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## A STUDY TO EVALUATE THE EFFECTIVENESS OF GUIDED IMAGERY ON PAIN AND ITS ASSOCIATED BEHAVIORAL TRANSITION AMONG POST-OPERATIVE PATIENTS AT BTCT HOSPITAL, SAGAR, MP, INDIA.

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### ABSTRACT

Proper pain depletion is vital for promotion of health in post operative period. Providing effective pain management in post operative period is a challenging opportunity. The post operative ward nurse combines the technologic sophistication of this unique setting with a personal, individualized care approach to maximize the positive potential outcomes for the patient. The objectives of the study were to assess the pain and its associated behavioral transition, to evaluate the effectiveness of Guided Imagery, to find out the association between the pain and its associated behavioral transition with the demographic variables of post abdominal patients admitted in post operative ward in BTCT Hospital Sagar MP. The Conceptual framework of the present study was based on Modified Weidenbach's Helping Art of clinical nursing theory. A pre experimental with one group pre-test and post-test design has been used in this study. The study samples have been selected by using purposive sampling technique. Guided Imagery was given for the patients. Data collection was done before and after guided imagery by using Numerical pain Scale and Modified FLACC Behavioral Scale. The study findings

showed that the obtained 't' value (36.28 on pain level; 36.51 on behavioral level) was significant,  $P < 0.05$ . Guided Imagery was effective in reducing pain among post abdominal surgery clients.

Key words: Effectiveness, Guided Imagery, Pain, Behavioral transition and Post abdominal surgery clients.

## **INTRODUCTION:**

Pain is much more than a physical sensation caused by a various specific stimulus. Pain is described as whatever the person says it does. This clinical statement recognizes pain as a personal private experience. This definition states that pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage. Mc Caffery (1998).

“Pain is an unpleasant sensory experience associated with actual and potential tissue damage”, International Association of Pain, IASP (1994). Pain is considered to be a blessing rather than a curse because it is one of the human body's defense mechanism that indicates that the person is going through a problem.

Pain is a common experience which is often inadequately managed in hospitals and community settings. While nurses are in key position to contribute to successful pain management there are frequent account in the literature that nurses lack knowledge about pain.

Effective pain management is now an integral part of advanced surgical practice. Post operative pain management not only minimizes patients suffering but also can reduce morbidity and facilitate rapid recovery.

According to American ache foundation, around 76 million Americans are suffering from ache after different surgical procedure. A research done to measure the prevalence of post surgery ache, an assessment was made of 1490 surgical patients who were receiving postoperative ache treatment according to an acute ache protocol. As the result of the study, Moderate or severe ache was reported by 41% of the patients on day 0, 30% on days 1 and 19%, 16% and 14% on days 2, 3 and 4. The prevalence of moderate or severe ache in the abdominal surgery group was high on postoperative days 0–1 (30–55%).

## Significance and Need for the Study

Pain is the major problem in the post surgery period. The degree and severity of post surgery pain depends on the physiologic and psychological makeup of the person, the subsequent tolerance level, the incision site, the nature of the operation, the extent of the surgical trauma and the type of the anesthetic agent used. Postoperative pain is characterized by sharp, stabbing and shooting. Unrelieved post surgery pain can affect the pulmonary, cardiovascular, gastrointestinal, endocrine and immune systems etc. Koziar Bacclare (1995).

Pain often dominates the mind, blocking all other sensation or thought. Chronic pain imposes diverse restrictions on daily living and role performance. It affects sleep, mobility, work, finances, travel, recreation and simple activities. Thomas ,et.al., (2000).

Most postoperative patients have unrelieved pain despite the use of analgesics. Nurses need additional effective modalities. Relaxation and music in addition to analgesics, have been shown to reduce pain more than analgesics alone. Non Pharmacologic adjuvants to analgesics can ease pain without adding side effects. Marion.G., (2010)

Pain is complex, multidimensional experience. It is a major problem that causes suffering and decreases the quality of life. Pain is one of the major reasons that people seek health care. Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage. IASP-International association for the study of pain (2000)

Recent statistics indicate that the proportion of patients requiring analgesia in the post operative period correlated closely with the site of operations as follows: gastric and gall bladder surgery 95%, abdominal surgeries 82%, appendectomy 75%, inguinal herniorraphy 48%, neck and superficial head surgeries 55%, minor chest wall and scrotal surgeries 20%. In India it has been noted that 80% of the patients undergoing abdominal surgeries had moderate to severe pain in the post operative period.

Post surgery pain is an important form of morbidity after abdominal surgeries. It was found that relaxation technique significantly decreases post surgery pain. Guided Imagery is a method of visualization and imagination that has a positive effect on post surgery pain and reduces post surgery complications like anxiety, inability to cope up with surgical stress etc. It remains widely used technique for the prophylaxis and treatment of post surgery pain in abdominal surgery clients.

## Statement of the Problem

A study to assess the effectiveness of Guided Imagery on Pain and its associated behavioral transition among Post-Operative Patients at BTCT Hospital, Sagar MP India.

## Objectives of the Study

- To assess the pre – test level of Pain and its associated behavioral transition among Post Abdominal Surgery Clients before and after Guided Imagery.
- To evaluate the effectiveness of Guided Imagery on Pain and its associated behavioral transition among Post Abdominal Surgery Clients.
- To find out the association between the pre – test level of Pain and its associated behavioral transition among Post Abdominal Surgery Clients with their selected demographic variables.

## Research Hypothesis

H<sub>1</sub>: There will be a significant difference between the mean pre and post test level of Pain and its associated behavioral transition among Post Abdominal Surgery Clients.

H<sub>2</sub>: There will be a significant association between the level of Pain and its associated behavioral transition among Post Abdominal Surgery Clients with their demographic variables.

## Materials and methods:

The effectiveness of Guided Imagery on Pain and its associated behavioral transition was evaluated. Therefore on quantitative evaluation research approach was essential to test the effectiveness of the intervention. Design selected for the present study was pre experimental design one group pre and post test. The study was conducted at BTCT Hospital, Sagar, MP. Total sample size is 30 Post abdominal surgery clients. Purposive sampling technique was selected for the present study. There are three types of tools used for this study, Part I: It consists of demographic characteristics of Post Abdominal Surgery clients they were, Part II: It consists of pain assessment scale (i.e) the combined numerical and categorical scale. This is a standard scale used for pain assessment and measures 10cm in length with division from 0-10. Part III: Associated behavioral transition were tracked by observational checklist (i.e.,) modified FLACC behavioral scale which was adopted from Erica Jacques (2009).

**Results:****Table: 1 Frequency and Percentage Distribution of samples according to their demographic variables.**

(N = 30)

S.No	Demographic Variables	Frequency(n)	Percentage (%)
1.	Age a)20-30 b)31-40 c)41-50 d)51-60	16 7 5 2	53% 23% 17% 7%
2.	Sex a)Male b)Female	10 20	33% 67%
3.	Education a)No formal education b)Primary education c)Secondary education d)Higher Secondary education e)Graduates & above	7 7 9 6 1	23% 23% 30% 20% 4%
4.	Type of anesthesia a)General anesthesia b)Spinal anesthesia	13 17	43% 57%
5.	Type of Surgery a)Laparoscopic surgery b)Open surgery	18 12	60% 40%
6.	Family Support a)Present b)Absent	27 3	90% 10%

It was concluded that among 30 Post abdominal surgery clients, majority of them belong to 20-30years, female, secondary education, Spinal anesthesia, Laparoscopic surgery and Presence of family support.

Table: 2

Assess The Effectiveness Of Guided Imagery On Pain And Its Associated Behavioral Changes Among Post Abdominal Surgery Clients.

Frequency and percentage distribution of the Pretest and Post test level of pain among post abdominal surgery clients.

N=30

Level of Pain	Pre-test		Post-test	
	Frequency(n)	Percentage (%)	Frequency(n)	Percentage (%)
Mild	-	-	11	37%
Moderate	7	23%	19	63%
Severe	23	77%	-	-

The data shows that out of 30 patients, none had mild pain, 7(23%) of them had moderate pain and 23(77%) of them had severe pain in pre-test and in post-test 11(37%) of them had mild pain, 19(63%) of them had moderate pain and none had severe pain.

It was inferred that most of the patients in pre-test had severe pain and most of them had moderate pain in post-test.

Table: 3

Frequency and percentage distribution of the Pretest and Post test level of behavioral changes among post abdominal surgery clients.

N=30

Level of behavioral changes	Pre-test		Post-test	
	Frequency(n)	Percentage (%)	Frequency(n)	Percentage (%)
Mild	-	-	9	30%
Moderate	9	30%	21	70%
Severe	21	70%	-	-

The data shows that out of 30 patients, none had mild behavioral changes, 9(30%) of them had moderate behavioral changes and 21(70%) of them had severe behavioral changes in pre-test and in post-test 9(30%) of them had mild behavioral changes, 21(70%) of them had moderate behavioral changes and none had severe behavioral changes.

**Table: 4 Comparison of the level of pain among post abdominal surgery clients before and after guided imagery**

N=30

Aspect	Pre-test		Post-test		Paired 't' test Value
	Mean	Standard Deviation	Mean	Standard Deviation	
level of pain	7.2	1.61	3.73	1.87	36.28* df=29 P<0.05

\*Significant

Table: 4 states that in pre-test, the mean value of level of pain was 7.2 with the standard deviation of 1.61 and post-test mean value of level of pain was 3.73 with the standard deviation of 1.87. The paired 't' test value obtained 36.28 was significant,  $P < 0.05$

It is inferred that, there is a highly significant decrease in the level of pain among post abdominal surgery clients after Guided Imagery as measured by the post-test. Hence the stated hypothesis  $H_1$  was accepted.

**Table: 5 Comparison of the level of behavioral changes among post abdominal surgery clients before and after guided imagery**

N=30

Aspect	Pre-test		Post-test		Paired 't' test Value
	Mean	Standard Deviation	Mean	Standard Deviation	
level of behavioral changes	7.4	1.75	4	1.60	36.51* df=29 P<0.05

\*Significant

Table: 5 shows that in pre-test, the mean value of level of behavioral changes was 7.4 with the standard deviation of 1.75 and post-test mean value of level of behavioral changes was 4 with the standard deviation of 1.60. The paired 't' test value obtained 36.51 was significant,  $P < 0.05$ .

It is inferred that, there is a highly significant decrease in the level of behavioral changes among post abdominal surgery clients after Guided Imagery as measured by the post-test. Hence the stated hypothesis  $H_1$  was accepted.



**Table: 6 Association between the demographic variables and the post test level of pain of post abdominal surgery clients.**

N=30

Sr. No	Demographic Variables	Mild Pain		Moderate Pain		Chi-square
		n	%	n	%	
1.	Age					1.45 P>0.05 NS
	a)20-30	5	17	11	65	
	b)31-40	4	13	4	57	
	c)41-50	1	25	3	75	
	d)51-60	-	-	2	100	
2.	Sex					12.11 P<0.05 S
	a)Male	8	73	3	27	
	b)Female	2	11	17	89	
3.	Education					4.68 P>0.05 NS
	a)No formal education	4	57	3	43	
	b)Primary education	1	14	6	86	
	c)Secondary education	4	44	5	56	
	d)Higher Secondary education	1	17	5	83	
	e)Graduates & above	-	-	1	100	
4.	Type of anesthesia					1.7 P>0.05 NS
	a)General anesthesia	6	46	7	54	
	b)Spinal anesthesia	4	24	12	76	
5.	Type of Surgery					0.001 P>0.05 NS
	a)Laparoscopic surgery	6	33	12	67	
	b)Open surgery	4	33	8	67	
6.	Family Support					1.08 P>0.05 NS
	a)Present	10	36	18	64	
	b)Absent	-	-	2	100	

S: Significant

NS: Non-Significant

It is noticed that there was significant association only between the level of pain of patients with their sex.

### Discussion:

The first objective of the present study was to assess the level of Pain and its associated changes among Post Abdominal Surgery Clients before Guided Imagery. The present study findings revealed that out of 30 patients, 9(30%) of them had moderate pain and 21(70%) had severe pain in pre-test; and 9(30%) of them had moderate behavioral changes and 21(70%) had severe behavioral changes in pre-test.

The second objective was to assess the effectiveness of Guided Imagery on Pain and its associated behavioral transition among Post Abdominal Surgery Clients. The present study indicated that in pre-test, the

mean value of level of pain was 7.2 with the standard deviation of 1.61 and post-test mean value of level of pain was 3.73 with the standard deviation of 1.87. The paired 't' test value obtained 36.28 was significant,  $P < 0.05$  and the mean value of level of behavioral transition was 7.4 with the standard deviation of 1.75 in pre-test and post-test mean value of level of behavioral transition was 4 with the standard deviation of 1.60. The paired 't' test value obtained 36.51 was significant,  $P < 0.05$ . It is inferred that, there is a highly significant decrease in the level of pain and its associated behavioral transition among post abdominal surgery clients after Guided Imagery as measured by the post-test. Hence the stated hypothesis  $H_1$  was accepted.

The third objective was to find the association between the post test level of Pain and its associated behavioral changes among Post Abdominal Surgery Clients with their demographic variables. The present study findings revealed that in post test, there was significant association only between the level of pain of patients with their sex ( $X^2=12.10$ ).

### Recommendations

- The study can be replicated with large sample size.
- A study can be conducted to assess the attitude and practice among nurses.
- A comparative study can be conducted between the post abdominal surgery patients and other surgery patients.
- A comparative study can be conducted between the males and females.

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