



# ORIGINAL RESEARCH PAPER

## Nursing

### EFFECTIVENESS OF EFFLEURAGE MASSAGE IN REDUCING PAIN AMONG POST-OPERATIVE PATIENTS

**KEY WORDS:** Post operative pain, Effleurage Massage, post operative patients, surgeries and effectiveness

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#### ABSTRACT

**INTRODUCTION:** Pain is a common phenomenon for patients after surgery. Post operative pain is an unpleasant experience in patients life. Usually pharmacological methods are used for treating pain but they have the side effects which makes less effective. One of the best effective and recommended complementary therapy is Effleurage massage. Effleurage massage when done regularly after the surgery helps in reducing pain progressively.

**METHOD:** An evaluative approach was used for this study. The research design used was one group pre test and post test design. Non- probability Purposive sampling technique was used to select the 60 samples for the study. The tool used for this study was Standardized Visual Analogue Pain Scale. Effleurage Massage was given to post operative patients for 30-40 minutes twice a day for consecutive 4 days

**RESULTS:** The mean pre test level was 26.6 and mean post test level was 9.16 respectively. The post test mean level was lower than the pre test mean level, which showed that Effleurage massage was effective in reducing post operative pain

**CONCLUSION:** The finding of the study showed that Effleurage Massage was effective in reducing post operative pain among post operative patients.

#### INTRODUCTION

Health is a state of being hale, sound in body, mind or soul, especially the state of being free from physical diseases or pain. A living human being enjoys a contented life when he is healthy. It will add to physical, psychological, social and economical and spiritual prosperity and stability. Pain is a feeling triggered in the nervous system. It helps in diagnosing a problem and provides a basis for the need of treatment.

Pain is a complex phenomenon that can impact a person's psychological, emotional, and physical functioning. Acute pain is mostly intolerable and makes individuals uncooperative and chronic pain can last for weeks, months or even years leading to personal and economical losses.

Surgical experience is varying for every individual, but common to all is experience of pain. Post surgical pain is an unpleasant sensory and emotional experience. All post operative patients suffer from varying degree of pain. Many studies indicate that almost 40 – 60% suffer from moderate to severe pain and about 16 – 20% patient are suffering from severe pain post operatively.

Complementary therapy as an adjuvant therapy may have the potential to improve the pain management. Several complementary therapies can increase the effectiveness of medical treatment. Effleurage Massage was chosen as the best intervention to relieve post operative pain Effleurage is a French word meaning “to skim” or “to touch lightly on”. It is a form of gentle massage involving the circular stroking movement made with the palm and hand. The padded part of the palm or the finger tips are used to massage. This can be done firmly or lightly without dragging the skin. The effleurage massage works as a mechanical pump in the body to encourage venous and lymphatic return. It is an effective measure in relieving pain.

#### STATEMENT OF THE PROBLEM

“ Effectiveness of Effleurage Massage In Reducing Pain among Post Operative Patients admitted to Shri Krishna Sevashrama Multispecialty hospital, Bangalore”.

#### OBJECTIVES OF THE STUDY

1. Assess the pre-test levels of pain among post operative patients in experimental and control group.
2. Assess the post-test levels of pain among post operative patients in experimental and control group.
3. Determine the effectiveness of effleurage massage by

comparing the post test levels of pain in experimental and control group.

4. Find out the association between the pre-test scores on levels of pain with their selected demographic variables

#### HYPOTHESES:

Hypothesis will be tested at 0.05 level of significance

**H<sub>1</sub>-:** There is significant reduction in levels of pain among post-operative patients after Effleurage massage.

**H<sub>2</sub>-:** There is significant association between pre-test levels of pain and selected demographic variables.

#### MATERIAL AND METHODS

The conceptual framework for the study was developed from Ludwig Von-Bretanlaff's the general system theory. An evaluative approach was used for this study. The research design used was one group pre test and post test design to evaluate the effectiveness of effleurage massage in reducing pain among post operative patients. The present study was conducted in Shri Krishna Sevashrama Multispecialty hospital. Purposive sampling technique was adapted to select the samples for this study and 60 samples were selected. The data collection was done using structured interview schedule which consist of 2 parts. These includes

- **Part I :** Questions on demographic variables of the subjects such as age in years, gender, religion education, occupation, family income, religion, place of residence, any experience to previous surgery, uses of analgesics, and type of surgery.
- **Part II –** Visual Analogue pain scale, to assess the post-operative pain.

In order to obtain content validity, the prepared instrument along with problem statement, operational definition and blue prints were submitted to 8 experts from Medical Surgical Nursing, a experts from biostatistics and a expert from surgery department. Prior permission was obtained from institutional ethical committee Shri Krishna Sevashrama Multispecialty hospital. Formal permission was obtained from the authorities. Written consent was obtained from the subjects to participate in the study. Structured interview schedule was used to collect the demographic data and the Visual Analogue pain assessment scale was used to assess the post-operative pain in patients undergone surgeries. For collecting the demographic data time taken was 10 minutes and for the assessment of post-operative pain for each patient was 30 minutes.

Pre assessment of level of post-operative pain was done 2<sup>nd</sup> to

5<sup>th</sup> post operative day after the surgery for the subjects in both experimental and control group by using Visual Analogue pain scale. After pre-test, Effleurage Massage was administered to experimental group, twice a day for 30

minutes, on the 2<sup>nd</sup> day to 5<sup>th</sup> day of surgery without altering the treatment regimen. After Effleurage Massage post assessment of level of post-operative pain was by using Visual Analogue Pain scale

## RESULTS

**Table 1**

**Pre test assessment of levels of post operative pain in experimental and control group**

**N=60**

Pre test level of post operative pain	Experimental group n =30				Control group n = 30			
	frequency	mean	mean %	SD	frequency	mean	mean%	SD
Mild Pain	9	24.23	96.92	1.54	-	-	-	-
Moderate Pain	21	28.71	87	2.16	25	46.2	92	2.4
Severe pain	-	-	-	-	5	52.2	98	0.25

**Table 2**

**Post test assessment of levels of post operative pain among experimental and control group.**

**N=60**

post test level of post-operative pain	Experimental group n = 30				Control group n = 30			
	frequency	mean	mean %	SD	frequency	mean	mean%	SD
Mild pain	30	9.2	61.33	2.07	2	22.5	90	2.5
Moderate pain	-	-	-	-	28	43.17	95.93	5.31

**Table 3**

**Comparison of the pre test and post test scores of levels of post operative pain among experimental group by paired 't' test**

**n = 30**

LEVEL OF POST OPERATIVE PAIN AMONG EXPERIMENTAL GROUP	MEAN	SD	t - TEST VALUE	df	TABLE VALUE AND SIGNIFICANCE
Pre – test	26.6	2.85	40.17	29	3.66
Post – test	9.16	2.08			Significant

\*p≤0.05

The above table revealed that the post-test mean level is lesser than the pre-test mean levels post operative pain (9.16<26.6). The data further depicted that the obtained 't' test value was 40.17 which was greater than the table value  $t_{(29,0.05)} = 3.36$  at 0.05 level of significance. This showed that Effleurage Massage was effective in reducing post operative pain patients.

**Table 4**

**Comparison of the pre test and post test scores of level of post operative pain among control group by paired 't' test**

**n = 30**

LEVEL OF POST OPERATIVE PAIN AMONG CONTROL GROUP	MEAN	SD	t - TEST VALUE	df	TABLE VALUE AND SIGNIFICANCE
Pre – test	47	3.03	13.18	29	3.66
Post – test	36.03	4.17			Significant

\*p≤0.05

The above table revealed that mean of pre-test levels is higher than the post-test mean level of post operative pain (47>36.03). The data depicted that the obtained 't' test value is 13.18 which is greater than the table value  $t_{(29,0.05)} = 3.66$  at the 0.05 levels of significance. This showed that control group receives routine post operative measures to reduce the pain.

**Finding of Association between the levels of post operative pain and the demographic Variables among experimental group.**

It depicted that there was significant association found between the level of post operative pain and demographic variable such as education, family income and experience to previous surgery. Hence the research hypothesis was

accepted at 0.05 level of significance.

**Finding of Association between the levels of post operative pain and the demographic Variables among control group**

It represented that there was significant association found between the level of post operative pain and demographic variable such as type of family and place of residence. Hence the research hypothesis was accepted at 0.05 level of significance.

## DISCUSSION

- The overall post test level of pain of the subjects was lesser than the pre test level of pain on post operative patient with Effleurage massage.
- Effleurage massage on post operative patient has shown significant reduction of post operative pain.
- There was significant association found between the level of post operative pain and demographic variable such as education, family income and experience to previous surgery, type of family and place of residence. These findings indicates that these factors had a greater influenced in reducing post operative pain.

## IMPLICATION

The finding of the study had the following implications on

### Implication on nursing practice:

Nursing practice is the actual provision of patient care. Thus nurse can administer or teach the post-operative patients regarding complementary therapies like Effleurage Massage which is a non-pharmacological intervention to reduce the post-operative pain among patients underwent surgeries.

### Implication on nursing administration:

The nurse administrator should plan and organise educational program for the nursing professionals and nursing students, in order to prepare them to provide quality care. Nursing administrators should organize in-service education programme among nurses to update their knowledge on complementary therapies.

## CONCLUSION

Based on the findings of the study Effleurage Massage was effective in reducing post operative pain among post operative patients.

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