



## EFFECTIVENESS OF FOOT MASSAGE ON PAIN, HEART RATE AMONG PATIENT UNDERWENT ABDOMINAL SURGERY

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Foot massage,  
Pain, Heart rate,  
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### ABSTRACT

**Aim of the study:** Is to assess effectiveness of foot massage on pain, heart rate among abdominal surgery.

**Background:** Post operative pain is very common and develops naturally as warning symptoms its development can be predicted and should be prevented and treated. Despite the medication and aesthetics technique available, the prevalence of the post operative pain is still high. Pain after abdominal surgery has a significant effect on physiological, psychological, and socio-economic aspects of patients. The physiological effects are related to increased heart rate and the blood pressure. It will make them to readmission.

**Design:** Pre experimental design

**Methods:** Non probability purposive consecutive sampling technique was used. A total of 30 samples admitted in surgical ward were selected for the study. Foot massage is given 30 minutes to reduce pain, heart rate and blood pressure as intervention. The tool was developed by the investigator after extensive review of literature, previous knowledge, internet search and discussion with experts in selection of suitable items. The tool for data collection consists of: Structured questionnaire which comprises of general information, disease condition. Demographic variables of the care givers. Structured questionnaire for collecting data regarding the knowledge of foot massage among the abdominal surgery patients. Foot massage was done to assess the level of pain, heart rate and blood pressure by Numerical pain scale reading and Sphygmomanometer.

**Result:** The findings of the study reveals that there is significantly decrease in the level of pain, heart rate and the level of pain. The paired T test value shows that there was statistical non significance between pre and post test level of pain, heart rate among abdominal surgery patients.

**Conclusions:** The finding illustrated that the foot massage is not effective for seven days after abdominal surgery for the patient with the pain and the heart rate. But it is effective in the blood pressure among abdominal surgery patients.

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## INTRODUCTION

Post operative pain is very common and develops naturally as warning symptoms its development can be predicted and should be prevented and treated. Despite the medication and aesthetics technique available, the prevalence of the post operative pain is still high. Pain after abdominal surgery has a significant effect on physiological, psychological, and socio-economic aspects of patients. The physiological effects are related to increased heart rate and the blood pressure.

It will make them to readmission. Pain after abdominal surgery delays discharge from the hospital and health care cost increases because of longer stay hospital, due to treat the negative effects of pain like the increased heart rate and blood pressure. And it may also results in productivity of pain. This leads to increase the financial needs.

### Background

Complementary therapy as an adjuvant therapy may have the potential to improve pain management and palliate acute

postoperative pain. Several complementary therapy can increase the effectiveness of medical treatment and enhance the patients comfort., soothing music, relaxation, mind body techniques, reflexology, herbal medicine ,hypnosis, therapeutic touch and massage. Massage was chosen as an alternative nursing intervention in relieving acute postoperative pain in this present study. Several previous studies have been conducted to investigate the effect of foot massage on acute post operative pain. Study was conducted by Wang and Keck (2007) and indicated that 20 minutes foot massage and hand massage significantly reduced both pain intensity and heart rate resulting from incision pain in general surgery on the first postoperative day.

### Aim of the study

Was to assess the effectiveness of foot massage on pain, heart rate among abdominal surgery.

## MATERIALS AND METHODS

Quantitative research approach was followed with the Pre experimental design. Foot massage is given 30 minutes to reduce pain, heart rate and blood pressure as intervention. The tool was developed by the investigator after extensive review of literature, previous knowledge, internet search and discussion with experts in selection of suitable items. The tool for data collection consists of: Structured questionnaire which comprises of general information, disease condition. Demographic variables of the care givers. Structured questionnaire for collecting data regarding the knowledge of foot massage among the abdominal surgery patients. Foot massage was done to assess the level of pain, heart rate and blood pressure by Numerical pain scale reading and Sphygmomanometer. Foot massage is a complementary therapy that has great potential for use by nurse in a multidisciplinary pain management programme. It is one of the few natural therapies to be adopted by health profession, especially by the nurses in the area of pain management.

### Ethical consideration

The project has been approved by the ethics committee of the institution. Informed consent was obtained from the participants before initiating the study.

## RESULTS

Figure 1 & 2 reveals that the frequency and percentage distribution level of pre and post test level of pain, heart rate and blood pressure among abdominal surgery patients. In the pre test out of 30 samples majority (57%) where have moderate pain and (27%) have mild pain. Where as in post test out of 30 samples (73.3%) have a mild pain and none of them have severe pain. Where as in pre test level of heart rate (70%) have mild heart rate and none of them have severe increased in heart rate. In the post test level (87%) are having mild increased in the heart rate and none of the have severe increased in heart rate. Regarding the pre test level of blood pressure (50%) having both mild and moderate blood pressure where as in none of them having increased in the level of blood pressure. In the post test level (70%) having decreased in the level of pain and heart rate.

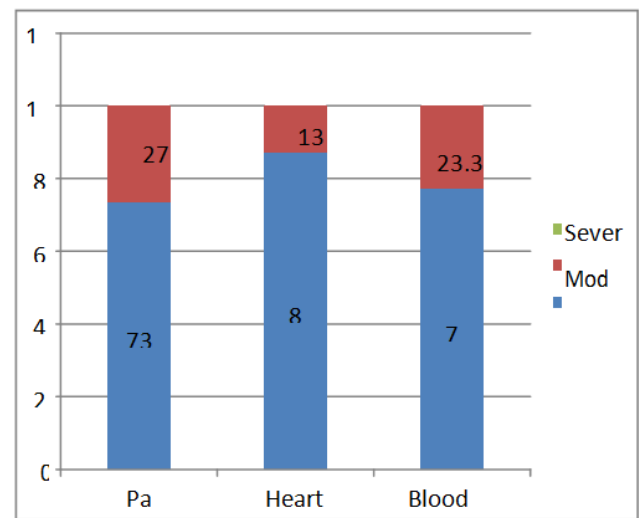
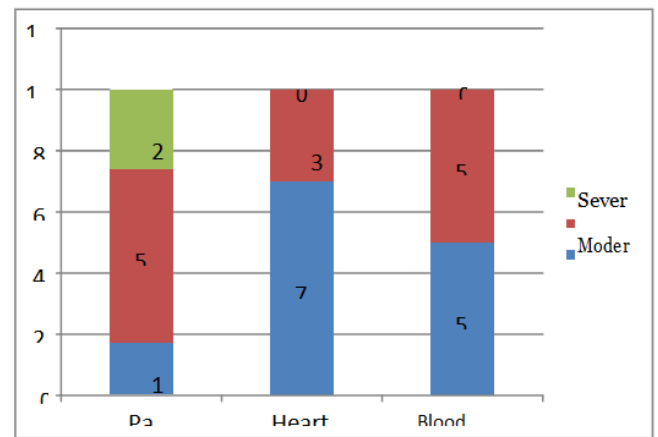


Figure 1. Frequency and percentage distribution of level of pre level of pain among abdominal surgery

### Conclusion

After completion of the study the effectiveness of the foot massage after abdominal surgery in not effective in the pain, heart rate due to duration in insufficient. Massage is an extended form of touch which results in mutual energy exchange. It soothes pain and produces relaxation. It is the most widely used complementary therapy in nursing practice. It is one of the ways nurses use to communicate caring to patients and touch is central to the nurse's role in healing. It increases pain thresholds and thereby modifies an individual's perception of pain. Complementary strategies based on sound research findings are needed to aid in postoperative pain relief. The goal for postoperative pain management is to reduce or eliminate pain and discomfort with a minimum of side effects as cheaply as possible. Postoperative pain relief must reflect the needs of each patient and this can be achieved only if many factors are taken into account.

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