

CHAPTER V

CONCLUSION, DISCUSSION AND RECOMMENDATION

1. Conclusion

The project of “The musical therapeutic exercise program in orthopedic patients ward, Krabi hospital” aimed 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 of Krabi hospital. By study the length of stay of orthopedic patients of Krabi hospital after using the musical therapeutic exercise program and 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. The outcome of this study will lead to improvement quality of service to orthopedic patients to the healthier stage in both physical and mental. It will saves the overall expenses both for the patients and for the hospital resulting from the decreasing of the length of stay in the hospital and creates a good relationship among health personal the patients and their relatives according to the goal of the ward. The program can be the model project that can be expanded to other department or other interested hospital for branch marking. The study outcome are summarized as follows:

1.1 General Information

The majority of patients were male and between the ages of 15-32, with the average age of 37. Most were Buddhist, graduating from primary school. The main occupation is laborer with the average income of 4,382 Baht, with a mode of 5,000 Baht. Most of the patients use the gold card.

1.2 Information the organs of injury and the length of stay for this study after using “The musical therapeutic exercise program”

The majority organs of injury were thigh. The average LOS of patients of 6, Mode 2 days, Min 1 day and Max 26 days.

1.3 Comparing 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

For this study the researcher had a limitation for studying through the experimental group and the control group because of the moral principles and the rights of the patients .Another obstruction was that there were only one orthopedic ward in Krabi hospital. The researcher was found out the way to solve the problem by studying the patients through retrospective studied to compare their length of stay with the experimental group’ s length of stay and found that this program could decrease means of LOS one day at a statistically significant level ($p<.05$).

2. Discussion

This research is a quasi-experimental to study the result of the experimental application the musical therapeutic exercise program to the length of stay should be beneficial for improvement the quality of service in the hospital

2.1 General Information

The majority of patients were male with an average age of 37. Most were Buddhist with an education level of primary school. Labourer was the main occupation with income level between 1,000 – 5,000 Baht. Most used the gold card.

2.2 The length of stay

This research is a quasi experimental study. The result from study to found that the project can decrease the length of stay in hospital one day at a statistically significant level ($P < .05$). It was established in three month period from March to May, 2004 by using the musical therapeutic exercise program motivate the orthopedic patients in orthopedic ward, Krabi hospital to take exercise during time 06.30-07.00 pm. of everyday. The musical therapeutic exercise is the systematic implementation of planned physical movements, postures, or activities designed to ; 1) remedial or present impairments ; 2) enhance function ; and 3) enhance fitness and well being common impairments to be addressed. The musical therapeutic exercise program can increase strength , range of motion , and cardiovascular endurance.

Exercise is not only beneficial for only the bones fracture but also the exercise is an important part of the treatment for general orthopedic patients , such as in

Osteoarthritis , exercise is essential for two reasons ;It prevent the joints from becoming stiffer , and it strengthens the muscles surrounding the joints. Strong muscle provide needed support , making movement easier and reducing pain. (Petrella J. R, 1999) In Rheumatiod Arthritis patients, common impairments attended therapeutic exercise can increase strength, range of motion and cardiovascular endurance. This research is agreed with Nhunil (2000) showed that the exercise effect to the body systems to work well such as ; to exchange blood circulation systems, lead to decreasing systolic blood pressure, to expand lung size, to enhance the strength of respiratory muscle systems and to enhance the muscles and bones, can control the mass body index level, to decrease percentage of intra lipid in the body (Poombunmee1995). Singhasem and Keawgae (2003) found that the exercise program can increase muscle power to stronger and range of motion of joints, the body can move quicker , to have agility and flexibility. During exercise the body will be prompting secretion of Endophrines and Enkephalins to feel fresh and Norepinephrine to be well emotion and decrease the stress (Kabilsing . 1998 in Kojadee and et .al, 2003) The sound and the rhythm from the music can help the patients to be well because the music influences the brain by prompting the secretion of Endorphrines , the body's own morphine confirmed by Fontaine (1994). Music therapy leads to slower heart rate, calmer and more regular respiratory rate and lower blood pressure(Bonny1978; Chaln,1998; Uplike,1990) and it has even been shown to result in lower Adrenaline level and reduced neuromuscular activity (Chaln, 1998) The music influences on the person , psychologically and emotionally during treatment off illness or injuries.

For results of this study are confirmed by the orthopedic patients ward of Khonkaen hospital from an interview which found that after using the music therapeutic exercise program for 2 years. It can decrease the length of stay from 6.49 to 6.45 (Thipornpun, 2004). However, although the musical therapeutic exercise program can decrease the length of stay of orthopedic patients in orthopedic ward, Krabi hospital but It had a limitation for some patients to do for each postures or disease . So the musical therapeutic exercise program must be designed with the specific stage of the disease process in mind, the injured organs and the degree of inflammation. No matter which types of exercise may be needed initially and are applied to remedy a patient's specific condition, the final goal of rehabilitation is to try, whenever possible, to achieve an optimal level of physical fitness in the orthopedic patients being treated by the end of the treatment regimen. It can be beneficial to the patients as far as possible.

3. Recommendations

Critical recommendations gained from implementation of the project "The musical therapeutic exercise program in orthopedic patients ward, Krabi hospital" were as follows ;

3.1 Research Design

Since the research is designed to study the patients as a whole, the findings were likely unclear. The further study then should have 2 groups separated clearly into control and experimental and compare the result of the application of "The musical therapeutic exercise program in orthopedic patients" such design could give a clearer result in indicating that the decrease of length of stay is caused by the program. In

addition, it is necessary to control numerous variables affecting the length of stay such as the policy of hospital, doctor's treatment plan, collaboration of executives, catering and need and necessity of individual patient in staying in hospital. Moreover, if needed to have clearer findings, it is needed to choose the same group of patients according to the age, symptom such as only the patients with broken thigh bone at the same age, in order to gain comparable results

3.2 Types of song applied in “The musical for therapeutic exercise program in orthopedic patients”

- The song should be selected to serve the difference in music preference of the patients who may differ in cultural background. Since individual patients prefers different songs. The patients' song preference should be checked first in order to motivate them to take exercise. Otherwise, the patients, maybe, feel annoyed with the song or are not willing to join the program.
- Most of orthopedic patients have to take a long time for treatment, some may feel bored doing such activity, so there should be many cassettes of different songs taking turn to play each day to create a pleasant atmosphere in attending the program of both patients and staff.
- There should be some video cassettes to play and to display each posture for the patients to be the pictures and to follow the posture of exercise. And also it makes them enjoy taking exercise.

- Leaflet and poster about the program should be made to publicize for the patients and their relatives to participate the program.
- Choose some patients who are good at exercises to be leaders and take turn to lead the exercise activity by starting from making speech to open the project, to talk about benefit of doing exercise, to persuade other patients and to monitor, to control, and to close the program each day. This is done to create self – confidence, being proud of themselves while staying in the hospital. They feel themselves worth helping others, creating friendship among the patients and they have the responsibility for these burden with staff.

3.3 Postures for therapeutic exercise

They should be basic and simple and need some orthopedic experts' advice such as doctor, physiotherapy in order to gain effective treatment and safety for the patients.

3.4 Atmosphere in doing activity

- The patients' rights, willingness and satisfaction is thought the most important. The assessment to check their needs and satisfaction while joining the program should be done in order not to force them to do. And friendship atmosphere should be created. The patients must be invited to join the program and take turn to be the leader of exercise.
- The team of project staff must steadily take in charge, monitoring, helping while the patients are taking exercise. Since tiring staff make

the patients distracted, leading to discontinued practice and failed project. So the awareness of the duty is vital.

- After taking exercise, the patients must be served water or sweet drinks in order to refresh them. Body check – up after the exercise is also necessary.
- Additional entertainment for 5 – 10 minutes after the exercise should be done in order to warm down and relax such as singing song by patients or their relatives, taking turn day by day but it should not too loud to disturb other departments.

3.5 Follow – up plan PCU (Primary Care Unit)

Since rehabilitation is very important for the orthopedic treatment, so the patients should have a continuous program for practice at home, apart from taking exercise in hospital. This provides effective treatment. As a result, orthopedic nurses should make a follow – up PCU in order to pay a visit to the patients in the responsibility area or make leaflet or cassette tape about exercise program for the patients and their relatives to go on practicing at home or in case of the patients who transfer to special ward.

3.6 Others

This study not only gain the finding of application of “The musical for therapeutic exercise program in orthopedic patients” in term of length of stay, it but also may study feature of range of joint motion in order to study movements of joints. This makes the study more useful.