

CHAPTER 3

METHODOLOGY

The focus of this chapter is to describe the research design and methods adopted in this study. This chapter includes descriptions of methodological approach, informant selection, research instruments, ethical consideration, data generation, data analysis procedure, and trustworthiness.

Methodological Approach

The qualitative descriptive approach proposed by Sandelowski (2000) was undertaken to address the research question which was “What was the lived experience of persons awaiting CABG?” This qualitative descriptive approach was considered to be the most suitable method because it provided an ideal method to enable the researcher to gain insight into the informants’ perceptions, experiences, as well as the life managements in their own terms. Furthermore, by adopting this methodology, it provides both exact and rich descriptions of the experiences and life managements of persons awaiting CABG along with the least amount of coloring in interpretation or staying from the original data. Such an approach also helps establish a deeper understanding of the informants during critical periods of their lived experience in a holistic way which is inclusive of their culture and social values. Importantly, in the qualitative descriptive approach, the informants are identified as the experts in the phenomenon of interest and are persons who are actively involved in the construction of what is significant in the world they lived. This approach is

also useful for capturing and portraying experiences from an informant's or an insider's perspectives rather than a perspective from an outsider's or researcher's point of view.

In an attempt to gain legitimate insight into the experiences and the life managements of persons awaiting CABG in the informants' own terms, the naturalistic inquiry as described by Lincoln and Guba (1985) was employed as the philosophical underpinning of this study. Naturalistic inquiry is a generic orientation to inquiry that includes not only qualitative research, but also forms of behavioral research involving humans (Lincoln & Guba, 1985). This inquiry implies only a commitment to studying something in its natural state, or as it is. The process of naturalistic inquiry follows a paradigm of inductive approach. It takes the following five principles into account. First, naturalists assume that multiple realities exist in any situations and in concrete forms. Second, naturalists emphasize the study of meanings given to or interpretations made about objects, events and processes concerning a situation. An understanding of human behavior or a social phenomenon involves understanding of how humans see what they are doing or see how they participate in an activity. Third, naturalistic inquiry insists on the generation of knowledge that results from the interaction between the inquirer and the respondents. The respondents answer the questions put forth by the inquirer in terms of their perceptions or the meanings they attach to their actions. Fourth, naturalists argue that in the process of making generalization, a lot of meaningful information that exists in individual units is reduced in the process of generalization; hence, generalized knowledge does not represent real knowledge. Lastly, naturalists do not believe in value free inquiry. They assume the effect or influence of value systems in the

identification of problems, selection of samples, use of tools for data collection, the conditions in which data are gathered, and the possible interaction that takes place between the inquirer and the respondents. Therefore, to describe the situation as it relates to the experiences and the life managements of persons awaiting CABG in Thailand, the qualitative descriptive approach underpinned by naturalistic inquiry is entirely suitable.

Informants Selection

To gain the most understanding of the experiences of persons awaiting CABG, it is crucial to have information from persons awaiting CABG. A purposive sampling was used in the selection of informants from O.P.D.1, Maharaj Nakorn Chiang Mai Hospital, Chiang Mai, Thailand. Inclusion criteria for selecting the informants in this study were persons who understand and are able to communicate in Thai or northern local dialect, have experienced the phenomenon of waiting for CABG surgery, have undergone CABG within three months after surgery, reside within a reasonable distance for the researcher to access, and were willing to participate in the study. The exclusion criteria were persons who have undergone emergency or urgent CABG procedures, have received repeated CABG surgery, or have received combined valve and CABG surgery. The researcher recruited the informants from August 2009 to September 2009 and continued to engage interviews with the informants until the data saturation was achieved or till no new themes are being expressed. Ultimately, a total of 11 persons that awaited CABG were included in this study.

The caregivers who took care of persons awaiting CABG were also included as supplemented informants. Inclusion criteria for caregivers in this study were actual persons who: took care of the key informants while awaiting CABG, the ability to

understand and able to communicate in Thai or the northern local dialect, and willingness to participate in the study. Ultimately, a total of 9 caregivers of persons awaiting CABG were included in this study.

Research Instruments

Researcher

In a qualitative study, the researcher is an important instrument (Denzin & Lincoln, 2000). The researcher served as a major research instrument and was involved throughout the research study. Therefore, consciousness of preconceptions, background, and past experiences of the researcher that may affect the interpretation was required.

For this study, the researcher's pre-conceptions arose from her experiences as a nurse who has experiences in taking care of persons who have undergone cardiac surgery in the cardiovascular thoracic intensive care unit, and as a researcher who has experience in conducting research in persons who have undergone CABG. These experiences helped the researcher to understand the situation of persons awaiting CABG. The researcher was born and brought up in an urban area in the northern part of Thailand. She is completely fluent in Thai and the northern local dialect. The competency in languages and her knowledge of the northern culture enabled her to discern the smallest nuances of the informants' every word for its implied meaning as well as for its direct/primary meaning.

To prepare herself for executing this qualitative descriptive study, the researcher learned about the qualitative methodology by enrolling in related coursework at the Faculty of Nursing, Chiang Mai University. The researcher also had been trained to perform qualitative research by enrolling in additional elective

coursework related to qualitative methods at the Faculty of Nursing, Chiang Mai University. In order to gain experience in qualitative data analysis, the researcher also attended workshops in qualitative data analysis from the Institute for Population and Social Research, Mahidol University.

The Interview Guide

The interview guide was a major instrument in this study. Prior to interview, this interview guide was developed by the researcher based on the research question that is “What is the lived experience and the life management of persons awaiting CABG?” The open-ended questions in the interview guide were suggested and guided by the dissertation advisory committee to enhance the relevance of the study. The interview guide provided the framework for eliciting detail rich descriptions about the phenomenon of waiting for CABG from the informants. Although questions in the interview guide were used, the technique of probing further was adopted to produce deep, rich, and complete descriptions, to the most accurately portray both the inner and outer life of persons awaiting CABG surgery.

The Demographic Profile

The demographic profile was developed by the researcher to highlight the contextual issues of the informants. It was composed of the basic characteristics of the key informants including age, gender, religion, marital status, educational level, occupation, financial status, medical payment, family and support system, accessibility of health care facilities in their area, information related to their underlying disease, operative date, waiting time for CABG surgery, type of surgery and cause of why surgery was postponed. In addition, medical information and treatment, the prognosis, and their current medical status were also recorded from the

medical record of the informants to enhance the researcher's understanding regarding the informants' experiences awaiting CABG.

An Audiotape Recorder

After obtaining the permission to record the interview, an audiotape recorder was used to allow the researcher to gain full and accurate information from the interview. It also helped to reveal upon review marked changes to the voice tone, tempo, and animation of informants' speech.

Fieldnotes

Fieldnotes is an important instrument in the data generation phase (Cohen, Kahn, & Steeves, 2000). Things that were observed including environmental context of the informants and informants' responses during interview were recorded by researcher. These notes were considered to be a useful and valuable source for data analysis as well as result interpretation.

Reflexive Journal

Qualitative researchers are required to think critically through the dynamic interaction between the self and the data occurring during analysis (Burns & Grove, 2009). Therefore, prior to and after each interview, the researcher recorded her ideas, thoughts, feelings, and experiences as a researcher who interviewed, observed, and worked with informants throughout this study into this diary. Additionally, the researcher's pre-conceptions and beliefs about the experience awaiting CABG at the beginning of the study were recorded in the journal. This journal was a supplement to aid the researcher to understand the informants' descriptions and became a part of audit trail for the study.

Ethical Consideration

Before conducting research, this project was approved by the Research Ethics Review Committee of Faculty of Nursing, and Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. The researcher individually approached the informants at Maharaj Nakorn Chiang Mai Hospital. A summary project overview which included purpose, method of the study, the potential risk and benefits of participation, and rights of the informants including rights for refusing or withdrawal from the participation at any time were presented to all informants. The researcher also assured the informants that their participation in this study would not affect their treatment and service they received.

In order to maintain confidentiality, permission for tape recording was obtained from the informants. The audiotape records, reflexive journal, and transcriptions were kept in a secure place. The findings and interpretations were reported anonymously, and their names were not labeled on the transcriptions documents. Each informant was assigned a code number and those personal identifiers were removed from the transcriptions. Only the findings of this study were reported to supervisors and were published only in terms of collective outcomes. Written consent form was obtained after participants verbally agreed to participate in this study.

Data Generation Procedure

Identifying pre-conceptions

Prior to interact with the informants, the researcher wrote her pre-conceptions, assumptions, and beliefs about the experiences and the life managements of persons awaiting CABG into the researcher's diary. This writing helped the researcher to

mitigate the effects of her bias and was also intended to facilitate openness and new insight because this process itself initiates critical thinking or reflection.

Gaining Access and Establishing Rapport

After receiving approval by the Research Ethics Review Committee of the Faculty of Nursing, and the Faculty of Medicine, Chiang Mai University, the researcher contacted the nurse coordinators and the head nurse of O.P.D.1, Maharaj Nakorn Chiang Mai Hospital. The potential informants who met the inclusion criteria were identified by the nurse coordinators. Then, the nurse coordinators asked for permission from these informants to release their name to the researcher. After gaining permission from these informants, the researcher approached them individually.

To establish rapport, the researcher contacted the potential informants by meeting them face to face at O.P.D.1. The informants' most favored language was used. To develop a trusting relationship, the researcher also addressed informants with the correct cultural honorifics in relation to their seniority and position in Thai culture and society, all of which are congruent with the Thai traditional way. The research purpose, research process, risks and benefits of participation in this study, and the information regarding their rights to participate in this study were explained to the potential informants. After the informants submitted completed consent forms to participate in this study, an appropriate time and a convenient place for interview were agreed upon. After that, the researcher contacted the informants by calling them twice before the actual interview to get familiar with them.

In-depth Interview

An in-depth interview was used as a primary method of data gathering in this study. All interviews were conducted individually in a quiet place or a private room in the informants' homes at a time of their convenience. The interviews were conducted in Thai or northern local dialect depending upon informants' preference. Prior to the interviews, the informants were asked to provide a demographic profile and were asked for permission to record the interviews by the audiotape.

During the first interview of the informants, the interview guide was used as a major instrument. The interview started with broad questions: "Could you please tell me how you felt when you knew that you needed to have CABG?" and "How long did you wait for CABG?" The series of questions began with more structured questions: "Could you please tell me how you felt during the waiting for CABG?" In chronological order, the informants, then, were asked to describe the problems they had experienced, how they had managed them, and what kind of support/help they had received/lacked from lay and professional network members. Probing questions such as: "What do you mean by that?", "How did you feel then?", "What did you think then?", and "why did you think that?", were asked to discuss with the informants and to gain the most understanding of the informants' experiences. Before ending each interview, informants were asked if they would like to add anything else, in order to gain more in-depth information relevant to the experience of awaiting CABG.

The second interview was scheduled after the researcher had carefully reviewed the first interview to clarify initial interpretations and to pose probing questions previously overlooked. At the beginning of the second interview, each

informant was presented with a summary of the first interview. This gave the researcher opportunity to check her understanding with the informants and to increase her understanding in the experiences and the life managements of persons awaiting CABG. The second interview also allowed researcher to re-confirm the information the informants previously provided, and it also afforded the informants another opportunity to add information that they did not cover in the first interview. The subsequent interviews were performed in the same manner as the second interview until the obtained data covered all research questions.

The numbers of interviews were conducted with each informant ranged between two to five sessions. A total of 31 interview sessions were done with 11 informants. The length of the interview ranged from 60 minutes to 120 minutes in the first interview and ranged from 30 minutes to 50 minutes in the subsequent interviews. No informant reported any discomfort with being interviewed, nor did any informants withdraw from any of the interviews.

Caregiver Interview

Using data triangulation technique, after the completion of the first interview with each informant, the informant's caregiver was informally interviewed to gather supplemental information regarding the informant's experience of awaiting CABG to verify or check out information received from that informant. All interviews were conducted individually in the quiet place or a private room in the informants' homes. The interviews were conducted in Thai or northern local dialect depending upon the caregiver's preference. Prior to interviews, the caregivers were asked to provide a demographic profile and were asked for permission to record the interviews by the audiotape.

Using the interview guide for caregivers, the researcher started the interview with broad questions: “Could you please tell me how the informants felt when he/she knew that he/she needed to have CABG?” and “How long did he/she wait for CABG? The series of questions then transitioned with more structured questions: “Could you please tell me how he/she felt as he/she awaiting CABG?” and “What did he/she do during the waiting for CABG?” Then, in the same manner as asked of the informants, caregivers of the informants were asked about the problems the informants had experienced, how they had managed them, and what kind of support/help they had received from caregivers, lay, and professional network members. Probing questions such as “What do you mean by that?” and “How did he/she feel and think then?” were also asked to cross-check out the information from the informant. To gain additional information before ending the sessions, the caregivers were given another opportunity to add comments. A session of informal interview was conducted with each caregiver. The caregivers’ interviews were conducted informally ranged from 40 to 60 minutes.

Reflection

At the completion of each interview session and after entering fieldnotes, a reflexive journal or critical reflection was written to enhance contextual understanding. It included the researcher’s feelings and thoughts about the interview and a summary of researcher’s new thoughts related to the experiences and managements of persons awaiting CABG. Finally, all reflections became as a part of audit trail or the documentation of the ideas/decisions made during data analysis of the study.

Data Analysis Procedure

Data analysis procedure began after completing each interview. The procedure was divided into two steps including data preparation and data analysis.

Data Preparation

Prior to the analysis, data was prepared after completing each interview. The audiotapes were transcribed verbatim and repeatedly review line by line to gain an understanding of the informants' experiences and to examine the significant statements or phrases that pertained to the objectives of this study. Fieldnotes and reflexive journal were also read and compared with the transcriptions in order to gain more understanding within informants' context.

The brief stories regarding the experiences and the life managements of persons awaiting CABG were written and reviewed to gain a better understanding of common patterns among informants. It is notable that the description of each case enabled the researcher to capture a whole picture of the experiences and the life managements of persons awaiting CABG. Thereafter, descriptions of the personal characteristic of informants were also grouped and summarized.

Data Analysis

Qualitative content analysis inspired by Graneheim and Lundman (2004) was chosen as data analysis strategy in this study. The intent was to present experiences and life managements of persons awaiting CABG. The interviews were analyzed using the following steps:

1. The audiotapes were reviewed completely and the transcribed text was read repeatedly to give the researcher the opportunity to become familiar with all of the texts.

2. Meaning units (words, sentences, or paragraphs) containing aspects related to experiences and the managements of persons awaiting CABG through content and context were identified.

3. The meaning units (words, sentences, or paragraphs identified in step 2) were condensed (shortening the text while still preserving the core meaning) and each condensed unit was abstracted and labeled with a code. The possible loss of information in terms of the complete context in which the meaning was originally presented was considered during the condensing and coding process.

4. The codes were compared based on differences and similarities, and sorted into categories based on similarities.

5. The process of analysis involved back and forth comparisons between the whole texts, the codes, and the categories for each theme. An interpretation of the underlying meaning, which permeated the categories within the content area (experiences/managements of persons awaiting CABG), was formulated into a theme. This process was repeated for each theme.

All themes in each content area (experiences/life managements of persons awaiting CABG) were discussed and shared with the dissertation advisory committee. Finally, final findings (final themes and categories in each content area) were verified by a debriefing session with the dissertation advisory committee and two Thai experts in qualitative inquiry. They provided an audit for the inquiry to validate that the themes and categories were congruent with or supported by the data.

Trustworthiness

The rigor of this qualitative descriptive research was addressed by ensuring trustworthiness in the design and conducting research. Criteria for rigor in qualitative study suggested by Lincoln and Guba (1985) including credibility, transferability, dependability, and confirmability were used as follows.

Credibility

Credibility is believability or trust value in the findings and interpretation (Beck, 1993). To establish credibility of the findings, triangulation of data by interviewing both informants and their caregiver was applied as a cross check in the study. The researcher also conducted member checking by confirming the findings that arise from data generation with five informants to check out the findings and to increase understanding of the experiences of persons awaiting CABG. In addition, a formal peer debriefing with the Thai experts in a qualitative inquiry was performed to validate and verify the tentative analysis and findings that were encountered in the process of fieldwork.

Transferability

Transferability refers to the degree of detail provided about the context of a situation so that it can be used to judge whether something is similar or dissimilar when compared to another situation (Lincoln & Guba, 1985). In this study, rich descriptions related to experiencing awaiting CABG and life managements were provided. Rich descriptions were enhanced by conducting interviews eliciting more specific details of experiences. The amount of detail and overall adequacy of information in the findings guides readers to see how the categories were elaborated and applicable to other groups.

Dependability

Dependability is concerned with the appropriateness of the decision and methodology used (Lincoln & Guba, 1985). In this study, the formal peer debriefing with the Thai experts in qualitative inquiry was performed to validate and verify the tentative analysis and findings.

Confirmability

Confirmability was achieved through ensuring that the emerging categories and properties were drawn from the data in a systematic procedure that could be easily traced and substantiated. In this study, the process of collecting data, analysis, and interpretation were discussed and shared with the dissertation advisory committee in order to verify the findings at each step. The researcher maintained a reflexive journal throughout the process, data analysis documentation, and peer debriefing memos in order to determine confirmability. In addition, the informants' statements were quoted to support objectivity of emerging categories and properties.