Effect of Rehabilitation Program on Physical and Psychosocial Functioning of Patients with Burn

THESIS

Submitted for Partial Fulfillment of the Requirements for Doctorate in Nursing Science

(Medical-Surgical Nursing)

By

Salwa Attia Mohamed

(M. Sc.N.)
Faculty of Nursing
Cairo University

Faculty of Nursing Ain Shams University 2009

Effect of Rehabilitation Program on Physical and Psychosocial Functioning of Patients with Burn

THESIS

Submitted for Partial Fulfillment of the Requirements for Doctorate in Nursing Science (Medical-Surgical Nursing)

Supervised By

Prof. Dr. Mohamed Radwan El HadidyProf. of Plastic Surgery,
Faculty of Medicine, Mansoura University

Assist. Prof. Dr. Salwa Samir Ahmed Assistant Professor of Medical-Surgical Nursing Faculty of Nursing, Ain Shams University

Assist. Prof. Dr. Ola Abd El-Aty Ahmed
Assistant Professor of Medical-Surgical Nursing
Faculty of Nursing, Ain Shams University

Faculty of Nursing Ain Shams University 2009

SUMMARY

The burn injury considered one of the most serious and devastating injuries among people of all age. Burn injury resulting in tissue loss or tissue damage. This tissue injury occurs when energy from heat source is transferred to the tissues of the body, as a result of direct contact or exposure to any thermal, chemical, electrical, or radiation are termed burns (*Edelman*, 2007).

Aim of the study:

This study is aimed to evaluate the effect of rehabilitation program on physical and psychosocial functioning of patients with burn.

Research hypothesis:

It is hypothesized that the rehabilitation program will have a positive effect on physical and psychosocial function of patients with burn.

Subjects and Methods:

Research Design:

A quasi-experimental design was used in this study.

Research Setting:

The study was conducted at the burn units of Main University and Emergency Hospital in El-Mansoura.

Subjects of the study:

The subjects of the present study were selected as a convenience sampling. They consisted of one hundred patients with burn their aged ranged from 18-60 years, and they are divided equally to study group and control group.

Tools for data collection:

The data was collected by the researcher using the following tools:

I. Interview Questionnaire Sheet:

It consist of:

- Socio demographic and medical data section: was constructed to elicit patient's name, age, sex, education, occupation, income, site of burn, total body surface area, depth of burn etc.
- Patient's health needs assessment section: was constructed to assess physical and psychosocial need.

- II. Burn Knowledge Assessment Sheet: compromised series of questions to elicit subject's knowledge regarding burn injury.
- III. Observation checklist for physical exercises: To assesses the practice of patients in relation to exercises of extremities and breathing for study and control groups.
- IV. Brief Burn Specific Health Scale is adopted from (Kildal et al., 2001). To assess physical and psychosocial function in individual suffering from burn injury. The scale consisted 40-question instrument. Responses to the items were made on a five-point scale from 0 (extreme(ly)) to 4 (not/none at all). For each category to give a total scores ranging from 0-160.
- V. A burn rehabilitation program was developed based on patient's needs assessment to cover knowledge and performance skill related to burn patient.

Pilot study:

A pilot study was conducted on 10 patients to test clarity, applicability of the tools and time consuming. The necessary modifications were done to suit the patient's level.

Field work:

- The collection of data for this study began after the pilot study was concluded. Data was collected during the morning or after noon shifts four days a week and lasted for one year from November 2005 until November 2006.
- Patients who met the sample selection criteria were allocated consecutively to each of the study and control groups.
- The study subjects were exposed to the rehabilitation program activities which are 7 consecutive sessions over two weeks (3 sessions practical & 4 session theory). Each session lasted from 30 45 minutes. The first two sessions were designed to equip subjects with the necessary basic information related to the burn injury. One session about diet, three sessions about wound care and physical therapy and session about coping. The total time for program was six hours.

The results of the study showed that:

 There was no statistical significant difference between both groups regarding to age, sex, marital status, education level, occupation status and monthly income pre program.

- There were no statistical significant differences between mean scores of knowledge for the study and control groups' pre program. However, there were highly statistically significant differences between mean scores of the same items for both groups after implementation of program.
- The finding of the present study revealed that there was no statistical significant between both groups as regard to physical, psychosocial status pre program. However, there were highly statistically significant differences between mean scores of the same items for both groups post program.
- Results of this study stated that there were positive significant statistically correlation between physical and psychosocial status and educational level (p<0.05).
- Also there were negatively correlated with physical and psychosocial status and length of hospital stay after implementation of program.
- Results of this study stated that positive significant statistically correlation between physical and psychological status and (knowledge & practice) (p<0.05) among study group.

This study concluded the following:

- The burn rehabilitation program leads to improve burn patient's knowledge related to injury. Also practice improved after implementation of the burn rehabilitation program.
- Patient's physical and psychosocial status improved after implementation of the burn rehabilitation program.

The study recommended the following:

- Implementation of burn rehabilitation program for patients with burn injury through the collaboration of various rehabilitation team members.
- Replication of the study on a larger probability sample from different geographical areas, to achieve more generalizable results.