

## CHAPTER III



## PROPOSAL

### 3.1 Introduction

The quality of pre-operative nursing care is the first important stage of operative nursing care. It is the situation where patients face with operation there are high pressure , stress and anxiety. The situation causes scaring, anxiety and stress which can cause physiological change and the body from the secretion of Cathicolamine and Corticosteroid into blood pressure causing hyper-respiration and mal-function of immunity. These problems may cause the post-operative patients to be at low tolerance for pain and low self-reliance. They can develop many complication symptoms such as collapse of lung, malfunction of bowel movement and retention of urine (Chapman, 1985) resulting in long term treatment a and high expenditure. If the nursing care lack of quality, there are consequences from inadequate pre-operative care. This includes a high risk complication, an increased surgical patient/family anxiety and a delay in operation. It also affects to the rehabilitation of post-operative phase. The lack of knowledge of pre-operating self-care of patients lead to anxiety and stress which make patients unsatisfied with nursing care. One problem of operative-nursing care at Phanat Nikhom hospital is the lack of pre-operative nursing care quality which has high potential to cause sick to patient's safety.

Participatory Action Research (PAR) blurs lines between previously dichotomous concepts. It bridges chasms between theory and practice, between thought and action, between science and common sense . It encourages ownership of local problem in a way that gives voice and strength to local solution. (Rains & Ray, 1995). PAR can be defined as “collective, self-reflective enquiry undertaken by participants in social situations in order improve the rationality and justice of their own practices” and this approach is only action research when it is collaborative, though it is important to realize that the action research of the group is achieved through the critically examined action of individual group member (Kemmis & Mc Taggart, 1988, p. 5). According to Scherman & Israel (1995), “ PAR is a methodology in which researcher and member of social system collaborate in a process of (1) improving the system’ ability to provide members with desired outcome, (2) contributing to general specific knowledge through (a) enhancing system’s ability to take action to meet identified needs, (b) improving ability to use data to guide actions and contribute to a body of knowledge, and (c) increasing its capacity to learn from system members.

Another study remarked that PAR represents attractive alternative research methods for nurses primarily because it allows them to be exposed to research in a collegial collaborative environment and it emphasizes both naturalistic and humanistic scientific methods (Holter & Schwartz-Barrcott, 1993). Chesler (1991) stressed on it as a research paradigm when nurses want to acknowledge local talent develop lay leadership, and empower groups or communities to reach their potential.

Accordingly, researcher chose PAR as a strategy to help preoperative team to (1) identify problems (2) to learn about the factors causing understandard preoperative care, and (3) to solve problem that are obstacles to preoperative care seeking.

## **3.2 Rational of Study**

3.2.1 Owing to the higher incident rate of cancellation (3.2 %) and postponement (1.4 %) of operation from incomplete preparation for patients, from annual report of the operating room , Phanat Nikhom Hospital (2000) It is higher than the quality indicator of preoperative nursing care which the Nursing Division was recommended by zero. The consequences of these problem lead to anxiety and stress which make patients unsatisfied with nursing care , loss of time and the cost of care. It include the patient day away from work.

3.2.2 The patients receives inadequate information about self care practice, abnormal symptom that required further medical examination, medical fee, the name of surgeon, operation period. There are increased surgical patients/family anxiety and high risk complication. It also affects to the rehabilitation of post operative phase.

3.2.3 There is duplication of preoperative nursing activities among perioperative nurses and anesthetist nurses, such as nursing record,

preoperative teaching, the assessment of patients readiness. It show that the lack of co-ordination among perioperative team.

The purpose of this study was to identify areas for improvement of preoperative care in operating room at Phanat Nikhom hospital and then select solution to solve problem. The process that aims at enhancing the collaborative of preoperative team to improve their practice or quality and care is known under many terms; Participatory Action Research, Participatory research, or Collaborative Action Research. The Researcher used the term Participatory Action Research (PAR) in this study.

The researcher who is the pre-operative nurse in operation room applied the participatory action research for development of quality of pre-operative nursing care. This participatory action research study is the formal research study undertaken by preoperative team. The study emerged as the result of nurse brainstorming issues that they perceived to be problematic in their nursing practice and their unit environment. This study provides a way of creating knowledge that involves learning from investigation. That is, the preoperative teams experiencing the problem are directly involved in the research process. The participants are capable of conceptualizing and analyzing their own problems, developing their own solution, and taking action to facilitate change to quality preoperative nursing care for surgical patients. It answered the research questions of how is the situation of pre-operative nursing care of Phanat Nikhom hospital and how the participation action research be implemented to develop nursing care quality.

### **3.3 Objective of the Proposed Study**

The general and specific objectives of this study are described as follows:

#### **3.3.1 General objective.**

To investigate the role of PAR as a strategy in improving the quality of préoperative nursing care in the operating room, Phanat Nikhom hospital, Chon Buri province.

#### **3.3.2 Specific objectives.**

- 3.3.2.1 To formulate the situation in the preoperative nursing care (The vision, mission, scope of care, value, process of care, opportunity / risk / problem) in the Operating Room at Phanat Nikhom Hospital
- 3.3.2.2 To formulate system procedure of pre-operative nursing care
- 3.3.2.3 To decrease duplication of care during perioperative nurses and anesthetic nurses.
- 3.3.2.4 To decrease incidence of cancellations/postponement from incomplete preparation of physical, psychological, documentation, instrument and preoperative teams.
- 3.3.2.5 To provide patient satisfaction with preoperative nursing care.

### **3.4 Research Questions**

The following research questions were formulated:

- 3.4.1 What is the situation of the preoperative nursing care in the Operating Room at Phanat Nikhom Hospital?
- 3.4.2 Is PAR able to improve the quality of preoperative nursing care in the Operating Room at Phanat Nikhom Hospital?

### **3.5 Research Methodology**

#### **3.5.1 Research design**

The approach of this study is qualitative research. The participatory action research method use for the main component of this study. The study aims to determine the problem occurring in the operating room. An intervention aims at identifying the ways to improve the preoperative nursing service to meet the standard of preoperative nursing care

#### **3.5.2 Study population**

The study population consists of 6 perioperative and 4 anesthetic nurses in the operating room, Nursing Department, Phanat Nikhom Hospital, Chon Buri

### **3.5.3 Selection of participants.**

This study occurred in a specific area. Therefore, purposive sampling is indicated. The researcher met with the head of anesthetist and staff nurses in order to develop a shared concern with improving quality of preoperative nursing care. The group agreed to collaborate and participate in this PAR project. The chief of nursing department support this study.

### **3.5.4 Study site**

The researcher has chosen the Operating room, the Nursing Department, Phanat Nikhom Hospital (community hospital), Chon Buri Province, as place for the study.

## **3.6 Data Collection Tools**

There were five types of instruments for collecting data : Focus group discussion question guideline in planning, action, observation and reflection step. (see appendices I, II, III, IV); Incident reports, preoperative record; Observation participation; Audiotape, Tape recorder; and The questionnaires by in-dept interviews with the surgical patient about satisfaction level of respondents with preoperative nursing care. (Apply from : Nursing Division, 2001, p. 60-63) Development of a tool for data collection as follows: literature review and consultation with experts in order to set pattern and contents of question guideline, interveiw with ward nurse, surgical patients, Doctor, reviewing the design by experienced person for any recommendation

and for content validity checking and pre -testing question guideline at another operating room in Chon Buri province.

### **3.7 Data Collection**

The data collection were done by researcher. The methods that used in this study are focus group discussion, interview and documentation. The participants have the final authority to generate, summarize, prioritize and select their preoperative nursing care problem. Planning and action are constructive and arise during the discussions of the participants, include the method of evaluation of the change. Focus groups were conducted to obtain general background information about topic of interest, stimulating new idea and creative concepts; identifying potential for problems in preoperative nursing care; generating impression of nursing service; interpreting previously obtained qualitative results. Evaluation process was conducted as part of a needs assessment during the study, and at the end of the study to gather perception on the outcome of this study.

### **3.8 Management of Participatory Action Research**

The purpose of this study is to identify opportunities for improvement of preoperative care in the operating room of Phanat Nikhom Hospital and then to find out solution to the problems. This process that aimed at enhancing collaboration of the

preoperative team in view of improving their practice or quality of care was known under the term of Participatory Action Research (PAR). The procedural steps of participatory action research in development of preoperative nursing care quality were illustrated in Figure 3.1



### 3.8.1 Preparatory phase

To obtain baseline data on preoperative nursing care from the evaluation of the quality improvement in the operating room.

- The author studied information about research techniques and methodology, reviewed related research papers and literature, studied preoperative nursing care standard and reports of incidences according to the key quality indicators, and participated in academic conference on participatory action research.
- Studied details and information about preoperative nursing care standard of the Nursing Division, the Office of Permanent Secretary, Ministry of Public Health and that of the Thai Operating Room Nurses Society in order to be information in outcome evaluation of preoperative nursing care quality development.
- Informal conversation with preoperative nurses, anesthetist nurses, the head of the operating room, the head of anesthesia department, could generate information on view in the operating room.
- The author proposed the problems and the research plan to the Nursing Group Management Committee.
- Organized meetings of the participants (co-researchers), which consisted of the head of the operating room, the head of anesthesia department, operative nurses, and anesthetist nurses in order to inform the description of the research project, its objectives, operation process, duration, and the project activities. The participants were requested to participate in the project for the period of 1 year and 2 months, with the frequency of twice

per month, each session of 1-2 hours. The participants were provided with full freedom in decision-making during the research cycle.

- Preparation of question guidelines for brainstorming and group discussion.

### **3.8.2 Cycle of participatory action research** divided into 4 steps, which are:

The cycle of participatory action research comprised of co-planning between operating nurses and anesthetist nurses, practicing the plan, observing and monitoring the practices, analyzing and reflecting the practices, and finally improving the plan to suit the circumstance of the Community Hospital. The duration for this cycle giving the total project period of 1 year and 6 months (April 2001-Sept 2002). The concepts and instruments for hospital quality improvement were adopted and the quality improvement instruments were brainstorming for determination of vision, responsibilities/ goals of the operative sector, quality points, scope of services, and key process of the services and analysis of problem conditions and development opportunity of preoperative services.

#### **Step 1: Planning**

The preoperative nursing care quality development was planned by organizing group discussion sessions to analyze the problems, causes, and effects resulted from lacking of preoperative care quality as well as to establish the action plan and guideline procedure for preoperative care practices. The duration of this phase was during 2 months (August-September 2002). Prioritization was conducted for the identified problems and the activities required to be developed during preoperative phase and postoperative phase.

The complete plan was obtained on completion of this step, which contained identified problems, operational schedule and duration, responsible people, principles and rationale, practical procedure and strategies as the imposed plan, relevant key measurement indicators, the method for controlling, follow up, and evaluation before implementation of the plan, and techniques in providing advice on incidence-report record forms during data collection process.

Reviewed situation to understand the origin of the context related to the overall quality of preoperative nursing care by studying secondary data from the summary report on the project of “development of preoperative nursing care quality by pre- and postoperative visits and from the 2001 evaluation report on the quality of operative care services of the Social Insurance Office, by visiting to pre and postoperative patients, operating nurses, and ward nurses, by analysis of current operative nursing practices against the nursing standard of the Nursing Division, and by studying the data from the incidence records according to the key quality criteria for operative nursing care.

The focus group discussion led to determination of vision, responsibilities/goals of the operative sector, quality points, scope of the services, key process in providing services, problem conditions, and development opportunities. The problem data were then classified into preoperative, operative, and postoperative problems. The entire research team was aware of the importance of quality improvement of preoperative nursing care. The instrument used in quality improvement was voting to select the most critical aspect for improvement. The duration of this phase was 4 months (April-July 2001).

### **Step 2: Action and observation**

The actions were in accordance with the imposed procedure and the operative nursing care behaviors of the operating room nurses including the general environment of the operating room were observed. The important thing was the author must build good relationships with the participants by showing sincerity to support, allowing them to express their opinions, and accepting suggestions as well as proposed problems that affected the work practices. There was coordination with the Nursing Work Management Committee to inform the procedure and request for support as required. In this step, the author implemented the action plan with related activities such as work observation, relevant data collection and analysis, identification of supporting factors and inhibiting factors, and promotion of supporting factors. The questions used as guidelines for group discussion process were:

### **Step 3: Reflection**

The author, operating nurses, anesthetist nurses, the head of the operating room, and the head of anesthesia department participated in reflection of the implementation outcomes. The process included identifying things that helped to improve the nursing quality; planning, revising, and finding resolution to existing problems and obstacles; and trying out the revised plan to further find a suitable direction for practices. Group discussion sessions were organized for the participants fortnightly with the help of question guidelines so that the team members could reflect their ideas, inform the supporting factors for the imposed plan, and indicate the factors that were obstacles of the practices. This step consisted of:

#### **Step 4: Revise of the plan**

Organizing meetings of the participants on a monthly basis in order to revise the plan for further operation so that the quality of preoperative nursing care was improved. The evaluated key measurement indicators included: procedure and direction for preoperative nursing care practices that were practical and tangible; the frequency of operative postponement and cancellation due to that physical and mental condition of patients, document, equipment and operative personnel were not ready; patients' satisfaction with preoperative nursing care services; and reduction of repetitive preoperative care activities between operating nurses and anesthetist nurses. The outcomes of practice reflection were used to improve the plan and in determination of new activities to respond to the problem of lacking of quality in preoperative nursing care. The plan and process were continuously improved according to the occurring conditions and circumstances by reviewing the questions imposed in the planning step.

Some operational phases of the participatory action research in practice might be overlapped or carried out at the same period of time. Some activities might be paused with beginning of new activities or further steps were continuously operated. Those were because this type of research could not be rigid but can be improved or changed to suit any occurring circumstances.

### 3.9 Data Analysis

After focus group and debriefing sessions were completed, the next step was to prepare data analysis. Transcript-based analysis is the most rigorous and intensive choice. Audiotape are transcribed verbatim, and the result documents easily can be used as the source data for the analysis whether using a full or abridged transcript, research team members conducted independent content analysis of all documents. From this review and analysis, researchers summarized data and coded them by identifying idea clusters, and generate a list of key themes. Identifying themes helped researchers to determine key data categories among respondents' comments. This was done by hand, with notes on index card.

During data analysis, researchers collapsed these similar comments into an "altered self- image related the preoperative nursing care experience" category. After themes were identified, researchers compared whether data were categorized in the same manner and determined their level of agreement. During this phase, researcher team members reviewed and discussed impressions. This process encouraged ownership of problem which will enable strength for problem solving. The researcher used content analysis in this study.

### 3.10 Ethical Issues

This study based on a participatory approach had guaranteed the rights of perioperative and anesthetist nurses to participate in decision and proposals affecting their practices. The study was intended to improve quality of preoperative nursing care among the perioperative teams, as a specific group, which could be justified in term of answering the perceived needs and concern of quality of nursing services. Participation in the PAR process should be voluntarily and based on a negotiated agreement between participants and facilitator. This agreement, concluded on the basis of local staff nurses, would specified reciprocal commitments and rights, such as:

1. The facilitators had committed themselves to assist the participants to learn in order of improving their practices.
2. The participants had committed themselves to participate for the full period of the project (although they can quit the program at any moment)
3. Activities should be scheduled to allow both the participants to carry out their normal professional duties, as the program to yield results.
4. Participants could proposed problem issues other than the predefined problem issues, if they deem these pertinent and related to the predefined issue.
5. Activities would be designed on a joint basis.
6. Participants agreed to bring in resources, as deemed reasonable, and facilitators to supplement them, as deemed reasonable.

7. Participants and facilitators were the jointly owner of the information gained and possible dissemination would occur after reciprocal consultation.
8. It was acknowledge that the learning process, while changing the participants' practices might be threatening. Also, the methods used in the PAR process might be at odds with the customs and manners of the operating room. Therefore, it was important that the facilitator created an atmosphere in which the participants felt comfortable, and that did not expose them to humiliation, or otherwise undesirable situations.

### **3.11 Activity Plan**

It was tentative planned that the activity would start in January, 2001 and would be finish in October, 2002. Below the activity plan is presented in a table 3.1.



### 3.12 Budget

The budget, which was required to provide the necessary inputs for this study, is shown in table below. The budget reflects only those financial inputs necessary for the programme activities for the period of January 2001- October 2002.

**Table 3.2 : Estimated expenditure for programme activities**

Budget category	Unit price (Baht)	Unit	Duration (month)	Total amount (Baht)
1. Food , refreshments	30	10	11	3,300
2. Stationery				
2.1 computer diskettes	30	10		300
2.2 Stationery meeting	-	-	-	4,000
3. Tape recorder	30	30		900
4. Audio-tape	3,000	2		6,000
5. Meeting room	-	-	-	Phanat Nikhom hospital
Total budget				14,500

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