

CHAPTER III

RESEARCH METHODOLOGY

1. Research Design

This research is a quasi-experimental to study the result of the experimental application of the musical therapeutic exercise program to the length of stay in the hospital of orthopedic patients in orthopedic ward, Krabi hospital with one patient group who are applied by this program.

2. Research Question

Can the musical therapeutic exercise program decrease the length of stay in orthopedic patients ward, Krabi hospital ?

3. Objective

General objective

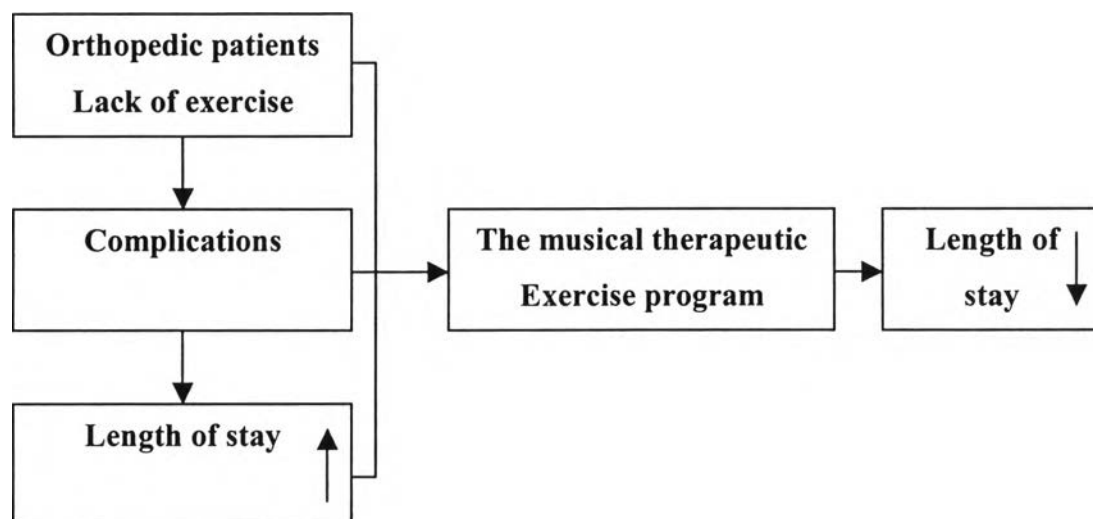
To apply the musical therapeutic exercise program to motivate the patients to take exercise to strengthen to prevent to cure and to rehabilitate the physical and mental state orthopedic patients ward, Krabi hospital.

Specific objectives

1. To study the length of stay of orthopedic patients ward, Krabi hospital after using the musical therapeutic exercise program
2. To compare the length of stay between the patients group who attend the musical therapeutic exercise program and the patients group who do not attend this program

4. Conceptual Framework

To study the result of the experimental application of the musical therapeutic exercise program to the length of stay in orthopedic patients of orthopedic ward, Krabi hospital.



**Conceptual Framework for the musical therapeutic exercise program in
orthopedic patients ward, Krabi hospital.**

Rehabilitation during stay in hospital and important activity for orthopedic patients since it helps them to get recovery sooner. However, there is no such activity in the orthopedic ward of Krabi hospital. It is because of many factors from both patients and nurses such as lack of awareness of exercise benefit, ignorance, less participation, fear of pain, in confident, lack of stimulation from nursing staff. This result in complicating diseases such as stiffness of joints, atrophy, foot drop bedsore etc. This complications cause bad affect to the treatment, to economic, social, emotional and mental condition of the patients, lengthen period of stay and increase hospital expenses. Therefore, the researcher introduced the musical therapeutic exercise program into practice in order to encourage and stimulate the patients to take some exercise to rehabilitate and prevent complicating diseases while staying in hospital. This obviously shortened the patients' stay period in Krabi hospital.

5. Limitation and Obstacle

For this study the researcher could not study through the experimental group and the control group because of the moral principles and the rights of the patients. Another obstruction is that there is only one orthopedic ward in Krabi hospital. The researcher has found out the way to solve the problem by studied the length of the stay of the patients group through retrospective study to compare their length of stay with the experimental group.

6. Expected Benefit of this Study

The results of this research will be use to improve quality of service to provide appropriate service for the orthopedic patients in the hospital. The advantages of the project was as follow;

1. Orthopedic patients were healthy in both physical and mental.
2. It saved the overall expenses both for the patients and for the hospital resulting from the decreasing of the length of stay in the hospital.
3. It creates a good relationship among health personnel, the patients and their relatives according to the mission goal of the ward.
4. The program can be the model project that can be expanded to other department or other hospital that interested in this program.
5. The program can promote to the patients and their relatives habit of taking exercise and putting into the practice in their home and community.

7. Operational Definitions

The therapeutic exercise : The physical movements partially or every part, to cure to counteract and to decrease the illness or to increase the physical functions.

The musical therapeutic exercise program : The application of the musical rhythm and short explanation of the patterns of exercise to stimulate and to motivate the patients to take the exercise by moving their arms and legs to gain the effective treatment.

The orthopedic patients : The patients both male and female , the age 15 years old up who had injuries about bones system, muscles system, tendons and joints who are admitted in orthopedic ward, Krabi hospital.

The length of stay : The number of days for which the patients had stayed during admitted in the hospital was discharged.

8. Research Methodology

This study is a quasi-experimental study by one group to study the result of the music exercise program in orthopedic patients ward, Krabi hospital through the following process:

Preparation

1. Meeting ward doctor, nurses and physiotherapist to make a plan and postures and exercises.
2. Making publication of the project in order to gain participation form patients and their relatives.
3. Setting criteria to choose patients day-by-day to the project by pre-assessment.
4. Installing sound equipments.
5. Making time schedule for orthopedic ward and put it on the notice board for the patients and their relatives to know and to get themselves ready to join the program.

Pre-performing Steps

Hold a meeting again to check understanding among orthopedic ward staff and to keep on track as planned such as ;

- Length of time in taking exercise
- Postures (Applied from orthopedic Nursing and Rehabilitation book of Lertsin hospital Bangkok. (1996) and Chiangrai hospital). See Appendix II
- Music / song
- Assessment

Practice stages

- At 06.20 pm.
 - Play music, greet patients and their relative, explain exercise activity and its benefit.
 - Take a pulse check and assess the patients' readiness to be involved in the program
- At 06.30- 07.00 pm. - Nurse, relatives and patients do exercises by the nurses who intensively take care of.
- At 07.00- 07.15 pm. - Do assessment of the patients after exercise, if any case has a problem, write down the nursing record.
- At 07.15- 08.00 pm. - Clean the patients' body by sponge bath or shower and take some medicine.
- At 08.00- 10.00 pm. - Make a visit to the patients again, let them take a rest.

Since there is only one orthopedic ward in Krabi hospital, so there is a limitation in dividing group of patients into 2 group: experimental and control group, and awareness of medical etiquette and the patients' right, then the researcher let patients join the program (except the case with restriction)

For the control group, the researcher has studied the patients' medical record instead, because they were considered good representatives, being in the same period of time, in the same policy, in the same team of executive, doctor and staff of orthopedic ward and in the same technology and equipment. Their length of stay at that time were taken to be studied and compared as complete representative of control group.

9. Target Population

The patients who are admitted in orthopedic ward of Krabi hospital

10. Population

The patients who are admitted in orthopedic ward from March - May 2004.

11. Data Collection

Data were collected by interviewing and data from the record of orthopedic patients.

12. Statistical Analysis

The analysis for this information uses the SPSS 10.0 for window program and is separated as follows;

1. Analysis of the general information of the patients using frequency and percentage.
2. Analysis of the length of stay of population using frequency, percentage and means.
3. Compare the length of stay between the patients group using means and T-test.