

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

1. Participants

Participants in this study consisted of 10 nurses who worked in the intensive care units of 2 government hospitals in Medan, Indonesia. The inclusion criteria of participants in this study included:

- (1) have at least a diploma degree,
- (2) have at least 6 months experience in intensive care units,
- (3) have experience in ethical dilemmas and resolutions of ethical dilemmas, and
- (4) willing to participate in this study

2. Research Design

Hermeneutic phenomenology was used in this study. This qualitative type of research uses the lived experience of the people as a tool for better understanding the social, cultural, political, or historical context in which those experiences occur (Polit & Hungler, 1999). The goal is to understand the basic structure of phenomena of human experience by analyzing the verbal explanations of the experiences from the perspective of the participants. This method was chosen because hermeneutic inquiry almost always focuses on meaning and interpretation—how socially and historically conditioned individuals interpret their world within their given context (Polit & Hungler, 1999). Hermeneutic phenomenology provides the philosophical and methodological framework

for this study since this approach is concerned with the interpretation of meanings of everyday experiences. It is also within this approach that the experience and meaning of ethical dilemmas can be explored and understood. Therefore, with this hermeneutic or interpretive approach, the researcher had a means for arriving at a deeper understanding of ethical dilemmas experienced by intensive care nurses through attention to the nature of language and meaning.

3. Instruments

The instruments used in this study consisted of two elements, questionnaires and the researcher. The researcher in this phenomenological study was an important tool. In the qualitative method, the researcher also serves as an instrument, not only collecting the data (Rew, Bechtel, & Sapp, 1993).

The questionnaire consisted of a Demographic Data Form and an Interview Guide regarding Ethical Dilemmas and Resolutions of Ethical Dilemmas.

Part I The Demographic Data Form

The Demographic Data Form was designed by the researcher to collect data regarding participants' demographic data including age, sex, marital status, educational level, position, years of clinical experience in ICU, and training experience in ethics.

Part II The Interview Guide: Ethical Dilemmas and Resolutions

The Interview Guide consists of four open-ended questions regarding meanings of ethical dilemmas, ethical dilemmas experienced by nurses, resolution of ethical dilemmas, and feelings of nurses when facing the ethical dilemmas. This interview guide was developed by the researcher based on the research questions.

4. Context of the Study

This study was conducted at two public hospitals in Medan Indonesia: H. Adam Malik Hospital and Dr. Pirngadi Hospital. H. Adam Malik Hospital is a teaching and referral hospital with 450 beds. In this hospital, intensive care is grouped into 4 divisions: Adult ICU (12 beds), ICCU (8 beds), Pediatric ICU (4 beds), and Postoperative ICU (8 beds). An anesthesiologist is a head of the installation and there is a nurse supervisor. Sixty-four nurses are assigned to this installation and rotation among ICU nurses takes place every three months. Almost 90% of nurses were diploma graduates.

Dr. Pirngadi Hospital is the second largest hospital in Medan and also serves as a teaching hospital for medical and nursing students. This hospital has 600 beds. In this hospital the intensive care unit has two wards: general ICU (10 beds) and pediatric ICU (4 beds). Nineteen nurses are assigned to this ICU. Seven nurses were diploma graduates and the rest had lower education preparation.

5. Data Collection

Data collection was conducted after permission was obtained from the Graduate School and the Faculty of Nursing, Prince of Songkla University. The data collection steps were divided into 2 phases: preparation phase and implementing phase.

Preparation Phase

1. Asking permission to collect data by submitting a letter from the Faculty of Nursing, Prince of Songkla University and a recommendation letter from the Dean of the Faculty of Medicine, University of Sumatra Utara to the director of the target hospitals.
2. Informing the directors of nursing of the target hospitals concerning the research objectives and asking for permission from them to collect data.
3. Describing the objectives and expected research outcomes to head nurses of each ICU unit and asking for participation of staff nurses who met the inclusion criteria to be a participant.
4. Carrying out a pilot study to test the appropriateness of the questionnaires and data collection technique.
5. Translating all documents related to this study into the Indonesian language prior to the data collection.

Implementing Phase

1. Asking the participants to sign a consent form.
2. Asking the participant to fill in the demographic data form.

3. Carrying out the interview for each participant using the interview guide with probing questions and taping the conversation. Each interview was 60 to 90 minutes. The interview was conducted in the Indonesian language. The participants were encouraged to express their feelings, opinions, and experiences.

4. The interview was ended when data saturation was achieved, which took about 2 interviews for every participant.

5. Interview data were transcribed verbatim into written text and then the transcription was translated into English by the researcher.

6. Protection of Human Subjects

Before starting the interview, the researcher asked for permission from participants by giving a full explanation to the participants concerning the purposes of the study, assurance of subject's anonymity, the voluntary nature of participating in the study, freedom to withdraw from the study at any time, and the benefits of the findings for the nursing profession. Tapes and transcripts were numbered and kept in a confidential way. Tape recordings were erased after the data were no longer needed. Each participant signed a consent form before data collection.

7. Data Analysis

Analysis was performed simultaneously when the first transcription was done. The raw data were transcribed verbatim. Colaizzi method was modified to analyze the data (Colaizzi, 1978 cited by Talbot, 1995). The Colaizzi's method was used because it

was compatible with the interpretive approach taken in this study. It is one of the common methods for data analysis recommended for phenomenological study (Talbot, 1995). The analysis process includes (Talbot, 1995):

1. Read all descriptions to acquire a feeling for them. In this first step, the researcher read all descriptions and also listened to the audiotapes several times to acquire a feeling of familiarity for the participant's expressed meanings and to sensitize the researcher to the way in which each participant spoke.

2. Extract phrases or sentences that directly pertained to the phenomenon. In this step, significant phrases and sentences that directly pertained to ethical dilemmas were extracted. Significant statements were reformulated into a more general form or restatement in order to transform the concrete language of the participants into the language of science.

3. Formulate the meaning of each significant statement. In this step, the significant statement and restatement were studied to derive and record a sense of their meaning, the formulated meaning. Each formulated meaning was developed with consideration of the statements preceding and following it so that the context was maintained.

4. Organize the aggregate formulated meanings into clusters of themes. In this step, the researcher identified the themes from the formulated meanings. The themes were organized into clusters and categories to allow for the emergence of themes common to all participants' descriptions.

5. Integrate the results in exhaustive description. In this step of analysis, an exhaustive description of ethical dilemmas was derived, which was a narrative integration of all the themes, theme clusters, and categories of themes.

6. Formulate an exhaustive description that is unequivocally a statement of the essential structure of the phenomenon. In this step, the researcher developed exhaustive descriptions to gain insight into the structure of the lived experiences. The researcher formulated the essential structure of ethical dilemmas from the exhaustive descriptions.

8. Trustworthiness of Data

According to Lincoln and Guba (1985) the trustworthiness of data in a qualitative study can be established by maintaining credibility, transferability, dependability, and confirmability. However, in this study, the trustworthiness of data was established by maintaining only the credibility, transferability, and confirmability. Dependability, which can be established by external expert check for transcription and themes emerged in this study, wasn't conducted because of time constraints.

8.1 Credibility

Credibility is the extent to which someone can have confidence in the veracity of the data. In this study, credibility was achieved by using prolonged engagement and member checks. Prolonged engagement is the investment of sufficient time to achieve a certain purpose, such as learning the culture, testing for misinformation induced by distortion either of the self or of the respondents, and building trust (Lincoln & Guba,

1985). In this study, the researcher spent around 1 month to have a long enough involvement with the participants in intensive care units. It allowed the researcher to collect accurate data and develop a clear picture of a valid answer. The researcher used interviews and also observation by using field notes to record the participants' feelings and impressions and for obtaining any relevant information that was not asked in the interview. This information was matched in the analysis process.

Member checking is a process through which respondents verify data and the interpretations thereof (Lincoln & Guba, 1985). The researcher met and gave a copy of the interview transcripts for review to selected participants and then discussed with them the findings of the study.

Besides using prolonged engagement and member checks, the researcher also worked with advisors who are experts in ethics in developing themes. This effort helped the researcher to achieve credible findings.

8.2 Transferability

Transferability is the extent to which data can be generalized to other groups (Lincoln & Guba, 1985). To achieve this principle, the researcher provided in-depth descriptive information (thick description) so that other can decide preliminary if the data is generalizable.

8.3 Confirmability

Confirmability is the extent to which data findings are objective (Lincoln & Guba, 1985). To establish the confirmability in this study, a record of the ongoing process, notes from interview, and copies of all transcriptions were maintained by the researcher. The researcher also asked advisors who are experts in ethics to review the data.