

CHAPTER 3

RESEARCH METHODOLOGY

This descriptive study aimed to identify the level of frequency of ethical dilemmas, level of disturbance of ethical dilemmas, and ethical decision making of nursing students in providing care for patients with mental illness in Diploma III Nursing Programs in North Sumatra province, Indonesia.

Populations and Settings

The target population in this study was 287 third-year nursing students who enrolled in nursing ethics course, mental health nursing course, and mental health nursing practicum. Each of these nursing students was from one of the four Diploma III Nursing Programs in North Sumatra province, Indonesia. There are four D III nursing programs: (1) D III nursing program in University of Sumatra Utara Medan; (2) D III nursing program of Health Polytechnic Medan; (3) D III nursing program of Pemda Langkat; and (4) D III nursing program of Pemda Sidikalang. The four D III nursing programs in nursing schools under the government of Indonesia were purposively selected to be a target setting in this study.

Samples and Sampling

1. Sample Size

The sample size of student was calculated based on Yamane (1967) formula:

$$n = \frac{N}{1 + Ne^2}$$

where. n = the sample size

N = the size of population

e = the error of 5 percentage points.

Using Yamane formula with error 5 % and with a confidence coefficient of 95%, the calculation from 287 students comes up with 167 students for all the four of D III nursing programs in North Sumatra province. The number of subject was increased up to 176 to account for attrition. Because the number of third-year students in each school was not same, therefore it was planned to recruit 37-53 students from each nursing school.

2. Sampling Method

The steps of proportionate random sampling were used in this study as follows:

2.1 The numbers of third-year students in D III Nursing Program from four Institutions: University of Sumatera Utara, Health Polytechnic Medan, Pemda Langkat, and Pemda Sidikalang were 87, 80, 60, and 60, respectively. Thus, the total number of third-year students from the four nursing institutions was approximately 287.

2.2 The researcher determined the number of subjects from the four D III nursing programs proportionally to the population of each D III nursing program.

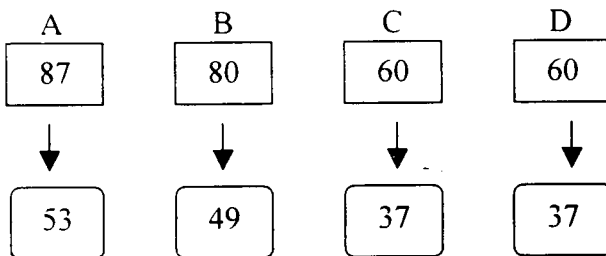
2.3 The researcher calculated the number of subjects by proportion from each D III nursing program. The formula used to calculate the subjects in each nursing program was

$$n = \frac{176 \times N}{287}$$

n = the number of the subjects needed

N = the number of students in each D III nursing program

The schematic of population and calculated number of subjects from each Institution is shown in the following figure:



A = D III nursing program University of Sumatera Utara Medan

B = D III nursing program of Health Polytechnic Medan

C = D III nursing program of Pemda Langkat

D = D III nursing program of Pemda Sidikalang

2.4 Therefore, the numbers of subjects of each D III nursing program were 53, 49, 37, and 37 students, respectively with the total of 176. Then, the researcher selected subjects by using random sampling from the name list of the third-year students in each D III nursing program.

Instruments

The Development of Instruments

A self-report questionnaire was used as the instrument in this study. The instrument consisted of 3 parts: (1) the Personal Data Questionnaire (PDQ), (2) the Ethical Dilemmas Questionnaire (EDQ), and (3) the Ethical Decision Making Questionnaire (EDMQ)

1. The Personal Data Questionnaire (PDQ)

The PDQ consisted of demographic data (gender, age, race, and religion), teaching methods of ethics course, and teaching ethics in caring for mentally ill patients.

2. The Ethical Dilemmas Questionnaire (EDQ)

The EDQ was used to measure frequency of ethical dilemmas faced by nursing students while had been providing care for patients with mental illness in clinical practice. The Ethical Dilemmas Questionnaire consists of: (1) respect for autonomy vs. doing good for patients/others, (2) professional obligation vs. protecting oneself from risk, (3) advocating for patients vs. lack of authority, and (4) intradisciplinary and interdisciplinary conflicts.

Each item was a 4-point scale (0 = never; 1 = seldom; 2 = sometimes; 3 = often). The total possible mean scores were classified into three levels for each dimension. The mean scores of 0 – 1.00 shows low frequency, 1.01 – 2.00 shows moderate frequency, and 2.01 – 3.00 shows high frequency in facing ethical dilemmas.

In addition, the level of disturbance of ethical dilemma, a 4-point scale (0 = not disturbed; 1 = slightly disturbed; 2 = moderately disturbed; and 3 = highly

disturbed) were used to identify the degree of disturbance faced by nursing students while had been providing care for patients with mental illness. The total possible mean scores of the level were classified into three levels for each dimension. The mean scores of 0 – 1.00 shows a low level, 1.01 – 2.00 shows a moderate level, and 2.01 – 3.00 shows a high level of disturbance.

The Ethical Dilemmas Questionnaire was developed based on literature reviews (Forchuk, 1991; Gibson, 1997; Granskar et al. 2001; Latvala et al. 1998; Landeen et al. 1995; Melrose & Shapiro, 1999; Pujiastuti, 2004; Stuart & Laraia, 2001) and focus group interviews with nursing students in Medan, Indonesia. The following steps were performed to develop the EDQ.

(1) Based on the literature reviews from textbooks, and related research studies, the researcher developed four themes of ethical dilemmas which included (1) respect for autonomy vs. doing good for patients/others with seven items, (2) professional obligation vs. protecting oneself from risk with seven items, (3) advocating for patients vs. lack of authority with seven items, and (4) intradisciplinary and interdisciplinary conflicts with eight items (English version I).

(2) Asked three experts in nursing ethics and two experts in mental health nursing to examine the content validity of the English version I instruments). Two experts were from the Faculty of Nursing, Prince of Songkla University, Thailand. Three experts were from Diploma III of Nursing, Health Polytechnic, Semarang, Indonesia. Then, the researcher corrected the instruments based on their suggestions (English version II).

(3) The English version II was translated from English to Indonesian by an Indonesian-English bilingual expert (Indonesian version I).

(4) Conducted focus group interviews with one group of 10 members. The members of the group represented the four Diploma III nursing program in North Sumatra, which were the target subjects in this study. The researcher asked students in the group to discuss about relevancy of each item of the instrument Indonesian version I based on their experiences in providing care for patients with mental illness in psychiatric hospitals. Finally, the Ethical Dilemmas Questionnaire (EDQ) consisted of 23 original items, 2 modified items, and 4 new items. The Ethical Decision Making Questionnaire (EDMQ) consisted of 18 original items, 7 modified items, and 2 new items (Indonesian version II).

(5) The Indonesian version II was translated by an English-Indonesian bilingual translator from Indonesian into English. Then, the researcher discussed with the advisors and corrected the instruments based on their suggestions (English version III).

(6) The instrument of English version III was back-translated into Indonesian language by an Indonesian-English bilingual expert (Indonesian version III).

(7) The instrument of Indonesian version III was used with 20 nursing to test for stability. The relevance of the instruments were also asked from these 20 subjects. Then, the researcher considered the comments of the students and corrected the instrument under advisors suggestions (Indonesian version IV).

(8) The instrument of Indonesian version IV was edited by an Indonesian expert before distributing to the subjects.

(9) An Indonesian-English bilingual translator translated Indonesian version IV into English and edited by an English expert as the final instrument of English version (English version IV).

3. The Ethical Decision Making Questionnaire (EDMQ)

The EDMQ was used to examine how frequent ethical decision-making is made by nursing students. The EDMQ consisted of 27 items, which were divided into three models including: (1) thirteen items for the Patient-centered Model, (2) seven items for the Physician centered-Model, and (3) seven items for the Bureaucratic-Model.

The students were asked to rate each item on a 4-point scale (0 = never, 1 = seldom; 2 = sometimes; 3 = often). The total possible mean scores were classified into three levels for each dimension. These were 0 – 1.00 as low frequency, 1.01 – 2.00 as moderate frequency, and 2.01 – 3.00 as high frequency.

The instrument of Ethical Decision Making Questionnaire (EDMQ) was modified from Chaowalit et al. (2004); Murphy (1984); Swider et al. (1985), other literature review (Garritson, 1988, Landeen et al. 1995; Lowe et al. 2003; Magnusson et al. 2002), and focus group interviews with nursing students in North Sumatra, Indonesia. The modifying steps of the instrument development were as follows:

(1) Based on studies of Chaowalit et al. (2004); Murphy (1984); Swider et al. (1985), and related research studies (Garritson, 1988, Landeen et al. 1995; Lowe et al. 2003; Magnusson et al. 2002), the researcher modified three model of ethical decision making: (1) the Patient-centered Model, (2) the Physician-centered Model, and (3) the Bureaucratic-centered Model (English version I). The steps 2 – 9 were conducted the same as the Ethical Dilemmas Questionnaire (EDQ).

Validity and Reliability of the Instruments

1. The validity of instruments

This step was conducted at the initial phase before translation. Three experts in nursing ethics and two experts in mental health nursing analyzed the instruments for content validity. Two experts in nursing ethics were from the Faculty of Nursing, Prince of Songkla University, Thailand. The other expert in nursing ethics and two experts in mental health nursing were from Diploma III of Nursing, Health Polytechnic, Semarang, Indonesia. Then, the researcher revised the items of the instruments based on experts' suggestions.

2. The reliability of instruments

The reliability of the instrument was tested with 20 nursing students who had similar characteristics to the subjects. The test-retest was used for testing reliability of EDQ and EDMQ using the Pearson's product moment correlation. The researcher asked the students to answer the questionnaire twice within a 2-days interval. A significant correlation had been found in test-retest reliability of EDQ subscales: advocating for patients vs. lack of authority, professional obligation vs. protecting oneself from risk, intradisciplinary and interdisciplinary conflicts, and respect for autonomy vs. doing good for patients/others as .84, .79, .78, and .73, respectively. Furthermore, the reliability of EDMQ were as follows: (1) the bureaucratic-centered subscale was .79, (2) the physician-centered subscale was .74, and (3) the patient-centered subscale was .76. It showed that both EDQ and EDMQ were presumably fairly stable attributes that did not change markedly one day to the next day. Moreover, the coefficient reliability of .70 is considered satisfactory and acceptable for a new developed tool (Polit & Hungler, 1999).

Data Collection Methods

Data collection was conducted after the approval from the Graduate School and Faculty of Nursing, Prince of Songkla University. The data collection procedures were divided into two phases: (1) preparation phase, and (2) implementing phase.

1. Preparation Phase

1.1 Asking permission to collect data by submitting a letter from the Faculty of Nursing, Prince of Songkla University to inform the Director of D III Nursing Program about objectives of the study and procedures of data collection.

1.2 Asking the directors of Diploma III nursing programs in Langkat and Sidikalang to find two lectures who were willing to be research assistants in this research.

1.3 Research assistants were informed, by the researcher, about their responsibility in assisting the researcher collected questionnaires returned from the subjects.

1.4 Preparing packages of questionnaires including a covering letter and two sets of questionnaires for students (EDQ and EDMQ).

2. Implementing Phase

2.1 One hundred and seventy six nursing students from the four Diploma III Nursing Programs in North Sumatra, Indonesia were included in this study.

2.2 The package of instruments used for data collection, consisted of a covered letter informing each subject about protection of human rights, the purposes, procedures of the study, and asking the subject's consent to participate, a general data questionnaire, ethical dilemmas questionnaire, and ethical decision making

questionnaire. Each package of instruments was put in a sealed envelope and distributed to each subject by the researcher and two research assistants. Then, the researcher asked the research assistants to collect the package within one week.

2.3 The researcher collected the answered questionnaires directly from the subjects and from the research assistants.

2.4 The researcher checked for the completion of the responses.

Ethical Considerations

1. The Institutional Review Board of the Faculty of Nursing, Prince of Songkla University, approved the thesis proposal.

2. The letter of assurance of confidentiality will be sent to the subjects who were willing to participate in the study in the package of the Personal Data Questionnaire, the Ethical Dilemmas Questionnaire, and the Ethical Decision Making Questionnaire.

3. The confidentiality of the data during the study was maintained by having the researcher and research assistants had access to the data for the purpose of the study.

4. The privacy of subjects through anonymity was maintained by having each set of questionnaires was given a code and put in a sealed envelope. Anonymity was maintained for each questionnaire, as there were no subject's personal identities on it.

Data Analysis

In this study, the Statistical Package for Social Science (SPSS) version 11.00 for Windows was used for data processing. Descriptive statistics were used to analyze data:

(1) The personal characteristics data of subjects were analyzed and described in frequencies and percentages.

(2) Data on the ethical dilemmas and ethical decision making of nursing students were analyzed and described in frequencies, percentages, means, and standard deviations.