## **CHAPTER I**

## **INTRODUCTION**

The orthopedic surgery ward of Krabi hospital has started the operation service since June, 2000 so far. It composes 30 patients beds; for both male and female patients, the age 15 years old up. Most cases caused by road accidents are in top 10 symptoms ranging from Fracture of femur, Fracture of tibia, Fracture of Radius, Fracture finger, LBP, Fracture of Fibula, Tear tendon, L spondylosis, Fracture of Patella and Fracture of Toe respectively.(data from the record of orthopedic patients: 2003) The age group of patients most found is 15-30 years with the rate of staying in bed 7 days. The mission is providing the service of orthopedic surgery efficiently with integration, making the patients satisfied and free from the complication and returning to live their lives happily.

The fracture can be found quite often nowadays especially the fracture caused by accidents, which make the victims suffer from the fracture, the disability or even the death. That causes a lot of expenses for treatment. The recovery after the orthopedic treatment is definitely necessary to prevent the complication or the disability and to help the patients to get their fracture organs back into an original state, or the most favorable state. The orthopedic treatment for the fracture is to make bones into a proper position, may be through the operation. The broken parts must be put in a cast for

immobilization by plaster cast or traction outside or inside the broken bone. In order to hold the broken bone in place as the original state of anatomy or nearest position. This makes the orthopedic patients stay in the hospital for a long time. They are usually restricted to lie in bed and pulled and kept in traction by a special medical apparatus in order to gain the effective treatment result and to follow the treatment plan or to get ready for the operation. It makes the patients stressful, worried and full of pressure. Moreover, the majority of the orthopedic patients who are around 15-30 years( the record of orthopedic patients:2004) are active, do not want to stay still, so the exercise is the activity that can help them to relax and to decrease the complication caused by the patients lying still in bed for a long time.

Before an operation, the exercise is the way to get the patients' body and mind ready to take the surgery. If the patients have a chance to take exercise to strengthen the muscles and joint that is amputated, the patients will soon recover after the operation. In the case of leg amputation, for example, teaching the patients to take exercise will benefit to adjust himself to the artificial leg. In doing this, it needs the explaining the importance of the exercise to the patients that some exercise can help the patients getting a quicker recovery and a better acquaintance in using the artificial leg than the patients who never take the exercise (Wannee and et al;1990)Sometime it is necessary to take the physical exercise with the other parts besides the sickness parts such as the case with the fracture of femur unable to walk on that leg, the muscles of the other leg and two arms must be strengthened to be strong enough to walk by the crutches. The aged patients suffer even more problem with their weak limb muscles. Furthermore the

musical can help the patients relax, lessen their stress and worrying before taking the surgery.

After the surgery, the exercise will also be the recovery technique to get sooner rehabilitating, to prevent complications such as constipation, flatulence, pneumonia, fat emboli, to create a good blood circulation, to make the wound got well sooner, to decrease swelling, to gain a proper physical recovery, to prevent the stiffness of joints, atrophy, bedsore, the patients then become strong enough to do anything by themselves. The patients can themselves relieve the pain by taking some exercise while staying in bed right after the recovery from the operation; it is because the exercise and movement can decrease the strain of muscles and increase blood circulation through the surgical wound, that helps the wound getting well sooner and relieves the pain.

During the rehabilitation, when the injure is so serious that there is fracture of bone, it is necessary to bring back the body into good condition after the operation, to put the broken bone in place and during the body repairing its broken parts. The rehabilitation after the broken bone needs both scientific and artistic method that can prevent the complication, and that does not disturb the under-repairing broken bone. For the arm bone injury, the objective is to recover its potential in being able to do the routine work by themselves. For the leg bone injury, it is to help the patients able to walk as ever again. (Pajaree,1999:594) It will save time and money, if the patients can get a quick recovery, being able to walk by a crutch support, shortening the time for practice walking.

It is obvious that the rehabilitation is the important step in the treatment. It is the way to revive the patients' health into the original state as much as possible; the way to prevent the complications and the disability. Setting the proper lying position and taking exercise of joints and muscles by isometric and isotonic are the activities to increase the blood circulation and the bone joining (Koopantawee, 2001:142)Similarly, the patients being in plaster cast and in traction are treated for the same purposes.

So far, the nurses in orthopedic ward of Krabi hospital have had to advice the patients individually with hope to have an individual patients taking the exercise for 15 minutes a time. This practice causes a burden for 2 nurses on duty. Moreover, the patients and their relatives do not realize the importance of taking an exercise; paying no attention and some are afraid of the injury incurring from the exercise. These problems cause a lot more of complications making treatment more difficult such as constipation, flatulence, fainting, infection, respiratory diseases; a cold, pneumonia, the stiffness of joints, atrophy. These affect the patients' health, mind, economic and social life and actually increase the burden for theirs relatives and the medical staff. These problems can apparently be prevented by many ways. However, one of the most effective methods is to take an exercise along the musical rhythm that help stimulate the patients to enjoy taking exercise joyfully and happily.

The musical for therapeutic exercise program in orthopedic patients is the project for the patients to take an exercise to counteract the orthopedic illness by applying the favorite songs from which the finding was obtained through interview forms with 30 patients is that 90 percent of them prefer quick rhythm country song;

thus the researcher used the songs of local singers to the six standard patterns of exercise in 30 minutes The patients' relatives can join the program everyday from 6.30-7.00 pm, according to the interview of the patients and their relatives revealing that it is the most suitable time. It is the prime time for both patients, their relatives and the nurses to work and to make relationship that reaches the most favorable outcome.

So "The Musical for Therapeutic Exercise Program in Orthopedic Patients" is important and useful not only to satisfy the patients but also to decreases the length of stay in hospital and to save time and medical charge. This type of program has also never done by any department in Krabi hospital. In other hospitals, this type of program has ever introduced to use with some patients, but lack of assessment and implementation. The researcher is interested in the therapeutic exercise program and then set the project in the department and do the trial for one month (July 2003). It turns out that the patients and their relatives willingly join the program. The patients are happy and relaxed. The project can stimulate and raise the interest from the patients. It can be the pilot project that composes 4 dimensions of nursing process, that is, promotion, prevention, treatment, rehabilitation and in the pattern of integration including body, mind, emotion, society, soul, relatives and family participation of taking care of the patients to come back to their daily life happily as the mission of orthopedic ward and the policy in promoting the good health of Krabi hospital.