

## SUMMARY

Postoperative pain is the most common cause of delayed recovery, maximal postoperative pain occur between 12 and 36 hours after surgery and usually diminishes significantly by 48 hours. Therefore, postoperative pain may be feared more than surgery and anesthesia this can lead to a delay in surgical intervention, thereby increasing the risks, the extent of surgery, and the postoperative pain. Delay may allow advancement of a pathologic condition, thereby complicating the recovery course. Pain management is an integral component of nursing practice setting. Because of the amount of contact nurses have with patients in pain, they are in a good position to help the patient with pain. The nurse can establish a relationship with the patient to help them learn new ways of controlling pain such as relaxation techniques which are a useful pain relief measures as a non-pharmacological measures.

Thus, the present study aimed to determine the effect of relaxation technique on minimizing postoperative pain.

The study was conducted at the general surgical units at Benha university hospital. 100 postoperative patients with no history of any additional chronic illness assigned to 2 groups: study and control groups each group comprised of 50 patient.

### **Four tools were used for collection of data:**

#### ***Tool 1: pain assessment tools***

Used to assessing the pain it consisted of three parts. **Part one** dealt with information related to biosociodemographic characteristic of the sample. **Part two** comprised initial pain assessment which include: location and intensity of pain, pattern of activity that causes or relieves

pain. Effects of pain on physical, psychological, mental symptoms, and effect of pain on activities of daily living and relationship with other were contributed to a valuable information on patient ability to function and cope with pain, followed by assess what sound the patient prefer to listen during relaxation technique. **Part three** include (UAB) pain behavior scale which consists of 10 target behaviors which each contributes equally to the total score, hence a range of possible scores from 0 to 10 include the following behaviors: verbal, non verbal complaints, down time, facial grimaces, mobility, body language, the use of visible supportive equipment, stationary movement and the need of pain medication.

### ***Tool II:***

Visual analog pain scale this tool was used to assess pain intensity

### **Tool III:**

Relaxation technique sheet this tool was used to minimize postoperative pain. It includes patient's name, date, preparation of patient, psychological and physical. Measuring vital sings pre and post relaxation and listening to therapeutic sound as music & Quran during relaxation as the patient prefer.

### ***Tool VI Evaluation tools***

This tool was used to evaluate the effect of relaxation technique on postoperative pain intensity. It includes vital signs and visual analog scale pre and post relaxation in two shifts morning and afternoon for 3 consecutive days and on discharge.

## Method

Administrative approval for conducting the study was obtained from Benha university hospital director and head of general surgical department for conducting the study after the explanation of its purpose. A pilot study was carried out on 10 patients. Relaxation technique was done individually for 3 consecutive days postoperative and on the discharge, pain intensity was assessed by visual analog scale before and after relaxation sessions.

The present study showed the following results:

- The study revealed that the majority of the sample were females, educated, married and had cholecystectomy
- A significant difference regarding to visual analog scale was found between the two groups and in the study group. there were a significant difference between pre and post relaxation especially after the third day. Moreover there were a continuous reduction in the intensity of pain through the fourth days.
- A significant changes in vital signs between study and control group as a results of relaxation technique practicing and listening to therapeutic sound, a decrease in pulse and respiration were noted through the study period but no significant difference was found between pre and post relaxation in the blood pressure and temperature.
- Continuous reduction of mean score of pain behaviors through the four days were noted.
- A significant differences between the two groups regarding to verbal, non verbal complaints, facial grimaces, standing posture, body language, stationary movement and the need of medication were noted.

- The study also proved that there were no significant difference between the two groups regarding to mobility, use of visible supportive equipment and downtime.
- The present study also showed that practicing of relaxation technique with listening to therapeutic sound as Quran or music both sounds had an effect on decreasing the intensity of pain but Quran has more effect than music as the mean score of pain decreases in addition to decreases of pulse and respiration post relaxation in the two shifts but no changes were noted in temperature and blood pressure.
- A significant difference between education and illiterate patients pre and post relaxation technique and therapeutic sound in the two shifts were noted in the intensity of pain as it decreases with educated patients more than illiterate one.
- Also, A significant changes in pulse and respiration with educated patients after practicing relaxation technique more than illiterate patient in the two shifts but no change in the two group for temperature and blood pressure.
- The present study showed significant changes between single and married patients pre and post relaxation technique and therapeutic sound in the two shifts it had more effect on married patients than single one in decreasing there pulse, respiration and on decreasing the intensity of pain.
- A significant difference between male and female was noted pre and post relaxation technique and therapeutic sound in the two shifts, it had more effect on female than males, while pre relaxation mean score of pain was higher among females more than males.