### CHAPTER 3

## **Research Methodology**

This chapter presents the methodological approach used in this study. The sections include: research design, participants, setting, instruments, data collection methods, data collection procedures, and data analysis. Trustworthiness of the study and the protection of human subject.

## **Research Design**

The aim of the study was to gain a better understanding of parent involvement in caring for hospitalized preterm infants, a focused ethnographic approach was selected as the research design.

A focused ethnographic approach was recognized as a useful method for applying ethnography to give emphasis on a distinct problem or shared experience in cultures or sub-cultures within specific settings, not the whole cultural system (Cruz & Higginbottom, 2013; Knoblauch, 2005). Focused ethnography was applied to investigate the specific beliefs and practices of particular illnesses or particular healthcare processes, as held by patients and practitioners (Higginbottom et al., 2013). This approach is very suitable and useful for healthcare research because it can be pragmatic and efficient ways to capture data on a specific topic (Higginbottom, Pillay, & Boadu, 2013) and it allows the nurse researchers to gain more insight into experiences of health and illness of participants (Cruz & Higginbottom, 2013). Focused ethnography is unique because of its use of intermittent and purposeful field visits in the particular time frames or events, and closed field of investigation to collect specific information (Higginbottom et al., 2013). It involves a limited number of participants (Knoblauch, 2005). Background knowledge from the literature or clinical practice helps informs research questions and informants serve as key participants with their knowledge and experience. Focused ethnography may employs various recording

devices, including tape recorder, video, or camera to maximize data collection intensity (Higginbottom et al., 2013).

In this study, focused ethnography was selected because I, the researcher aimed to explore the perceptions and caregiving practices of parents in providing care for their hospitalized preterm infants at the SNB and the socio-cultural factors influencing their involvement. In addition, this study was conducted in short-term intensive field visits in various times rather than permanent ones to get a whole picture of parent involvement in the care of their preterm infants. Moreover, I have had background knowledge and prior experience within the field of newborn care, which facilitates the development of the research questions. Therefore, a focused ethnography allows me to gain a better understanding of parent involvement in caring for their hospitalized preterm infants from parents' point of views and to discover beliefs and value of Thai parents, caregiving practices, and socio-cultural factors influence their involvement.

## **Research Participants**

Purposive sampling was used to select the parents from the SNB in a regional hospital, Eastern, Thailand. All participants were willing to participate in the study. Participants included both key informants and general informants.

In this study, the key informants were mothers and/or fathers who provided care for their preterm infants during the period of hospitalization in the SNB of a regional hospital, Eastern, Thailand. The inclusion criteria for key informants were: mothers and/or fathers older than 18 years, who had an infant born before 37 completed weeks of gestation without congenital abnormalities and chromosomal defects; had direct experience in providing care for their preterm infants during the hospitalization in the SNB. I excluded mothers and/or fathers who were unable to speak and understand Thai language well.

During data collection, I excluded three mothers from the study because two infants were referred to other hospitals due to the infant's condition. Another infant had a worse condition, the mother asked permission to withdraw from the study because of stress. Finally, there were 22 parents (19 mothers and 3 fathers) who provided care for

their preterm infants in the SNB of a regional hospital from September, 2014 to October, 2015 participating in this study. General informants were family members and/or relatives of preterm infants who were involved in the family and nursing staff who worked at the SNB, a regional hospital of the East, Thailand. There were five general informants (2 grandmothers and 3 nurses) participating in this study.

### **Research Setting**

The SNB of a regional hospital of the East, Thailand was selected for this study as mentioned in the introductory chapter that the rate of preterm birth was high (Hospital's labor room record, 2014). Therefore, I could choose parents who had various experiences in providing care for their hospitalized preterm infants. In addition, the SNB had a policy of allowing mothers and fathers to be involved in the care for their preterm infants during hospitalization.

### **Research Instruments**

In this study, data collection included both primary instrument and supplementary instruments. I acted as the investigator and interpreter of the study. Understanding the researcher's background, knowledge, and skills enables readers to judge the credibility of the researcher as instrument. The supplementary instruments included the demographic data sheets, participant observational guide, and interview guides. These instruments were developed by the researcher based on literature review and approved by the advisory committee.

## The Researcher as Instrument

Born in a middle class and Buddhist family, I was a preterm baby and grew up in a warm family in Bangkok. I was graduated with a Bachelor of Nursing Science from the Faculty of Nursing, Burapha University, Chonburi province. After graduation in 1997, I worked as a registered nurse in the neonatal intensive care unit and newborn nursery for 7 years at Samitivej Hospital, Bangkok. While working at that hospital, I took good care of well newborn babies, sick newborn babies, and their parents. Currently, I work as a nursing instructor in the Pediatric Nursing Department, Faculty of Nursing, Burapha University in Chonburi. I have supervised nursing students in the

newborn and pediatric wards in Chonburi Hospital, Queen SavangVadhana Memorial Hospital, and Chachoengsao Hospital. According to my work experiences, I noticed that many hospitals promoted parents' involvement in caring for their child during hospitalization. What is the parent's involvement in caring for hospitalized preterm infants? What are the problems when parents get involved in caring for their hospitalized preterm infants? How could their involvement be improved? These questions inspired me to carry out an ethnographic study to explore parents' involvement in caring for hospitalized preterm infants.

To enhance knowledge and skills in qualitative research, I took two qualitative research courses at the Faculty of Nursing, Chiang Mai University; 3 credits of a qualitative paradigm in nursing research and 3 credits of a qualitative data analysis. I also learned about focused ethnographic research from my mentor at the Faculty of Nursing, University of Alberta, Canada. In addition, I prepared my skills in qualitative research under the supervision of major advisor and research mentors at the Faculty of Nursing, Chiang Mai University by conducting interviews, transcribing interviews verbatim, and analyzing qualitative data. These experiences helped me conduct this study with confidence.

### **The Supplementary Instruments**

To obtain all required information, the demographic data sheets, participant observational guideline, and interview guidelines were developed. Details of each instrument are described in the following section.

The demographic data sheets. To obtain basic characteristics of all informants and preterm infants, these forms were developed. Key informant's demographic data sheet (Appendix A) was divided into two parts: the parent's information and infant's information. The parent's information included gender, age, hometown, nationality, religion, marital status, educational levels, work/occupation, family monthly income, financial status, and type of family. The preterm infant's information included gender, age, gestational age, apgar score, birth weight, current age, current weight, birth order, and diagnosis.

The general informants' demographic data sheets consisted of information about family members and/or relatives of preterm infants, and information about nursing staff. Information about family members and/or relatives (Appendix B) including gender, age, hometown, nationality, religion, relationship to the preterm infant, marital status, educational levels, work/occupation, family monthly income, and financial status. Information about nursing staff (Appendix C) including age, hometown, nationality, religion, marital status, educational status, family monthly income, financial status, job position, and work experience.

The participant observational guideline. A participant observational guideline (Appendix D) was used to structure the observations of caregiving activities of parents in caring for their hospitalized preterm infants, and interaction between nursing staff, parents and preterm infants.

The interview guidelines. The interview guidelines were used to guide interviews regarding parents' involvement in caring for hospitalized preterm infants and three types of interview guidelines were developed. The first was for conducting in-depth interview with parents (Appendix E) that included open-ended questions on parents' perceptions, caregiving activities, and the socio-cultural factors influence on parent involvement in caring for hospitalized preterm infants. The second was for conducting in-depth interviews with family members and/or relatives of preterm infants (Appendix F). The third was for conducting in-depth interviews with the nursing staff (Appendix G) that included open-ended questions on their perspectives towards parental involvement in caring for hospitalized preterm infants and factors related to parents' involvement.

In addition, other ethnographic tools such as notepad, MP3 recorder and a digital camera were used for data collection. Sketches of the SNB's physical layout were made. A digital audio-recorder was used to record detailed conversations between the researcher and informants, and field notes reflected the social interactions and context. A digital camera was used to capture some supplementary data sources, unit context and particular events that provided the cues for subsequent interviews.

### **Data Collection Methods**

In this study, I employed various techniques for gathering data including participant observation, in-depth interviews, and supplementary sources. Each of these techniques is described in the following section.

### **Participant Observation**

Participant observation (PO) is the primary method of collecting data about cultural context (Holloway & Wheeler, 2010). Observations were made at different times of day including in the morning, afternoon, evening, and night to ensure that all parental caregiving activities were observed. The observations began with general observation and then focused on specific events or activities related to parents' involvement in caring for hospitalized preterm infants. The observations were focused on the physical environment in the SNB, caregiving practices of parents for their hospitalized preterm infants, and interaction between parents-preterm infants and parents-healthcare providers. According to four levels of participant observation (Holloway & Wheeler, 2010), I assumed the role of an observer or an observer-asparticipant depending on the situation. For example, I only observed the interaction between a mother and a nurse while a nurse was helping mother breastfeed their child. I stayed near the breastfeeding corner but I could see mother-nurse interaction and hear their conversation. Sometimes, I took a role as observer-as-participant by facilitating a mother when she was bathing her baby.

In addition, field notes were the document in which I recorded what I saw, heard, felt, and thought about parents' involvement in child's care as well as descriptions of the setting context and reflections on data collected. These field notes were jotted down during or immediately after an observation or interview. I usually found the private place for taking short notes in notepads or smart phone and when I arrived home, these short notes were explained in detail and recorded in a computer. Field notes were written throughout the data collection.

### **In-Depth Interviews**

All informants were interviewed to explore their feelings, perceptions, and thoughts (Holloway & Wheeler, 2010). To obtain the key informants' point of view, twenty-two in-depth interviews were conducted with mothers (n=19) and fathers (n=3) of hospitalized preterm infants. Interviews were arranged in various places depending on the parent's convenience and the situation of each interview such as the official room, breastfeeding corner, mother's bedside, and balcony seating area. In arranging interviews I was concerned about the protection of the informants' rights and confidentiality. I ensured the parent's privacy before conducting the interviews. For example, interviewing at a mother's bedside, I ensured that no other people stayed near a mother's bed and mothers could share information with confidence. Two fathers were interviewed at the SNB while they were visiting their babies. I interviewed one father at his home after the baby discharged. Each interview began with a general question such as "What do you think is the cause of hospitalizing your baby in the SNB?" "How do you feel when your baby was admitted to the SNB?" I concluded by asking parents to describe their caregiving activities, feelings or perceptions on their involvement in caring for their preterm infants, and factors influencing their involvement in their child's care. During data collection, a problem that I usually faced was that mothers were worried that their babies could wake up and cry during the interviews. Some mothers preferred their child to stay beside her during the interview, and this affected some interviews. I had to stop the interview and made an appointment with them again later. Therefore, each mother was interviewed 2 to 4 times and each father was interviewed 1 to 2 times, with each interview lasting approximately 30 to 90 minutes. All interviews were tape-recorded with their permission. eserved

Five in-depth interviews were conducted with the general informants (2 grandmothers and 3 nursing staff) to obtain their perspective towards parent's involvement in caring for hospitalized preterm infants and factors related to parents' involvement in caring for their child. I interviewed two grandmothers via telephone after meeting them at the SNB because I met them at the setting only once and did not have enough time to interview them during visiting time. However, I obtained their permission to contact and interview them via telephone later. I interviewed three

nursing staff in the official room at the SNB. Each grandmother and nurse was interviewed once for approximately 20 to 90 minutes. All interviews were tape-recorded with the informants' permission.

Each interview was reviewed immediately and carefully which were reflected through the questions in order to improve further interviews. During data collection, the interview questions were modified in order to help parents better understand the questions. For example, "What do you think encourages or facilitates you to get involved in doing caregiving activities for your babies during their hospitalization at the SNB?" In this question, I used both words encourage and facilitate as it found that parents could understand either words after adjusting the wording in the question. Interviews were conducted until the data saturation; that is, no new information related to key themes or topics is being provided by parents and their explanations are repeating old information.

## **Supplementary Data Sources**

To obtain supplementary data sources, the demographic data from medical charts, shift reports, admission criteria, and pamphlets in the SNB were reviewed. Some documents in the SNB were captured by a digital camera. Before using a camera, I asked the permission from the head of the SNB. I examined the supplementary data sources from the beginning to the end of the data collection.

# Data Collection Procedures

Data collection was started after getting an approval from the Research Ethical Committee of Faculty of Nursing, Chiang Mai University and the Regional Hospital. To obtain the information on parents' involvement in caring for their hospitalized preterm infants, the detailed procedures are described in the following sections.

First, gaining access to the setting, I obtained permission from the hospital administrator, head of pediatric unit, and head of the SNB. I introduced myself to them as a doctoral student and a nurse structure in the university. I informed them about the purpose of the study, duration of the study, and data collection methods. Head nurse of the SNB, she was first gate keeper in this study. She helped me to access the setting and

some potential informants by introducing me to nursing staff and others staff in the SNB and orienting the setting. Another gate keeper was nurses, I knew some nurses who were working in the SNB as they were graduated from my faculty. I asked them to help me to access key informants and general informants, and the setting.

Second, I recruited key informants who met the inclusion criteria. I recruited the parents of preterm infants by selecting preterm infants from a list of sick newborn babies or asking the in-charge nurses or leader of nursing team. Then I viewed the information of preterm infants and their parents from the medical charts to see if the parents met the inclusion criteria, I waited to meet them during the visiting time and invited them to play a part in the study. Besides, I recruited some family members and/or relatives of preterm infants who visited the baby at the SNB by inviting them after building a relationship with the parents. I looked for nursing staff who could provide rich information regarding parents' involvement after visiting the setting for several times. I invited key and general informants to participate in the study by introducing myself and explaining about the study. I allowed them to ask questions about the study. When they agreed to participate in the study, I obtained their informed consent.

Third, to establish rapport and trust with the key and general informants, I introduced myself and the research study to them. I met parents several times while they were visiting their babies or staying with their babies approximately 4 to 10 times per each parent. I spent time 1 to 5 hours per each meeting and facilitated their care for their babies. This strategy helped me spend sufficient time to observe caregiving practices of parents and let me establish trust and rapport with them. Sometimes I had lunch or dinner with the parents and shared some fruits and desserts with them. In addition, at first field visit, I asked the permission from the head of the SNB to dress in non-nursing attire. I did not want parents to see me as healthcare provider of the SNB since that perception might affect the parents' viewpoint on their involvement in caring for their child. Thus, I usually wore black pants and a local t-shirt with prints (flowers prints or sea prints) which was the dressing style of general people in this area. Moreover, I established the rapport and trust with the nursing staff by visiting the setting several times, having lunch with them, and volunteering in providing basic care for babies and

taking preterm babies to screen retinopathy of prematurity (ROP) at the OPD. I helped the head nurse and nursing staff of the SNB edit their presentation paper and helped them to design care record.

Fourth, data collection was conducted after the key and general informants signed the informed consent by using several techniques as I provided the details in the data collection methods. The data collection was started with observations and then in-depth interviews. Before interviewed and tape-record, I asked the permission from all participants. These procedures were repeated in all informants throughout the period of data collection.

## **Data Analysis**

After each interview, data were transcribed verbatim as soon as possible and all interviews were reviewed. This initial review established a preliminary analysis and helped inform on-going interviews. Data were analyzed by using Braun and Clarke's thematic analysis method (2006). The thematic analysis method consisted of six phases including familiarizing yourself with your data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Data analysis was conducted under the supervision of the dissertation advisory committee.

## Phase I: Familiarizing Yourself with Your Data

The first phase of thematic analysis began with immersion in the data through transcribing data, reading and re-reading the data, and noting down initial ideas. During this phase, I transcribed the interviewed data verbatim in the Thai language and read and re-read interviewed transcriptions line by line. I started taking note or marking ideas for coding.

### **Phase II: Generating Initial Codes**

The second phase continued from listing interesting initial ideas. In this phase, I coded the data as many potential themes or patterns across the entire data set. I matched codes with data extracts that demonstrate that code. Codes captured a feature of the data both semantic and latent content.

### **Phase III: Searching for Themes**

In the third phase, data from the initial codes were reviewed several times to identify themes across the data set by re-focusing the analysis at the abstract level of themes rather than codes. This phase involved sorting the different codes into subcategories, categories, and potential themes. I collated all the relevant coded data extracts within the identified themes. Mind-maps were used to collate codes into subcategories, categories, and potential themes. At this stage, candidate themes and ปมกหัญ กร categories were created.

## **Phase VI: Reviewing Themes**

In the fourth phase, data within candidate themes were considered for internal homogeneity and external heterogeneity including coherence, clear, and identifiable distinctions between themes. This phase involved reviewing and refining candidate themes. I reviewed the coded data extracts by reading all the collated extracts for each theme and considering coherent pattern. I consulted with my dissertation advisory committee regarding the validity of individual themes in relation to the data set. At this phase, the satisfactory thematic map was created.

### **Phase V: Defining and Naming Themes**

The fifth phase occurred following a satisfactory thematic mapping of the data leading to the final refinement of the main themes. I defined and refined the themes by identifying the essence of what each theme and the theme overall were about, and determining what aspect of the data each theme captured. Final themes and categories rights reserved were generated.

## Phase VI: Producing the Report

The final phase involved the final analysis and write-up. The analysis provided a concise, coherent, logical, non-repetitive and interesting account of the story the data tell. The write-up provided sufficient evidence of the theme within the data. Regarding to original data from the informants' view points and field notes were Thai language (native language in Thailand). Data analysis was conducted in the Thai language. After

final results were generated, then I translated into English by consulting an expert editor who was Thai and fluent in English in order to maintain the meaning of the Thai parent' perspectives and the Thai contexts as accurately as possible.

## Trustworthiness of the Study

Trustworthiness of the data is the most integral part in the qualitative research. To establish the trustworthiness in this study, the researcher used four criteria of Lincoln and Guba (1985) including credibility, transferability, dependability, and confirmability.

Credibility refers to the truth of finding regarding the informants' experiences (Holloway & Wheeler, 2010). The credibility of this study was established by using several strategies including triangulation, peer debriefing, and member checking. According to triangulation in this study, I employed various methods of data collection including participant observation, in-depth interviews, field notes, and supplementary data sources. I conducted peer debriefing by discussing the findings of study with the dissertation advisory committee and three experts on ethnographic study. Member checking was done by the six informants (4 mothers and 2 fathers) who validated the findings. I confirmed and discussed the summary of the research findings with these informants by face-to-face. These six informants agreed that the summarized findings represented their own perceptions.

Transferability refers to the findings that have applicability in other contexts or with other informants (Cope, 2014). In this study, the transferability was achieved through thick description which provided enough information about informants' experiences of getting involved in caring for their hospitalized preterm infants that other researchers could make a judgment on its transferability.

Dependability refers to the findings of the study that are consistency and accuracy (Holloway & Wheeler, 2010). To achieve the dependability of this study, field notes was made throughout the study. All interviewed data and field notes were analyzed by the researcher and the dissertation advisory committee provided their expertise as auditors.

Confirmability refers to the findings that are shaped by the informants, not the result of the researcher's bias or viewpoint (Cope, 2014). The confirmability of this study was established by several methods including audit trail and triangulation. All interviews were tape recorded and observation was written in the field notes. Recorded interviews were transcribed verbatim and reviewed transcripts. Moreover, the dissertation advisory committee provided their expertise as auditors in all steps of the study.

## Protection of Human Subject

The research proposal was approved by the Institutional Research Ethics Review Committee, Faculty of Nursing, Chiang Mai University (see Appendix H) and the Institutional Review Board of a Regional Hospital (see Appendix I). All informants received sufficient information about the purpose, procedures, anticipated benefits, duration of the study, and the informants' right. All informants had a right to refuse, stop or withdraw from the study at any time without any impact on them or their infant's care and treatment. They also had a right to refuse any question or disclose any information that they did not want to share. A research consent form (see Appendix J) was obtained after the informants agreed to participate in the study. All informant information was kept in a cabinet in a secure place that only the researcher and the advisory dissertation committee could access. Coded numbers or pseudonyms were used on transcripts, field notes form. The results of the study were presented as a whole, not individual information in peer reviewed academic journal and academic conference with coded numbers or pseudonyms. All information about informants, demographic data sheets, audiotape files, transcriptions, photographs, and field notes will be destroyed at the completion of study.