CHAPTER III

METHODOLOGY

This chapter presents the methods and procedures used in the study. It is divided into six sections: (a) research design, (b) description of the research setting, (c) data collection methods, (e) procedures, and (f) data analysis. The research questions for this study were: what are the processes of caregiving for a person with schizophrenia (PWS) from the perspective of Thai family caregivers.

Research Design

The purpose of this study was to explore the process of caregiving based on Thai family caregivers for a PWS. The grounded theory methodology was an appropriate approach to use in this study because it allowed discovery of the participants' points of view and the way they processed their situations over time (Glaser, 1992). Generating grounded theory involved creative thinking in the researcher to continuously analyze and synthesize the data until the data integrated into a well fitting theory (Stern, 1986). This choice was based on the researcher's aim to further develop a theoretical understanding of the process of family caregiving for a PWS. Strauss and Corbin (1998) pointed out, it is rooted in the belief that people were actors who play an active role in anticipating problematic situations based on the meanings they perceive in that situation. These meanings are defined and redefined through interaction (Strauss and Corbin, 1998).

Research Setting

The setting for this study was a hospital of one provinces located in Thailand. The population of 844,702 was comprised of 415,356 males and 429,346 females. The majority of the people in this province were Buddhist which consists of 97.9% of the population, with 1.8% Christian, and 0.3% Islamic.

Data collection occurred in the Out Patient Department (OPD) of the selected Hospital. This setting was selected for recruiting the sample because this hospital provided routine schizophrenia care much more than the other hospitals around this area and provided strong counseling for family caregivers in regards to taking care of the PWS. The service hours for the outpatient department were Tuesday through Thursday, 9am to15 pm. There were more than 150 patients visiting the OPD each week.

Study participants

In this study, the criteria for selecting study participants were the family caregivers who were defined as a member of the family living with a PWS for at least six month as well as a PWS who had been diagnosed with schizophrenia (diagnosed by the Diagnostic and Statistical Manual of Mental Disorders (DSM IV) and International Classification of Disease (ICD-10). Both family caregivers and the PWS visited the hospital together for a follow-up meeting at Out Patient Department.

Seventeen caregivers who met the criteria were identified by nurses in the psychiatric field, and referred patients to the researcher at the Out Patient Department (OPD) of the hospital during the period of the follow-up meeting. The researcher had approached all of the study participants personally because the majority of the study participants were likely to have only a primary education. As noted earlier, with the screening assistance by nurses, study participants had been identified and invited to participate in the study. Participants who contacted the researcher were given an appointment to be interviewed. Appointments were made and interviews conducted in a convenient place chosen by the participants.

Human Subject

The research proposal, interview guide, and subject consent form were reviewed and approved by Institutional Human Subjects Board, Chulalongkorn University. In addition, they were approved by a director of the selective hospital (Appendix A). The ethical issues were considered throughout the whole process of this study and thereafter

Before the interviews, each participant was asked to sign a consent form for the study. This form included a statement introducing the purpose of the study, the cost and benefits of study participation, assurances of confidentiality protection, and the right to withdraw from the study at any time (Appendix B). The researcher gave them additional information about the study over the telephone and what their involvement would entail. All family caregivers who were contacted agreed to participate in the study. All participants had been asked their permission to record and transcribe their interviews.

Grounded theory study usually included interviews and observations. This study approached could create ethical issues such as confidentiality and the participants' rights. In order to insure the confidentiality of participants and data, the researcher transcribed all of the audiotapes by herself. Participants consented to tape recording of the interview.

Tapes and transcription, notes, and computer files were stored in a secure file cabinet and were destroyed after completion of the study.

In this study, inform consent from participants was obtained before data collection. All seventeen participants signed a consent form. The participants were informed to feel free to not to discuss any topics that they did not want to discuss. No participant reported any discomfort while being interviewed, nor did any participants withdraw during the interview. There were no costs or payment to them but that the interviewers might require their time. All of participants reported feeling relaxed during and after the interviews.

Data Collection

In-depth semi-structured interviews with each of the seventeen family caregivers were used to collect data. All participants agreed to allow their interview to be audiotaped. Field notes were written for every interview to capture nonverbal communication and used to record the reactions to the interviews and the responses of individual participants, emotional intensity, and other relevant contextual information beyond the interview questions. Interviews were conducted in outpatient department of the selected hospital where the participants were recruited. This provided private space where the participants could speak freely. The duration of interviews started from June to October 2005 and the interviews ranged in length from fifty to ninety minutes. The average length was seventy minutes.

A structured interview protocol was developed for this study. It consisted of closed and opened-ended items. It took about fifty to ninety minutes to administer. The

interview protocol included two sections. The first section obtained demographic data. It was completed before more open-end questions in order to establish rapport with the participant to help them feel more at ease. The second section contained a guide for the semi-structured in-depth interviews. It included questions about major components of caregiving activities, providing routine care, and care management. These questions were developed based upon a review of the literature of family caregiving (Schumacher et al, 2000; Tungpunkom, 2000). In addition, a set of probes concerning the development of family caregiving over time was modified from a qualitative research study by Tungpunkom (2000) and Doornbos (2001).

The important instrument of the qualitative was the researcher. The researcher played a major role in the process of inquiry as a research instrument because the inductive ability came from being able to classify, think, analyze, and interpret data that came from the insight of an individual (Morse and Field, 1996). The researcher studied one semester in grounded theory as an independent study with Professor Phyllis Noerager Stern at School of Nursing, Indiana University. The researcher also attended qualitative class for 2 weeks and took a three-credit course of qualitative research at the Faculty of Nursing, Chulalongkorn University. Those courses helped the researcher to gain knowledge and more understand how to conduct the qualitative study using grounded theory.

Data analysis

Data analysis was the process of systematically searching and arranging interview, transcriptions, field notes, and other artifacts the researcher accumulated to increase their

own understanding and to enable the researcher to present what has been discovered to others (Oumtanee, 2001). In this study, data analysis was done by the researcher with the peer debriefing throughout the process of conducting the research. According to the grounded theory method (Glaser, 1978; Glaser and Strauss, 1967; Strauss and Corbin, 1998), data was analyzed by using the constant comparative method wherein each line, phrase, sentence, and paragraph from the transcribed interviews and field notes were read to decide what concepts the data reflected and to code the data. Each code was compared to all other codes (Stern, 1980). Comparisons for similarities, differences, and general patterns were made. This process also helped the researcher gain insight into interviewing techniques and biases. The constant comparative method of analysis was used until core categories emerged (Strauss and Corbin, 1998). Two analytic procedures, making comparisons and asking questions, were carried out. Memo and diagrams were also created in conjunction with the coding process.

Coding Process

After the interviews were transcribed verbatim by the researcher, they were transcribed for content and checked for accuracy by a peer reviewer who worked in area of metal health and qualitative research. During the data analysis, three types of coding, open coding, axial coding, and selective coding, were used (Strauss and Corbin, 1998). Each type of coding was presented.

Open coding was started as soon as the researcher received the data, which aimed to develop and conceptual labels from the raw data. The process began with the researcher breaking the data down by reading the data line-by-line and paragraph by paragraph, identifying types of specific events, activities, and behaviors. Similar

incidents and phenomena were compared and contrasted with each other and similar phenomena were assigned the same name. In open coding, initial concepts were formed and developed into categories that reflected more abstract concepts. Their properties and dimensions were discovered in the data (Strauss and Corbin, 1990; 1998). The researcher attempted to discover as many categories as possible and compared them with new incidents to uncover characteristics and relationships. During open coding, the researcher wrote memos to keep track of emerging categories, stimulate further coding, which served as a means for integrating theory.

Axial coding involved both inductive and deductive thinking. Axial coding was the process of relating categories to their subcategories to form more precise and complete explanations about phenomena (Strauss and Corbin, 1998). It consists of a set of procedures whereby data was put back together in new ways after open coding by making connections between categories. This was done by means of coding paradigm involving the following categories. The researcher used the constant comparative method to compare and contrast an incident with others and then assign them to clusters or categories according to rules of inclusion. These categories tended to be more abstract than initial codes and were formulated by the researcher.

Selective coding was the process of selecting the core category. The core category was a major category that links all other categories. Steps in selective coding included: explicating the story line; relating easily to other categories more than any other categories around the core category; relating categories at the dimensional level; validating those relations against the data; and filling in categories (Strauss and Corbin, 1990). In this study, a process of caregiving for the PWS was a core category and use to

guide additional data collection. More data were collected to elaborate the properties and relationships among categories and to validate those relationships and hypotheses. Data collection and analysis continued until there were no new data categories from the analysis. According to caregiving for a PWS, a family caregiver would help a PWS in four categories: providing routine care, finding alternative treatments, avoiding psychotic episodes, and preparing for the future. The linkage of these four categories was indicated that a family caregiver used these four categories back and forth in order to promote the well-being of a PWS.

Constant comparative method

This method is a non-mathematical procedure that is designed themes and patterns in qualitative data. It is central to the data analysis in generating grounded theory (Glaser, 1978). Using constant comparative method, all the sample codes generated at each of the three levels of coding were compared repeatedly within and between each other until the basic properties of a category or construct were defined. When incoming data was coded, they were checked for their fit with existing categories. Each incident or data segment was compared to other data segments at the property and dimensional level for similarities and differences. Similar data segments were grouped into the same topic. Similar topics were placed into the same category and similar categories were put into a pattern.

In this study, the data analysis procedure consisted of the following steps (Lincoln and Guba, 1985; Strauss, 1987; Strauss and Corbin, 1998; Oumtanee, 2001). After the first steps in data collection process had been taken, the researcher started data analysis to identify emerging ideas. Interview transcripts, field notes, and memos were typed.

Transcripts were separated into three parts in the same page which included: Thai language, English language, and open coding.

Data were broken into data segments, a sentence, a few lines, or several pages containing an entire event of participants' explanations. Transcripts, field notes, and memos were carefully reviewed to identify data segments. The data were examined line by line in order to break data down into as many segments as possible. Memos were also used in conjunction with coding process, written for further coding, questions, hypotheses, and summary of codes. These memos were continued throughout the data analysis process. Words or phrases relating to data segments were created and written under the notation of data sources. Then data segments were cut apart and each segment was taped into separate A4 papers.

All data segments were linked together and coded into groups of topics with similar traits. The constant comparative method was employed to seek similarity and difference of the data segment. Similar data segments were placed into the same topic name.

Rules for inclusion were created. The rules of inclusion, based on the criterion of "look like", "feels like" were prepositional statements that conveyed the meaning that was contained in the data paper gathered together under a category name (Oumtanee, 2001). Then the preliminary category names were written on a separate sheet, with one column for each data set. The duplicated topics and overlapping meanings were compared and the line drawn to appropriate categories.

The relationships between categories were examined. The peer reviewers helped the researcher in making explicit the rules for inclusion and exclusion for different categories. The rules for inclusion were reviewed and modified. Data papers were often moved from one to another category and some new categories were created at that time.

A pattern from categories was synthesized by using pattern-seeking techniques, such as triangulation (transcripts, field notes, memos, and literature). Each concept, pattern and its relationship to others were analyzed to generate theory.

Credibility

Marshall and Rossman (1995) noted that in qualitative research, it was used the word "trustworthiness" rather than reliability and validity of the research. In general, trustworthiness was bolstered by the amount of time spent in the field and with the data, triangulation of data, alertness to the subjective lenses and subsequent biases that the qualitative researcher bring to the study and mapping what works within the boundaries and limitations of the study (Denzin, 1978; Lincln and Guba, 1985). Lincoln and Guba (1985) proposed four criteria of trustworthiness in qualitative research including credibility, fittingness, auditability, and confirmability. In grounded theory, only credibility of study findings would be mentioned by Glaser and Strauss (1967).

Credibility measures how vivid and faithful the description of the phenomena was. The participants and also the readers, who have had that human experience, should recognize the researchers' described experiences as their own. To increase the credibility of this study, firstly, the researcher selected the appropriate participants, Thai family caregivers for PWS, who had experience taking care of their relatives with various personal histories such as age, gender, status, and duration of care. Secondly, the researcher established relationship with participants by constructing human relations with the participants until they built trust, enhancing the relationship before collecting data. Thirdly, the researcher concluded the findings depend on the empirical data, by collecting adequate data and using data collection methods (in-dept interviews, field note, and memos).

Credibility in this study, using prolong engagement which the researcher spent five months recruiting and interviewing participants. Another technique was triangulation using data and investigator triangulation. In relation to data triangulation, the researcher collected the data in many place, in her house, his work place, and outpatient department. For investigator triangulation, the researcher, expert qualitative, and peer reviewer always discussed every process of the research from writing the proposal to analysis and interpretation.

According to Guba and Lincoln (1985), fittingness measured how well the working hypotheses or propositions fit in the context other than the one from which they were generated. In addition, the findings of the study, whether in form of description; explanation, or theory, fit the data from which they were derived. The findings are well grounded in the life experiences studies. To enhance fittingness in this study, the researcher confirmed the findings to determine the congruence within the context of the findings. To meet the criterion of auditability in this study, the researcher recorded the process of the events in the study and every thinking process clearly so that another person could understand the decisions and follow the study.

Trustworthiness of this study was qualitative research which the researcher approved in all of the research process. Each interview was read, coded and categorized independently by the researcher. An audit trail, consisting of field notes and memos complied during analysis sessions, documented the investigators' responses to the data, "emerging hypotheses, analytical schemes, hunches and abstractions" (Stern, 1980). The memos, developed in conjunction with coding of individual interviews, were regularly reviews as part of the iterative process.

Summary

Grounded theory methodology was designed to explore and describe the process of family caregiving of Thai family caregivers for people with schizophrenia. The grounded theory method was used in this study: recruiting participants, interviewing, transcribing and translating data, coding, memorizing, and diagramming. The data from interview transcriptions, field notes, and memos was analyzed using the constant comparative method. Data collection and data analysis was conducted simultaneously until the process saturation had been reached.