

CHAPTER 3

METHODOLOGY

This study is an attempt to describe the effect of informational support on psychological well-being of postmastectomy patient in the First Teaching Hospital of Xi'an Medical University. In this chapter, the research design, setting, samples, and the instruments were described. The data collection procedures and data analysis were also presented.

Research design

For this study, the quasi-experimental two-group design was used to identify the effect of informational support on psychological well-being of the postmastectomy patient.

Population and sample

The target population for this study were the postmastectomy patients. The accessible population for this study were the postmastectomy patients in the First Teaching Hospital of Xi'an Medical University during November, 1998 to April, 1999.

Purposive sampling technique was used in this study to select sample according to the criteria. The inclusion criteria were as follow:

1. breast cancer woman receiving modified radical mastectomy, aged 20 years and older;
2. be able to speak, read, and understand Chinese;
3. willing to participate in this study.

The samples in the experimental group were selected according to the inclusion criteria and the criteria for matching. The criteria for matching was that the difference between the pretest psychological well-being scores of subjects in both control and experimental groups are not more than 5.

Sample size: In this study, the subjects were 30 postmastectomy patients who met the inclusion criteria.

Instrumentation

The tools in this study include two parts: part one, Informational Support Guideline; part two, Questionnaire, which includes:

1. Demographic data record form;
2. Psychological Well-Being Questionnaire.

Part I: Informational Support Guideline

Informational Support Guideline (ISG) was developed by researcher based on reviewed literature. The content of

the information includes pain relief, wound care, arm exercises, care for affected arm, activity of daily living, choose the prostheses, breast self-examination and follow up. The informational support also includes some other support such as giving advice, encouragement, listening, and staying with patients with expression of care and sympathy.

Part II: Questionnaire

Demographic Data Record Form

This questionnaire includes the age, marital status, education, occupation, income earned, way of hospital payment, past experience of major surgery, and staging of breast cancer. It was used to obtain some basic personal information.

Psychological Well-Being Questionnaire

Psychological Well-Being Questionnaire (PWBQ) was a self-reporting instrument developed by the researcher based on the reviewed literature. It includes an affective component consisting of both positive and negative aspects, and an evaluation of one's life. It was a 4-point rating scale to measure the psychological well-being of the patients. Each item was scored ranging "1-2-3-4" for responsive categories of "not at all - a little - moderate amount - very much so". For items measuring the negative feeling, the scoring was reversed as some items were phrased negatively. The reversal items, among the 20 items totally,

were No. 7 to 11. Total possible score ranged from 20 to 80. Lower scores signified poor psychological well-being and higher scores indicated good psychological well-being.

Content validity testing

Informational Support Guideline

After the construction of the ISG in English was done, 5 nursing experts from Chiang Mai University were consulted and their suggestions were incorporated the guideline. After the instrument was translated into Chinese by researcher, the Chinese version was back translated into English by a bilingual expert from the English department of Xi'an Medical University.

Psychological Well-Being Questionnaire

After the PWBQ was developed, content validity of the English version of PWBQ was validated by using Content Validity Index (CVI) by 5 Thai experts. The experts had experience of taking care of the postmastectomy patient and of developing instrument in Chiang Mai University. The CVI score was .88.

After receiving approval by the Thai nurse specialists, the instrument in English version was translated into Chinese by a bilingual expert. Then, it was back translated into English by another bilingual expert in Xi'an Medical University. The accuracy, clarity as readability of translation was examined by a nursing expert

who was both good at English and Chinese.

Reliability testing

Reliability of the ISG was tested with 5 postmastectomy patients to see its appropriate of language and time.

Reliability of the PWBQ was tested among 10 postmastectomy patients who met the sample criteria in Xi'an before data collection. Chronbach's coefficient alpha was .93 for internal consistency. The acceptable level of it is not less than .70 (Polit & Hungler, 1991).

Data collection procedure

Data collection was done by the researcher step by step as follows :

1. Request for permission from the director of the First Teaching Hospital of Xi'an Medical University and the head nurses of the general surgical unit and surgical oncology unit to collect the data for the study.

2. Postmastectomy patients who met the subject's criteria were selected.

3. The purpose of the study was informed, and a subject's verbal consent was obtained from every subject. The subjects were also informed to have right to withdraw from the study in anytime during the study without any disadvantage.

4. The first 15 subjects were assigned to be in the control group.

5. The demographic data record form, the PWBQ were administered on the third day after operation as a pretest by the researcher.

6. The researcher administered the PWBQ on the tenth day after operation as a posttest.

7. The next 15 subjects were matched according to the matching criteria one by one and assigned to the experimental group.

8. Step 2 to step 3 and step 5 to step 6 were repeated with the experimental group.

9. The subject in experimental group received the informational support provided by the researcher. The time used for providing informational support was about 1 hour. It was divided into 2 parts. In the first part, the researcher provided information about pain relief, wound care, arm exercises, which needed about 30 minutes on the third day after operation.

10. The second part of informational support was provided on the fourth day after operation. The informational support includes information regarding care for affected arm, activity of daily living, choose the prostheses, breast self-examination and follow up. The provision of informational support needed about 30 minutes.

11. During providing information, booklet were used

and other support such as giving advice, encouragement, listening, and staying with patients with expression of care and sympathy, were provided to the subjects.

Analysis of data

The data were analyzed by SPSS on the computer.

1. Frequency, percentage, means and standard deviation were used to analyze the demographic data.

2. The independent t-test was used to compare the means of pretest psychological well-being scores between the control group and experimental group.

3. The paired t-test was used to compare the means of pretest psychological well-being scores and posttest psychological well-being scores within the control group.

4. The paired t-test was used to compare the means of pretest psychological well-being scores and posttest psychological well-being scores within the experimental group.

5. The independent t-test was used to compare the means of posttest psychological well-being scores between the control group and experimental group.