962), 951-53. Obstetrics and Gynecology, LXXXIII (January, 1962), 35.

discomfort. It should be noted that a physiotherapist was with the patients throughout labor.⁴

Thoms likewise reported that with the use of training for childbirth, of 546 patients, 45 per cent of the primiparous patients had no analgesia and 57 per cent had no anesthesia; 70.3 per cent of the multiparous patients had no analgesia and 45.6 per cent had no anesthesia.⁵

Kline, in pursuing the effect of the father on direct nursing care for the labor patient, found that there was a mean decrease of 2.36 hours in the patient's labor when the father was present.⁶ Although the patient sample was small, sixteen patients, there was an indication that the added support the father gave the mother had some influence on the mother's labor.

Earn, utilizing a method of "mental concentration," found that the process of "delivery was not altered, but suffering was eliminated."⁷

⁴Helen Heardman, A Way to Natural Childbirth (Baltimore: The Williams and Wilkins Company, 1950), p. 85.

⁵Herbert Thoms, Training for Childbirth (New York: McGraw-Hill Book Company, Inc., 1950), p. 48.

⁶Mary M. Kline, "The Effects of Fathers upon Direct Nursing Care" (unpublished Master's thesis, The University of Colorado, 1960), p. 44.

⁷A. A. Earn, "Mental Concentration--A New and Effective Psychological Tool for the Abolition of Suffering in Childbirth," American Journal of Obstetrics and Gynecology, LXXXIII (January, 1962), 35.

who had Buxton, in reviewing various psychophysical methods of preparation throughout the United States, England, Norway, Sweden, Denmark, West Germany, Switzerland, Belgium, and France, found that three-fourths of the women who had any type of childbirth preparation had had a successful delivery. He further reported that 90 per cent of all the deliveries in Holland were achieved without any training and without analgesia or anesthesia.⁸ These statistics seemed to indicate that successful childbirth can take place with no previous training on the part of the patient. Buxton further reported that, in the Pavlovian Conditioned Reflex methods for painless childbirth, there was failure in only 5 per cent of the patients. He reported also that some advocates of other methods indicated that there was a positive effect on labor, whereas others stated that there was little evidence for this belief, and that the benefits were mainly psychological.⁹

Thoms and Wiedenbach attempted to ascertain the effects of support during labor. From questionnaires to 142 patients, it was found that of the 83 patients who had attended parents' preparation classes and the 59 patients

⁸C. Lee Buxton, A Study of Psychophysical Methods for Relief of Childbirth Pain (Philadelphia: W. B. Saunders Company, 1962), pp. 4-5.

⁹Ibid.

who had not, 43 of the former group said the things that were most helpful in labor were the confidence that was felt in the attention received, and the interest and helpfulness of the attendants; 37 mothers emphasized the aid received from the administration of medication. In the group that did not attend classes, 33 mothers emphasized the presence of the husband and help from attendants, five emphasized relaxation and breathing techniques, and 26 commented on medication.¹⁰ These findings indicated that slightly more (56 per cent as compared to 51 per cent) of the unprepared patients appreciated the care they received during labor and delivery; that a greater proportion (45 per cent as compared to 8 per cent) of the prepared mothers emphasized relaxation techniques; whereas more mothers who were unprepared (44 per cent as compared to 27 per cent) emphasized medication as helpful. In response to the question "What did you mind during labor?" one set of responses that seemed significant to the current study was that severe pain was mentioned by twenty-one of the prepared patients and of the unprepared patients eighteen mentioned severe pain.¹¹ This was a

¹⁰ Herbert Thoms and Ernestine Wiedenbach, "Support during Labor," Journal of American Medical Association, CLVI (September, 1954), 5.

¹¹ Ibid.

proportion of 25 per cent for the prepared patients and 31 per cent for the unprepared patients.

Other attempts have been made to facilitate labor, make it shorter and more comfortable for the mother, through development of devices such as the decompression dome,¹² or development of deviants of the various psychophysical methods in an attempt to make the experience of birth as safe and satisfying as possible.

Although there have been dissenting voices as to the value of the preparation methods until more thorough investigation can be undertaken,¹³ there seemed to be some indication that many aspects of the various techniques were valuable and that

... even though proof should not be forthcoming, the psychophysical preparation technique should become a permanent aspect of obstetric care. Possibly as has occurred in some European hospitals, it will merge almost imperceptibly into the overall concept of good prenatal and intrapartum obstetric care so that it will lose

¹⁵ Ruth and Edward Brecher, "How to Get Better Maternity Care," Redbook, July, 1962, p. 49; Samuel Crafton, "Too Busy for Backrubs," McCall's, LXXXVI (September 1962), 12-20; Christine Smith, "We Asked the Patients

¹² Brenda Kastell, "The Facilitation of Labour by Abdominal Decompression," Physiotherapy, XLVII (June 10, 1961), 161-62; and D. B. Scott and J. D. O. Loudon, "Abdominal Decompression in Labour," Lancet, I (May, 1960), 1181-85.

¹³ Duncan E. Reid and Mandel E. Cohen, "Evaluation of Present Day Trends in Obstetrics," Journal of American Medical Association, CXLII (March 4, 1960), 615-23; and Robert H. Stewart, "Natural Childbirth, Father Participation, Rooming-In, or What-Have-You," Medical Times, XCI (November, 1963), 1065-68.

its present possibly militant and controversial identity and still retain all of its essential advantages.¹⁴

II. PSYCHOLOGICAL ASPECTS OF THE LABOR

AND DELIVERY EXPERIENCE

What Mothers Have Said about

Childbirth

From the publications in lay magazines¹⁵ and implications drawn from various authors,¹⁶ and the necessity for the formation of an International Childbirth Association to improve maternity care, it seemed apparent that the type of maternity care desired by patients was not always available. More attempt has been made in recent

¹⁴Buxton, op. cit., p. 102.

¹⁵Ruth and Edward Brecher, "How to Get Better Maternity Care," Redbook, July, 1962, p. 49; Samuel Crafton, "Too Busy for Backrubs," McCall's, LXXXVI (September, 1959), 52-53; and R. Owen, "Experience in Childbirth: A Painful Ordeal," American Journal of Nursing, LI (January, 1951), 27.

¹⁶"Untouched by Human Hands," Nursing Forum, I (Spring, 1962), 12-20; Christine Smith, "We Asked the Patients," Nursing Outlook, VI (August, 1958), 458-659; Marion S. Lesser and Vera R. Keane, Nurse-Patient Relationships in a Hospital Maternity Service (Saint Louis: The C. V. Mosby Company, 1956), pp. 98-150; and "The Lonely Mother," Briefs, XXII (January, 1958), 14-15.

years to find out what patients think of their childbearing experiences, and these findings have not always proven complimentary. One study reported by Smith indicated that when mothers thought about having a second baby, many were worried about pain during delivery. Mothers also reported that they needed more questions answered and that they were frightened during labor. Of the 250 patients in this study, 70.8 per cent reported no preparation as to what labor would be like.¹⁷ From another study it was ascertained that many of the 283 mothers complained of being alone, and half of this latter group admitted to worries and fears. Although one-half of this group of mothers said they would not like their labor to be different, and almost one-fifth of the mothers said they disliked "nothing most,"¹⁸ the half that did want their labor to be different in some way, or the four-fifths who did dislike something "most" seemed significant and indicated a need for improved care for the patients.

Another study encompassing 1,048 patients from two large hospitals found from questionnaires that nurses treated patients "surprisingly well" in labor and

Purvis L. Martin and Steward H. Smith, "Public Relations in Our Maternity Wards," American Journal of Obstetrics and Gynecology, LXXI (June, 1961), 1079-85.

¹⁷Smith, loc. cit.

¹⁸Alfred Yankauer, et al., "What Mothers Say about Childbearing and Parents' Classes," Nursing Outlook, VIII (October, 1960), 563-65.

delivery. Further questions revealed derogatory remarks, however.¹⁹ These remarks are listed in Table I for consideration.

The authors reporting the latter study stated that the bitter criticisms of cruelty and neglect reported in lay magazines were not confirmed. However, in tabulating the results, a majority of the complaints listed were found to stem from poor personnel-patient relationships. They felt that at least half of the complaints could have been prevented.²⁰

In reporting in Nursing World an article from Ladies' Home Journal, "Cruelty in Maternity Wards," Alperin quoted the article as having stated:

. . . most prospective mothers realize that members of the medical profession are truly dedicated human beings. On the other hand doctors and nurses should more fully understand their patients if undesirable practices in the maternity wards are to be eliminated.²¹

6. No assurance was given to an anxious patient.

¹⁹Purvis L. Martin and Steward H. Smith, "Public Relations in Our Maternity Wards," American Journal of Obstetrics and Gynecology, LXXXI (June, 1961), 1079-85.

²⁰Ibid., p. 1085.

²¹Shirley Hope Alperin, "What They're Saying," Nursing World, CXXXIII (February, 1959), 6.

Morris, after reviewing numerous letters sent to a woman's weekly magazine complaining about confinement, stated:

TABLE I

DEROGATORY REMARKS MADE BY PATIENTS CONCERNING NURSING CARE IN TWO HOSPITALS*

Remark	Per cent	Mentioning	Remark
		Hospital A	Hospital B

A review of the report of the Central Health Serv-

1. The nurse was unsympathetic abrupt, rude, hostile, sarcastic. 45 29
2. The patient was neglected. 35 36
3. Nurses were aloof, indifferent, doing their job routinely. 11 18
4. Nurses made errors in judgment and didn't call the doctor when necessary. 12 7
5. Nurses performed painful rectals. 11 9
6. No assurance was given to an anxious patient. 2 7

the United States.

*Purvis L. Martin and Steward H. Smith, "Public Relations in Our Maternity Wards," American Journal of Obstetrics and Gynecology, LXXXI (June, 1961), 1079-85.

²² Norman Morris, "Human Relations in Obstetrical Practice," Lancet, I (April, 1960), 913-15.

²³ "Human Relations in Obstetrics," Nursing Times, LVII (April 7, 1961), 421.

Morris, after reviewing numerous letters sent to a woman's weekly magazine complaining about confinement, stated:

The joys, hopes, and wonder that the arrival of new life should bring are spoiled and splintered into loneliness, indignity, and despair. The feeling of personal achievement is lost, drowned in a sea of inhumanity.²²

A review of the report of the Central Health Services Council's Standing Maternity and Midwifery Advisory Committee indicated the chief complaint in labor was loneliness. Other complaints reported by patients were: they were treated rudely; there was a fear of calling the nurse; explanations were too technical for comprehension; patients were not told why; breathing methods were not encouraged by the staff; and too little consideration and understanding were given to the patients' psychological and emotional needs.²³

Although these last two authors were reporting on conditions that existed in England, it seemed likely that similar statements would be made about obstetric care in the United States.

Shainess reported:

²²Norman Morris, "Human Relations in Obstetrical Practice," Lancet, I (April, 1960), 913-15.

²³"Human Relations in Obstetrics," Nursing Times, LVII (April 7, 1961), 421.

In summarizing the role of the nurse in labor, as a result of patient interviews, Lesser and Keane stated:

Whenever a nurse is busy or conveys "business," does her job in a "routine" way, or fails to display warmth and acceptance toward the laboring woman, this patient's satisfaction decreases, regardless of what the nurse does, or how skillfully she does it. If the nurse is uninformed or poorly skilled in the use of self-help techniques, such as progressive relaxation, and controlled breathing, she proves disappointing to many of these women.

The nurse who is approachable, friendly, ready to "give," who seems interested in the woman for her own sake, and is ready to teach and guide her when necessary, is the nurse these women are seeking.²⁴

Psychological Experience

The literature varied as to what the psychological experience of labor and delivery might mean to an expectant mother. Also various explanations as to the psychological basis for different psychophysical methods were presented for consideration. The fact remained that mothers have delivered "without pain" and have been thrilled and enhanced by the moment of birth. Other mothers looked on the birth experience as "an agonizing ordeal."²⁵ Shainess reported:

Natalie Shainess, "The Psychologic Experience of Labor," New York State Journal of Medicine, CLIII (October 1953), 2983.

²⁴ Lesser and Keane, op. cit., p. 130.

²⁵ Vera R. Keane, "Maternity Care--From the Parent's Viewpoint," Briefs, XXII (April, 1958), 56-59., 821.

Delivery is a time of crisis and is best understood as part of a dynamic process in which, after a nine-month period of body change, there is a relatively brief period of extreme stress, pain and danger, culminating in release. . . . Since a woman's reproductive experience is highly charged emotionally in relation to ego, or sense of identity, women react with unusual sensitivity to events during pregnancy and delivery.²⁶

An academic psychologist explained that Natural Childbirth "worked" and explained this by an assumption that the production of a child is a rewarding goal. She stated that the mother tolerated pain because she saw the physiological changes as a "discriminative stimulus," telling her what to do next, and as a "secondary reinforcement," rewarding in its own right. The closer each stimulus is to the anticipated goal, the actual birth, the more rewarding it is.²⁷

The mother's acceptance of her maternal role was also attributed to her experiences in labor and delivery as well as pregnancy.

Significant contributions to the mother-child tie occur during pregnancy and delivery, and the

²⁶ Natalie Shainess, "The Psychologic Experience of Labor," New York State Journal of Medicine, CLIII (October 15, 1963), 2923.

²⁷ Virginia L. Senders, "After Office Hours--An Academic Psychologist Looks at Natural Childbirth," Obstetrics and Gynecology, XIV (December, 1959), 821.

woman's sense of mastery of her most vital function, reproduction, in terms of ego-identity, or self-esteem, shapes her acceptance of the child.²⁸

Several attempts have been made by various authors to explain the different reactions of patients to the childbirth experience and the psychological aspects that cause difficulties in the process of labor.²⁹ The study by Rosengren, who interviewed ninety-four patients, sixty-two clinic patients and thirty-two private patients, was an effort to identify some of the social psychological attributes of pregnant women who experienced difficulty during labor and delivery. Difficulties consisted of long labors or other complications that arose during birth. The following are a few of his findings:

²⁸Shainess, op. cit., p. 2924.

²⁹S. B. G. Eysenck, "Personality and Pain Assessment in Childbirth of Married and Unmarried Mothers," Journal of Mental Science, CVII (May, 1961), 417-30; Patricia Donovan and Selma Landis, "Some Psychological Observations of 'Educated Childbirth,'" New York State Journal of Medicine, LIII (November 1, 1953), 2504-10; Lawrence Zelic Freedman, "Childbirth While Conscious: Perspectives and Communication," The Journal of Nervous and Mental Disease, CXXXVI (October, 1963), 372-79; A. E. B. Matthews, "Behavior Patterns in Labour," Journal of Obstetrics and Gynecology of the British Commonwealth, LXVIII (October, 1961), 867; A. A. Robin, "The Psychological Changes of Normal Parturition," Psychiatric Quarterly, XXXVI (January, 1962), 129-50; William R. Rosengren, "Some Social Psychological Aspects of Delivery Room Difficulties," Journal of Nervous and Mental Disease, CXXXII (June, 1961), 515-21.

1. If the patient regarded pregnancy as an "illness," the patient tended to have subse-

quently significantly longer active labor.

2. There was a tendency for women of low socioeconomic standing to have longer periods of year-old, unmarried girl whose uterine activity was poor labor.

3. Those patients who consulted the doctor late in pregnancy had longer labors.

4. Women who had a "pregnancy definition conflict" went to the bedside, reassured the patient, told her the situation with the attending doctor tended to would give her medication soon, and that there would be no have longer labors.

5. When the patient made the first visit to the excessive body movements ceased, and a record of contractions having good labor characteristics appeared. This patient was reported more likely to view occurred before medication was given. The authors further pregnancy in a manner different from that of stated: "It is clearly the result of effective suggestion, and the result of confidence inspired in a tense and doctor in the first trimester.³⁰

That psychological factors affect the course of labor had been demonstrated effectively in a discussion of tokodynamometric studies.³¹

³² S. R. M. Reynolds, Jerome S. Harris, and Irvin H. Kaiser, Clinical Measurement of Uterine Forces in Pregnancy (Springfield, Ill.: Charles C Thomas, Publisher, 1958), p. 238.

³⁰ Rosengren, op. cit., p. 521.

³¹ The measurement of the force and character of uterine contractions in pregnancy and labor by electronic devices. ibid., p. 241.

Time and time again, we observed that a nervous, tense woman exhibited a faulty and poor pattern of uterine contractility.³²

As an example of what reassurance can do in such cases, these same authors reported a case of an eighteen-year-old, unmarried girl whose uterine activity was poor in character, irregular and uneven in profile, as measured by tokodynamometric devices. After a half hour when there was no progress in cervical dilatation, the anesthetist went to the bedside, reassured the patient, told her he would give her medication soon, and that there would be no more pain. "Within one minute the patient relaxed, the excessive body movements ceased, and a record of contractions having good labor characteristics appeared."³³ This occurred before medication was given. The authors further stated: "It is clearly the result of effective suggestion, and the result of confidence inspired in a tense and nervous patient by the attending physician."³⁴

Wiedenbach defined supportive nursing care most effectively,³⁷ and felt that nursing care "to be effective

³²S. R. M. Reynolds, Jerome S. Harris, and Irwin H. Kaiser, Clinical Measurement of Uterine Forces in Pregnancy and Labor (Springfield, Ill.: Charles C Thomas, Publisher, 1954), p. 238.

³³Ibid., pp. 238-41.

³⁴Ibid., p. 241.

From the belief that psychic factors do influence labor has resulted such statements:

. . . ultimately will be proved that women use those powerfully dynamic psychological forces either to aid or to impede their deliveries according to their mental health.³⁵

As the psychological aspects were brought more to the forefront, and as more was written on what should be done to utilize these forces in a positive manner, a closer look has been taken at the care the mother receives during the actual birth experience. Authorities in the medical and nursing professions have for the most part become more conscious about understanding, considering, and guarding the patients' emotional reactions to the fullest.³⁶ From this point of view have developed the outlines, objectives, and goals of supportive care during labor and delivery.

III. SUPPORTIVE NURSING CARE

Wiedenbach outlined in detail the reactions and feelings of patients as labor progresses and the nursing needs that this progress evidences.⁴⁰ Fitzpatrick and Eastman likewise stated: effectively,³⁷ and felt that nursing care "to be effective

³⁵ Davidson, op. cit., p. 2501.

³⁶ Ibid.

³⁷ Supra, p. 7.

during labor, must be supportive³⁸ She listed principles of this type of nursing care as:

1. Keeping the mother informed about her progress helps to allay fear.
2. The presence of an understanding and informed person is reassuring and may also help to allay fear.
3. Labor tends to progress more smoothly when the mother is relaxed.³⁹
4. Continuous attention and encouragement minimize fear and pain during the transition period.
5. Relaxation and breathing techniques aid the expulsive contractions of the second stage of labor.³⁹

As supportive care was described as need-centered and based on the physiological function of labor, Wiedenbach outlined in detail the reactions and feelings of patients as labor progresses and the nursing needs that this progress evidences.⁴⁰

Fitzpatrick and Eastman likewise stated:

Edward M. Davis and Reva Rubin, *Obstetrics for Nurses* (Philadelphia: W. B. Saunders Company, 1962), pp. 192-203.

³⁸Wiedenbach, op. cit., p. 216.

³⁹Ibid.

⁴⁰Ibid., pp. 236-38.

... it is one of the first responsibilities of the nurse to recognize that, in addition to the physical manifestations, there are social, economic and emotional factors which influence each mother's pregnancy and thus have bearing on her individual needs for care. The nurse who is cordial, empathetic and interested in the welfare of her patients establishes good rapport with relative ease and without prying, secures information which will enable her to gain greater insight into the individual's nursing needs. Regardless of the amount of preparation for this event, every mother deserves encouragement that tends to inspire assurance during labor.⁴¹

Another author also outlined support in an interesting, dynamic way:⁴² Davis and Rubin, as well as Bookmiller and Bowen,⁴³ outlined the necessity of supportive nursing care and listed the stages of labor and patients' needs in these stages. Davis and Rubin mentioned, "Encouragement is her [the mother's] guidepost to achievement,"⁴⁴ and Bookmiller and Bowen reported that

A nurse may afford a troubled patient much confidence merely by her own professionally calm and matter-of-fact manner. Often a nurse's

R--assurance--is given by providing facts to replace

⁴¹Elsie Fitzpatrick and Nicholson J. Eastman, Zabriskie's Obstetrics for Nurses (Philadelphia: J. B. Lippincott Company, 1960), p. 243.

⁴²Edward M. Davis and Reva Rubin, Obstetrics for Nurses (Philadelphia: W. B. Saunders Company, 1962), pp. 192-203. Bookmiller and Bowen, loc. cit.

⁴³Mae M. Bookmiller and George L. Bowen, Textbook of Obstetrics and Obstetric Nursing (Philadelphia: W. B. Saunders Company, 1963), p. 243.

⁴⁴Davis and Rubin, op. cit., p. 194. "during Labor and Delivery," RN, XXV (February, 1962), 70-74.

spiritual support and understanding can prove to be of greater value than medication.⁴⁵

Goodrich also defined support during labor in much the same way and described the nurse as one

... who asks herself, "what would I want if I were in this woman's place," and then does what her judgment tells her she herself would want. This is empathy--experiencing⁴⁶ with--as contrasted with sympathy or feeling for.

Another author also outlined support in an interesting, dynamic way:

S--ureness--involves listening and observing the patient, identifying needs and answering questions.

U--nderstanding--involves awareness, perception, comprehension and judgment.

P--hysical care--or contact with the patient is especially important.

P--raise--is an essential need for this experience.

O--ral communication--involves letting the mother talk.

R--eassurance--is given by providing facts to replace desire, vague fears.

T--hereness--is essential to let the patient know that the nurse is available when she cannot be present.⁴⁷

⁴⁵Bookmiller and Bowen, loc. cit.

⁴⁶Frederich W. Goodrich, "Modern Obstetrics and the Nurse," American Journal of Nursing, LVII (May, 1957), 587-88.

⁴⁷Josephine Iorio, "Effective Support during Labor and Delivery," RN, XXV (February, 1962), 70-74.

In providing nursing care during labor and delivery, it seemed important that psychoprophylactic methods outlined by the psychophysical techniques of childbirth be used to relieve pain when possible. These methods include:

1. Elimination of negative emotions, especially anxiety.
2. Helping the patient attain an active, conscious part in the birth.
3. Helping the patient develop positive emotions in connection with the birth of the baby.
4. Helping the patient develop a concept of delivery as a normal physiological act that is not dangerous and not necessarily an extremely painful event.⁴⁸

In describing patients' needs during labor and delivery, Lesser and Keane listed five major patient desires that should be considered in planning care for patients in labor. These patient needs are:

1. To be sustained by another human being.
2. To have relief from pain.

⁴⁸F. A. Syrowatka, "Psychological Basis for Natural Childbirth," Journal of American Medical Association, CLXVI (February, 1958), 517.

3. To be assured of a safe outcome, both for her-
 student, student nurse, porter, aid, etc. (sic)
 The more she cooperates wholeheartedly and
 cooperatively in giving support, the better
 will be the mother's experience.⁴⁹

4. To have attendants accept her personal attitude
 toward, and behavior during, labor.⁴⁹
 To provide that a 5. To receive bodily care. This care was most

effective. Thoms and Wiedenbach, in outlining supportive care,
 listed four objectives: was devised so that patients'

needs. 1. Make the mother feel important as an individ-
 ual.

2. Give her confidence in her environment.

3. Institute measures to promote relaxation.

A review of the literature pertaining to the psy-
 4. Instruct the mother in techniques that lead to
 chological factors during labor and delivery was pre-
 effective performance.

sented. From this review, it was found that patients were
 5. Endeavor to encourage the mother at all
 requesting more than physical care, and that they were not
 times.⁵⁰

always pleased with the care they received. Also studies
 These authors further stated:
 were presented that supported the fact that preparation

We believe that support in labor should pro-
 and provide an atmosphere of friendliness, interest, course
 understanding, and encouragement coupled with
 of 1. effective comfort-producing measures that will satisfac-
 tion enable the mother to put forth her best effort
 in the birth of her child. Everyone who attends with
 her contributes to the effectiveness of such
 some support. This includes her husband or other out was
 family member, physician, nurse, medical

⁵¹ Ibid., p. 5.

⁴⁹ Lesser and Keane, op. cit., p. 100.

⁵⁰ Thoms and Wiedenbach, op. cit., p. 3.

student, student nurse, porter, aid, etc. [sic]

The more each participates wholeheartedly and cooperatively in giving support, the better will be the mother's experience.⁵¹

To provide the most effective care, it was found that a definite plan for providing this care was most effective.⁵² From the ideas developed in the literature, a definite plan of care was devised so that patients' needs were met to the best of the nurse's ability.⁵³

IV. SUMMARY

A review of the literature pertaining to the psychological factors during labor and delivery was presented. From this review, it was found that patients were requesting more than physical care, and that they were not always pleased with the care they received. Also studies were presented that supported the fact that preparation and support during labor did have an effect on the course of labor as well as on the patient's feeling of satisfaction and well being. The meaning of supportive care with some indications of how it might best be carried out was

⁵¹Ibid., p. 5.

⁵²Ibid.

⁵³See Appendix B.

also presented. From the review of the literature, no studies were found that attempted to measure the effects that nursing care alone had on the patient's satisfaction or course of labor.

The purpose of this study was to investigate the effects of supportive nursing care on primiparous patients during labor and delivery. To determine what these effects might be, an experimental study was undertaken. This chapter presents the methods employed for conducting such a study and the statistics utilized for the analysis of the data.

I. EXPERIMENTAL DESIGN AND ITS APPLICATION

TO THE CURRENT STUDY

The experimental method was the research design most appropriate for measuring the effects of supportive nursing care on primiparous patients during labor and delivery.

In experimentation, the investigator controls (manipulates or changes) certain independent variables and observes the changes that take place in the form of dependent variables.¹

See Appendix B.

¹ See Appendix B.
 1. Carter V. Good, Introduction to Educational Research (New York: Appleton-Century-Crofts, Inc., 1959), p. 358.

CHAPTER III

METHODOLOGY

To meet the requirements of experimental design, patients were selected from the same population and randomly assigned to a control or experimental group. The independent variable, supportive nursing as outlined,² was given. The purpose of this study was to investigate the effects of supportive nursing care on primiparous patients during labor and delivery. To determine what these effects might be, an experimental study was undertaken. This chapter presents the methods employed for conducting such a study and the statistics utilized for the analysis of the data. The experimental method provides means by which

evidence relevant to testing hypothesis of causal relationships can be determined. The three major types of evidence that can be collected are:

I. EXPERIMENTAL DESIGN AND ITS APPLICATION TO THE CURRENT STUDY

The experimental method was the research design most appropriate for measuring the effects of supportive nursing care on primiparous patients during labor and delivery.

In experimentation, the investigator controls (manipulates or changes) certain independent variables and observes the changes that take place in the form of dependent variables.¹

²See Appendix B.

¹Claire Sellitz, et al., Research Methods in Social Relations (New York: Appleton-Century-Crofts, Inc., 1959), p. 358.

To meet the requirements of experimental design, patients were selected from the same population and randomly assigned to a control or experimental group. The independent variable, supportive nursing as outlined,² was given to the experimental group. The other group received regular nursing care as provided in the hospital where the study was conducted. The two groups were then compared to for differences in the dependent variables, the degree of satisfaction with labor and delivery, and changes in the course of labor. The experimental method provides means by which evidence relevant to testing hypothesis of causal relationships can be determined. The three major types of evidence that can be collected are:

... (1) evidence of concomitant variation-- that is the causal variable and the dependent variable are associated; (2) evidence that the dependent variable did not occur before the causal variable; and (3) evidence ruling out other factors as possible determining conditions of the dependent variable.³

²See Appendix B.

³Claire Selltiz, et al., Research Methods in Social Relations (New York: Holt, Rinehart and Winston, Inc., 1963), p. 94.

patient II. STEPS UNDERTAKEN IN CONDUCTING THE STUDY in the control or experimental group depending on whether the Preliminaries to Conducting the Study to come to the hospital to care the Study in labor. The determining factor of which

group A letter was written to the director of nursing⁴ of the hospital where the study was to be conducted requesting permission to pursue the problem.⁵ Oral permission to conduct the study was obtained. All staff nurses in the obstetric area were informed by letter of their responsibilities and the manner in which the study was to be conducted.⁶ satisfaction with the labor and delivery experience.⁷ The control group was given the questionnaire by Selecting the Patients the experimental group was given the

questi Primiparous patients were selected for the study who were married, had attended the clinic of a state teaching hospital for prenatal care for approximately two months, had no obvious problems that would prevent a normal delivery, and would deliver between April 27, 1964, and July 6, 1964. A list of these patients was placed in the labor and delivery area, and notice that the patient was part of a study population was attached to the sex and

score of the infant, the amount and type of medication received in labor, the type of anesthetic given

⁴See Appendix A.

⁵Ibid.

⁶See Appendix D.

patient's clinic records. The patients were placed in the control or experimental group depending on whether the investigator was available to come to the hospital to care for a patient in labor. The determining factor of which group the patient would fall into depended entirely upon the investigator's own schedule and availability.

Collecting the Data

Twenty-four to seventy-two hours after the patients delivered, they were given a questionnaire developed to measure satisfaction with the labor and delivery experience.⁷ The control group was given the questionnaire by the investigator and the experimental group was given the questionnaire by someone other than the investigator so that the presence of the nurse who cared for them would not influence their answering of the questionnaire.

After the patients delivered, their charts were examined for specific information. This information included age, race, religion, husband's occupation, type of antenatal course, type of labor, delivery date, length of labor, description of labor, type of delivery, sex and Apgar score of the infant, the amount and type of medication received during labor, the type of anesthetic given

⁷See Appendix C.

in the delivery room, and an estimation of pain relief the from the medication received.⁸

III. THE STUDY SETTING

Hospital Care

Patients delivering their first baby in the hospital where the current study was conducted had a chance to be cared for by any one of the obstetrical staff nurses employed by the hospital. The patient might have had one nurse or several nurses depending on the length of time the patient was in the labor and delivery area. There were three labor and two delivery rooms in the area, and usually one nurse was assigned to both. Therefore, the amount of attention and the quantity of nursing care depended on the number of patients in the area or the particular nurse's desires and philosophy of nursing care for patients in labor. An aide was also assigned to this area but had little, if any, responsibility for direct patient care. There was a possibility that student nurses from a baccalaureate program might have been assigned to some of the patients in the control group.

⁸ See Appendix E.

Nurses described. A questionnaire was given to the thirteen staff nurses employed in obstetrics.⁹ From a return of ten of these questionnaires, information about the nurses caring for patients in the control group was obtained. It was found that these nurses' ages ranged from twenty-three to thirty-five years, that approximately half of these nurses were married, and half were single. All of the nurses held the position of staff nurse with the exception of a "Senior nurse" and the Head Nurse.

Concerning educational background, three nurses had a Bachelor of Science degree, five nurses had a Diploma in nursing, one nurse was a midwife, and one nurse listed no educational background. Seven of the nurses were interested in further preparation, and one nurse did not answer the question.

The nurses' experience ranged from one year to twelve years and, more specifically, experience in obstetric nursing ranged from six months to seven years.

Concerning clinical preference in obstetrics, eight of the nurses ranked the labor or delivery area as their first or second choice. Of the two remaining nurses, one did not rank the areas and one ranked the labor area fourth and the delivery area fifth. Three of these nurses

⁹See Appendix D.

preferred some other clinical area to obstetrical nursing. The areas preferred by these nurses were either medical-surgical, pediatric, or emergency-room nursing. When asked what they felt was the nurse's most important role in caring for patients in the labor and delivery area, all but one of the nurses mentioned "support." Several of these nurses also mentioned other roles that were equally important.

The nurse who cared for the patients in the experimental Medical care. The patient's medical care was mainly provided by medical residents and students. The patient, during her labor, might or might not have had a doctor she had seen in the antepartal clinic. During her labor the patient could have had several doctors, again depending on how long she was in labor. Also, during labor she likely had a number of medical students, who changed frequently, doing many of the tasks usually assigned to nurses. No provision was made to have one special person with a patient in labor, and the amount of attention received depended upon the number of patients in the area and the particular staff on duty.

Differences in the Care

The medical care received in the control and the experimental groups was essentially the same, except for

fewer of the nursing tasks being done by medical students. Other differences were that the experimental group had one special nurse who was with the patients throughout their labor and delivery, who followed a definite plan of care and attempted to meet the objectives outlined in such a plan in so far as limitations of the situation allowed,¹⁰ and who had few responsibilities other than direct patient care.

The nurse who cared for the patients in the experimental group was married, twenty-six-years old, and completing her Master of Science degree in nursing. Including her experience during graduate school, this nurse had had four years' experience in nursing and one and a half years in obstetrical nursing. The clinical area of obstetrics was her choice since this was her major area of study in graduate school. She preferred labor and delivery as an area in obstetrics and felt support for the patient was the most important nurse role in caring for patients in labor. This nurse's views as to what nursing care should be may be examined in Appendix B.

¹⁰ See Appendix B. for the completed plan of care.

Differences in the Nurses

In comparing the nurses who cared for patients in the control or experimental group, it was found that there were many similarities. The main difference between the nurses who cared for patients in the control group and the nurse who cared for patients in the experimental group was in the opportunity for pursuing further formal education.

IV. THE TOOLS UTILIZED

The Plan of Care

A plan for supportive nursing care was developed as a guide for meeting the needs of a patient during labor. Specific objectives and steps outlined as to how to meet these objectives were a necessary part of the guide. The formulation of objectives assures a patient-centered

approach and gives purpose and direction to the various routines and procedures that nurses must provide and also makes more impressive and imperative the need for administering nursing tasks.¹¹ The plan of care was developed, through compilation of the nursing needs of patients B. Lippincott Company, 1960), pp. 241-87; Edward M. Davis and Saunders Company, 1962), pp. 192-203; Mae M. Bookmiller and George L. Bowen, Textbook for Obstetrics and Obstetric Nursing (Philadelphia: W. B. Saunders Company, 1963), pp. 210-64; and Henry L. Woodward, Bernice Gardner, and Richard D. Bryant, Obstetric Management and Nursing (Philadelphia: W. B. Saunders Company, 1960), pp. 214-39; Elsie Fitzpatrick and Nicholson J. Eastman, Nurse-Patient Relationships in a Hospital (New York: Vera R. Keane, Nurse-Patient Relationships in a Hospital (New York: Journal of American Medical Association, 1956), pp. 98-130; Ernestine Wiedenbach, Family-Centered during Labor, "Journal of American Medical Association," 1956).

¹¹ See Appendix B for the completed plan of care.

literature.¹² The form and ideas were organized, developed, and implemented by the investigator through experience and reading about what nursing is and can be for the patient during labor.

of questions, its standardized instructions for recording responses--ensures

The Patient Questionnaire

Choice of the questionnaire as a measuring tool.

A questionnaire was selected as the technique of choice to measure patient satisfaction because respondents could categorize their answers with less prejudice than the investigator; answers could more accurately be interpreted than with an interview technique; and the investigator could not interview the patients she cared for during labor and delivery for obvious reasons. Other advantages

grounds of the patients. There was also a need for ease

answering the questions since patients had so recently
¹² delivered. Herbert Thoms and Ernestine Wiedenbach, "Support during Labor," Journal of American Medical Association, CLVI (September 4, 1954), 3-5; Marion S. Lesser and Vera R. Keane, Nurse-Patient Relationships in a Hospital Maternity Service (Saint Louis: The C. V. Mosby Company, 1956), pp. 98-130; Ernestine Wiedenbach, Family-Centered Maternity Nursing (New York: G. P. Putnam's Sons, 1958), pp. 214-39; Elsie Fitzpatrick and Nicholson J. Eastman, Zabriskie's Obstetrics for Nurses (Philadelphia: J. B. Lippincott Company, 1960), pp. 241-87; Edward M. Davis and Reva Rubin, Obstetrics for Nurses (Philadelphia: W. B. Saunders Company, 1962), pp. 192-203; Mae M. Bookmiller and George L. Bowen, Textbook for Obstetrics and Obstetric Nursing (Philadelphia: W. B. Saunders Company, 1963), pp. 310-64; and Henry L. Woodward, Bernice Gardner, and Richard D. Bryant, Obstetric Management and Nursing (Philadelphia: F. A. Davis Company, 1959), pp. 201-38.

of the questionnaire listed by Selltitz, et al., and felt valid for this study are as follows: completing such a questionnaire. The et al. "standardized wording, its standardized order of questions, its standardized instructions for recording responses--ensures over a period some uniformity from one measurement situation to another."¹³

2. The questionnaire places less pressure on the subject for immediate response.¹⁴

The questionnaire utilized in the current study was of the fixed-alternative type, except for the last three questions, which were open-ended. The fixed-alternative type of questionnaire was selected because of the possibility of a language barrier and various educational backgrounds of the patients. There was also a need for ease in answering the questions since patients had so recently delivered a baby. These patients had fairly busy schedules in the hospital and had an increased need for rest. The open-ended questions and provision for comments by the fixed-alternative questions were provided so if patients desired, they could more freely express themselves. Indicating five minutes or less. There were various views as to when would be the best postpartum day for the patients to

¹³Selltitz, et al., op. cit., p. 239. referring the

¹⁴Ibid., pp. 238-43. the preferring the second day,

five th Pretesting the questionnaire. In order to test day the response that patients had to completing such a questionnaire and the reliability of the questionnaire, a questionnaire containing twenty questions was developed and administered to the patients on the obstetric ward ~~nts~~ over a period of several days. ~~ss~~ No regard was given for parity or post partum day. ~~ss~~ From the twenty-seven patients who completed this questionnaire, information was obtained through an interview as to the patient's reaction to the questionnaire. ~~ss~~ From the interviews, it was found that all twenty-seven of the patients agreed that completing such a questionnaire was a good idea; twenty-five of the patients said that they could answer questions honestly and frankly with their name on the questionnaire; eighteen of the patients said the questions were clear; twenty-two of the patients said that all the answers needed were provided; and all twenty-seven of the patients felt that the questionnaire was valuable enough to take time to answer. ~~ss~~ The patients estimated the time it took them to complete the questionnaire between three and twenty minutes, with the approximately half, or fourteen, of the patients indicating five minutes or less. There were various views as to when would be the best postpartum day for the patients to complete the questionnaire, six patients preferring the ~~occasions. Due to the patients' short hospital stay,~~ first day after delivery, nine preferring the second day,

five the third day, and five patients stating that any day would be acceptable. When the patients were questioned, no suggestions for additions to the questionnaire were given.

From the interviews, it was concluded that patients did not mind completing the questionnaire, and answering the questionnaire was not extremely time-consuming and therefore the questionnaire could, if necessary, be

lengthened. With an attempt to make the wording clearer and someone available to answer the patient's questions, the scores in the current questionnaire, so that each half the patient could understand the meaning of the questions and answers as presented in the questionnaire. Also, it was decided that placing the patient's name on the questionnaire, necessary for coding, did not inhibit their answers. Since any post partum day apparently would be acceptable to the patients, twenty-four to seventy-two hours was selected. Before twenty-four hours, the

patients would not as likely feel like completing a questionnaire, and after seventy-two hours, patients were more concerned with preparations for going home than with the events that take place during labor and delivery.

The questionnaire reliability. It was not practical to administer the questionnaire on two different occasions, due to the patients' short hospital stay and

In the above formula:

r_{kk} = the estimated reliability of the test with the total number of items.
 r_{nn} = the observed reliability coefficient of the test based on one-half of the items in the test and is obtained by use of the Pearson Product Moment correlation.¹⁷
 According to Guilford, the comparability of the test halves is probably never perfect, and therefore an estimate by use of the Spearman-Brown Prophecy formula is probably conservative because it tends to be an underestimate.¹⁸

The reliability coefficient obtained on the first questionnaire was 0.86 and indicated high correlations according to Guilford.¹⁹ The correlation is also an indication of the internal consistency of the test.²⁰

In order for split-half equivalence to be high, all items of the test must be highly correlated, that is, they must all provide a five-tenths per cent of the patients fell in the upper half of the score range. From the review of the literature,

¹⁷ Ibid.

¹⁸ J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Company, Inc., 1956), p. 452.

¹⁹ Ibid., p. 145., op. cit., p. 178.

²⁰ Edwards, loc. cit. pages 17-22.

measure of essentially the same characteristics or of characteristics that vary together.²¹

The questionnaire, as it was administered, measured the patients' satisfaction with their performance and feelings about labor and delivery as well as their degree of satisfaction or dissatisfaction with the total care received. An assumption in utilizing the questionnaire was that the patients' satisfaction with the care they received would have direct influence on their satisfaction with the birth experience, and both contributed to their total satisfaction. The resulting coefficient is an indication that these two things did vary together.

On the first questionnaire there was a total of sixty points. The scores of the twenty-seven patients completing this questionnaire ranged from eighteen to fifty-three points. However, 59 per cent of the patients' scores were in the upper third of the score range, or between forty and sixty score points. Ninety-two and five-tenths per cent of the patients fell in the upper half of the score range. From the review of the literature,²² the question arose if the hospital in which the study was to be conducted could be completely different

²¹Selltiz, et al., op. cit., p. 178.

²²See Chapter II, pages 17-22.

from other hospitals that were staffed in much the same way. If patients' scores indicated such high satisfaction, no positive difference could be measured when one nurse remained with the patient throughout labor. It was questionable that such great satisfaction could be present, no matter how superior the care. Meeting patients' every wish and desire is not always easy or possible, no matter how great an attempt is made.

In order to measure more specifically what was done and how patients felt about their experience in labor and delivery, a more detailed questionnaire was devised. On the revised questionnaire, space for patients' comments was provided, an attempt was made to make the wording simpler and clearer, and the answers were less often listed in order of more satisfaction to less satisfaction. The revised questionnaire was administered to patients over a period of several weeks with no regard for parity or post partum day. Twenty-one patients' completed questionnaires were used to obtain reliability. By use of the Spearman-Brown Prophecy formula,²³ a correlation of 0.94 was obtained, described as "very high correlation" by Guilford.²⁴ The questionnaire did seem to

²⁴ Guilford, *loc. cit.* what was done was, her name was

²³ *Supra*, p. 48. *op. cit.*, p. 165. *See also*

Guilford,²⁴ and indicated that this questionnaire was more reliable than the first. The second questionnaire contained thirty-four questions that were scored to form a scale, and there seemed to be a wider variety of scores. Only one patient had a score in the upper scale range, or between 82 and 102 score points.

The questionnaire validity. It was felt that the revised questionnaire had face validity since patients were asked direct questions about what happened to them or how they felt about their experience. To elicit frank and honest answers, an attempt was made to create an atmosphere that gave patients freedom to express themselves so that their answers would benefit future mothers. According to Selltitz, et al., to make a judgment that a test is measuring what it is assumed to measure, "on the face of it," two major questions must be considered. These questions are: (1) whether the instrument is measuring the kind of behavior it was assumed to measure, and (2) whether the instrument provides an adequate sample of the particular kind of behavior.²⁵ The questionnaire did seem to

²⁴ Guilford, loc. cit. what that care was, her score

²⁵ Selltitz, et al., op. cit., p. 165. her care.

measure the kind of behavior it was assumed to measure. After caring for several patients and reading their responses to the revised questionnaire, it appeared they were answering realistically. The second question posed by Selltitz, et al., also seemed to be answered because questions were devised from the plan for supportive nursing care and patients could not suggest other questions needed to express their feelings. When what the patient said, did not correspond with what was actually done, it was felt the patient's answer was an interpretation of what meaning the situation had for her. This meaning for the patient was felt to be more important than what was actually done.

Scoring the questionnaire. The first six questions on the revised questionnaire were included to obtain information about the mother's desire for a baby and how she felt about the clinic teaching. These first six questions were not scored as part of the labor and delivery satisfaction scale.

Question seven through question forty were scored from zero to three, depending on the patient's degree of satisfaction. When the patient was satisfied with the care she received, no matter what that care was, her score was higher than if she was not pleased with her care.

The last three open-ended questions and comments made by patients throughout the questionnaire were scored positively or negatively according to three judges. Two of these judges were active in maternal-child nursing, and the third judge was enrolled in a graduate nursing program majoring in maternal-child nursing.

When a complete thought was mentioned by a patient on one of the last three questions, or anywhere throughout the questionnaire, this thought was termed plus one or minus one by the judges. Where there was disagreement, discussion was undertaken and agreement reached. The judges were not told to which group, control or experimental, the patients belonged. The positive scores were added and the negative scores were subtracted from the patient's total score.

Evaluation of the Charts

To secure necessary information from the patients' charts, a form was devised to aid the investigator in obtaining specific information.²⁶ To complete this form, both the control and the experimental groups and the doctors' notes, nurses' notes, admission records, and clinic records were utilized. At times, no information could be obtained concerning the control patients' degree

²⁶ The formulas utilized for the statistical analysis are in Appendix E.

of comfort and the effectiveness of pain relief through the use of medications. and related to the length of labor.

To determine the difference between the control and the

V. STATISTICS USED FOR ANALYSIS OF THE DATA

the means, variances, and standard deviations were

To analyze the data, several statistical tests were obtained and the t-test was applied for the significance utilized²⁷ and are as follows:

1. To determine if the two groups varied significantly prior to receiving supportive nursing care, the scores were correlated by using a Pearson Product Moment means, variances, standard deviations, and the t-test were calculated.

2. In order that the patients' degree of satisfaction could be compared, the means, variances, standard deviations, and a t-test were obtained.

3. To compare the two groups as to length of labor, the means, variances, standard deviations, and a t-test were calculated to determine the significance of the difference.

4. To determine how length of labor and satisfaction were related, contingency tables were developed for

both the control and the experimental groups and chi square was applied.

²⁷The formulas utilized for the statistical analysis are presented in Appendix F.

5. Medication and anesthetics were coded according to analgesic powers and related to the length of labor. To determine the difference between the control and the experimental groups in the amount of medication received, the means, variances, and standard deviations were obtained and the t-test was applied for the significance of the difference.

6. The patients' length of labor and satisfaction scores were correlated by using a Pearson Product Moment correlation. This chapter outlines the steps taken in conducting the study. The experimental method is described and

7. A Pearson Product Moment coefficient of correlation was obtained to determine the relationship between the patients' satisfaction with labor and their satisfaction with the care they received to determine to what extent these were related.

8. The patients' position in relation to the mean care these two groups received was that the experimental group received supportive nursing care as outlined, and the patients' position above or below the mean in satisfaction by means of a contingency table and chi square. The control group received the regular nursing care provided in the state teaching hospital.

9. Individual questions were examined for both groups and a mean score for each question obtained to determine in which areas of satisfaction the two groups satisfaction are described. The questionnaire reliability were most alike or different.

10. A Pearson Product Moment correlation was obtained between the patients' desire to have a baby and

their satisfaction scores to determine if there was any relationship. Patients' charts is listed, and an outline of

the study. To analyze the data more completely and develop a more thorough understanding of how labor is perceived by patients, specific questions from the questionnaire and patients' comments were examined periodically.

VI. SUMMARY

This chapter outlines the steps taken in conducting the study. The experimental method is described and its relationship to the current study is outlined. In order that the effects of supportive nursing care could be measured, patients who were in labor were selected from the same population and assigned randomly to a control and an experimental group. The difference in the care these two groups received was that the experimental group received supportive nursing care as outlined, and the control group received the regular nursing care provided in the state teaching hospital.

The method used for developing a plan of supportive nursing care and a questionnaire to measure patient satisfaction are described. The questionnaire reliability and validity and the patients' reception to such a

questionnaire are also discussed. Information obtained from the patients' charts is listed, and an outline of the statistics for analysis of the data is presented.

This chapter contains the analysis and interpretation of the data. The purpose of this analysis is to:

- (1) determine the degree of satisfaction primiparous patients received from supportive nursing care; (2) determine the effects that supportive nursing care had on the course of labor; (3) determine if supportive nursing care can provide comfort measures that influence the amount of medication needed during labor and delivery; (4) determine to what extent nursing care can prepare patients for labor even though they have had little previous preparation; (5) assess the value of a definite plan of care; and (6) determine if the study of the effects of supportive nursing care will be helpful in teaching students and staff nurses.

In order that the analysis is more informative, the patients are described and their desire for a baby, their clinic experience, and their feelings as to the adequacy of their preparation for labor and delivery are discussed. The control and the experimental groups are compared in all of these aspects so that it can be determined if the groups were alike when they came to the labor area. The

CHAPTER IV

ANALYSIS AND INTERPRETATION

This chapter contains the analysis and interpretation of the data. The purpose of this analysis is to:

- (1) determine the degree of satisfaction primiparous patients received from supportive nursing care; (2) determine the effects that supportive nursing care had on the course of labor; (3) determine if supportive nursing care can provide comfort measures that influence the amount of medication needed during labor and delivery; (4) determine to what extent nursing care can prepare patients for labor even though they have had little previous preparation; (5) assess the value of a definite plan of care; and (6) determine if the study of the effects of supportive nursing care will be helpful in teaching students and staff nurses.

In order that the analysis is more informative, the patients are described and their desire for a baby, their clinic experience, and their feelings as to the adequacy of their preparation for labor and delivery are discussed. The control and the experimental groups are compared in all of these aspects so that it can be determined if the groups were alike when they came to the labor area. The

patient questionnaire and information from the patient's chart are analyzed in order that the purposes of the study could be met.

I. THE STUDY POPULATION

The Patients Described

Patients in the control group. There were twelve patients in the control group¹ whose ages ranged from sixteen to twenty-one years. Approximately 42 per cent of these patients were seventeen or younger. As to race, nine of the patients were Caucasian, one was Indian, and two were Spanish American. Seven of these patients were Protestant and five were Catholic. Six of the patients had an essentially normal prenatal course and four patients had minor complications. The remaining two patients had more severe complications with their pregnancy, one having had a threatened abortion at fifteen weeks and the other patient having had a urinary tract infection and pre-eclampsia.

Four of this group of patients' husbands were unemployed, four were laborers, one was a mechanic, one

* Indicates minor complications.

¹See Table II, page 61.

TABLE II
CONTROL PATIENTS DESCRIBED

Patient Code	Age	Race	Religion	Antenatal Course	Husband's Occupation	Length of Antenatal Care
I	17	W	Protestant	Threatened abortion 15 weeks	Laborer	2-4 months
II	18	W	Catholic	Normal*	Foundry worker	6-8 months
III	18	W	Protestant	Normal	Stock clerk	4-6 months
IV	20	W	Protestant	Normal	Disabled veteran	8 months or more
V	16	W	Protestant	Normal	Unemployed	4-6 months
VI	19	W	No preference	Normal*	Truck driver	1 month
VII	17	SA	Catholic	Normal*	Laborer	6-8 months
VIII	18	W	Catholic	Normal	Unemployed	4-6 months
IX	17	W	Protestant	Normal*	Mechanic	6-8 months
X	19	W	Catholic	Normal	Laborer	6-8 months
XI	21	I	Protestant	Pre-eclampsia	Laborer	6-8 months
XII	16	SA	Catholic	Normal	Unemployed	2-4 months

* Indicates minor complications.

was a truck driver, one a stock clerk, and one a foundry worker.

When asked how long they had come to the clinic before their baby was born, one patient indicated eight months or more, five patients indicated from six to eight months, three patients four to six months, and two patients two to four months. The mean length of prenatal clinic attendance was four months and eighteen days.

Five patients, or 41.7 per cent, indicated they would rather not have gotten pregnant as soon as they did, and seven, or 58.3 per cent of the patients, indicated that they did want to become pregnant when they did. Ten patients, or 83.3 per cent, indicated they were "excited and happy" when they found they were pregnant, and 16.7 per cent of the patients indicated that "it's all right" once they found they were pregnant.

Patients in the experimental group. There were ten patients in the experimental group.² These patients' ages ranged from sixteen to twenty years. Fifty per cent of this group of patients were seventeen or younger. As to race, six patients were Caucasian and four patients were Spanish American. Six of the patients were Protestant and

²See Table III, page 63.

TABLE III
EXPERIMENTAL PATIENTS DESCRIBED

Patient Code	Age	Race	Religion	Antenatal Course	Husband's Occupation	Length of Antenatal Care
A	17	W	Protestant	Normal	Construction	4-6 months
B	20	W	Protestant	Hysteria	Truck driver	1 month
C	18	W	Protestant	Normal*	Unemployed	4-6 months
D	17	SA	Catholic	Normal	Farm laborer	2-4 months
E	19	W	Protestant	Normal	Unemployed	1 month
F	17	W	Protestant	Normal*	Timekeeper	4-6 months
G	16	SA	Catholic	Normal*	Housekeeping	4-6 months
H	18	SA	Catholic	Normal	Sandblaster	2-4 months
I	20	SA	Catholic	Normal	Laborer	2-4 months
J	16	W	Protestant	Normal	Truck driver	4-6 months

* Indicates a minor complication during pregnancy.

four patients were Catholic. Six patients had a normal course of pregnancy and three patients had an essentially normal pregnancy with some minor complications. The remaining patient in this group had severe vomiting and hysteria.

Concerning the husbands' occupations, two were unemployed, three were laborers, two were truck drivers, one was a timekeeper, one was a sandblaster, and one worked in the housekeeping department of a hospital.

When these patients were asked how long they came to the clinic before their baby was born, five patients indicated from four to six months, three patients indicated from two to four months, and two patients indicated two to four months. The mean length of antenatal care at the clinic was two months and twenty-four days.

Six, or 60 per cent of these patients, indicated they wanted to become pregnant when they did, and four, or 40 per cent of the patients, indicated that they did not want to become pregnant "so soon." When questioned as to how they felt when they found they were pregnant, eight, or 80 per cent of the patients, stated they were "excited and happy," one patient indicated she was "upset," and one patient indicated "it's all right."

³See Table IV, page 66.

Comparison of the Two Groups

When these two groups were compared,³ it was found that there was little difference in their mean ages. In the experimental group approximately 50 per cent were seventeen years of age or younger as compared to 42 per cent in the control group.

The control group contained a slightly larger proportion of those of the Caucasian race, 75 per cent as compared to 60 per cent, and the experimental group contained a larger proportion of Spanish American patients, 40 per cent as compared to 16.7 per cent.

When the antenatal course was compared, there were 83.3 per cent of the control group patients whose pregnancy was normal or had only minor complications as compared with 90 per cent in the experimental group.

In the control group 33.3 per cent of the patients' husbands were unemployed as compared to 20 per cent in the experimental group. Also, more of the patients' husbands in the control group were classified as laborers, 33.3 per cent as compared to 30 per cent in the experimental group. More of the patients' husbands in the experimental group had a job that required some type of training, 50 per cent as compared to 33.3 per cent in the control group.

³See Table IV, page 66.

The patients in the control group had a longer length of clinic attendance, with 75 per cent of these patients attending the clinic four months or more, and 50 per cent attending the clinic six months or more. In

TABLE IV
COMPARISON OF THE CONTROL AND EXPERIMENTAL GROUPS
attended the clinic for four months but not as long as six

	Control	Experimental
Mean age	18 years	17.8 years
Race	75 % White 8.3% Indian 16.7% Spanish American	60% White 40% Spanish American
Religion	58.3% Protestant 41.7% Catholic	60% Protestant 40% Catholic
Antenatal Course	50 % Normal 33.3% Minor complica- 16.7% Severe complica-	60% Normal 30% Minor complica- 10% Severe complica-
Husband's Occupation	33.3% Unemployed 33.3% Laborers 33.3% Training for job	20% Unemployed 30% Laborers 50% Training for job
Length of Antenatal Care	4 months and 18 days (mean)	2 months and 24 days (mean)

⁴See Table V, page 68.

The patients in the control group had a longer length of clinic attendance, with 75 per cent of these patients attending the clinic four months or more, and 50 per cent attending the clinic six months or more. In comparison, in the experimental group 50 per cent had attended the clinic for four months but not as long as six months. No patients in the experimental group indicated they had attended the clinic for as long as six months.

The groups were much alike in their desires to become pregnant. Of the control group 58.3 per cent indicated they wanted to become pregnant when they did. In the experimental group, 60 per cent of the patients indicated they wanted to become pregnant when they did. Likewise, 41.7 per cent of the control group and 40 per cent of the experimental group said they did not want to become pregnant so soon. In the control group 83.3 per cent stated they were "excited and happy" when they found they were pregnant as compared to 80 per cent in the experimental group. Of the patients in the control group, 16.7 per cent checked "it's all right" when they found they were pregnant as compared to 10 per cent in the experimental group.⁴

⁴See Table V, page 68.

To determine if these differences were statistically significant and how these two groups varied, the variance, standard deviation, and a t-test were calculated on the patients' ages, desire to become pregnant, and length of antenatal care.

TABLE V
DESIRE FOR A BABY

Question	Group	Number of Points	Per cent
Did you want to become pregnant?	Control		
	yes	7	58.3
	not so soon	5	41.7
	Experimental		
	yes	6	60
	not so soon	4	40
How did you feel when you found you were pregnant?	Control		
	excited and happy	10	83.3
	it's all right	2	16.7
	upset	0	0
	Experimental		
	excited and happy	8	80
	it's all right	1	10
	upset	1	10

⁵ See Table VI, page 70.

⁶ J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Company, Inc., 1956), pp. 217-21.

To determine if these differences were statistically significant and how these two groups varied, the variance, standard deviation, and a t-test were calculated on the patients' ages, desire to become pregnant, and length of antenatal care.⁵

The patients' mean ages for the two groups were similar. Also the standard deviation and the variance were very much alike. There were slightly more variance and a slightly larger standard deviation in the control group, indicating that the experimental group was more homogeneous. When the t-test was applied for the significance of the difference between these two groups, the t-test was not significant.⁶

A score was obtained of the patients' desire to have a baby from questions two and three on the patient questionnaire. Question two asked the patient if she wanted to become pregnant. This question provided answers for "yes," "not so soon," and "no." The scores ranged from three to one on this question. Question three stated: "When you first found you were pregnant, how did you feel?" The answers provided were "upset,"

⁵See Table VI, page 70.

⁶J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Company, Inc., 1956), pp. 217-21.

"disappointed," "it's all right," and "excited and happy."

The scores on this question ranged from one to four as the answer was more positive. TABLE VI

THE MEAN, VARIANCE, AND SIGNIFICANCE OF THE DIFFERENCE BETWEEN THE CONTROL AND THE EXPERIMENTAL GROUPS

the score approached seventeen, or the total number of points, the score was more positive. Also, on the patients' desire to become pregnant was similar.

Group	Variable	Mean	Variance	Standard Deviation	t*
Control	Age	18 years	2.36	1.54	.312
Experimental	Age	17.8 years	2.09	1.47	
Control	Desire for baby	16.42 pts.	1.63	1.27	.267
Experimental	Desire for baby	16.20 pts.	1.51	1.23	
Control	Length of antenatal care	138 days	4002.54	63.26	.261
Experimental	Length of antenatal care	84 days	1560	39.49	

* t to be significant at the 0.05 level of confidence must equal 2.086 or greater. (Guilford, op. cit., p. 145.)

"disappointed," "it's all right," and "excited and happy." The scores on this question ranged from one to four as the answer was more positive. Ten points were added to each total score to provide ease in calculation. Therefore, as the score approached seventeen, or the total number of points, the score was more positive. Also, the mean score on the patients' desire to become pregnant was similar. The control group was found to be a more homogeneous population since the scores varied less. When the t-test was applied to the difference in scores, it was not significant. Patients' Preparation for Labor and Delivery

When comparing the length of antenatal care, it appeared that the control group had come for care for a longer period of time. However, the experimental group varied less among themselves, indicating that the control group had patients who had come for a long time, and at the same time there were patients who had come only a short time. The t-test was likewise not significant. However, since more of the patients in the experimental group had come to the clinic for a shorter period of time, this may have indicated negative feelings toward medical care and preparation for birth. Also, these patients had

⁷ See Chapter II, pages 24-25.

a possibility of having a more difficult labor as was indicated in the study by Rosengren.⁷

All these statistics on the patients' ages, length of antenatal care, and score on the desire to become pregnant indicated that these samples were not statistically different and could be compared for the difference in effects when supportive nursing care was received by one group and not by another group.

5. The nurse's responsibilities included inter- Patients' Preparation for Labor and Delivery

The environment in which the patients came for antenatal care and the general instructions they received about labor and delivery were investigated to obtain information as to how the patients in the study population were prepared for the experience of delivery. To obtain such information, an interview with the clinic Head Nurse was conducted. From this interview, several things about the clinic were determined. This information included:

1. The clinic saw approximately thirty-five patients each day, eight of these patients being seen for an initial visit. This carefully. Concerning labor and delivery, this booklet listed briefly a few of the signs of how labor begins, what the patient should bring to the

⁷See Chapter II, pages 24-25.

2. From five to seven hundred patients were typically seen each month.

3. The clinic was staffed by one registered nurse, one practical nurse, and one clerk, with a public health nurse available most of the time.

4. One resident and four medical students were usually available to examine the patient. Usually different doctors saw different patients at each visit.

5. The nurse's responsibilities included interviewing patients on the initial visit, providing referrals to the public health nurse, assisting the doctor, and certain clerical duties. health nurse also visited the patient

6. Patients often had to wait several hours to see the doctor. then every one to two months during pregnancy.

As to what the patient was taught about her pregnancy and the events involved, the following was generally provided: The topics of discussion in these classes were

labor 1. The nurse saw each patient on the initial visit and the danger signs and diet were explained. asces.

2. At the initial visit, the nurse gave each patient a booklet prepared by the hospital and the patient was told to "read this carefully." Concerning labor and delivery, this booklet listed briefly a few of the signs of how labor begins, what the patient should bring to the

hospital, and how to contact the hospital when labor did begin. It may be seen that not a great deal of individual

3. Other similar literature in the form of pamphlets and booklets was available if the patient desired to take one of these booklets.

4. The doctor talked to the patient after he informed her to discuss problems, or he might have referred problems to the nurse. more information might

5. The patient might also be seen by the public health nurse on the initial visit, then at the clinic by the public health nurse only when problems arose. patient

6. A public health nurse also visited the patient at home several weeks after the patient's initial visit to the clinic, then every one to two months during pregnancy.

66.7 per 7. Prenatal classes were available to patients and were taught by the public health nurse and a student dietitian. The topics of discussion in these classes were labor and delivery, diet, and baby care. A small proportion of patients reportedly attended these classes. the

8. After the initial visit, the clinic nurse, if called, talked to the patient if there was a problem. Usually, however, the nurse guided the patient through the clinic and was not present when the patient was examined by the doctor.

⁸ See Table VII, page 76.

From this description of the clinic and the teaching done, it may be seen that not a great deal of individual attention could always be given, but that some attempt was made to teach patients. How many patients gained from that which was provided or how much was sought by a patient was likely highly individualized. The information received by some patients might have been adequate for their needs, but for others more information might have been desired.

To determine how these patients learned about labor and delivery, questions four, five, and six on the patient questionnaire were designed to elicit patients' feelings in regard to their teaching.⁸

Of those patients in the control group, eight, or 66.7 per cent, indicated that the nurse or the doctor in the clinic told them what labor would be like. In comparison, in the experimental group, three, or 30 per cent of the patients, were told about labor and delivery in this manner. Two patients in both the control and the experimental groups indicated they were "told some things, if I asked a question." Two patients, or 16.7 per cent, in the control group indicated they were not told about labor and delivery by the clinic nurse or doctor, while

⁸ See Table VII, page 76.

TABLE VII
PATIENT PREPARATION FOR LABOR AND DELIVERY

Question	Group	Number of Patients	Per cent
Did the clinic nurse or doctor tell you about labor and delivery?	Control		
yes		8	66.7
if I asked		2	16.7
no		2	16.7
	Experimental		
yes		3	30
if I asked		2	20
no		5	50
Would you have liked to have been told more?	Control		
no		1	8.3
a little more		7	58.3
a lot more		4	33.3
	Experimental		
no		2	20
a little more		3	30
a lot more		5	50
From whom did you get most of your information about labor and delivery?	Control		
nurse in clinic		4	33.3*
public health nurse		2	16.6
doctor		4	33.3
mother or relatives		6	50
written material		2	16.7
	Experimental		
nurse in clinic		0	0
public health nurse		1	10
doctor		0	0
mother or relatives		6	60
written material		3	30
from all sources listed		1	10*

* Patients listed more than one source of information.

five, or 50 per cent, of the patients in the experimental group indicated they were not told about labor and delivery. When the patients were asked if they would have liked more information, 8.3 per cent of the patients in the control group and 20 per cent of the patients in the experimental group did not desire more information than they received about labor and delivery. In the control group, 58.3 per cent would have liked "a little more" information as compared to 30 per cent of the patients in the experimental group. Thirty-three and three-tenths per cent of the patients in the control group would have liked to have been told "a lot more" than they were told about labor and delivery, and 50 per cent of the patients in the experimental group would have liked to have been told "a lot more." When the entire twenty-two patients were considered, approximately 18.1 per cent of the patients did not desire more information than they received. This left a large percentage who desired more information than they were given. In the control group, two patients, or 16.7 per cent, When the patients were asked to indicate whether they received most of their information from their mothers or relatives, the nurse in the clinic, the doctor, the public health nurse, or printed material, it was found that in the control group, four patients, or 33.3 per cent

indicated the clinic nurse, while no patients from the experimental group indicated this nurse. Two patients in the control group and one patient in the experimental group indicated the public health nurse as a major source of information concerning labor and delivery. Four labor patients in the control group, or 33.3 per cent, mentioned the doctor, while no patients in the experimental group indicated this source of information. It was interesting to note that 33.3 per cent of the patients in the control group mentioned some professional person as a major source of information, leaving 66.7 per cent who did not indicate any of the professional people available. In the experimental group, 80 per cent of the patients did not mention any of the professional people as providing the most information about labor and delivery. questionnaire to

In the control group, six, or 50 per cent of the patients, mentioned their mothers or relatives as a major source of information, and six, or 60 per cent of the patients in the experimental group, mentioned this source of information. In the control group, two patients, or 16.7 per cent mentioned that written material was a major source of information as compared to three, or 30 per cent of the patients in the experimental group. One patient in the experimental group indicated she "learned a little from all." In the control group, the score ranged from

From these questions, it was found that even though there was an attempt to provide classes and teach patients about labor and delivery, the major proportion of these patients' information came from other than professional persons. The majority of these patients went into labor with less information than they desired, and some of the patients even indicated they were not told about labor and delivery in the clinic even when teaching about labor and delivery was assumed to be part of the clinic routine. These patients did not seem to be highly prepared for and childbirth as it can be assumed that the information received from mothers, relatives, or friends might at times have been inadequate and inaccurate.

The t-test was applied to a score obtained from questions four and five of the patient questionnaire to determine if the differences between the two groups were significant.

To determine how patients viewed the nursing care they received, questions that made a specific reference to nursing care were utilized. These were compared for the two groups and the individual patients' answers examined to determine how they pictured nursing care. A description of what the nurse did, how the patient rated this of three; if she checked "some things if I asked a question," and if the nurse was often found to be the most told about labor and delivery, the score was one. When

the patient indicated whether or not she would have liked more information than she was given, the score ranged from

one to three as the response was more favorable toward the patient's teaching. Ten points were added to the total score for ease in calculation. As the patient's score approached sixteen points, the total number of points possible, it was more positive.⁹

From Table VIII, it can be seen that the experimental group had a lower mean, slightly more variance, and a slightly more varied standard deviation. The control group in this respect was more alike and had received more information. The t-test was higher than when the ages and desire for a baby were compared but still remained insignificant.

Control	14.25	1.295	1.14
Experimental	13.50	1.835	1.35

II. NURSING CARE AS SEEN BY THE PATIENT

To determine how patients viewed the nursing care they received, questions that made a specific reference to nursing care were utilized.¹⁰ These were compared for the two groups and the individual patients' answers examined to determine how they pictured nursing care. A description of what the nurse did, how the patient rated this care, and if the nurse was often found to be the most

⁹See Table VIII, page 81.

¹⁰Questions 11, 12, 18, 19, 20, 21, 22, 23, 33, 34, 37, 38, and 40 from the patient questionnaire are included.

helpful person to the patient in labor and delivery, as well as a delineation of the patients' feelings as to whether one special nurse would make her experience better were tabulated.¹¹ Other questions also would reflect on

TABLE VIII
COMPARISON OF PATIENT PREPARATION FOR LABOR
AND DELIVERY

Group	Mean	Variance	Standard Deviation	t-value*
Control	14.25	1.295	1.14	
Control Group				1.382

Of the patients in the control group, 42 per cent stated that nursing care was not quite what they expected, while 25 per cent said that nursing care was what they

expected. * To be significant at the 0.05 level of confidence t must equal 2.086.

When asked to rank nursing care, 50 per cent of the patients checked "good" and another 25 per cent checked "excellent." Twenty-five per cent of the patients ranked nursing care as "fair" and no patient ranked nursing care as "poor." Over half, or 58.3 per cent of these patients, felt nursing care could be improved "a little," and another 16.7 per cent of the patients felt that the care

¹¹See Table IX, page 83.

helpful person to the patient in labor and delivery, as well as a delineation of the patients' feelings as to whether one special nurse would make her experience better were tabulated.¹¹ Other questions also would reflect on nursing care; however, since no direct reference to nursing care was made, it was assumed that others in addition to the nurse were considered by the patient in answering these questions.

Nursing Care for Patients in the

Control Group

Of the patients in the control group, 42 per cent stated that nursing care was not quite what they expected, while 25 per cent said that nursing care was what they expected. There was 25 per cent of the patients who thought nursing care was "much better" than they expected.

When asked to rank nursing care, 50 per cent of the patients checked "good" and another 25 per cent checked "excellent." Twenty-five per cent of the patients ranked nursing care as "fair" and no patient ranked nursing care as "poor." Over half, or 58.3 per cent of these patients, felt nursing care could be improved "a little," and another 16.7 per cent of the patients felt that the care

¹¹See Table IX, page 83.

TABLE IX (continued)

TABLE IX

NURSING CARE AS SEEN BY PATIENTS
IN THE CONTROL GROUP

Description	Number of Patients	Per cent
Patients' Expectations		
yes, at times	5	41.7
no, not at all	1	8.3
Nursing Care Was	0	0
much better than expected	3	25
what was expected	3	25
not quite what was expected	5	42
not at all what was hoped for	0	0
Nursing Rated		
comfortable	1	8.3
Nursing Care Was	4	33.3
excellent	3	25
good	6	50
fair	3	25
poor	0	0
Nursing Care Should Be Improved		
no, not at all	3	25
a little	7	58.3
yes	2	16.7
yes, very much so	0	0
Nurses Described		
The Nurses Were		
friendly	10	83.3
accepting	2	16.7
indifferent	0	0
unfriendly	0	0

[continued on next page]

[continued on next page]

TABLE IX (continued)

Description	Number of Patients	Per cent
Nurses Were Warm and Understanding		
very much so	6	50
yes, at times	5	41.7
not very	1	8.3
no, not at all	0	0
What Nurses Did		
Made the Patient Comfortable		
whenever needed	4	33.3
sometimes when not busy	3	25
when patient asked to be made comfortable	1	8.3
never	4	33.3
Were "too busy" to Help Patient		
never	4	33.3
not often	1	8.3
sometimes	7	58.3
often	0	0
Gave Patient Encouragement		
everytime needed	5	41.7
sometimes	5	41.7
once	1	8.3
never	1	8.3
Most Important Role of Nurse		
stayed with the patient and explained labor	4	33.3*
told the doctor how the patient was doing	0	0
did treatments	9	75
assisted in the delivery room	0	0

** Patients mentioned more than one person.

[continued on next page]

TABLE IX (continued)

Description	Number of Patients	Per cent
Best Description of What Nurse Did		
stayed with patient and made her comfortable	2	16.7
came in to talk once or twice	1	8.3
was in and out to do treatments	9	75
rarely seen	0	0
Needed to Tell Patient More about Self-help Measures		
no, she told the patient everything needed	6	50
a little more	3	25
yes, a good bit more	2	16.7
yes, a whole lot more	1	8.3
One Special Nurse		
One Nurse Would Have		
made things a lot better	6	50
made things some better	3	25
made things about the same	3	25
made things much worse	0	0
Most Helpful		
The Most Helpful Person during Labor		
nurse	3	25**
doctor	11	91.6
family or husband	0	0
no one	0	0

* Patients checked more than one area.

** Patients mentioned more than one person.

should be improved more than "a little." These two groups totaled 75 per cent of the patients who felt that nursing should be improved as compared to 25 per cent who checked that nursing care did not need to be improved at all.

Of the three patients comprising the 25 per cent who did not think nursing should be improved, two of these patients ranked nursing care "excellent" and the third patient ranked nursing care as "good." These three patients and a fourth patient who ranked nursing care "excellent" found the nurses friendly. Three of these patients indicated that the nurses were "very warm and understanding" and the fourth stated that the nurses were "warm and understanding at times." One of these patients indicated that the nurse made her comfortable whenever she needed anything, two patients were made comfortable when the nurse wasn't busy, and the fourth, when she "asked for something." Two of these patients indicated that nurses were "never too busy" to do the things they needed or wanted, and the remaining two patients indicated the nurse was "sometimes too busy" to meet their needs. Three of this group of patients were encouraged every time they needed encouragement, while the fourth patient was encouraged "sometimes." The most important thing the nurse did for three of these patients was "things" like the enema, vaginal

preparation, or other treatments. Two of these patients indicated that the nurse stayed with them and explained how labor was progressing. One of these patients mentioned both of these areas as the most important things the nurse did.

Three of these patients checked as the best description of the nurse, "she was in and out every once in a while to do treatments." The fourth patient described her nurses as having stayed with her and having made her comfortable. Three of these patients indicated the nurse told them how to help themselves, while one indicated she wanted the nurse to tell her "a little bit more." Two of these patients felt "one special nurse" would "make things about the same," one patient indicated that one nurse would make things "some better," and the fourth patient thought that one nurse would "make things a lot better." Two of these patients stated the doctor was the most helpful during labor and delivery, and one indicated the nurse was the most helpful. The fourth patient indicated that both the nurse and the doctor were "most helpful." Two patients indicated nursing care was much better than they expected, and the remaining two patients checked that nursing care was "not quite" what they expected. This latter response could have indicated that they had not expected nursing care to be as good as

it was instead of indicating that nursing care was less than expected as was intended by the response. ~~third patient~~ From the examination of how the four patients who ranked nursing care as "excellent" or indicated that nursing care did not need to be improved, some insight was gained into how patients perceived nursing care when they thought it was what it should have been. of these patients ~~descri-~~ There were three patients who ranked nursing care as "fair" and indicated that nursing should be improved. Two of these patients indicated that the need for "a little improvement" existed and the third checked "yes" concerning the need for improvement in nursing care. Two of these patients indicated the nurses were "friendly" and one indicated they were "accepting." One of these ~~during~~ patients thought nurses were "very much warm and understanding," the second patient thought nurses were warm and understanding "at times," and the third patient thought the nurses were "not very" warm and understanding. Two of these patients were "never" made comfortable by the nurse and one of these patients was made comfortable whenever she needed to be made comfortable. However, an indication of what All of these patients who ranked nursing care as "fair" thought nurses were sometimes "too busy" to do the things they needed. One patient checked that the nurse ~~patients~~ comfortable, encouraged them, did not convey

encouraged her "sometimes," one patient indicated that the nurse gave her encouragement "once," and the third patient indicated that the nurse "never" encouraged her. The most important "thing" the nurse did for two of these patients was treatments, and the most important thing the nurse did for the third patient was to stay with her and explain what was happening. All of these patients described the nurse as being "in and out to do treatments." Two of these patients would have liked "a good bit more" information and the third patient would have liked "a little more" information than the nurse provided. All of these patients thought that having "one special nurse" would "make things a lot better." All of these patients found the doctor the most helpful person during labor and delivery. One patient, however, indicated that the nurse was helpful along with the doctor. All of these patients checked that nursing care was "not quite what they expected." As can be seen, some differences and some similarities existed in the patients' description of nursing care when ranked "excellent" or "fair." However, an indication of what was desired by both groups can be seen from this comparison. Patients had different expectations and saw the nurse in different roles. As the nurse made the patients comfortable, encouraged them, did not convey

"busyness," was warm and understanding, and explained self-help measures, the patient ranked the care higher. Most of the patients, however, described the nurse as coming into their room to do treatments and felt this was the most important thing the nurse did to "make things better." This seemed to be the role in which these patients saw the nurse, and no matter how they ranked nursing, "excellent" or "fair," they saw the nurse as doing little else. ~~er~~ cent of these patients would have preferred one nurse. Looking at the entire group of patients, in the control group, 83.3 per cent of these patients thought the nurses were friendly; 50 per cent of the patients indicated that the nurses were "very much warm and understanding." There was a variety of answers when patients were asked if the nurse made the patient comfortable, 33.3 per cent of the patients having been made comfortable whenever needed, while 33.3 per cent were never made comfortable. Twenty-five per cent of the patients were made comfortable when the nurse was not busy, and 8.3 per cent of these patients were made comfortable when they asked. As to encouragement, 41.7 per cent were given words of encouragement every time they needed such encouragement, and 41.7 per cent were encouraged "sometimes" as compared to 8.3 per cent who were encouraged "once" and "never." Doing treatments was the most important thing the nurse

did for 75 per cent of the patients; however, 59 per cent indicated that the nurse told them how they could have helped themselves. Fifty per cent indicated they would have liked varying degrees of increased instruction. Of the total group of control patients, 50 per cent thought "one special nurse" would make things "a lot better" with an added 25 per cent who thought that one nurse would "make things some better." Therefore, a total of 75 per cent of these patients would have preferred one nurse to several. The doctor was found to be indicated as the "most helpful" to the patient during labor by 91.6 per cent of these patients. Only one patient indicated that her nurse alone was the most helpful. Two other patients indicated that the nurse was helpful along with the doctor.

Nursing Care Should Be Improved
Nursing Care As Seen by the Patients
in the Experimental Group

Likewise, the questions that specifically mentioned the nurse were examined for the experimental group to determine how these patients perceived the nursing care they received.¹² Of the patients in the experimental group, 70 per cent found nursing "much better" than they

¹² See Table X, page 92. next page

TABLE X (continued)

NURSING CARE AS SEEN BY PATIENTS
IN THE EXPERIMENTAL GROUP

Description	Number of Patients	Per cent
Nurses Were Warm and Understanding		
very much so	8	80
Patients' Expectations	2	20
not very	0	0
Nursing Care Was	0	0
much better than expected	7	70
what was expected	1	10
not quite what was expected	1	10
not at all what was hoped for	1	10
Nursing Rated	8	80
when not busy	2	20
Nursing Care Was	0	0
never	0	0
excellent	7	70
good	3	30
fair	0	0
poor	0	0
Nursing Care Should Be Improved	2	20
often	0	0
no, not at all	5	50
a little	3	30
yes	1	10
yes, very much so	1	10
sometimes	3	30
Nurses Described	0	0
never	0	0
The Nurse Was		
friendly	10	100
accepting	0	0
indifferent	0	0
unfriendly	0	0
did treatments	1	10
assisted in the delivery room	2	20

[continued on next page]

[continued on next page]

TABLE X (continued)

Description	Number of Patients	Per cent
Nurses Were Warm and Understanding		
very much so patient and made her	8	80
yes, at times	2	20
not very to talk once or twice	0	0
no, not at all to do treatments	0	0
rarely seen	0	0
What Nurses Did		
Made the Patient Comfortable		
whenever needed	8	80
sometimes when not busy	2	20
when patient asked to be made comfortable	0	0
never	0	0
One Were "too busy" to Help Patient		
One never Would Have	6	60
not often	2	20
sometimes a lot better	2	20
often things some better	0	0
made things about the same	0	0
Gave Patient Encouragement		
everytime needed	7	70
sometimes	3	30
once	0	0
never	0	0
Most Important Role of Nurse		
stayed with the patient and explained labor	9	90*
told the doctor how the patient was doing	1	10*
did treatments	2	20*
assisted in the delivery room	1	10*

[continued on next page]

TABLE X (continued)

Description	Number of Patients	Per cent
Best Description of What Nurse Did		
stayed with patient and made her comfortable	10	100
came in to talk once or twice	2	20
was in and out to do treatments	0	0
rarely seen	0	0
Needed to Tell Patient More about Self-help Measures		
no, she told the patient everything needed	8	80
a little more	1	10
yes, a good bit more	1	10
yes, a whole lot more	0	0
One Special Nurse		
One Nurse Would Have		
made things a lot better	8	80
made things some better	2	20
made things about the same	0	0
made things much worse	0	0
Most Helpful		
The Most Helpful Person during Labor		
nurse	10	100
doctor	0	0
family or husband	1	10
no one	0	0

* Patient checked more than one item as the most important.

had expected. One patient indicated nursing care was "not quite" what she expected and another patient indicated nursing care was "not at all" what she "had hoped" it would be. However, these patients indicated that nursing care was "excellent" or "good" and that it did not need to be improved at all. Nursing care was rated as "excellent" by 70 per cent of the patients in this group and "good" by the remaining 30 per cent. Fifty per cent indicated that nursing care did not need to be improved, while 30 per cent indicated that the nursing care should be improved "a little" and 10 per cent checked "yes" when asked this question. One patient indicated that nursing care should be improved "very much." However, the last patient, when asked what she liked most about giving birth to her baby, said: "The most like is [sic] nurses." All of the patients in the experimental group felt that the nurse was friendly and 80 per cent felt the nurse was "very warm and understanding" while 20 per cent felt that the nurse was "warm and understanding at times." Eighty per cent of these patients indicated they were made comfortable whenever needed, while 20 per cent indicated that they were made comfortable when the nurse was not busy. The nurse who cared for these patients remained with the patient, and the only thing she did

other than give direct nursing care to the patient was to do some necessary charting and at times obtain equipment for the doctor or the patient. These patients' answers indicated how easily "busyness" is conveyed to patients when the nurse's tasks may interfere with patients' desires although the nursing tasks must be done. Some of these patients, or 60 per cent, indicated that the nurse was "never too busy" to do the things they needed, and an additional 20 per cent indicated that the nurse was not often "too busy." However, 20 per cent of the patients checked that the nurse was "sometimes too busy" to meet their needs. The two patients who indicated they were made comfortable when the nurse was not busy were the two patients who said the nurse was "not often" too busy to do the things they needed. The two patients who indicated "sometimes" rated nursing care as "excellent" and checked that they were made comfortable whenever they "needed to be made comfortable." one nurse made "things some better." When the patients were asked if they were encouraged and told they were "doing a good job," 70 per cent said "everytime" they needed to be encouraged they were, and the remaining 30 per cent indicated they were encouraged "sometimes."

The most important thing the nurse did for 90 per cent of these patients was to stay with them and explain

"how things were going." The one patient who did not indicate the above checked that the treatments the nurse did were the most important nursing task. Along with this, she wrote, "she gave me back rub downs which helped the pain." All of the patients described the nurse as having stayed with them and having made them comfortable. Two patients also indicated that the nurse came in to talk to them once or twice. This could have referred to other nurses, or the patients perhaps wanted to indicate the value that talking to them had. Eighty per cent of the patients indicated the nurse told them everything they needed to know to help themselves. Two patients indicated they would have liked "a little more" information or "a good bit more information." All of the patients apparently liked the idea of having one special nurse, and 80 per cent of the patients indicated that having such a nurse made "things a lot better" while 20 per cent of these patients thought one nurse made "things some better." All of these patients indicated that the nurse was the "most helpful" to them during labor and delivery. One patient also checked "family or husband" because her family did get to come into the labor area for about an hour. While 90 per cent of the patients in the experimental group indicated the most important role of the nurse was staying with them and giving explanations of

Comparison of the Two Groups'

Description of Nursing Care

When the two groups were compared, it was found that the experimental group was more alike in their description of nursing care. A larger percentage in the experimental group, 70 per cent, as compared to 25 per cent in the control group, rated nursing as excellent, and a larger percentage, 50 per cent, as compared to 25 per cent in the control group, responded that nursing did not need to be improved. A larger percentage of patients in the experimental group also indicated the nurse was "friendly," and 80 per cent indicated that the nurse was "very warm and understanding" as compared to 83.3 per cent and 50 per cent respectively in the control group. In the experimental group, 80 per cent were "made comfortable" when they needed to be made comfortable as compared to 33.3 per cent in the control group. That the nurse was "too busy" was indicated by 60 per cent of the patients in the control group as compared to 33.3 per cent in the experimental group. Of the patients in the experimental group, 70 per cent felt encouraged when they needed encouragement as compared to 41.7 per cent in the control group. While 90 per cent of the patients in the experimental group indicated the most important role of the nurse was staying with them and giving explanations of

labor, 75 per cent of the patients in the control group described the most important nursing role as performing treatments. All of the patients in the experimental group described their nurse as "stayed with me and made me comfortable" while 75 per cent of the patients in the control group described their nurses as being "in and out when she had a treatment to do." Eighty per cent of the patients in the experimental group were told how to help themselves as compared to 50 per cent in the control group. Of the patients who had one nurse, 80 per cent thought it would "make things much better" and 20 per cent of these patients thought it would make "things some better." When patients did not have one special nurse, 50 per cent thought this would "make things better," 25 per cent of these patients thought it would "make things some better," and 25 per cent thought it would "make things about the same." While all of the patients in the experimental group indicated that the nurse was "most helpful," only 25 per cent of the patients in the control group indicated the nurse as "most helpful" to them during labor and delivery.

for the entire study population was 62.68, and with comments the mean was 63.18. In Table XI, the Roman numerals indicate patients in the control group and the letters

III. SATISFACTION WITH LABOR AND DELIVERY

Table XI it can be seen that none of the patients in the experimental group were below the mean in either score grouping. In the control group, seven, or 38.3 per cent of the patients, were below the mean when the patients' objectives of supportive nursing care had been met. There were 102 score points on the total scale. No patient had the total amount of points. This did not mean that patients were not satisfied with nursing care or many aspects of their care. Due to the hospital situation, however, the patients could not usually have their husbands present, and often the situation prevented complete accomplishment of the objectives.

The mean for the entire population was obtained. The mean score for the control group was 59.7. The judges scored the comments and these were added to the points as compared to 71.3 points for the experimental score if they were positive and subtracted from the score if they were negative. The standard deviations of the two groups indicated that two-thirds of the sample would appear in a wider score range in the control group than in the experimental group. Therefore, the patient might have mentioned only one of each in response to these questions and the score was not changed. The mean score without comments for the entire study population was 62.68, and with comments the mean was 63.18. In Table XI, the Roman numerals

indicate patients in the control group and the letters

See Table XI, page 102.
See Table XII, page 103, and Table XIII, page 104.

indicate patients in the experimental group.¹³ From Table XI it can be seen that none of the patients in the experimental group were below the mean in either score grouping. In the control group, seven, or 58.3 per cent of the patients, were below the mean when the patients' comments were not considered in the score, and nine patients, or 75 per cent, were below the mean for the entire group when the patients' comments were considered.

In order that the patients' scores could more readily be compared, a mean, variance, and standard deviation were obtained for scores with and without comments. To determine if the difference in the scores was statistically significant, a t-test was applied.¹⁴

The mean score for the control group was 55.5 points as compared to 71.3 points for the experimental group. The standard deviations of the two groups indicated that two-thirds of the sample would appear in a wider score range in the control group than in the experimental group. When the t-test was applied to determine if the difference between the means was significant or the result of a chance, a t of 3.62 was obtained on the scores

¹³See Table XI, page 102.

¹⁴See Table XII, page 103, and Table XIII, page 104.

TABLE XII

COMPARISON OF SATISFACTION SCORES
(WITH COMMENTS)

TABLE XI

SATISFACTION SCORES TOTAL STUDY POPULATION

Patient Code	Score	Deviation From Mean	Patient Code	Score	Deviation From Mean
Patient Code		Score (without comments)			Score (with comments)
I	45	-10.7	A	73	1.3
II	28	-27.45	B	72	40 .7
III	64	+ 8.28	C	66*	27 5.3
III	35	-20.64	D	63	62 8.3
IV	66	+10.35	E	73	31 1.7
V	69	+13.66	F	78	61 6.7
VI	46	- 9.69	G	80	71 8.7
VII	60	+ 4.46	H	74	46 2.7
VIII	64	+ 8.60	I	68	60 3.3
IX	72	+16.64	J	66	66 5.3
XX	58	+ 2.72			69
XI	59	+ 3.58			60
XII		59			57
A Control Group		73	Experimental Group		73
B		72			76
Mean	55.5		Mean	71.3	
C		66			70
Variance	193.18		Variance	29.94	
D		63			65
Standard Deviation	13.89		Standard Deviation	5.47	
E		73			72
F		78			95
G		80			79
H		74			75
I		68			71
J		66			64
* This patient did not answer five questions					
** To be significant at greater than 0.01 level of confidence, t must be greater than 3.62**					
Mean 62.68			Mean 63.18		

(Guilford, p. 145).

TABLE XII
COMPARISON OF SATISFACTION SCORES
(WITHOUT COMMENTS)

Patient Code	Score	Deviation from Mean	Patient Code	Score	Deviation from Mean
I	45	-10.5	A	73	+ 1.5
II	28	-27.5	B	72	+ .7
III	64	+ 8.5	C	66*	- 5.3
IV	35	-20.5	D	63	- 8.3
V	66	+10.5	E	73	+ 1.7
VI	69	+13.5	F	78	+ 6.7
VII	46	- 9.5	G	80	+ 8.7
VIII	60	+ 4.5	H	74	+ 2.7
IX	64	+ 8.5	I	68	- 3.3
X	72	+16.5	J	66	- 5.3
XI	58	+ 2.5			
XII	59	+ 3.5			

Control Group		Experimental Group	
Mean	55.5	Mean	71.3
Variance	193.18	Variance	29.94
Standard Deviation	13.89	Standard Deviation	5.47

$$t = 3.62^{**}$$

* This patient did not answer five questions.

** To be significant at greater than 0.01 level of confidence, t must exceed 2.845. (Guilford, op. cit., p. 145).

without comments, and a t of 4.71 was obtained on the scores with comments. Both of these values are significant at greater than 0.01 level of confidence.¹⁵ This

TABLE XIII
COMPARISON OF SATISFACTION SCORES
(WITH COMMENTS)

Patient Code	Score	Deviation from Mean	Patient Code	Score	Deviation from Mean
I	40	-14.16	A	73	- 1
II	27	-27.16	B	76	+ 2
III	62	+ 7.84	C	70	- 4
IV	31	-23.16	D	65	- 9
V	61	+ 6.84	E	72	- 2
VI	71	+16.84	F	95	+21
VII	46	- 8.16	G	79	+ 5
VIII	60	+ 5.84	H	75	+ 1
IX	66	+11.84	I	71	- 3
X	69	+14.84	J	64	-10
XI	60	+ 5.84			
XII	57	+ 2.82			
Control Group			Experimental Group		
Mean	54.16		Mean	74.00	
Variance	215.42		Variance	80.00	
Standard Deviation	14.68		Standard Deviation	8.94	

¹⁵ Guilford, *op. cit.*, p. 538.

¹⁶ *Ibid.*, p. 145.

¹⁷ Included questions 6, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, * To be significant at greater than 0.01 level of confidence, t must exceed 2.831 (Guilford, *op. cit.*, p. 145). Included questions 7, 9, 12, 17, 24, 25, 26, 27, 28, 32, 35, 36, and 39, page 107.

without comments, and a t of 4.71 was obtained on the scores with comments. Both of these values are significant at greater than the 0.01 level of confidence.¹⁵ This indicated that there was a difference in patients' satisfaction. Since the only consistent difference was in the nursing care received, it was concluded that the difference was due to this care. group were calculated.²⁰ When the — To determine if the patients' satisfaction scores were dependent upon the patients' desire to have a baby, a correlation was obtained. There was a correlation of $-.12$ between satisfaction scores and desire to have a baby. This indicated, according to Guilford, there was "almost negligible relationship" between these two variables.¹⁶

Separate scores for each patient were obtained on the care received¹⁷ and the patients' satisfaction with the birth of their babies.¹⁸ A total score of fifty-four points was possible on the care received and a score of thirty-nine points on the patient's satisfaction with her experience. Between the care the patient received and the

No explanation for deviation can be given except that
patients¹⁵ Guilford, op. cit., p. 538. examination during

the diff¹⁶ Ibid., p. 145. labor and sometimes several medical

¹⁷ Includes questions 8, 10, 11, 13, 18, 19, 20, 21, 22, 23, 29, 30, 31, 33, 34, 37, 38, and 40.

¹⁸ Includes questions 7, 9, 12, 17, 24, 25, 26, 27, 28, 32, 35, 36, and 39. page 107.

patient's degree of satisfaction, there was a correlation of 0.60, which indicated a substantial relationship between the two aspects of patient satisfaction for the entire group.¹⁹

A mean score was obtained for each question and the groups compared. The total points of all the patients and the question mean for each group were calculated.²⁰ When the patient did not answer the question, the score was considered zero. No explanation can be given for the patients not answering a question, but it could be due to lack of understanding on the part of the patient, the answer needed was not provided, a negative response, or the patients were not able to make a decision as to the answer most appropriate. The mean for the experimental group was above the mean for the control group for each question except eight, fourteen, seventeen, and twenty-four.

Question eight asked if things were done because they were important for the patient rather than routine. No explanation for deviation can be given except that patients were often given a physical examination during the difficult part of labor and sometimes several medical

¹⁹Guilford, op. cit., p. 145.

²⁰See Table XIV, page 107.

TABLE XIV
MEAN FOR INDIVIDUAL QUESTIONS, CONTROL AND EXPERIMENTAL GROUPS

Question Number	Total Points	Mean	Question Number	Total Points	Mean
Control Group			Experimental Group		
7.	11	.91	7.	11	1.1
8.	27	2.25	8.	17	1.7
9.	26	2.16	9.	22	2.2
10.	27	2.25	10.	26	2.6
11.	13	1.08	11.	28	2.8
12.	13	1.08	12.	15	1.5
13.	26	2.16	13.	27	2.7
14.	7	.51	14.	4	.4
15.	10	.83	15.	12	1.2
16.	6	.50	16.	7	.7
17.	24	2.0	17.	20	2.0
18.	34	2.83	18.	30	3.0
19.	19	1.58	19.	24	2.4
20.	24	2.0	20.	27	2.7
21.	27	2.25	21.	30	3.0
22.	23	1.91	22.	22	2.2
23.	17	1.41	23.	30	3.0
24.	24	2.0	24.	19	1.9
25.	13	1.08	25.	15	1.5
26.	20	1.66	26.	23	2.3

[continued on next page]

TABLE XIV (continued)

Question Number	Total Points	Mean	Question Number	Total Points	Mean
Control Group			Experimental Group		
27.	22	1.83	27.	19	1.9
28.	15	1.25	28.	24	2.4
29.	4	.33	29.	4	4
30.	20	1.66	30.	24	2.4
31.	19	1.58	31.	25	2.5
32.	23	1.91	32.	21	2.1
33.	21	1.75	33.	28	2.8
34.	18	1.5	34.	28	2.8
35.	18	1.5	35.	18	1.8
36.	22	1.83	36.	20	2.0
37.	20	1.66	37.	24	2.4
38.	29	2.41	38.	28	2.8
39.	3	.25	39.	4	4
40.	26	2.16	40.	24	2.4

students would perform the same task. A careful explanation of why the treatments were done was given to the patients in the experimental group; however, the patients did not see these treatments and routines as important to them, so that this objective was not as completely accomplished as was hoped it might be. Another explanation might have been that since these patients found the most important thing the nurse did as having stayed with them and the best description of the nurse 90 per cent of the time was that the nurse "stayed with" the patients as opposed to doing "things" that more typically was listed by patients in the control group. Perhaps treatments were minimized as the nurse's presence with the patients was emphasized in the experimental group.

The control group's mean on question fourteen exceeded the experimental patients' mean by 0.11 points. Question fourteen through sixteen indicated the patients' desire for their husbands to be present. The scores on these questions were low in both groups because the patients desired their husbands to be present and this was not possible in twenty out of twenty-two cases. Therefore, it can be seen that having a special nurse did not influence the patients' desire for their husband's presence during labor. More often, patients in the experimental group indicated a desire for their husbands to be

with them in the future. Of the patients in the experimental group, 90 per cent felt that the father would "make labor some" or "a lot better," and 83.3 per cent of the patients in the control group felt the father could affect their labor in this manner.

Another The means of the patients in the two groups differed one-tenth of a point in regard to the desire for future deliveries to be like the one that just occurred. One patient in the experimental group did not answer this question, influencing the mean in the negative direction. The interpretation from this review of the mean scores on each question was that supportive nursing care did seem to influence the patients' response to the questions in a favorable direction most of the time.

A few patient quotes indicated that supportive nursing care was felt valuable by these patients. Some statements from patients in the experimental group are presented; however, at times positive statements were made about nursing care in the control group. Patients appreciated the nursing care they received when it met their needs and indicated their appreciation through comments. Not all of the patients were equally verbal in their comments; however, a few patient comments are encouraging as to how nursing was viewed by the patients.

complete One patient made the following comments:

The nurse helped me to keep from giving up.
 . . . The nurse was just wonderful. . . . She
 was there most of the time and helped me a lot.
 . . . Have a nurse for each one patient if pos-
 sible. . . . She really knows how to help make
 things better and comfortable. . . .

Another patient who had a long labor and was at times
 easily discouraged wrote:

Their [sic] was a nurse with me at all the
 time [sic]. It was very helpful. I really did
 appreciated [sic] it. She made me feel quite a
 bit better.

Another patient stated:

I had a wonderful nurse who stayed with me all
 the time and did everything she could to make me
 comfortable. I never had to ask. She made me
 feel good all the time and built up my encourage-
 ment [sic].

At least, for these patients the nurse could make labor
 better. Such comments emphasized the value that nursing
 had for these patients.

IV. SATISFACTION AND THE COURSE OF LABOR

One of the purposes of this study was to determine
 what effect supportive nursing care would have on the
 course of labor. To evaluate such effects, the patients'
 length of labor, from beginning of regular contractions to

Herbert Thomas, Our Obstetric Heritage: The Story
 of Safe Childbirth (Harden, Conn.: The Shoe String Press,

complete birth of the baby was calculated.²¹ A mean for both groups was obtained. The mean for the control group was 799.83 minutes, or approximately thirteen hours and twenty minutes. The mean for the experimental group was 640.2 minutes, or ten hours and forty minutes. There was a difference in the mean length of labor for the two groups of two hours and forty minutes.²² When the standard deviations were examined, it was found that the control group varied more widely than the experimental group. Although this difference is not statistically significant as measured by the t-test, there was some indication that something influenced the experimental group to be more alike. It would be expected that patients having a first baby would vary widely in length of labor due to individual differences and the patient's ability to remember when regular contractions began or at times to know when they were in labor. From the review of the literature, it was found that the difference in the mean length of labor when patients were prepared extensively in one of the psychophysical methods was at most three hours and forty-two minutes.²³ One study that indicated more of a

²¹See Table XV, page 113.

²²Ibid.

²³Herbert Thoms, Our Obstetric Heritage: The Story of Safe Childbirth (Hamden, Conn.: The Shoe String Press,

difference in the length of labor when hypnosis was utilized was the only study reviewed that indicated the difference was statistically significant.²⁴ The advocates of a various preparation method, however, were stating that their preparation did effect the course of labor. It seemed important therefore that a difference in length of labor could be obtained when patients were not prepared except by the nurse as they went through labor. Little difference was found in need for forceps delivery in either of the groups. In the control group, 41 per cent of the patients had a spontaneous delivery as compared to 40 per cent in the experimental group. In both groups, 50 per cent of the patients were delivered with forceps. The experimental group had one patient who had "low-mid" forceps and the control group had one patient who had a mid forceps extraction. To determine if the length of labor and satisfaction were related, a correlation was obtained. There was a correlation of 0.057 which did not indicate any significant relationship. To evaluate further if there might be

tingency table, there was no relationship between length

inc., 1960), p. 144; Helen Heardman, A Way to Natural Childbirth (Baltimore: The Williams and Wilkins Company, 1950), p. 85; and Josephine E. Davidson, "On Assessment of the Value of Hypnosis in Pregnancy and Labour," British Medical Journal, II (October 13, 1962), 951-53.

²⁴ Davidson, loc. cit. pp. 228-37.

some relationship when the two groups were compared separately, a contingency table was developed for each group²⁵ and chi square was applied.

In the control group, there was a relationship between length of labor and satisfaction scores at greater than the 0.01 level of confidence when chi square was applied.²⁶ This relationship was not, however, in the expected direction. Seven patients, or 58.3 per cent of the patients, were below the mean in length of labor and below the mean in satisfaction. Of the four patients who were above the mean in satisfaction, three were also above the mean in the length of labor. A possible explanation might be that these patients' labors did not begin with light, or ineffective, contractions, but that the contractions were effective right away and in the staff's rush to do the necessary admission routines, the patient might have been undergoing the most difficult time of her labor, therefore, comfort measures and encouragement might have been lacking to increase patient satisfaction.

When the experimental group was placed in a contingency table, there was no relationship between length of labor and satisfaction. This was due to the fact that

²⁵See Table XVI, page 116.

²⁶Guilford, op. cit., pp. 228-37.

TABLE XVI

LENGTH OF LABOR AND SATISFACTION
CONTINGENCY TABLES FOR CONTROL AND EXPERIMENTAL GROUPS

		<u>Control Group</u>	
		Length of Labor	
		Above 727	Below 727
Satisfaction	Above 63	3	1
	Below 63	1	7
		<u>Experimental Group</u>	
		Length of Labor	
		Above 727	Below 727
Satisfaction	Above 63	3	7
	Below 63	0	0
		Chi Square	
Control		7.043	Significant at greater than the 0.01 level of confidence.
Experimental		0	Not significant.

all of the patients in this group fell above the mean in satisfaction. Therefore, length of labor had no effect on satisfaction. If the patient had a long or short labor, she still remained above the mean in satisfaction. Something other than a short, easy labor influenced satisfaction in this group. Since the only difference between the control and the experimental groups was the type of nursing care, the interpretation was made that nursing care made satisfaction more constant, regardless of the course of labor.

Read as having said:

In looking at satisfaction's influence on the length of labor, it can be seen from Table XVI that 70 per cent of the patients were below the total mean in the length of labor as compared to only one patient in the control group who was both below the mean in length of labor and above the mean in satisfaction. One interpretation could be that supportive nursing care as provided for the patients in the experimental group did have a tendency to decrease the length of labor.

From these comparisons, having one special nurse, possibly, had some influence on the course of labor as there was a difference of two hours and forty minutes in the mean length of labor and the experimental group was a more homogeneous group. The difference was not statistically significant, and therefore further study on a

longitudinal basis with a larger number of patients would be necessary to indicate further the value of supportive nursing care on the course of labor.

V. MEDICATION AND ITS RELATIONSHIP TO SATISFACTION

One of the purposes of the study was to determine if supportive nursing care would influence the amount of medication the patient needed to be made comfortable. Concerning the Natural Childbirth regimen, Thoms quoted Read as having said:

That the attention given the patient during labor is the most important part of the program is attested by the "success" rate in those women who have never attended any classes. Even though a woman has not registered in prenatal clinic and had received neither prenatal care nor instruction, she often undergoes labor and delivery with no medication or a minimum, if the proper support is given to her.²⁷

Reports have shown that there is a possibility of harm to babies due to anoxia and that a combination of analgesia and anesthesia can be harmful to the infant.²⁸ Therefore, the nurse's responsibility is to provide comfort measures

²⁷ Herbert Thoms, Training for Childbirth (New York: McGraw Hill Book Company, Inc., 1950), p. 53.

²⁸ Ruth D. Musser and Joseph G. Bird, Modern Pharmacology and Therapeutics (New York: The Macmillan Company, 1961), p. 279.

that will help the patient relax before there is a necessity of giving medication. In order that the two groups could be compared, a medication score was obtained in relation to the patients' length of labor. Medication was given a score rank according to its analgesic power and another score for the dosage. These were multiplied to obtain a score for that medication. Each medication received was scored and these were added. To the medication score, a score for anesthesia was added. The scores for each drug and anesthetic are as follows:

<u>Medication</u>	<u>Score</u>	<u>Dosage</u>	<u>Score</u>	<u>Dosage</u>	<u>Score</u>
Scopolomine Hydrobromide	5	0.4mg	1	0.6mg.	2
Morphine Sulfate	4	gr. $\frac{1}{6}$	2	gr. $\frac{1}{4}$	3
Meperidine (Demerol)	3	25mg.	1	50mg.	2
Saddle Block		75mg.	3	100mg.	4
Promethiazine (Phenergan)	2	25mg.	1	50mg.	2
Secobarbital (Seconal)	1	100mg.	1	200mg.	2
Levallorphan (Lorfan)	0	$\frac{1}{2}$ mg.	0	1mg.	0

²⁹ Ibid.

³⁰ Ibid., p. 503.

Levallorphan (Lorfan) was given a score of zero since it is an antagonist to the depressive effects of the drugs given for relief of pain.²⁹ Scopolomine Hydrobromide was given the highest scoring since it produces twilight sleep when given with meperidine³⁰ and is used when patients do not want to remember the birth of their baby. When this drug was given, it was scored only once since it would be repeated at the discretion of the doctor to continue the effects.

The anesthetic the patient received was scored as follows:

<u>Type of Anesthetic</u>	<u>Administered</u>	<u>Score</u>
Caudal	when the cervix is dilated 5-8 centimeters	1
Caudal	when the cervix is completely dilated	0.5
Saddle Block	when the fetal head is crowning	0.5
Pudendal	when the fetal head is crowning	0.25
Local Infiltration	when the fetal head is crowning	0.12
No anesthetic		0.0

²⁹Ibid.

³⁰Ibid., p. 503.

When a patient was given an anesthetic and it was ineffective, the anesthetic was not scored. Perhaps there should be a negative scoring since the patient expected to be relieved of pain and was not. It seemed that such a situation would make the experience more difficult for the patient.

The patients' code, length of labor, anesthetic and medication score, and score in relation to length of labor and the baby's Apgar score are shown in Table XVII. The mean medication score for the control group was 22.44 and the mean score for the experimental group was 15.74.

Therefore, the patients in the experimental group took less medication on the average. This was not significant when the t-test was applied. However, not many of these patients had a great deal of medication, and many of them went through labor with only a caudal or a very small amount of medication prior to the caudal. Although statistical significance was thought important, it was felt that if individual patients could take a minimum amount of medication and still remain satisfied, as measured by the patient questionnaire, this was significant for that patient. Many of the patients in the experimental group did deep breathing and were able to relax with contractions to a level that indicated some training on their part.

[continued on next page]

TABLE XVII (continued)

MEDICATION SCORES

Patient Code	Length of Labor in Minutes	Medication Score	Anesthetic and Score	Medication and Anesthetic Ratio	Score X 1000	Baby Apgar 1 min	Baby Apgar 5 min
I	202	9	Caudal-1 Local infiltration-0.12	10.12/202	50	9	10
II	465	27	Caudal-1	28/465	60.3	7	10
III	590	0	Caudal-unsuccessful Spinal-0.5	0.5/590	0.8	9	10
IV	707	2	Pudendal-0.25	2.25/707	3.1	8	10
V	270	11	Spinal-0.5	11.5/270	42.5	8	10
VI	1,177	11	Caudal-1	12/1177	10.2	6	10
VII	651	13	Caudal-0.5	13.5/651	20.7	10	10
VIII	729	6	Pudendal-0.25	6.25/729	8.5	6	7
IX	1,282	20	Caudal-0.5	20.5/1282	15.9	2	5
X	899	15	Caudal-1	16/899	17.7	9	10
XI	2,156	44	Pudendal-0.25	44.25/2156	20.5	9	10
XII	470	9	Local infiltration-0.12	9.12/470	19.4	9	10
A	305	13	Caudal-ineffective	13/305	42.6	10	10
B	590	11	Pudendal-0.25	11.25/590	19	10	10
C	1,221	29	Sadelle-0.5	29.5/1221	24.1	4	10
D	518	0	Caudal-1	1/518	1.9	9	10

[continued on next page]

TABLE XVII (continued)

Patient Code	Length of Labor in Minutes	Medication Score	Anesthetic and Score	Medication and Anesthetic Ratio	Score X 1000	Baby Apgar 1 min	Baby Apgar 5 min
E	720	25	Caudal-ineffective Pudendal-ineffective	25/720	34.7	6	10
F	1,104	9	Caudal-1	10/1104	9	8	10
G	870	16	Caudal-1	16/870	18.3	7	9
H	315	0	Caudal-0.5	0.5/315	1.5	9	10
I	492	0	Caudal-1	1/492	2	9	10
J	231	0	Caudal-1	1/231	4.3	9	9
		Control Group		Experimental Group			
		$S^2 = 349.1216$		$S^2 = 212.9371$			
		$S = 18.68$		$S = 14.59$			
		$\bar{S} = 5.35$		$\bar{S} = 4.62$			

the ex A mean of nineteen was obtained for the medication-anesthetic-length of labor score. This was done so that those above and below the mean in the amount of medication received could be compared with those above or below the mean in satisfaction. When chi square was applied to the scores for the control group, it was found that there was a relationship between medication and satisfaction at a greater than the 0.05 level of confidence. However, the contingency table revealed that of the nine patients below the mean in satisfaction, six were above the mean in the amount of medication received. Receiving more medication, apparently influenced satisfaction, or lack of satisfaction influenced the need for more medication in the control group. and delivery if the proper support is given.

In the experimental group, 70 per cent of the patients were below the mean for the total group in the amount of medication received but remained above the mean in satisfaction. Having more medication did not influence the patients' satisfaction score to the degree that they often liked more information than they received about labor and delivery and all the patients did not attend prenatal classes, it was felt important to see if the nurse could teach the patient about labor and delivery was highly insignificant.

In comparing the two groups, 50 per cent of the patients were below the mean in amount of medication in her labor better as well as take an active part in her the control group, while 70 per cent of the patients in

the experimental group were below the mean in amount of medication. All of the patients who received less medication than the average in the experimental group were above the mean in satisfaction. In comparison, the control group had only one-half of those patients who were below the mean in amount of medication but above the mean in satisfaction. For the control group, this was 25 per cent of the patients above the mean in satisfaction but below the the mean in medication as compared to 70 per cent in the experimental group. about labor and delivery. Patients also in The interpretation from these findings was that patients could take less medication than the average amount taken for a similar group and still be satisfied with labor and delivery if the proper support is given.

VI. PREPARATION FOR LABOR DURING LABOR

Therefore, these patients apparently felt that they could perform as expected. Since these patients indicated they would have often liked more information than they received about labor and delivery and all the patients did not attend by deep breathing, relaxing, or doing adequate pushing, prenatal classes, it was felt important to see if the 60 per cent of the patients in the experimental group nurse could teach the patient about labor and delivery indicated they could help themselves in this manner "very when the patient entered the hospital in labor and much so," while only one patient, or 8.3 per cent, in the instruct her in self-help measures so that she could make her labor better as well as take an active part in her

See Table XVIII, page 127.

labor process. Several questions on the patient questionnaire were examined to determine how patients were able to help themselves and if things were explained.³¹

From these questions, it was found that someone explained exactly what was happening for 70 per cent of the patients in the experimental group and 33.3 per cent of the patients in the control group. Things were never explained to 33.3 per cent of the control group, while none of the patients in the experimental group indicated they were "never" told about labor and delivery. Patients also indicated they thought they performed well or exceptionally well. In the experimental group, 80 per cent indicated they thought they could perform well and 75 per cent of the patients in the control group indicated the same. Only one patient in the entire group, a member of the control group, indicated that she had done poorly. Therefore, these patients apparently felt that they could perform as expected.

When asked if they were able to make things better by deep breathing, relaxing, or doing adequate pushing, 60 per cent of the patients in the experimental group indicated they could help themselves in this manner "very much so," while only one patient, or 8.3 per cent, in the

³¹See Table XVIII, page 127.

TABLE XVIII (continued)

TABLE XVIII

PREPARATION FOR LABOR DURING LABOR

Question	Per cent	
	Control	Experimental
Would you have liked to have been told more about how you could help yourself?		
Did someone explain exactly what was happening, how you were doing, and what you should expect next?	50	70
	25	20
yes, all the time without my asking	33.3	70
most of the time if not busy	16.7	20
once or twice if I asked	8.3	10
no, never	33.3*	0
Did you feel you had accomplished a great task successfully	16.7	20
gotten through the experience in an acceptable manner	58.3	60
not gotten through the experience in an acceptable manner	16.7	10
had done poorly	8.3	0*
Were you able to help yourself make labor and delivery be more comfortable by relaxing, doing deep "tummy breathing" during contractions or doing "good pushing"?		
yes, very much	8.3	60
yes, sometimes	41.7	30
not often	16.7	10
never	33.3	0

[continued on next page]

TABLE XVIII (continued)

Question	Per cent	
	Control	Experimental
Would you have liked to have been told more about how you could have helped yourself?		
no, the nurse told me a little more	50	70
a good bit more	25	20
a whole lot more	16.7	10
	8.3	0

* One patient did not answer the question.

Likewise, the last question in this group indicated whether these patients would have liked to have been told more about how to help themselves. In the control group, 50 per cent were told all they needed, and 50 per cent would have liked some degree of further information. In the experimental group, 70 per cent were told all that was needed, and 20 per cent needed a little more information. One patient, however, indicated that she would have liked a "good bit more" information than she received.

For the most part, these patients, and especially patients in the experimental group, were able to help

control group and 30 per cent in the experimental group indicated they were able to help themselves "sometimes." In the experimental group then, 90 per cent of the patients were able to help themselves "very much" or "sometimes," as compared to 50 per cent in the control group. In the control group 41.7 per cent were "never" able to help themselves, however. No patients in the experimental group were unable to help themselves with these relaxation measures. The interpretation from these calculations was that patients felt they could utilize breathing and relaxation methods to help themselves go through labor, especially if support and encouragement were given them while they were utilizing these techniques.

Likewise, the last question in this group indicated whether these patients would have liked to have been told more about how to help themselves. In the control group, 50 per cent were told all they needed, and 50 per cent outlined. Since there was a significant difference in the would have liked some degree of further information. In patients' degree of satisfaction when nursing care was the experimental group, 70 per cent were told all that was provided as outlined, and when nursing care was regularly needed, and 20 per cent needed a little more information. given in a hospital setting, it was felt the plan of care One patient, however, indicated that she would have liked a "good bit more" information than she received.

For the most part, these patients, and especially patients in the experimental group, were able to help

themselves and use techniques thought to require some degree of training by advocates of the various psychophysical preparations. Perhaps the need is for increased effort, explanation, and encouragement on the part of the staff in the labor area. The performance of many of these patients indicated that preparation while the patient was in labor could be accomplished.

As further indication of how the experimental patients could go through labor and delivery, two doctors stated: "If every woman could have a special nurse, they would all do much better. The influence of one nurse remaining with the patient has a positive effect on these mothers."

Another objective apparently not accomplished in its entirety was "to make the mother

VII. THE EFFECTIVENESS OF THE PLAN OF CARE

slightly higher in this respect, but not high. This ques-

All the foregoing analyses were undertaken to evaluate the effectiveness of the type of nursing care. Some patients indicated that they did not want to be the center of attention, or if they were, then this would have patients' degree of satisfaction when nursing care was given in a hospital setting, it was felt the plan of care was effective. Also, since there was a difference in the mean length of labor and the patient's ability to take less medication and remain satisfied with her experience

in labor and delivery, the value of the plan of care was further substantiated.

If all the objectives could have been met in their fullest, every patient would have had a score equal to the total 102 points. Scores, however, did not reach this level. It was felt that a more favorable environment would have to be created to meet fully the objectives outlined. This environment would need to provide team members who contributed toward accomplishing the objectives. For instance, patients were displeased with not being able to have their husbands present, so the atmosphere was not conducive to the accomplishment of the family-centered objective. Another objective apparently not accomplished in its entirety was "to make the mother the central figure." The experimental group's mean was slightly higher in this respect, but not high. This question could have meant something different to the patients. Some patients indicated that they did not want to be the center of attention, or if they were, then this would have worried them. However, to accomplish this objective, differences existed, but these were not significant. Most steps were set out to call the patient by name, talk about the things she was interested in talking about, and other given in the prenatal clinic, especially patients in the aspects of individual attention. An effort was made to experimental group. Since these groups were not significantly different in relation to age, length of clinic follow through with the same effort, it was doubtful if

one person could influence the patient to the degree that she felt like the center of attention. Also, some of the patients' scores were lower than desired concerning the patients' feelings about pain, their performance, and how they felt about labor and delivery in the future. More study and effort needs to be done on what causes the patient to feel satisfied or dissatisfied with her performance in labor as does not relate to the care received. Supportive nursing care was accomplished with the plan as outlined. The plan of care was found to be valuable and effective if it was followed with conscientiousness and determination as well as with an effort to improve the environment and include every member of the labor and delivery team in its implementation. They could use self-help measures very effectively.

VIII. SUMMARY

The plan of supportive nursing care was found to be effective and useful in promoting patient care since such care as implemented increased patient satisfaction. When patients in the control and experimental groups were compared descriptively and statistically, some differences existed, but these were not significant. Most of these patients needed more preparation than they were given in the prenatal clinic, especially patients in the experimental group. Since these groups were not significantly different in relation to age, length of clinic

attendance, desire to become pregnant, and clinic teaching, they were compared for differences in the effects that supportive nursing care had on their satisfaction and their course of labor.

From the analysis, it was found that supportive nursing care had a significant effect on the patients' satisfaction as measured by the questionnaire developed for the study. Supportive nursing care also had a tendency to effect the length of labor in a positive manner and maintained the patients' satisfaction regardless of the length of labor or amount of medication received. Supportive nursing care was also found capable of teaching and guiding patients through labor when they had had little previous preparation for this experience to a degree that a large percentage of these patients indicated they could use self-help measures very effectively.

The plan of supportive nursing care was found to be effective and useful in promoting patient care since such care as implemented increased patient satisfaction. This plan of care and the questionnaire developed to measure the effectiveness of nursing as outlined in this plan were found to be useful in evaluating nursing care.

The literature was reviewed as to the effects that support during labor and various psychophysical preparations had on patient satisfaction and their course of

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

The problem of this study was to investigate the effects that supportive nursing care would have on primiparous patients during labor and delivery.

The purposes of the study were (1) to determine the degree of satisfaction primiparous patients received from supportive nursing care; (2) to determine the effects that supportive nursing care had on the course of labor; (3) to determine if supportive nursing care can provide comfort measures that influence the amount of medication needed by patients during labor and delivery; (4) to determine to what extent nursing care can prepare patients for labor and delivery when the patients have had little previous preparation; (5) to assess the value of a definite plan of care; (6) to determine if the study of the effects of supportive nursing care will be helpful in teaching students and staff nurses.

The literature was reviewed as to the effects that support during labor and various psychophysical preparations had on patient satisfaction and their course of

was tested for reliability and validity. Information concerning labor. The patients' psychological experiences during labor and studies undertaken to determine how patients felt about their labor and delivery experience were also reviewed to elicit some of patients' needs during labor. Literature was also reviewed as to what supportive nursing care was thought to be by authorities in the field. ~~statistically~~ The experimental method was utilized to conduct the study. To measure the effects that supportive nursing care had on patients, twenty-two patients who were married and had attended the prenatal clinic of a state teaching hospital were assigned randomly to a control or an experimental group. Supportive nursing care as outlined was provided for patients in the experimental group, and then twelve patients in the control group received nursing care as provided in the hospital where the study was conducted. ~~the exp~~ The patients in both groups were compared descriptively and statistically to determine if there were significant differences between the groups that might influence the results of the study. No statistically significant differences were found. ~~control group.~~

So that effects of supportive nursing care could be measured, a fixed-alternative questionnaire was developed to obtain patients' feelings of satisfaction with labor and delivery and the care they received. The questionnaire

was tested for reliability and validity. Information concerning the length of labor, amount of medication received, and other information that would indicate changes in the course of labor were obtained from the patients' records. The information obtained was statistically analyzed, and revealed:

1. Patients in the experimental group had statistically significant higher satisfaction scores than did patients in the control group.

2. Nursing care was seen differently by the two groups of patients in many respects, even though nursing care was rated high by patients in both groups.

3. Satisfaction and length of labor were related in the control group but not in the experimental group.

The patients who had shorter labors in the control group were more frequently below the mean in satisfaction. In the experimental group, patients remained above the mean in satisfaction regardless of the length of labor.

4. The experimental group had a mean length of labor that was two hours and forty minutes shorter than the mean length of labor for the control group.

5. The experimental group was a more homogeneous group in relation to length of labor. The experimental group were able to utilize self-help measures to a greater degree than patients in the control group.

6. Patients in the experimental group received less medication on the average than did patients in the control group.

17. Patients' satisfaction in the experimental group was not influenced by the amount of medication received. These patients remained above the mean in satisfaction regardless of the fact that a majority of these patients were below the mean for both groups in the amount of medication received. control group 88 per cent

18. In the control group, patients' satisfaction and amount of medication were related. As the patient was above the mean in amount of medication, she was below the mean in satisfaction.

On the basis of the data obtained in this study,

9. There was no difference in the type of delivery for the two groups.

1. Patient satisfaction with labor and delivery

10. Patients in the experimental group's responses to items on the questionnaire indicated that a majority

2. Supportive nursing care influenced patient satisfaction regardless of the length of labor or the amount of medication received by the patient. extensively prepared prior to labor.

3. There was a difference in the mean length of

11. Patients were able to utilize self-help measures to a significant degree without previous preparation. patients in the experimental group.

12. Patients in the experimental group were able to utilize self-help measures to a greater degree than patients who received regular hospital nursing care were less satisfied with the labor and delivery patients in the control group.

13. The plan of care as outlined was effective in increasing patients' satisfaction with the care they received. Supportive nursing care provided comfort measures.

14. The technique used for investigation was found useful in measuring supportive nursing care and its effects.

15. The mean score on each question of the patient questionnaire for the experimental group was above the mean score for patients in the control group 88 per cent of the time. Satisfaction was decreased for these patients, the amount of medication was increased.

II. CONCLUSIONS

7. Supportive nursing care prepared the patient and guided her through labor and delivery satisfactorily. On the basis of the data obtained in this study, even though the patient had had little previous preparation, the following conclusions were made:

1. Patient satisfaction with labor and delivery was influenced by planned supportive nursing care.

2. Supportive nursing care influenced patient satisfaction when utilized to guide nursing care, regardless of the length of labor or the amount of medication received by the patient.

III. RECOMMENDATIONS

3. There was a difference in the mean length of labor when supportive nursing care was provided for patients in the experimental group.

4. Patients who received regular hospital nursing care were less satisfied with the labor and delivery

experience when their length of labor was below the mean for the total group.

5. Supportive nursing care provided comfort measures that decreased the amount of medication received by the patient in labor without influencing patient satisfaction.

6. As the amount of medication received during labor increased for patients receiving regular nursing care, their satisfaction was decreased, or conversely, as patient satisfaction was decreased for these patients, the amount of medication was increased.

7. Supportive nursing care prepared the patient and guided her through labor and delivery satisfactorily even though the patient had had little previous preparation.

8. The plan of supportive nursing care as outlined was an effective tool to increase patient satisfaction when utilized to guide nursing care.

9. That an increased effort be made to provide comfort measures other than medications for patients during labor.

III. RECOMMENDATIONS

As a result of the findings in this study, the following recommendations are made:

1. That an increased effort be made to provide supportive nursing care to patients during labor.

2. That provisions be made to have one nurse assigned to each patient for complete patient care in so far as possible.

3. That more effort be made to develop a definite plan of care and steps be taken to implement a team approach in carrying out this plan.

4. That the study be replicated with a larger population where more than one nurse provides specialized supportive nursing care for patients in the experimental group.

5. That when the study is replicated, the study population be selected from a different socio-economic level, a different type of hospital, and with multiparous patients as well as primiparous patients.

6. That an increased effort be made to evaluate existing patient care in light of patient needs.

7. That more teaching about labor and self-help techniques be provided for patients during labor.

8. That an increased effort be made to provide comfort measures other than medications for patients during labor.

9. That a study be undertaken to evaluate further the effects of supportive nursing care on the course of labor to determine if this difference is statistically significant.

10. That a study be undertaken that will reveal the relationship between the desire for a baby and satisfaction with labor and delivery.

11. That a study be undertaken that will provide insight into how patients perceive their role in labor, how patients perceive the role of the nurse in labor, and how patients perceive the nurses' expectations of them as patients.

12. That the tools utilized in conduction of the study be utilized in teaching students and staff nurses to improve their care. Such tools provide a guide for nursing care and a technique by which students and nurses can have patients evaluate the care received.

BIBLIOGRAPHY

A. BOOKS

- Bookmiller, Mae M., and George L. Bowen. Textbook of Obstetrics and Obstetric Nursing. Philadelphia: W. B. Saunders Company, 1963.
- Brown, Esther Lucile. Newer Dimensions of Patient Care. New York: Russell Sage Foundation, 1961.
- Buxton, C. Lee. A Study of Psychophysical Methods for Relief of Childbirth Pain. Philadelphia: W. B. Saunders Company, 1962.
- Campbell, William Giles. Form and Style in Thesis Writing. Boston: Houghton Mifflin Company, 1954.
- BIBLIOGRAPHY
- Davis, Edward M., and Reva Rubin. Obstetrics for Nurses. Philadelphia: W. B. Saunders Company, 1962.
- Dennis, Lorraine Bradt. Psychology of Human Behavior for Nurses. Philadelphia: W. B. Saunders Company, 1962.
- Eastman, Nicholson J., and Louis M. Hellman. William's Obstetrics. New York: Appleton-Century-Crofts, Inc., 1961.
- Edwards, Allen L. Statistical Analysis. New York: Rinehart and Company, Inc., 1950.
- _____. Statistical Methods for the Behavioral Sciences. New York: Holt, Rinehart and Winston, 1961.
- Ferguson, George A. Statistical Analysis in Psychology and Education. New York: McGraw-Hill Book Company, Inc., 1959.
- Fitzpatrick, Elsie, and Nicholson J. Eastman. Laborie's Obstetrics for Nurses. Philadelphia: J. B. Lippincott Company, 1960.
- George, Frances L., and Ruth P. Kuchn. Patterns of Patient Care. New York: The Macmillan Company, 1955.

Good, Carter V. Introduction to Educational Research.
New York: Appleton-Century-Crofts, Inc., 1959.

BIBLIOGRAPHY

Guilford, J. P. Fundamental Statistics in Psychology and Education. New York: McGraw-Hill Book Company, Inc., 1956.

A. BOOKS

Hamilton, Max. Methodology of Clinical Research.
Bookmiller, Mae M., and George L. Bowen. Textbook of Obstetrics and Obstetric Nursing. Philadelphia: W. B. Saunders Company, 1963.

Brown, Esther Lucile. Newer Dimensions of Patient Care. New York: Russell Sage Foundation, 1961.

Buxton, C. Lee. A Study of Psychophysical Methods for Relief of Childbirth Pain. Philadelphia: W. B. Saunders Company, 1962.

Campbell, William Giles. Form and Style in Thesis Writing. Boston: Houghton Mifflin Company, 1954.

Davis, Edward M., and Reva Rubin. Obstetrics for Nurses. Philadelphia: W. B. Saunders Company, 1962.

Dennis, Lorraine Bradt. Psychology of Human Behavior for Nurses. Philadelphia: W. B. Saunders Company, 1962.

Eastman, Nicholson J., and Louis M. Hellman. William's Obstetrics. New York: Appleton-Century-Crofts, Inc., 1961.

Edwards, Allen L. Statistical Analysis. New York: Rinehart and Company, Inc., 1958.

_____. Statistical Methods for the Behavioral Sciences. New York: Holt, Rinehart and Winston, 1961.

Ferguson, George A. Statistical Analysis in Psychology and Education. New York: McGraw-Hill Book Company, Inc., 1959.

Fitzpatrick, Elsie, and Nicholson J. Eastman. Zabriskie's Obstetrics for Nurses. Philadelphia: J. B. Lippincott Company, 1960.

George, Frances L., and Ruth P. Kuehn. Patterns of Patient Care. New York: The Macmillan Company, 1955.

- Good, Carter V. Introduction to Educational Research. New York: Appleton-Century-Crofts, Inc., 1959.
- Guilford, J. P. Fundamental Statistics in Psychology and Education. New York: McGraw-Hill Book Company, Inc., 1956.
- Hamilton, Max. Methodology of Clinical Research. Edinburgh: E. and S. Livingstone, Ltd., 1961.
- Heardman, Helen. A Way to Natural Childbirth. Baltimore: The Williams and Wilkins Company, 1950.
- Lesser, Marion S., and Vera R. Keane. Nurse-Patient Relationships in a Hospital Maternity Service. Saint Louis: The C. V. Mosby Company, 1956.
- Levitt, Eugene E. Clinical Research Design and Analysis. Springfield, Ill.: Charles C Thomas, Publisher, 1961.
- Mann, David, Luther E. Woodward, and Nathan Joseph. Educating Expectant Parents. New York: H. Wolff Manufacturing Company, 1961.
- Musser, Ruth D., and Joseph G. Bird. Modern Pharmacology and Therapeutics. New York: The Macmillan Company, 1961.
- Read, Grantly Dick. Childbirth without Fear. New York: Harper and Brothers Publishers, 1944.
- Reynolds, S. R. M., Jerome S. Harris, and Irwin H. Kaiser. Clinical Measurement of Uterine Forces in Pregnancy and Labor. Springfield, Ill.: Charles C Thomas, Publisher, 1954.
- Schultz, Johannes H., and Wolfgang Luthe. Autogenic Training. New York: Grune and Stratton, 1959.
- Selltiz, Claire, Marie Jahoda, Morton Deutsch, and Stuart W. Cook. Research Methods in Social Relations. New York: Holt, Rinehart and Winston, Inc., 1963.
- Sidman, Murray. Tactics of Scientific Research. New York: Basic Books, Inc., Publishers, 1960.
- Smith, Christine Spahn. Maternal-Child Nursing. Philadelphia: W. B. Saunders Company, 1963.

- Snedecor, G. W. Statistical Methods. Ames, Iowa: Iowa State University Press, 1956.
- Thoms, Herbert. Our Obstetric Heritage, The Story of Safe Childbirth. Hamden, Conn.: The Shoe String Press, Inc., 1960.
- Callan, E. D. "Can Hypnosis Be Used Routinely in Obstetrics." Training for Childbirth. New York: McGraw-Hill Book Company, Inc., 1950.
- Wiedenbach, Ernestine. Family-Centered Maternity Nursing. New York: G. P. Putnam's Sons, 1958.
- Wilson, E. Bright. An Introduction to Scientific Research. New York: McGraw-Hill Book Company, Inc., 1952.
- Woodward, Henry L., Bernice Gardner, and Richard D. Bryant. Obstetric Management and Nursing. Philadelphia: F. A. Davis Company, 1959.
- Young, Pauline V. Scientific Social Surveys and Research. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1956.

B. PERIODICALS

- Clark, Elizabeth E. "Training in the Care of Labor Patients," American Journal of Nursing, LVI (August, 1956), 1023-24.
- "All Is Not Well," Briefs, XXV (January, 1961), 15-16.
- Alperin, Shirley Hope. "What They're Saying," Nursing World, CXXXIII (February, 1959), 5-6.
- Athinson, Bernice. "Educating Prospective Parents," Nursing World, CXXXIV (May, 1960), 29-31.
- Bernstein, Irving C. "The Problem of Pain in Labor," Medical Times, XCI (February, 1963), 125-29.
- Bolin, B. J. "An Investigation of the Relationships between Birth-Duration and Childbirth Anxieties," Journal of Mental Science, CV (October, 1959), 1045-52.
- Crafton, Samuel. "Too Busy for Backrubs," McCall's, (October, 1959), 860-82.
- Brazier, Harding. "Physiotherapy in Pregnancy and Labor," Physiotherapy, XLV (August, 1960), 231-32.

- Brecher, Ruth, and Edward Brecher. "How to Get Better Maternity Care," Redbook, July, 1962, p. 49.
- Buxton, C. Lee. "American Obstetrics Needs Nurse-Midwives," Briefs, XXII (November, 1958), 136-41.
- Callon, T. D. "Can Hypnosis Be Used Routinely in Obstetrics?" Rocky Mountain Medical Journal, LVIII (August, 1961), 28-30.
- Caplan, C. "Psychological Aspects of Maternity Care," American Journal of Public Health, XLVII (January, 1957), 25-31.
- Carson, Ruth. "Childbirth, Facts and Fads," Parents Magazine, XXXVIII (May, 1963), 59.
- Chertok, L. "Relaxation and Psychosomatic Methods of Preparation for Childbirth," American Journal of Obstetrics and Gynecology, LXXII (August, 1961), 262-67.
- _____. "Theories of Psychophylaxis in Obstetrics," American Journal of Psychiatry, CXVII (June, 1963), 1152-59.
- Clark, Elizabeth E. "Inservice Training in the Care of Labor Patients," American Journal of Nursing, LVI (August, 1956), 1023-24.
- Corbin, Hazel. "Maternity Nursing Education--Yesterday, Today, and Tomorrow," Nursing Outlook, VII (February, 1959), 82-84.
- _____. "Meeting the Needs of Mothers and Babies," American Journal of Nursing, LVII (January, 1957), 54-56.
- _____. "Natural Childbirth," American Journal of Nursing, XLIX (October, 1949), 660-62.
- Casper, Lewis. "Emotional Stress in Pregnant Women," Nursing Times, LVII (January 20, 1961), 78-80.
- Crafton, Samuel. "Too Busy for Backrubs," McCall's, LXXXVI (September, 1959), 52-53.

- Davidson, H. B. "The Psychosomatic Aspects of Educated Childbirth," New York State Journal of Medicine, LIII (November 1, 1953), 2499-2503.
- Davidson, Josephine E. "An Assessment of the Value of Hypnosis in Pregnancy and Labour," British Medical Journal, II (October 13, 1962), 951-53.
- DeLee, Sol T., and Iva J. Duncan. "Training for Natural Childbirth," American Journal of Nursing, LVI (January, 1956), 48-51.
- Donnelly, James F. "Improving Maternal and Child Health through Statistical Studies," Children, VI (September-October, 1959), 180-84.
- Donovan, Patricia, and Selma Landis. "Some Psychological Observations of 'Educated Childbirth,'" New York State Journal of Medicine, LIII (November 1, 1953), 2504-10.
- Earn, A. A. "Mental Concentration--a New and Effective Psychological Tool for the Abolition of Suffering in Childbirth," American Journal of Obstetrics and Gynecology, LXXXIII (January, 1962), 29-36.
- Edelston, H. "The Psychological Approach in Childbirth," Nursing Mirror, CXVI (April 19, 1963), 53-55.
- "Emotional Support for Women in Labor," Nursing Times, LVIII (January 12, 1962), 52.
- Eysenck, S. B. G. "Personality and Pain Assessment in Childbirth of Married and Unmarried Mothers," Journal of Mental Science, CVII (May, 1961), 417-30.
- Flowers, Charles E. "Patient Participation in Labor and Delivery," Texas Journal of Medicine, LVIII (December, 1962), 988-93.
- Freedman, Lawrence Zelic. "Childbirth While Conscious: Perspectives and Communication," The Journal of Nervous and Mental Diseases, CXXXVI (October, 1963), 372-79.
- Goodrich, Frederick W. "Modern Obstetrics and the Nurse," American Journal of Nursing, LVII (May, 1957), 586-88.
- Kaplan, S. "Some Psychological Factors in Prolonged Labor Due to Inefficient Uterine Action," Comparative Psychiatry, IV (February, 1963), 9-17.

- Gregory, E. M. "How to Help Patients during Emotional Crisis," Nursing World, CXXXII (March, 1958), 8-11.
- Halmon, Barbara Lucas. "An Evaluation of Nursing Care on an Obstetric Service," Nursing Research, IX (Summer, 1960), 125-28.
- Hardy, F. M. "Management of Labour: Nursing Aspects," Nursing Times, LVIII (May 11, 1962), 598-600.
- Hardy, J., and J. C. T. Javert. "Studies on Pain: Measurements of Pain Intensity in Childbirth," Journal of Clinical Investigation, XXVIII (January, 1949), 153-62.
- Harpine, Frances. "Concepts in Maternal and Child Health," American Journal of Nursing, LXI (December, 1961), 84-87.
- Hellman, Louis M., and Robert A. Hingson. "The Effect of Various Methods of Obstetric Pain Relief on Infant Mortality," New York Journal of Medicine, LIII (December 1, 1953), 2767-71.
- Hirsh, Leon. "Sensible Childbirth," American Academy of General Practice, February, 1953, pp. 61-64.
- "Honored Guests," Nursing Times, LVII (April 7, 1961), 419.
- "Human Relations in Obstetrics," Nursing Times, LVII (April 7, 1961), 421.
- "Human Relations in Obstetrics," Nursing Times, LVIII (March 23, 1962), 373-75.
- Iorio, Josephine. "Effective Support during Labor and Delivery," RN, XXV (February, 1962), 70-74, 88.
- Jacobson, Edmund. "Relaxation Methods in Labor," American Journal of Obstetrics and Gynecology, LXVII (May, 1954), 1035-48.
- Jonathan, Sister. "Natural Childbirth," Hospital Progress, XLIII (May, 1962), 78, 146-47.
- Kapp, Frederic. "Some Psychological Factors in Prolonged Labor Due to Inefficient Uterine Action," Comparative Psychiatry, IV (February, 1963), 9-17.

Kastell, Brenda. "The Facilitation of Labour by Abdominal Decompression," Physiotherapy, XLVII (June 10, 1961), 161-62.

Keane, Vera R. "Maternity Care--From the Parent's Viewpoint," Briefs, XXII (April, 1958), 56-59.

Kimmel, M. Leonard. "Providing Complete Maternity Care," Nursing World, CXXXII (February, 1958), 22-25.

LeFever, John. "View from the Side of the Table," American Journal of Nursing, LXIII (June, 1963), 67-69.

"The Lonely Mother," Briefs, XXII (January, 1958), 14-15.

Madden, Margaret M. "The Storks Fly On," Canadian Nurse, LVII (August, 1961), 762-63.

Martin, Purvis L., and Steward H. Smith. "Public Relations in Our Maternity Wards," American Journal of Obstetrics and Gynecology, LXXXI (June, 1961), 1079-85.

"Maternal-Child Work Conference--Part II," Briefs, LXI (March, 1961), 88.

Matthews, A. E. B. "Behavior Patterns in Labour," Journal of Obstetrics and Gynecology of the British Commonwealth, LXVIII (October, 1961), 862-74.

Merrill, Pollock. "Childbirth Was Never Safer," Today's Health, XXXIV (October, 1956), 24-28.

Miller, H. Lloyd, Francis E. Flannesy, and Dorothy Bell. "Education for Childbirth in Private Practice," American Journal of Obstetrics and Gynecology, LXIII (April, 1952), 792-99.

Mitchison, Lois. "As the Patient Sees It: My Confinement," Medical World, XCIV (April, 1961), 353-58.

Montagu, Ashley. "Adaptive Value of Labor Pains," Journal of American Medical Association, CLXXIX (March, 1962), 887.

Morris, Norman. "Human Relations in Obstetrical Practice," Lancet, I (April, 1960), 913-15.

- "More about Psychological Anesthesia," Briefs, XXI (November, 1957), 132-35. Analgesia, Nursing World, CXXII (December, 1958), 27-30.
- "Mother's Charter," American Journal of Nursing, LXI (December, 1961), 86. London. Abdominal Decompression in Labour, Lancet, I (May, 1960), 1181-83.
- Mukherjee, Sambhu, and Suddhendu Biswas. "Duration of Labor and Its Relationship to Maternal Age and Parity--A Statistical Approach," Journal of the Indian Medical Association, XXXIII (September 1, 1959), 173-78.
- Shainess, Natalie. "The Psychologic Experience of Labor," October 15.
- Murphy, Patricia. "Expectant Mothers Organize for Natural Childbirth," American Journal of Nursing, LVI (October, 1956), 1298-1300.
- Smith, Christine S. "Nurses' Task," Nursing Outlook, VI (October, 1955), 11-13.
- Offen, Allen. "What Is Complete Obstetric Care," Nursing World, CXXIX (May, 1955), 11-13.
- Offen, Allen. "We Asked the Patients," Nursing Outlook, "The Greatest Adventure in a Woman's Life," Today's Health, XXXIX (September, 1961), 38-39.
- Spiegel, Herbert. "Current Perspectives on Hypnosis in Childbirth," Nursing Outlook, "Experiences in Childbirth: A Painful Ordeal," American Journal of Nursing, LI (January, 1951), 27.
- Owen, R.
- Pomeroy, Constance. "My Work Is a Labor of Love," RN, XXIV (October, 1961), 80-84. Love-You, Medical Times, XCI (November, 1963), 1065-68.
- Read, Grantly Dick. "An Outline of the Conduct of Physiological Labor," American Journal of Obstetrics and Gynecology, LVIII (October, 1947), 702-10. April, CLXVI (February, 1958), 517.
- Reid, Duncan E., and Mandel E. Cohen. "Evaluation of Present Day Trends in Obstetrics," Journal of American Medical Association, CXLII (March, 1950), 615-23. April, 442-47.
- Robin, A. A. "The Psychological Changes of Normal Parturition," Psychiatric Quarterly, XXXVI (January, 1962), 129-50. Journal of American Medical Association, CLVI (September, 1954), 3-5.
- Rosengren, William R. "Some Social Psychological Aspects of Delivery Room Difficulties," Journal of Nervous and Mental Diseases, CXXXII (June, 1961), 515-21.
- Rubin, Reva. "Basic Maternal Behavior," Nursing Outlook, IX (November, 1961), 683-86. Nursing, LXIII (June, 1963), 60-67.
- _____. "Maternity Care in Our Society," Nursing Outlook, XI (July, 1963), 512-21.

- Sarvajic, Joan. "Advances and Trends in Drug Therapy--Obstetric Anesthesia and Analgesia," Nursing World, CXXXII (December, 1958), 27-30.
- Scott, D. B., and J. D. O. Loudon. "Abdominal Decompression in Labour," Lancet, I (May, 1960), 1181-83.
- Senders, Virginia. "After Office Hours--An Academic Psychologist Looks at Natural Childbirth," Obstetrics and Gynecology, XIV (December, 1959), 817-24.
- Shainess, Natalie. "The Psychologic Experience of Labor," New York State Journal of Medicine, CLIII (October 15, 1963), 2923-32.
- Smith, Christine S. "Nurses' Task," Nursing Outlook, VI (October, 1958), 566-67.
- _____. "We Asked the Patients," Nursing Outlook, VI (August, 1958), 458-59.
- Spiegel, Herbert. "Current Perspectives on Hypnosis in Obstetrics," New York State Journal of Medicine, LXIII (October 15, 1963), 2933-41.
- Stewart, Robert H. "Natural Childbirth, Father Participation, Rooming-In, or What-Have-You," Medical Times, XCI (November, 1963), 1065-68.
- Syrowatka, F. A. "Psychological Basis for Natural Childbirth," Journal of American Medical Association, CLXVI (February, 1958), 517.
- Taylor, Ruth G. "Significant Development in Maternal Child Health," Nursing Outlook, VIII (August, 1960), 442-47.
- Thoms, Herbert, and Ernestine Wiedenbach. "Support during Labor," Journal of American Medical Association, CLVI (September, 1954), 3-5.
- "T.V. Introduces Dad to Babies," RN, XXIII (March, 1960), 46-47.
- Ulin, Priscilla Richardson. "The Exhilarating Moment of Birth," American Journal of Nursing, LXIII (June, 1963), 60-67.

"Untouched by Human Hands," Nursing Forum, I (Spring, 1962), 12-20.

Wallace, Helen M. "Progress and Problems in Maternal and Child Health," Nursing Outlook, VI (May, 1958), 278-81.

Wiedenbach, Ernestine. "Toward a More Humanistic Approach," American Journal of Nursing, LVII (May, 1957), 585.

Whitfield, A. P. "How to Relax," Nursing Times, LVIII (May 11, 1962), 603-6.

Yankauer, Alfred, Walter E. Boek, Emma L. Shaffer, and Dorothy Clark. "What Mothers Say about Childbearing and Parents' Classes," Nursing Outlook, VIII (October, 1960), 563-65.

C. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS

LETTER TO THE DIRECTOR OF NURSING IN OBTAINING
Maternity Center Association. Meeting the Childbearing Needs of Families in a Changing World. Report of a Work Conference. New York: Maternity Center Association, 1962.

Public Affairs Pamphlets. "Mental Health Is a Family Affair." No. 155.

D. UNPUBLISHED MATERIALS

Kline, Mary M. "The Effect of Fathers upon Direct Nursing." Unpublished Master's thesis, The University of Colorado, Denver, Colorado, 1960.

confer with the staff to see if Mr. Old Kearney
will be able to handle the project. Denver, Colorado
April 24, 1964

Dear _____

As a graduate student in nursing at the University of Colorado, I am requesting permission to pursue a project at _____ hospital as part of the requirements for the Master of Science Degree in Nursing.

My Master's thesis is concerned with attempting to measure the effects of a certain type of "supportive nursing care" on the patient during labor and delivery. To carry out this project, the plans are as follows: to have an experimental and a control group of primiparous patients selected from the clinic; to give "supportive nursing care" as outlined to approximately half of the patients in the study population; and to measure the effects through a questionnaire to patients and examination of patients' charts for length of labor and amount of medication given.

APPENDIX A

LETTER TO THE DIRECTOR OF NURSING IN OBTAINING 27,
1964, or Saturday, May 2, 1964, and to continue caring
for selected PERMISSION TO CONDUCT THE STUDY July of
1964. The staff on the Obstetric unit will be requested
to complete a brief questionnaire as to their background
and experience so that a comparison might be made between
the control group nurses and the nurse who will be giving
a specific type of nursing care. Also, it will be neces-
sary for the staff to notify me when a study patient
enters the hospital in labor. Otherwise, patient care
will continue as previously.

Further plans are that complete instructions as to
the staff's responsibility and whom to notify will be
given to all staff members in the Obstetric unit, and a
conference will be held with the Supervisor and the Head
Nurse in this area. Instructions will also be posted on
the Postpartum floor and in the Labor Area, and notice
will be put on the clinic charts that this is a "study
patient" as well as whom to notify.

I would appreciate very much being able to utilize
hospital for my project and will be most happy to

cooperate fully with the staff in any way 810 Kearney
will also be happy to supply you with any Denver, Colorado
information you desire or to talk to you in person April 24, 1964
plans.

Dear Thank you very much for your consideration.

As a graduate student in nursing at the University of Colorado, I am requesting permission to pursue a project at hospital as part of the requirements for the Master of Science Degree in Nursing.

(Mrs.) Vivian Littlefield

My Master's thesis is concerned with attempting to measure the effects of a certain type of "supportive nursing care" on the patient during labor and delivery. To carry out this project, the plans are as follows: to have an experimental and a control group of primiparous patients selected from the clinic; to give "supportive nursing care" as outlined to approximately half of the patients in the study population; and to measure the effects through a questionnaire to patients and examination of patients' charts for length of labor and amount of medication given.

I am hoping to begin the study Monday, April 27, 1964, or Saturday, May 2, 1964, and to continue caring for selected patients through June, or possibly July of 1964. The staff on the Obstetric unit will be requested to complete a brief questionnaire as to their background and experience so that a comparison might be made between the control group nurses and the nurse who will be giving a specific type of nursing care. Also, it will be necessary for the staff to notify me when a study patient enters the hospital in labor. Otherwise, patient care will continue as previously.

Further plans are that complete instructions as to the staff's responsibility and whom to notify will be given to all staff members in the Obstetric unit, and a conference will be held with the Supervisor and the Head Nurse in this area. Instructions will also be posted on the Postpartum floor and in the Labor Area, and notice will be put on the clinic charts that this is a "study patient" as well as whom to notify.

I would appreciate very much being able to utilize hospital for my project and will be most happy to

cooperate fully with the staff in any way possible. I will also be happy to supply you with any further information you desire or to talk to you in person about my plans.

Thank you very much for your consideration.

Yours truly,

(Mrs.) Vivian Littlefield

APPENDIX B

PLAN OF CARE

NURSING CARE OF A PATIENT IN LABOR

The purpose of supporting nursing care for the patient in labor shall be to provide an atmosphere of friendliness, interest, understanding, and encouragement coupled with effective comfort producing measures that will enable the mother to put forth her best effort in the birth of her child in so far as she is able. The nursing care will also be carried out in a manner that is need-centered so that an effort will be made to discover the individual patient's needs and steps will be taken to meet these, always considering the patient and what desires, expectations, and interests as well as needs she may have. To meet this goal of supportive-comprehensive nursing care, the following objectives and method of meeting these are outlined.

OBJECTIVES

1. To establish rapport so as to help the mother feel at ease and that she is APPENDIX B
a. introducing self and others
b. conveying an attitude of confidence and reliability through:
 (1) explaining things
 (2) letting the mother know where you will be and how she may reach you, and when you will return
 (3) answering questions--when answers are not known, find the answers for her from someone who does know
c. working smoothly and efficiently
d. anticipating her needs and meeting these promptly by understanding the needs and attitudes of women in labor as labor progresses--always remembering that the patient is an individual and may at times have unique needs. General needs as expressed by patients are:
 (1) to be sustained by another human being
 (2) to have relief from pain
 (3) to be assured of a safe outcome, both for the mother and her baby
 (4) to have attendants accept her personal attitude toward and behavior during labor
 (5) to receive bodily care
e. using thoughtfulness in conversation--thinking about your answers and how these will be taken and interpreted by the patients

NURSING CARE OF A PATIENT IN LABOR

The purpose of supportive nursing care for the patient in labor shall be to provide an atmosphere of friendliness, interest, understanding, and encouragement coupled with effective comfort producing measures that will enable the mother to put forth her best effort in the birth of her child in so far as she is able. The nursing care will also be carried out in a manner that is need-centered so that an effort will be made to discover the individual patient's needs and steps will be taken to meet these, always considering the patient and what desires, expectations, and interests as well as needs she may have. To meet this goal of supportive-comprehensive nursing care, the following objectives and method of meeting these are outlined.

OBJECTIVES

1. To establish rapport so as to help the mother feel at ease and that she is the central figure by:
 - a. introducing self and others
 - b. conveying an attitude of confidence and reliability through:
 - (1) explaining things
 - (2) letting the mother know where you will be and how she may reach you, and when you will return
 - (3) answering questions--when answers are not known, find the answers for her from someone who does know
 - c. working smoothly and efficiently
 - d. anticipating her needs and meeting these promptly by understanding the needs and attitudes of women in labor as labor progresses--always remembering that the patient is an individual and may at times have unique needs. General needs as expressed by patients are:
 - (1) to be sustained by another human being
 - (2) to have relief from pain
 - (3) to be assured of a safe outcome, both for the mother and her baby
 - (4) to have attendants accept her personal attitude toward and behavior during labor
 - (5) to receive bodily care
 - e. using thoughtfulness in conversation--thinking about your answers and how these will be taken and interpreted by the patients

f. being friendly and genuinely interested in the patient as a person. Remember that kindness is essential in all human relationships, especially when one is frightened and lonely. Six attributes to develop in caring for patients in labor:

- (1) peacefulness
- (2) patience
- (3) personal interest
- (4) confidence
- (5) cheerfulness
- (6) concentrated observation

2. To maintain the patient's individuality, dignity, and self-respect by:

- a. calling her by name either her given or surname, depending on the patient's preference
- b. making her the central figure--the star performer so that she feels that when you are with her, you are completely with her and not concerned with anything or anyone else
- c. keeping the conversation centered on her interests--talking about what she wants to talk about--and listening to what she has to say
- d. accepting her unique attitude toward and behavior during labor and delivery and conveying to her that she does not have to put on a front to maintain your interest and respect
- e. providing privacy by adequate draping and as little exposure during examinations and treatments as possible and insisting that others provide the same when they are examining the patient
- f. conveying to the mother that she, herself, can be and is an important part in helping the labor progress as easily as possible so that she feels she can control the situation--remembering that the woman's reproductive experience is of utmost importance to her and so she may react with unusual sensitivity to the things happening around her

3. To help the mother gain confidence in her environment by:

- a. staying with her as much as possible and creating an impression of "presence" when not there by:
 - (1) making physical contact while in the room--handclasp, backrub, etc., and a concentrated interest in this one patient
 - (2) taking the mother into your confidence--explaining where you are going, how you can be reached, when you will be back

- b. keeping her informed of her progress
 - (1) reminding her of the goal soon to come
 - (2) telling her how and what is happening
 - (3) not giving definite answers to the length of the remainder of labor--but as realistic answers as possible
 - c. explaining reasons for treatments, examinations, etc.
 - (1) always centering on the necessity of its function for her and not that we must do this treatment every two hours
 - (2) helping her know what to expect
 - d. attempting to sense needs for informing the husband and conveying messages to the patient from the husband
 - e. explaining routines and rules of the hospital, visiting hours, recognizing these may not at times be what the patient desires--so help her accept these as far as possible
4. To provide comfort and relaxation through nursing measures and/or use of medications when indicated by understanding various needs as they arise from labor and meeting these in so far as possible:
- a. Stage One
 - (1) First Phase--cervix dilates 0-4 cms which lasts 2-16 hours or more
- Characteristics--contractions are mild, which may follow a regular pattern and may be accompanied by:
- abdominal cramps
 - backache
 - rupture of the membranes
 - show
- How the patient feels and what she does:
- alert, sociable, eyes bright, and is eager for conversation
 - skin slightly flushed
 - smiling, excessive energy
 - a sense of anticipation
 - a sense of relief
 - some apprehension
- Nursing activities:
- meet needs for sociable conversation
 - help conserve the patient's energy by helping her relax
 - encourage the patient to be natural, to relax, and to rest as much as possible

- (2) Second Phase--cervix dilates 4-7 cms
Characteristics--contractions are more persistent (40-45 seconds), may be accompanied by pain
How the patient feels and what she does:
 feels apprehensive, a growing seriousness ill-defined doubts and fears, desire for companionship, uncertain if she can cope with contractions
 more withdrawn into herself, no surplus energy
 body becomes more flushed and hot
 mouth becomes drier, pain may be present
Nursing activities:
 increase attempts to make the mother feel at ease
 allay doubts and fears by teaching about labor and delivery
 encouragement
 help with relaxation and abdominal breathing
 to divert her from tightening her body in anticipation of contractions
 recognize this and plan nursing activities with such in mind (patient withdrawn into herself)
 conserve the patient's energy--she would now prefer to be in bed, provide quietness in the room, prevent excessive stimuli such as glaring lights, intrusive noise, and demand-conversations
 frequent bathing with a cool cloth of the patient's face and neck becomes increasingly more important as labor progresses
 cool sips of water--mouthwash, vaseline to dry lips, ice chips
 remind the patient to do deep breathing with rectal examinations
 obtain an order for medications if necessary
 maintain morale so she can cope with what follows
- (3) Third Phase--or transition phase when cervix dilates 7-10 cms
Characteristics--usually lasts through 10-20 contractions; 1 hour in a primipara. Contractions may become stronger, longer (50-60 seconds) and may be accompanied by: amnesia between contractions, cramps in legs, generalized discomfort, hiccoughing, irritable abdomen, marked restlessness,

nausea and possible vomiting, pain, perspiration on the upper lip and forehead, profuse, dark heavy show, pulling or stretching sensation deep in the pelvis, rupture of the membranes, severe low backache, shaking of the legs

How the patient feels and what she does:

increasingly apprehensive
bewildered by intensity of contractions
irritable and unwilling to be touched
frustrated and unable to cope with contractions if left alone
eager to be "put to sleep"
body heat increased
mouth drier
severe low backache
restless, throws body to and fro with contractions
elimination
withdraws from any conversation
minimum energy and all of it used for task at hand
nauseated

Nursing activities:

help the patient relax as much as possible,
explain that this is the most difficult stage and that it does not last too long--
change breathing to slow, deep chest breathing when abdominal breathing is ineffective
explanation of what is happening and that the contractions are at their height, help the patient relax between contractions
plan care so as to bother the mother as little as possible
prevent excessive or ineffective manipulation of the patient
stay with the patient as much as possible--most important in this phase
explain how she is progressing--that this is the most difficult part, and that she is doing well
change linens, sponge with cool cloth, provide cool room
vaseline, mouth wash become even more important
hot or cold, dry or wet applications to sacrum
have patient lie in Sims position to relieve back pressure

- pelvic rocking--if the patient has a tendency to do this
- sacral pressure--figure 8 massage across sacrum and hips between contractions--sacral massage with pressure from palm of hand during contractions--use lubricant to prevent generation of heat
- protect the patient from injury and increase efforts to increase relaxation
- obtain medication when indicated
- encourage frequent voiding before this stage to avoid bladder distention
- prevent excessive or unnecessary conversation
- conserve energy--use gentleness in carrying out examinations
- prevent vomiting by having patient take and hold a deep breath
- b. Stage Two--lasts from 2 to 60 or more minutes and begins with full dilatation of the cervix
- Characteristics--contractions 1-2 minutes apart becoming increasingly expulsive in nature, increased show, expulsive grunt when exhaling, rectal bulging with flattening of perineum, increased amnesia between contractions, gradual appearance of presenting part at vaginal opening
- How the patient feels and what she does:
- increasingly involved in birth
- relief because second stage has begun
- desires to bear down or push
- tremendous satisfaction with each push or, conversely, acute pain with each push
- desire to move bowels
- complete exhaustion after each expulsive contraction
- unable to follow directions readily
- desire to participate fully in total birth process, or to be "put to sleep"
- a splitting sensation due to extreme vaginal stretching as baby is born
- Nursing activities:
- do not expect the patient to concentrate on something beside the birth process
- help the patient push effectively
- encourage the patient and tell her she is doing a good job and tell her about the progress--help her make more effective use of the contractions
- explain why she needs to have a bowel movement
- help the patient rest as completely as possible between contractions

- make specific and simple instructions--repeat as needed
- explanation of the delivery room and what she is seeing
- remind the patient of the goal in view and that it will not be "too long"
- explanation of anesthesia used
- c. Stage Three--from 1-2 minutes or longer
- Characteristics--contractions temporarily cease upon birth of baby; when they resume they are usually painless
- How the patient feels and what she may do:
exhausted, but elated and proud of her achievement
eager to hear and see the baby
a sense of relief
- 6. To delight that abdomen is flat
and ravenously hungry
thirsty
relieve tensions by giving in to emotions
- Nursing activities:
enhance her feelings of achievement by complimenting her and focusing her attention on the baby
- hold baby for the mother to see--and explain what is going on
- get water for her as soon as possible as well as food
- accept her expression of emotions no matter what they may be
- 5. To provide emotional support:
 - a. remember in providing nursing care that the patient's world revolves around the patient and other goings on may seem to her magnified and in reference to herself
 - b. be available and receptive to patient's needs and desires to ask questions
 - c. a simplified explanation as to what to expect and what is going on within her body and how things will progress and what she is to expect as soon after admission as the patient seems ready for such an explanation
 - d. remind the patient of the goal and that it is within reach
 - e. allay fear and anxieties as fully as possible by telling her all is going well, letting her know the baby is all right, and letting her listen to the FHT if she desires
 - f. enhance her self-esteem so that she feels important and cared for and that she is doing what is expected of her

- g. convey a feeling of empathy--feeling with the patient
- h. recognize that as labor progresses there is an increased demand on the mother--point out that this is a part of labor and that this will soon pass
- i. convey emotional support through contact with the patient, hold her hand, etc.
- j. a completely relaxed and accepting atmosphere so she can release her tensions as she desires
- k. in the first stage encourage an optimistic and tranquil frame of mind so that the mother approaches the second stage with her physical and mental resources well in hand
- l. constant encouragement
- 6. To assure the mother of a safe outcome for herself and her child by:
 - a. protecting her from external or self injury
 - (1) quiet movements or guide these when restless or under the influence of medication
 - (2) pad the head of the bed and use side rails if necessary
 - (3) no jewelry that might scratch the patient
 - (4) both side rails up if heavily sedated
 - (5) stay with the patient until she is securely fastened on the delivery table--do not allow pressure on the elbow near the radial nerve, and prevent injury to the legs in stirrups
 - (6) allow the patient out of the bed only with permission of the doctor and then remain with her if she has had sedation or in active labor
 - (7) take other precautions as necessary to prevent injury
 - b. observing the patient for signs of unusual reaction to drugs
 - c. checking the contractions constantly for frequency, duration, and quality, reporting anything unusual
 - d. checking the FHT every hour until the membranes are ruptured; stat, after the rupture of the membranes, during a contraction if possible, and every half hour until the patient is delivered; report any abnormality of rhythm or rate
- 9. To provide techniques that lead to effective performance:
 - e. checking the blood pressure, pulse, and respiration on admission and frequently thereafter

- f. checking the temperature on admission and once each shift, unless ordered otherwise or unless it is elevated when it is to be rechecked as indicated
 - g. allowing the patient nothing by mouth unless a diet or fluids are specifically ordered by the doctor
 - h. reporting signs that indicate progress in labor as:
 - (1) when the patient gets more uncomfortable
 - (2) further dilatation of the cervix
 - (3) when the patient "pushes"
 - (4) when the perineum bulges
 - (5) when fetal head crowns
 - (6) when membranes rupture
7. To make the birth of this baby as much of a family experience as possible:
- a. since the father cannot visit, create a "presence" by relaying messages, keeping him informed of his wife's progress and the wife informed of her husband's whereabouts
 - b. make a point to talk with the father at least once during the course of labor
 - c. listen and encourage the mother to talk about her family if she so desires so that she has some feeling that they are still concerned
 - d. provide opportunities for a visit--outside the labor room--if possible if desired by the patient
8. To prevent infection:
- a. keep the perineum clean, wiping from the front to back, using clean wipes for each stroke
 - b. wash hands frequently
 - c. provide clean gown and sheets often
 - d. prevent patient from touching vulva
 - e. maintain aseptic technique in the delivery room
9. To promote good continuity of care by:
- a. care for the patient by one nurse throughout labor and delivery
 - b. keeping others informed through oral communication and accurate charting
 - c. planning care so that it is most effective
 - d. discussing special nursing needs with doctors and other nurses so as to meet these needs individually
10. To promote techniques that lead to effective performance
- a. slow, deep abdominal breathing after 4 cms dilatation with each contraction

- b. encourage the patient to go completely limp, forget the surroundings, concentrate on breathing
- c. use Fowler's position with pillows as props for arms--support to the entire body and Sims position alternately
- d. deep, slow chest breathing during transition stage or when abdominal breathing becomes difficult
- e. instruct in pushing
 - (1) take deep breath, and blow out, take another and hold it
 - (2) bend knees, spread them apart, and grasp them firmly while bringing them toward the shoulders
 - (3) with the mouth closed, pull back on knees while bearing down or pushing, keeping hips on the bed
 - (4) support the patient's back as she bends forward
 - (5) instruct her to take a second breath if she has a contraction and push again, reminding her to relax her pelvic floor at the same time
 - (6) encourage her to rest completely between contractions
- f. remind the patient to pant if she is not to push

QUESTIONNAIRE

We would appreciate very much your telling us about your experience during labor and the birth of your new baby. Please be frank so that we may better know how to help you and future mothers through this experience. Please do not include any feelings or evaluate any of your care after the delivery of your baby. Check (✓) the answer that best describes the way you feel. Then, if you wish, write in comments about your feelings or suggestions you may have beside each question.

Name _____

1. How long had you come to the clinic before your baby was born?
- () 8 months or more
- () 6 months or more
- () 4 months or more
- () 2 months or more
- Other _____

APPENDIX C

2. Did you want to become pregnant?
- () yes
- () no
- () not so soon
- THE PATIENT QUESTIONNAIRE

3. When you first found out you were going to have a baby, how did you feel?
- () upset
- () disappointed
- () it's all right
- () excited and happy
- Other _____

4. Did the nurse or doctor in the clinic tell you what labor and delivery would be like?
- () yes
- () some things, if I asked a question
- () no
- Other _____

5. Would you have liked to know more about how things would be when you gave birth to your baby?
- () yes, a lot more
- () no
- () yes, a little more
- Other _____

QUESTIONNAIRE

We would appreciate very much your telling us about your experience during labor and the birth of your new baby. Please be frank so that we may better know how to help you and future mothers through this experience. Please do not include any feelings or evaluate any of your care after the delivery of your baby. Check (✓) the answer that best describes the way you feel. Then, if you wish, write in comments about your feelings or suggestions you may have beside each question. Comments:

Name _____

1. How long had you come to the clinic before your baby was born?
 - ☐ 8 months or more
 - ☐ 6 months or more
 - ☐ 4 months or more
 - ☐ 2 months or more
 Other _____
2. Did you want to become pregnant?
 - ☐ yes
 - ☐ no
 - ☐ not so soon
 Other _____
3. When you first found out you were going to have a baby, how did you feel?
 - ☐ upset
 - ☐ disappointed
 - ☐ it's all right
 - ☐ excited and happy
 Other _____
4. Did the nurse or doctor in the clinic tell you what labor and delivery would be like?
 - ☐ yes
 - ☐ some things, if I asked
 - ☐ a question
 - ☐ no
 Other _____
5. Would you have liked to know more about how things would be when you gave birth to your baby?
 - ☐ yes, a lot more
 - ☐ no
 - ☐ yes, a little more
 Other _____

6. From which of the following did you get most of your information about labor and delivery?

- ☐ mother or relatives
☐ nurse in the clinic
☐ doctor
☐ public health nurse
☐ books or magazines or pamphlets

Other _____

7. While you were in labor did you feel like a special person, the center of attention?

- ☐ no, never
☐ every once in a while
☐ yes, most of the time
☒ yes, all of the time

Comments:

8. Do you feel things were done for you because they were helpful and important for you rather than just routines?

- ☐ no, not at all
☐ yes, all the time
☐ every once in a while
☐ most of the time

Comments:

9. Did you feel that you and your baby would come through the birth safely?

- ☐ sometimes I was doubtful
☐ many times I wondered
☐ yes, very much
☐ no, not at all

Comments:

10. As you went through labor, did someone explain exactly what was happening, how you were doing, and what to expect next?

- ☐ once or twice if I asked what was going on
☐ most of the time if they weren't busy
☐ no, never
☐ yes, all of the time, even without my asking

Comments:

16. If you were to have another baby sometime in the future, would you like to have your husband with you whenever possible?

- ☐ very much
☐ never
☐ sometimes, maybe
☐ yes, at times

Comments:

11. Did the nurse make you feel comfortable by rubbing your back, sponging your face, helping you relax, and doing other things that helped your labor go smoother?
() sometimes when she wasn't busy Comments:
() never
() whenever I needed to be made comfortable
() when I asked for something that would make me comfortable Comments:
12. Was labor and delivery like you expected it would be?
() yes, exactly Comments:
() none of it was
() some of it was
() almost
13. Did the nurse tell you things were going well, you were doing a good job, as well as give you other words of encouragement?
() sometimes Comments:
() never
() once
() every time I needed it
14. Would you have liked to have had your husband present during labor?
() some of the time Comments:
() not at all
() once
() all of the time
15. Do you feel that if your husband had been present your labor would have been--
() worse Comments:
() some better
() about the same
() a lot better
16. If you and your husband have another baby sometime in the future, would you like to have your husband with you whenever possible?
() very much Comments:
() never
() sometimes, maybe
() yes, at times

17. How do you feel about your labor and delivery?
☐ completely dissatisfied Comments:
☐ very pleased and satisfied
☐ that things went O.K.
☐ that things could have gone better
18. Were the nurses in the labor and delivery rooms--
☐ indifferent Comments:
☐ accepting
☐ unfriendly
☐ friendly
19. Did you think the nursing care in the labor and delivery area was:
☐ what you expected again, Comments: like the
☐ not quite what you expected
☐ not at all what you had hoped for
☐ much better than you had expected
20. Do you think nursing care was--
☐ fair Comments:
☐ good
☐ excellent
☐ poor
21. Who in the labor and delivery area was most helpful to you?
☐ your doctor Comments:
☐ your nurse
☐ no one
☐ family or husband
22. Do you think nursing care should be improved?
☐ no, not at all Comments:
☐ yes, very much so
☐ a little
☐ yes

23. Which of the following best describes the nurse or nurses who cared for you during labor?

☐ I rarely saw a nurse Comments:

☐ stayed with me as much as possible and made me comfortable

☐ was in and out every once in a while when

☐ she had a treatment to do, or check my baby's heart beat or something like that

28. ☐ came in to talk to me to help make the labor and delivery easier by relaxing, doing deep breathing, or doing "good pushing," etc.?

24. If you become pregnant again, would you like the experience in labor and delivery to be:

☐ as much like this one Comments:

☐ as possible

☐ not in any way like

29. Did this one for someone to stay with you more during

☐ improved somewhat from this one Comments:

☐ improved a great deal from this one

25. When thinking about future deliveries--if you so desire--what do you think of first about the experience?

☐ it will be satisfying Comments:

☐ I will be able to make it through Comments:

☐ it will not be too bad

☐ I dread it a great deal

26. Do you want to have more children at some later date?

☐ no, I don't think so Comments:

☐ yes, maybe Comments:

☐ yes, very much

☐ no, never

☐ only once when the baby was born

☐ never

☐ sometimes if I made a special request

27. Did you feel as a mother that you-- birth of your
☐ had done poorly during the experience Comments:
☐ had gotten through the experience in a fairly acceptable manner
☐ had accomplished a great task successfully most important thing the nurse
33. ☐ had gotten through the delivery that made things go better experience, though not
☐ in an acceptable manner Comments:
 me how things were
28. Were you, yourself, able to help make the labor and delivery be more comfortable by relaxing, doing deep "tummy breathing" during contractions, or doing "good pushing," etc.? doctor equip-
☐ not often the delivery Comments:
☐ never so things went
☐ yes, sometimes
☐ very much so like the enema, shave, listened
29. Did you wish for someone to stay with you more during labor?
☐ yes, often Comments:
 34. ☐ never think that having "one special nurse" to go
☐ no, not often experience would--
☐ yes, sometimes out the Comments:
 same feelings of work
30. Did you feel that your actions and feelings were accepted, no matter what they were during labor and delivery? things a lot
☐ yes Comments:
☐ never
 35. ☐ sometimes labor and delivery is: to your own
☐ yes, very much so people Comments:
 say it is
31. Was your husband and/or family told about how you were doing and about the baby?
☐ yes, everything they wanted and needed to know Comments:
☐ only once when the baby was born
36. ☐ never like to be asleep completely next time you
☐ sometimes if I made a special request Comments:
☐ no, not at all
☐ maybe the experience of birth
☐ I don't know

32. Were you afraid during labor or the birth of your baby? *things you wanted or needed?*

- ☐ no, never Comments:
☐ yes, all the time
☐ some of the time
☐ most of the time

33. What do you feel is the most important thing the nurse did for you during labor and delivery that made things go better for you?

- ☐ stayed with me and told Comments:
☐ me how things were going

39. ☐ told the doctor how I was doing *thought it* Comments:

- ☐ handed the doctor equipment in the delivery room so things went smoother

- ☐ did "things" like the enema, shave, listened to the baby's heart,

40. *Would have liked for the nurse to have told you more about how you could have helped yourself during*

34. Do you think that having "one special nurse" to go through the entire experience would--:

- ☐ make things about the same Comments:
☐ same whole lot more

- ☐ make things much worse
☐ make things some better
☐ make things a lot better
☐ better he did

35. Do you think labor and delivery is: *th to your new*

- ☐ about as bad as people say it is Comments:

- ☐ a lot better than people say it is

- ☐ worse than people say it is

Please ☐ a little better than *that you feel might be helpful in people say it is* *are you received--*

36. Would you like to be asleep completely next time you have a baby?

- ☐ yes, very much so Comments: *ad your time.*

- ☐ no, not at all *frank answers will benefit future*

- ☐ maybe the experience of birth.

- ☐ I don't know

37. Did you feel that the nurses were often "too busy" to do the things you wanted or needed?

- ☐ not often
☐ sometimes
☐ often
☐ never
- Comments:

38. Did you feel the nurses were warm and understanding?

- ☐ not very
☐ no, not at all
☐ yes, at times
☐ very much so
- Comments:

39. Was labor painful?

- ☐ about how I thought it would be
☐ very much so and more than I expected
☐ not at all
☐ not too much or more than I could stand
- Comments:

40. Would you have liked for the nurse to have told you more about how you could have helped yourself during labor?

- ☐ no, because she told me how to help myself
☐ yes, a whole lot more
☐ a little more than she did
☐ yes, a good bit more than she did
- Comments:

What did you like most about giving birth to your new baby?

What did you dislike most about giving birth to your new baby?

Please add any other comments that you feel might be helpful in improving the care you received--

Thank you very much for your cooperation and your time. It is felt that your frank answers will benefit future mothers in the experience of birth.

Dear Staff Member: As a graduate student in Maternal-Child Nursing at the University of Colorado, I am interested in pursuing a project on your ward. I would greatly appreciate your help and cooperation.

I am hoping to measure the effects that a certain type of supportive nursing care has on patients during labor and delivery. For this study, I have selected a number of primiparous patients from the clinic and am planning to care for a number of these patients throughout their experience in labor and delivery. Then to examine the effects, I will give the patients a questionnaire and then evaluate their charts for other details. I will begin this project Monday, April 27, 1964, and carry it out through June or July of 1964.

To be able to complete this project for my thesis, I have two requests to make of you as staff members:

APPENDIX D

1. Fill in the attached questionnaire and seal it in the attached envelope and return it to your supervisor. **QUESTIONNAIRE AND LETTER TO NURSES** describe the nursing population in my study. Your name will not be used in reporting the study. If you object, you do not have to include your name on the questionnaire.

2. When you are working in the delivery room, contact me immediately when any of the study patients enter the hospital. I will come to care for as many as is possible, but due to classes and responsibilities at home, I will not be able to come every time you contact me. However, I will still appreciate your calling me so that at some later date I may come to see the patient. The following are instructions as to how you can contact me:

Most of the primiparous patients, who are clinic patients, are included in the study, so if you are in doubt about whether to contact me or not, please feel free to go ahead and call me. A complete list of patients will be posted on the labor room bulletin board as well as on the Postpartum floor and all patients will have a notice in their clinic charts if they are to be included in the study.

Dear Staff Member:

As a graduate student in Maternal-Child Nursing at the University of Colorado, I am interested in pursuing a project on your ward. I would greatly appreciate your help and cooperation.

I am hoping to measure the effects that a certain type of supportive nursing care has on patients during labor and delivery. For this study, I have selected a number of primiparous patients from the clinic and am planning to care for a number of these patients throughout their experience in labor and delivery. Then to examine the effects, I will give the patients a questionnaire and then evaluate their charts for other details. I will begin this project Monday, April 27, 1964, and carry it out through June or July of 1964.

To be able to complete this project for my thesis, I have two requests to make of you as staff members:

1. Fill in the attached questionnaire and seal it in the attached envelope and return it to your supervisor's office. This is so I may describe the nursing population in my study. Your name will not be used in reporting the study. If you object, you do not have to include your name on the questionnaire.
2. When you are working in the delivery room, contact me immediately when any of the study patients enter the hospital. I will come to care for as many as is possible, but due to classes and responsibilities at home, I will not be able to come every time you contact me. However, I will still appreciate your calling me so that at some later date I may come to see the patient. The following are instructions as to how you can contact me:

Most of the primiparous patients, who are clinic patients, are included in the study, so if you are in doubt about whether to contact me or not, please feel free to go ahead and call me. A complete list of patients will be posted on the labor room bulletin board as well as on the Postpartum floor and all patients will have a notice in their clinic charts if they are to be included in the study.

Thank you very much for your help. Without your cooperation, I could not do this study. I realize that when you work in the delivery room that you have many responsibilities when admitting a patient--so if you are unable to reach me within the first few minutes after the patient is admitted, it is not necessary to continue trying. I will be on the ward frequently seeking such information and will be most willing to answer any questions you may have.

THANK YOU AGAIN,
VIVIAN LITTLEFIELD

Do you anticipate obtaining other preparation? _____

In what area or areas of obstetrics do you work? _____

Rank in order of preference the area in obstetrics where you prefer to work:

AREA	RANK
Antepartal clinic	_____
Labor area	_____
Delivery area	_____
Nursery	_____
Postpartum floor	_____
Rooming-in	_____
In charge of floor	_____
Other _____	_____

Number of years of experience _____

AMOUNT OF EXPERIENCE IN OBSTETRICS _____

In what area of obstetrics have you spent the most time? _____

If you had a choice would you prefer to work in some other clinical area? _____ What area would this be? Medical-Surgical, Pediatrics, Operating Room, Psychiatry, Public Health, School Nursing, etc.?

What do you feel the nurse's most important role is in the labor and delivery area? _____

Thank you very much for your cooperation.

QUESTIONNAIRE

NAME _____

AGE _____

MARITAL STATUS _____

POSITION _____

EDUCATIONAL BACKGROUND _____

Do you anticipate obtaining other preparation? _____

In what area or areas of obstetrics do you work? _____

Rank in order of preference the area in obstetrics where
you prefer to work:

AREA	RANK
Antepartal clinic	_____
Labor area	_____
Delivery area	_____
Nursery	_____
Postpartum floor	_____
Rooming-in	_____
In charge of floor	_____
Other _____	_____

Number of years of experience _____

AMOUNT OF EXPERIENCE IN OBSTETRICS _____

In what area of obstetrics have you spent the most time? _____

If you had a choice would you prefer to work in some other
clinical area? _____ What area would this be? Medical-
Surgical, Pediatrics, Operating Room, Psychiatry, Public
Health, School Nursing, etc.?

What do you feel the nurse's most important role is in the
labor and delivery area?

Thank you very much for your cooperation.

TO EVALUATE CHART

NAME	_____		
AGE	_____		
RACE	_____		
RELIGION	_____		
HUSBAND'S OCCUPATION	_____		
GROUP	_____		
ANTEPARTAL COURSE	_____		
DELIVERY DATE	_____		
LENGTH OF LABOR	HRS.	MINUTES	SEX OF INFANT
DESCRIPTION OF LABOR	_____		
TYPE OF DELIVERY	_____		
TYPE OF ANESTHETIC IN DELIVERY ROOM	_____		
ESTIMATION OF PAIN RELIEF FROM MED.	_____		
MEDICATION RECEIVED FOR PAIN	_____		

OTHER COMMENTS	_____		

(from regular cont. to
time of birth)

(normal, difficult)

(forceps, version,
spontaneous, etc.)

(pudendal, paraceneical,
spinal, etc.)

(does she ask for medica-
tion right after given,
cry out, etc.)

(type and dosage and
intervals)

STATISTICAL TESTS UTILIZED IN ANALYSIS OF THE DATA

1. The formula for calculation of the mean:*

$$\bar{X} = \frac{\sum X}{N}$$

2. The formula for variance:*

$$s^2 = \frac{\sum x^2}{N-1}$$

3. The formula used for standard deviation:*

$$s = \sqrt{\frac{\sum x^2}{N-1}}$$

4. The formula for the APPENDIX F of the standard error of the mean:*

STATISTICAL FORMULAS USED FOR THE ANALYSIS

\sqrt{N}

5. The formula utilized for calculation of t :**

$$t = \frac{M_1 - M_2}{\sqrt{(s\bar{X}_1)^2 + (s\bar{X}_2)^2}}$$

6. The formula for calculation of the Pearson product-moment correlation:*

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

* J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Company, Inc., 1956), pp. 54, 86, 88, 162, and 140.

** Adapted from G. W. Snedecor, Statistical Methods (Ames, Iowa: Iowa State University Press, 1956), p. 85.

7. STATISTICAL TESTS UTILIZED IN ANALYSIS OF THE DATA

tingency table:*

1. The formula for calculation of the mean:*

$$M = \frac{\sum X}{N}$$

2. The formula for variance:*

$$S^2 = \frac{\sum x^2}{N-1}$$

3. The formula used for standard deviation:*

$$S = \sqrt{\frac{\sum x^2}{N-1}}$$

4. The formula for the calculation of the standard error of the mean:*

$$S\bar{X} = \frac{S}{\sqrt{N}}$$

5. The formula utilized for calculation of t:**

$$\underline{t} = \frac{M_1 - M_2}{\sqrt{(S\bar{X}_1)^2 + (S\bar{X}_2)^2}}$$

6. The formula for calculation of the Pearson product-moment correlation:*

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

* J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Company, Inc., 1956), pp. 54, 88, 88, 162, and 140.

** Adapted from G. W. Snedecor, Statistical Methods (Ames, Iowa: Iowa State University Press, 1956), p. 85.

7. The formula for calculation of chi square from a contingency table:*

$$\chi^2 = \frac{N(ad - bc)^2}{(a+b)(a+c)(b+d)(c+d)}$$

* Guilford, op. cit., p. 236.