CHAPTER 3

METHODOLOGY

This chapter describes the methodology used for this study. It consists of a description of grounded theory perspective, including background and philosophical underpinnings and the major features of grounded theory methodology. The second subdivision presents the methods and procedures of the study, including informants and setting, the researcher as research instrument, data collection procedures, data analysis procedures, and ensuring rigor.

Grounded Theory Perspective

In this study, a grounded theory research design was employed to generate a descriptive theoretical framework of parent participation in the care of hospitalized young children in the Thai culture. The grounded theory method (Strauss & Corbin, 1990) was selected as the research approach for this study because of its focus on exploring the meanings attached to the phenomenon from the participants' point of view (Glaser, 1992; Glaser & Strauss, 1967). Moreover, grounded theory is a theory formulated from empirical data (Glaser & Strauss, 1967). In studies utilizing the grounded theory method, the grounded theory formulated is called a theory or a model. The result of this study is a model based on an inductive analysis of empirical data. This methodology allows a theoretical framework to be generated based on realistic data. The framework and the resultant themes that emerge provide a valuable

insight into participants' views on parent participation in the care of hospitalized young children.

Background and Philosophical Underpinning

Grounded theory was developed in the 1960s by two sociologists: Anselm Strauss and Barney Glaser. They developed both a new philosophical approach and a method to identify basic social processes within the context in which these processes occurred (Morse & Field, 1996). Grounded theory is a comparative research methodology for systematically generating theory from qualitative data (Glaser & Strauss, 1967; Strauss, 1987). Importantly, the major distinguishing factor between grounded theory and other qualitative research methods is its emphasis on theory development, either substantive or formal (Strauss & Corbin, 1994). The aims of grounded theory are: (a) to generate explanatory models of human social processes that are grounded in the data; (b) to elaborate on and modify existing theories (Morse & Field, 1996; Strauss & Corbin, 1990).

Grounded theory is derived from a theoretical perspective of symbolic interaction tradition of social psychology and sociology (Chenitz & Swanson, 1986; Glaser & Strauss, 1967). Symbolic interactionism is a theory about human behavior (Blumer, 1969). It is an approach to the study of human conduct and human group life. Symbolic interactionism focuses on the inner or experiential aspects of human behavior, or how people define events and reality and how they act along with their beliefs (Chenitz & Swanson, 1986). Blumer (1969) cited three basic premises of symbolic interactionism. The first premise is that "human beings act toward things on the basis of the meanings that the things have for them" (p. 2). These things may

include objects, other human beings, institutions, ideas, beliefs, activities of others, and situations, or any combination of these. The second premise describes that "the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows" (p. 2). The third premise is that "these meanings are handled in, and modified through an interpretative process used by the person in dealing with the things he encounters" (p. 2). Therefore, meaning guides behavior and a stage of deliberation or definition of the situation precedes action. The reality or meaning of the situation is created by people and guides the action and the outcomes of action (Chenitz & Swanson, 1986).

Holloway and Wheeler (1996) described the relationship between symbolic interaction and grounded theory study as a process in which researchers must enter the world of interactive human beings in order to understand the processes of their interaction with others from the perspective of participants rather than from that of the researchers. Grounded theory is used to investigate participants' interactions, behaviors, and experiences. Their perceptions and thoughts are also investigated. Thus, symbolic interactionism not only provides philosophical foundations but also guides the research questions, interview questions, data collection strategies, and methods of data analysis (Hutchinson, 1993).

The Major Features of Grounded Theory Methodology

A grounded theory is inductively derived from the study of social and psychological phenomena in which the goal is to develop a theory, generated from a systematic research process, that explains basic patterns of common interaction in particular contexts (Chenitz & Swanson, 1986; Strauss, 1987). It has methodological

features different from other qualitative research methods. First, the phenomena of interest are actions or processes. The main purposes of using this methodology are to generate either substantive or formal theories describing either basic social psychological processes or basic social structural processes regarding the phenomenon under study. Additionally, the inductive method is used to discover concepts and theories. In this way, instead of attempting to verify a previously hypothesized theory, the theory is generated from and grounded in the data itself. Second, the methodological features of grounded theory include theoretical sampling, constant comparative method, and the use of a coding paradigm to assure conceptual development and density. The constant comparative method is an important feature of grounded theory to develop concepts and theories. This method is applied at three levels of analysis (open, axial, and selective coding). Moreover, memo-writing and the researchers' interpretation of data through theoretical sensitivity are also used to develop concepts and theories. Finally, field research and interviews are the usual methods for gathering data. There are a variety of sources of data, including interviews, observation, focus groups, and other documents such as letters, newspapers, literature, and the researcher's experiences. The data sources and priorities in data collection are directed and integrated by the emerging theories. This specific technique is called theoretical sampling. Field notes are also written while researchers collect the data. Data collection will continue until the point of saturation (Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1990).

According to family studies, the contributions of symbolic interactionism to family research are the great stresses on families as social groups, the development of self and group definitions, and shared meanings through social interactions (LaRossa

& Reitzes, 1993). Using a symbolic interactionist perspective, the grounded theory method offers a way to study human behavior and interaction. Thus, using the grounded theory method and adopting symbolic interactionism are considered to be appropriate for this study as they can explore the participation experiences of Thai parents in the care of hospitalized young children. Moreover, these approaches focus on the process of a specific experience, subjectivity, and an analysis of data related to society and experiences of Thai parents participating in the care of hospitalized young children. Therefore, they provide a possible way to develop more insight into the participation experiences of Thai parents in the care of hospitalized young children.

Methods and Procedures of the Study

The research methods and procedures employed in this study are mainly based on Strauss and Corbin (1990) grounded theory methodology.

Informants and Setting

A purposive sampling of Thai parents providing care for their children, five years old or younger, during the period of hospitalization was obtained in a general pediatric unit of Chon Buri Hospital, Chon Buri Province, Thailand. All participants were volunteers. Inclusion criteria for informants were: (a) fathers or mothers who were mostly present and provided care for their children aged five or younger hospitalized in a general pediatric unit of Chon Buri Hospital, Chon Buri Province, Thailand; (b) ability to discuss and communicate; and (c) willingness and availability to participate in this study.

For the setting, Chon Buri Hospital, Chon Buri Province, Thailand was selected for recruiting the sample because Chon Buri Hospital can provide child care in various diseases and levels. Therefore, the researcher could select parents of hospitalized young children who had various experiences in providing care for their young child during the period of hospitalization. Moreover, Chon Buri Hospital has a policy for allowing parents to accompany their young child into hospital and to participate in their child's care. However, the visiting rules of units only allow mothers to participate 24 hours a day in the care of their child age five or younger.

The Researcher as Research Instrument

In qualitative research, the amount and quality of data, and the depth of analysis are mainly dependent upon the investigator's ability. Thus, the researcher is the key research instrument in this study. The understanding, theoretical knowledge, and insights of the researcher influence the methods of data collection and analysis. It is thus essential that information about my background should be provided for readers. I am a single, forty-one years old, Thai woman. I grew up in the central area of Chon Buri, the province selected for conducting this study. Therefore, I feel familiar with the people, society, environment, and culture. Currently, I am a faculty member in the Maternal and Child Nursing Department, Faculty of Nursing, Burapha University, Chon Buri.

I am interested in conducting this study because when I worked as a nursing instructor in the university, I had experience in supervising nursing students in a variety of pediatric wards, including pediatric ward of Chon Buri Hospital, Chon Buri Province. I noticed that there are evolving and changes over time in pediatric

nursing care. Today parents can accompany their child into the hospital and participate in their child's care 24 hours a day. Nevertheless, no model currently exists for parent participation in the care of hospitalized Thai children, especially young children. This issue inspired me to propose this study in order to develop a model for parent participation in the care of hospitalized Thai children, particularly young children.

For enhancing ability and skills, including interpersonal skill, interview and observational skills, and analytical skills in conducting this study, I have prepared myself by studying and training in qualitative research courses as follows: (a) 3 credits of a qualitative research subject for a doctoral student, Faculty of Nursing, Chiang Mai University; and (b) 3 credits of a qualitative research subject and 1 credit of a grounded theory subject for a visiting scholar, School of Nursing and Dental Hygiene, University of Hawaii at Manoa. Moreover, I had experience in conducting pilot studies by using a qualitative research method and a grounded theory method from the dissertation advisory committee. I also prepared myself by reading previous research studies using grounded theory as a research method and learning from nursing instructors who had experience in using the grounded theory methodology. Therefore, I hope that my personal and professional experiences and my willingness to do the study aided the process of data collection and interpretation. I also believe that the results of this study will be useful resource for improving the health care system, especially encouraging parents to actively participate in their hospitalized young children in order to promote the quality of life in Thai children in the future.

Data Collection Procedures

Data collection was initiated following the approval of the proposal by the dissertation committee, Faculty of Nursing, Chiang Mai University. The selected hospital, Chon Buri Hospital, was contacted and gave its permission for collecting data through the letter from the Dean of Faculty of Nursing, Chiang Mai University to the hospital director. After obtaining the permission letter, the researcher contacted the head nurse and nurses who provide service to Thai children at the pediatric ward of Chon Buri Hospital. The purpose and procedures of the study were explained to parents who provided their child's care, as potential informants in this study.

Recruitment of informants

The researcher approached all of the study informants at the pediatric ward of Chon Buri Hospital. The initial contact with potential informants was made by the researcher after reviewing the child's medical records and talking with nurses about appropriate people to approach. The researcher introduced herself to potential informants as a doctoral student and a nurse instructor but not one of the nurses working in the ward. The study was explained to all potential informants by the researcher. The ethical consideration were also addressed, particularly those of confidentiality, potential risk, and informant's right to withdraw or refuse to participate in this study. Potential informants read a consent form (Appendix E), or for potential informants who were illiterate, the consent form was read to them by the researcher. When the potential informants agreed to participate in this study, they were asked to sign a written consent form and arrange a convenient time for

interviewing. In all, nineteen Thai parents who provided their young children's care in the pediatric ward participated in this study.

Protection of human subjects

The research proposal was submitted for review and approval from the Graduate Committee and Research Ethics Committee, Faculty of Nursing, Chiang Mai University. In addition, it was also approved from the Administrative Committee of Chon Buri Hospital. All potential informants received sufficient information about the purpose of the study, the methods and instruments in collecting data, and the protection of the informants' rights. The informants were assured of privacy and confidentiality of their information. No identifiable information was on transcripts, field notes, memos, or forms. Code numbers were used. All data were stored in the researcher's cabinets in a secure place, accessible only to the researcher and the advisory research committee in this study. The information about informants, the tape transcripts, notes, and computer files were destroyed immediately upon completion of the study. The informants were informed that copies of the transcripts of their reviews were received by the researcher's committee who assisted with the data analysis.

Before interviewing, the researcher made an appointment with the informants at their convenience in a bid to avoid interrupting the care of their hospitalized children. For example, informants were interviewed while ill children were sleeping or taken care of by other relatives, or informants had nursing students and nurses help giving care to their ill children while the interview was conducted so as to lessen parent's concerns. In addition, some ill children woke up and cried for their parents just before the interview was finished, the researcher had to stop the

interview and made a new appointment with the informants. Importantly, all of the potential informants were specifically informed that they could choose not to answer some or all questions and withdraw from the study at anytime without any impact on the benefits or services they and their children received from hospital. Informants were given monetary compensation of 100 baht for each person.

Data collection

Grounded theory is a practical approach enabling a phenomenon to be studied from the respondents' own perspective. In this study, the parents of hospitalized young children were the primary sources for data collection. In-depth interviews were the main method of collecting data from informants. Data from participant observations served as a second source of data. Documents such as medical records were also employed in data collection. The reasons for using multiple data sources (triangulation) was to enhance the rigor of this study. Each of these strategies will be explained in further detail.

In-depth interviews. In-depth interviews were conducted after informants signed the consent forms. The informants were interviewed by the researcher in a private room or a comfortable area of the pediatric ward, as preferred by the informants. The researcher collected data in open-ended and semi-structured interview questions (Appendix B). The interview guide was reviewed for content validity by advisors and experts in pediatric nursing and grounded theory methodology before this study (Appendix D). Prior to interview, the researcher introduced herself. All information about the study was explained to the informants and each informant was asked to fill out a personal information form (Appendix A)

while rapport was being established, and then the researcher began the interview with a general question, "Please tell me what is your opinion of your participation in your child's care during his/her hospitalization?" During the course of the interview, the researcher probed more deeply on specific topics and issues that informants may have initiated. The researcher attentively listened to what the informants said and encouraged the informants to clarify and elaborate the detail of their experiences. In this way, interview questions were modified throughout the study according to the emerging information. The interviews were tape-recorded and conducted in the Thai language.

In this study, the informants were interviewed one to three times. The length of the interviews ranged from 30 to 115 minutes, with an average of 50.3 (S.D. = 20.9), depending on the child's condition and the situation of each interview. Informants were interviewed in the officials' rooms or at the patient's bedsides at the rear of the pediatric ward, depending on the informant's needs and the situation of each interview. During the interview, most of informants showed anxiety about their child's illness. However, none of the informants asked to stop the interview. The nineteen informants consisted of fourteen mothers and five fathers. Seventeen hospitalized young children were represented. After completing each interview, field notes were written by the researcher. With the permission of the informants, all of the interviews were tape-recorded and transcribed verbatim as soon as possible into the Thai language for the purpose of analysis.

The interview of this study was an in-depth interview. However, some weaknesses were found while the interview took place. One problem stemmed from the informants, namely the parents of ill children, who always showed their concerns

and worries that their ill children could wake up and cry or the doctor could come to examine their ill children during the interview. That had an impact on some interviews. For example, some ill children woke up and cried for their parents just before the interview was finished, the researcher had to stop the interview and made a new appointment with the informants. Another impediment to the interview was the case that father were the informants. Due to their masculinity and the non-talkative nature, fathers did not give as much information as mothers even after the researcher established a good relationship with this group of informants and tried to encourage them to clarify and elaborate their experiences in details. This was possibly attributable to the Thai culture under which fathers are normally assigned the duty of family earning rather than raising children. When combined with men's characteristics of being strong and not as talkative as women, the interviews by fathers were not as informative as those by mothers, as a result.

Participant observations. As Jorgensen (1990) states: "participant observation provides direct experiential and observational access to the insiders' world of meaning" (p.15). Participant observation is used as additional means of obtaining information. In addition, an observation is a strategy of validation to increase the credibility of the data collected by the interview and analyzed using qualitative methods (Lincoln & Guba, 1985). Importantly, participant observation must involve both observing the situation and listening to the informants (Holloway & Wheeler, 1996). In this study, participant observations were used in combination with the interviews, while the informants provided their child's care in the hospital, because sometimes the informants could not report accurately about certain behaviors. The researcher observed following the guideline for observation (Appendix C) to

focus on activities of parents in their hospitalized child's care; interactions and relationships between parents and health care providers, especially nurses; and events or incidents related to parent participation in their hospitalized child's care. It was planned that the participant observation would provide additional data and serve as a reliability and validity check as well.

For example, the observation of a mother who provided care for her ill child with intravenous fluid showed that this mother strictly followed the nurses' instructions of giving care for her child. She gave an interview that she was told by the nurse to hold her child's intravenous solution bottle in a high position and have the child place the arm attached to the intravenous catheter down in order to prevent the blood from flowing back into the line. The researcher noticed through the observation that this mother strictly followed the nurse's instruction by holding the intravenous solution bottle in a high position and told her child to place the arm connected to the intravenous catheter down. When the child was taken back to the bed, the saline dripped normally and the backflow of into the line did not occur.

Basically, participant observations were undertaken in the setting before the informants were interviewed. Moreover, the observations and conversations with informants in the setting were also undertaken during and after interviews. Observations were performed at different times during the daytime and the evening. Approximately 8-16 hours were spent on participant observation in each informant, depending on situation related to parent participation in their young child's care and the objectives of observation. Both interviews and observations were recorded on field notes for further analysis.

Reviewing medical records. Documentary data were employed to enhance the credibility of the study. In this study, the child's medical records were reviewed for relevant information which clarified, supported or contradicted the interview data. The researcher reviewed the child's medical records at least two times. First, the aim of review was screening potential informants. Second, the reviewing aim was obtaining additional data from the child's medical records to supplement the data as well as cross-check the data from interviews and observations. For example, a mother gave an interview that the doctor planned to perform lumber puncture for her child tomorrow in order to check if the child had a brain infection. The doctor talked and sought approval from the child's mother before performing lumber puncture, then the researcher examined this patient's chart which showed that the doctor wrote down the plan of lumber puncture tomorrow. In addition, the researcher discussed with the doctor the time and reason of lumber puncture in order to set up a plan of observation of the action/interaction between the informant, ill child, doctor, and nurses while lumber puncture was performed. This was conducted as part of the data collection process by using the participant observation. After reviewing the child's medical records, the information was noted in the personal information form (Appendix A), which consisted of biographic information of informants and history of the child's illness.

Writing field notes. According to Holloway and Wheeler (1996), the researcher wrote field notes from the initial data collection in order to remind himself/herself about events, actions/interactions, and activate the process of thinking. Importantly, there was no note-taking during the interview. Field notes were immediately recorded at the end of each interview and observation in this study. The

researcher wrote field notes from the beginning of data collection through the end of the study. The information contained in the field notes included the situations of interviews, observations, and the setting for reminding the investigator about the events, actions, and interactions of the informants and their child. For example, during an interview, a mother showed her compassion towards her child's illness. She told her experience with tears welling up in her eyes and a slight tremble in her voice. After the interview, the researcher suddenly recorded this informant's behavior on the field notes for the use of further analyzing the data. Therefore, the field notes helped inform the data analysis.

Data Analysis Procedures

Data analysis was done using the procedures of grounded theory method of Strauss and Corbin (1990). In this way, data were analyzed using the constant comparative method in which data collection, analysis, verification, and development of theoretical explanations were conducted concurrently until a core category or basic social process emerged. In addition, theoretical sampling, memos, and diagrams were also used to help in the coding process. In this study, interviewed data were transcribed verbatim in the Thai language, maintaining the subtlety and meaning of the Thai parent's narratives as accurately as possible. The analysis was conducted from the Thai transcripts and only verbatim quotations present in the writing were translated into English by the researcher. For syntactical accuracy, the quotations were checked by an expert English-speaking person. Importantly, data analysis was done by the researcher under supervision of the dissertation advisory committee throughout the process of conducting the research. The period of data collection and

analysis using the constant comparison technique and the coding process took approximately sixteen months**.**

Coding process

The interview and participant observation transcripts were analyzed using the constant comparative method of the grounded theory approach (Strauss & Corbin, 1990). The data were coded and each piece of data was compared so that similarities and differences in phenomena were documented. Two analytic procedures, making comparisons and asking questions, were carried out. By the constant comparative method, the comparison of incidents applicable to each category and the integration of the categories and their properties--identifying how the categories are defined, the conditions that explain why and when they occur, the strategies interactors use and their consequences--made the data more abstract. This method was applied at three levels of analysis (open, axial, and selective coding) and resulted in increased levels of interpretation and abstraction of the analysis (Strauss & Corbin, 1990).

Open coding involved examining the words, phrase, lines, and paragraphs of the transcripts to discover and name the concepts expressed by informants in this study. During this stage, concepts were pointed out and developed in terms of their properties and dimensions. Similar events and incidents were grouped together into codes and categories. Open coding involved the analytic techniques of asking questions and making comparisons that brought out properties and dimensions, and gave ideas for theoretical sampling to discover variation. In this way, the concepts were grouped together under more abstract explanatory terms, that is, different categories. Through open coding, major categories around the phenomenon of parent

participation in their child's care emerged. The concepts and categories that emerged from open coding provided a basis for axial coding. An example of the open coding is as follows:

One mother said, "When my kid wakes up in the morning, I'd wipe down his mouth and clean inside the mouth, clean and powder his body, and put him on clothes. Then, I'd feed him with milk, carry him in my arms, then take a short walk and put him to bed…after he takes a bowel, I'd clean his body, then powder and wear him a diaper." This statement initially fell within the code of "physical care" as a concept and was then grouped into the subcategory of "providing basic care."

Next, axial coding of the categories occurred which was coding beyond the properties and dimensions of concepts, making connections between a category and its subcategories and arranging these categories in a new way. This stage consisted of the use of a coding framework called a "paradigm model" (Strauss & Corbin, 1990), involving the following categories: causal conditions, phenomenon, context, intervening conditions, action/interaction strategies, and consequences. While examining the data, the researcher asked questions about the relationships between the categories, and then went back to the data to verify those relationships (Strauss & Corbin, 1990). In this study, after the researcher conducted ten informants' interviews, the method of axial coding was used for the data analysis. Additionally, the researcher wrote memos and drew a diagram that represented the relationships of all categories during comparing and examining the categories and their relationships. After the categories and their relationships were refined, the categories were collapsed. An example to demonstrate the axial coding: the category of the child's need for parental presence was a causal condition that led the parents desired to being

there (another category) in order to provide their child's care. Parents' being there and providing their child's care resulted in the emergence of the category of the improving child's well-being that related to parents' doing anything for an ill child.

Finally, selective coding was done to enable integration of the categories through verification of the core category and formulation of the grounded theory emerging from the study. The integration of the categories within the core category and relationships to between concepts is made explicit. This step changes the analysis from a simple description of concepts and themes to the development of theory (Strauss & Corbin, 1990). The steps in selective coding include (a) describing the story line, (b) relating subsidiary categories around the core category, (c) relating categories at the dimensions level, (d) validating those relations versus the data, and (e) filling in categories (Strauss & Corbin, 1990). Three categories emerged: carrying on home practice, learning new things, and working together with health care professional in their child's care. By employing the coding paradigm to arrange the categories into a meaningful configuration, those three categories were not sufficiently broad to encompass the main idea of parent participation in the care of hospitalized young children. After asking questions, thinking analytically and constantly referring to the data, the basic social process (BSP) emerged. In this study, through this type of analysis, the core category--*"doing anything for an ill child"* was described as a basic social process. This category was selected as a core category because it gave the richest explanation for the phenomenon of this study. This basic social process explains the process of Thai parents who participate in the care of hospitalized young children.

Theoretical Sampling

Theoretical sampling means sampling on the basis of concepts that have proven theoretical relevance to the evolving theory. Sampling procedures differ depending on types of coding and are closely tied to theoretical sensitivity (Strauss & Corbin, 1990). The researcher decides what further data to collect and where to look for it in order to generate the theory (Glaser & Strauss, 1967). The aim of theoretical sampling in this study was to seek events and incidents related to Thai parents' participation in their hospitalized child's care: what each informant did or did not do (actions); the range of conditions of action/interaction strategies and their variations; how conditions changed or stayed the same over time and their impact on the informants.

As data were collected and coded, theoretical sampling was used as a tool to guide the process of data collection. While the study was conducted, categories emerged and parents whose experiences met each category and its properties were selected to be the informants of the study. In this step, the researcher tried to seek informants who represented the diversity of Thai parents in terms of relationship with children, age, number of children, education, occupation, marital status, and type of family. Given the view that the parents' occupation might affect their participation in their hospitalized child's care, for example, the researcher thus sought to include Thai parents with different occupations in this study in order to obtain more varied data to contrast, compare, and verify them within each category until the category was saturated and its properties emerged. Various types of Thai parents' participation experiences based on different conditions and events were also investigated. Theoretical sampling guided the researcher to collect the data that were relevant for

the emergence of new categories and properties until the point of saturation occurred. Saturation means that the sampling continued until the categories were dense, the relationship between the categories was clear, and no new data emerged.

Memos and diagrams

Strauss and Corbin (1990) define memos as "written records of analysis related to the formulation of theory" (p. 197). Written memos involved the theorizing about coding and the relationship of the coding. They were written during data analysis (Glaser & Strauss, 1967), which began at the first coding sessions and continued throughout the research process until the final writing of this study. To help gathering data, memos were also written and they included methodological memos--that focused on the strategies for data collection, personal memos illuminating the researcher's introspective processes, and theoretical memos. In theoretical memos, the researcher discussed tentative ideas and provisional categories, compared findings, and jotted down the thoughts about the research. According to memoing, the researcher searched for the answers to the questions: What is the basic social process of Thai parents' participation in the care of hospitalized young children? For methodological memos, an example was shown below:

Memo: Interviewing

While the second case was interviewed, the informant, who was the mother, asked the researcher to give an interview at her child's bedside due to her concern over her child who was sleeping. This interview, however, was disturbed by other ill children's cries and nursing procedures the nurses

performed for other child patients, preventing the interview from flowing.
Still, the interview continued to the end, possibly due to the informant's good
cooperation. After this interview, the researcher wrote down on the memo the
problematic issues found from this interview so as to plan for next interviews.
It gave the researcher some useful ideas that if possible, interviewing at the
patient's bedside should be avoided. Interviewing in the officials' room or at
the rear of the ward could produce a good interview.

The diagrams are visual representations of the categories and how to link those categories together. Investigation of a diagram can indicate where theory needs further development. Both memos and diagrams are useful for all stages of the analytic process (Strauss & Corbin, 1990). They were essential documents because they helped to reflect the progress of the thoughts and feelings of the researcher and directions of the study.

Theoretical sensitivity

It is important for the investigator to have the theoretical sensitivity during the data collection and analysis process. According to Strauss and Corbin (1990), theoretical sensitivity refers to "the attribute of having insight, the ability to give meaning to data, the capacity to understand and capability to separate the pertinent from that which isn't" (p. 42). Theoretical sensitivity built up over time, making the researcher aware of the significance of the data from reading and from personal and professional experiences. This process guided the researcher to check the data from all sides rather than to fix on the obvious. The researcher's experiences were inserted

into the data analysis process (see the researcher as research instrument). The preliminary literature review was also done to get a feel for the issues at work in the subject area, and to identify any gaps to be filled in using a grounded theory. The second body of literature was assessed after the basic social process had emerged from the data. Therefore, theoretical sensitivity allowed the researcher to take chances on trying to generate codes that might fit and work in this study.

Ensuring Rigor

Rigor in a qualitative research is required to prevent error of either a constant or intermittent nature. Consequently, the researcher must demonstrate that the study is rigorous by establishing trustworthiness (Sandelowski, 1986). Trustworthiness of the data is the most important part of the naturalistic design. Techniques which establish trustworthiness include credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985).

Credibility of this study was established by using several methods, included triangulation, member checks, and peer debriefing. According to triangulation, the researcher used different data collection modes such as in-depth interview, participant observation and field notes, and reviewing medical records. These methods were used to enhance the congruency of the results. Moreover, the member checks were used to validate the reconstructions with the informants (Lincoln & Guba, 1985). In this study, the informants were given the results and asked to affirm or revise the basic social process. Consequently, these informants agreed that the results and the basic social process were consistent with their experiences. Additionally, peer debriefing was also carried out to enhance the credibility of the data. In this study, the

investigator discussed the data, the coding, and the categories with the dissertation advisory committee and experts on grounded theory research during the process of peer debriefing.

Transferability or fittingness appraises how well information of the research fit into a context other than the original context of the study (Beck, 1993), or information of the study can be adequately provided for the readers to judge how applicable the study is to other groups. In this study, transferability was achieved through thick description. Thick descriptions are composed of word for word transcriptions of the interviews and field notes, and were agreed upon jointly by the peer debriefer. Thick descriptions reflect the participants' answers to interview questions at length (Lincoln & Guba, 1985). These data provide the foundation for themes to emerge from experience of the participants, rather than from the perspective of the researcher. In this study, the findings included adequate "thick description" for readers to reach the potential transferability and appropriateness for their own settings. In addition, member checking and careful consideration in collecting, interpreting, analyzing the data were done in order to ensure the transferability of data in this study.

Dependability in qualitative research is used to substitute criterion for reliability and one of the ways in which a research study may be revealed to be dependable, as opposed to consistent, is for its process to be audited, that is, to have external checks made (Holloway & Wheeler, 1996). Dependability was established by having at least two people analyze the same data to see if the same themes were identified. In this study, each interview was coded by the researcher. The coding and a selected number of the transcripts were reviewed jointly by the researcher and the

dissertation advisory committee to enhance theoretical sensitivity, uncover any researcher biases and clarify the interpretation of the data. Discrepancies in coding were discussed until consensus was achieved. Code definitions were compiled into a codebook to ensure that all coders were using code words in the same way.

Confirmability refers to the findings themselves, not to the subjective or objective stance of the researcher (Sandelowski, 1986). It means that the data are related to their sources, such that the readers can feel confident that the conclusion and interpretations arise directly from the findings themselves (Holloway & Wheeler, 1996). In this study, the researcher enhanced the confirmability by linking quotes to the explanation of the properties and dimensions found within the data. In this way, the results of the study were proposed as emerging from the data itself. Therefore, confirmability was enhanced by the fact that all of the processes and the results of this study were logical. In addition, the evidence of findings and emerging theory are available for another investigator to audit.