

## An Experimental Study to Compare the Effectiveness of Hot Application versus Tapping Therapy among Pregnant Women Admitted in Maternity Ward with Labor Pain in Selected Hospitals of Ambala, Haryana

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### ABSTRACT

Labor pain is the process of delivering a baby and the placenta, membranes and umbilical cord from the uterus to vagina to the outer world. Labor is a crucial stage of women life. Pain during labor is caused by contraction of muscle of the uterus and by pressure on the cervix. Pain makes a person uncomfortable. Aim: The aim of this study is to compare the effectiveness of hot application and tapping therapy among pregnant women admitted in the maternity ward with labor pain in the selected hospitals of Ambala, Haryana. Material and Method: A quantitative research approach with comparative design was adopted. Total 60 samples were collected with non-probability convenient sampling technique 30 for hot application and 30 for tapping therapy. Data was collected with interview technique and observational method and analyzed with descriptive and inferential statistics. Result: Study result shows that according to type of pain among pregnant women after implementation of hot application, 20 women had mild pain and 10 women had moderate pain and no women had severe pain. According to type of pain during comparison among pregnant women after implementation of tapping therapy 6 women had mild pain and 18 women had moderate pain and 6 women had severe pain. Conclusion: The variation shows in the reading prove that hot application is more effective than tapping therapy.

**Keywords:** hot application, tapping therapy, labor pain

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### INTRODUCTION AND BACKGROUND OF THE STUDY

“Health is a state characterized by physiological, psychological integrity and anatomic, ability to perform personality valued family, work and community roles, ability to deal with physical, biological, psychological, and social stress.” The World Health Organization (WHO) proposed a definition that aimed higher linking health to well-being, in terms of physical, mental and social well being, and not merely the absence of diseases and infirmity [1].

An offensive impression that can range from mellow, limited distress to misery torment has both physical and enthusiastic parts. The physical piece of agony results from nerve incitement. Pain is mediated by specific nerve fiber that carries the pain impulses to the brain where their conscious appreciation may be modified by many factors. Torment is likewise a term particularly used to indicate a difficult uterine withdrawal happening in labor. "Pain" originates from the Latin "Poene" [2]. Labor is crucial stage of women life. Pain during labor is caused by

contraction of the muscle of the uterus and by pressure on the cervix. This pain can be felt as strong cramping in the abdomen, groin and back as well as on their sides or things as well. Agony amid work is distinctive for each lady, despite the fact that work is frequently thought as one of the more difficult occasion in human experience, it extends broadly from ladies to women and even from pregnancy to pregnancy [3].

To lessen this agony we can give hot application. Hot application is also known as thermotherapy. It is the used of heat in therapy such as pain relief and health .It is used either in a moist or dry from on the surface relief pain, congestion, provide warmth to promote healing it is also a common treatment of back pain, shoulder pain and other pain. It can take the form of hot cloth, hot water bottle thermotherapy is the use of heat to treat symptom of acute and chronic pain, especially those related to muscle tension, superficial modalities increase infrared lamps moist heat packs, paraffin bath and warm whirlpools, steamed towels, people often apply heat therapy as home for minor condition, it is also used in health care such as physical therapy, manipulation therapy, occupational therapy. Heat therapy facilitates the healing process by producing vessel dilation therapy enhancing local blood flow decreasing edema, increasing tissue temperature and producing pain relief. Thermotherapy broadens veins and increment blood stream to the skin. It unwinds shallow muscle, diminish in muscle fit and decrease the solidness of joint, soggy warmth appear to be more effective in treating then dry heat, as the moisture allows the heat to penetrate more deeply in the muscles. Hot application is effective in labor pain.

Tapping technique of massage of the name suggest consist of rhythmic tapping that

uses the first of the cupped hands. The sides of the hands are utilized as a part of this backrub method. Kneading technique is performed with ulnar side palm resting on the surface and fingers thumble grasping the skin and subcutaneous tissue which move with the hand of the operator. Friction technique can be used as a worm up for the muscle of the body to be treated for deeper massage. Vibrations or shaking technique heel can be used by the massage to shake up the muscle of the person [4].

### NEED OF STUDY

Stress during pregnancy may increase your chances of certain problems like pre mature birth. Most women who have serious stress during pregnancy can have healthy babies. Uneasiness and fits of anxiety hormonal changes amid pregnancy seem to make one more inclined to tension and fits of anxiety, just in light of the fact that they permit certain parts of the mind to become activated during period of intense stress. Extreme pain and discomfort as a result of giving birth.

Trauma birth trauma and post- traumatic stress disorder after child birth. A traumatic birth includes suffering and may leads to Post-traumatic stress disorder (Trauma is labor and subsequent post-traumatic stress disorder). Epidural anesthesia may do more than relive pain during labor. In some women it may decrease the likelihood of post-partum depression suggests a preliminary study. They calculated the percent in pain throughout labor after the implementation of epidural analgesia.

Fear of rejection pregnancy and child birth is usually a time of happiness and anticipation but it is also a time of fear and concern. New parents fear of their baby is healthy and level of pain mom will feel during labor. Weight is lost after all of this week and month of gaining weight, many women has two or three pound before labor even begins. Burst of energy many

women experience a burst of energy before the onset of labor.

A study is to check the effect of massage therapy and hot application on reducing the labor pain. According to result of this study it seen that heat therapy in addition to beneficial effects causes the mother to sense the labor pain in the lower pain severity. Tapping is a straightforward is effortless it can be learned by anybody. It can be utilized with particular enthusiastic substance towards your own particular special life challenge understanding. Thousands of people have used tapping for illness and to can be help to reducing the labor pain. It can be help to be reducing labor pain. In this tapping therapy may be used in emotional trauma chronic physical pain and compulsion. This tapping therapy has been demonstrated to be effective during pregnancy the women decrease in depression and anxiety, leg and back pain. Tapping therapy is most common alternative therapy recommended during pregnancy. Severe pain could result in expurgation of mother fear and anxiety during delivery leads to stimulation of sympathetic nervous system so, the increase of catecholamine production such as and consequently increases pain and studies have led to increase caesarean section rate [5].

In this study to evaluate the effect of local on labor pain is one of the severest that cause many women request cesarean section for fear of pain. This controlling labor pain is major concern of maternity care. Non pharmacological pain relief methods have been increased because of their low side effect. Intermittent local tapping therapy is no pharmacological, safe and effective method to relief labor pain. The randomized control preliminary, we incorporate that for the abatement of work torment as well as diminishment of the requirement for regular analgesics strategies the discoveries consider

demonstrated that to reducing the labor pain.

Warmth as a non-pharmacological strategy for relief from discomfort helps lessening the torment power and expands the torment consistency. The point of the examination is to decide the impact of the hot application and tapping therapy on the labor pain. Labor pain is one of the severest pains that cause many women request cesarean section for fear of pain. In this way controlling work torment is a noteworthy worry of maternity mind now a day's enthusiasm for non-pharmacological relief from discomfort strategy has been expanded in light of their lower side effects. The effects of discreet heat and cold decrease labor pain applying warmth is a triad and tested way of relaxing aching, tense muscles, so it's no surprise that it's an effective way to proving relief from labor pain [6].

#### **OPERATIONAL DEFINITION**

**Heat Application:** A nursing intervention from the nursing interventions classification (NIC) defined as stimulation of the skin and underlining tissue with heat or for the purpose of decreasing pain [7].

**Pain:** Pain is an unpleasant impression that can run mellow, restricted uneasiness to misery. Torment has both physical and enthusiastic parts. The physical part of pain results from nerve stimulation [8].

**Pregnancy:** Pregnancy the state of caring a developing embryo or fetus with in the female body. It is in the first trimester that same women experience morning sickness a form of nausea on a walking that usually passes with in an hour [9].

**Labor:** Labor is the process of delivering a baby and the placenta, membranes and umbilical cord from the uterus to the vagina to the outside world [10].

**Tapping Therapy:** Tapping therapy is the emotional freedom technique (EFT-also known as tapping therapy or meridian tapping technique (MTT) was created by Gary Craig and works like emotional acupressure to quickly, gently and easily related the negative emotions and beliefs that are at the root of all our problems and pain [11].

**Research Problem:** An experimental study to compare the effectiveness of hot application versus tapping therapy among pregnant women admitted in maternity ward with labor pain in selected hospitals of Ambala, Haryana.

**Aim of Study:** The aim of the study was to compare the effectiveness of hot application and tapping therapy among pregnant women admitted in maternity ward with labor pain in selected hospitals of Ambala, Haryana.

#### OBJECTIVES OF STUDY

- 1) To assess the level of pain among pregnant women admitted in maternity ward with labor pain.
- 2) To assess the level of pain among pregnant women who are admitted in maternity ward with labor pain before and after the implementation of hot application and tapping therapy.
- 3) To compare the effectiveness of hot application and tapping therapy among pregnant women admitted in maternity ward with labor pain.
- 4) To find out the association between hot application and tapping therapy with their selected sociodemographic variables among pregnant women admitted in maternity ward with labor pain.

#### ASSUMPTION

There will be significant difference between hot application and tapping therapy among pregnant women admitted in maternity ward with labor pain in selected hospitals of Ambala, Haryana.

#### MATERIAL AND METHOD

A quantitative research approach with comparative design was adopted. Total 60 samples were collected with non-probability convenient sampling technique 30 for hot application and 30 for tapping therapy. Data was collected with Interview technique and Observational method and analyzed with descriptive and inferential statistics.

#### ETHICAL CONSIDERATION

Ethical clearance in our study was the permission for research study was taken from Principal of Himalayan institute of Nursing, Kala-Amb. Written permission taken from C.M.O. of Civil Hospital Ambala cant. After explaining the purpose of study consent was taken from each individual. They were informed that findings will be kept confidentiality.

#### RESULTS OF STUDY

##### Analysis and Interpretation of Data

The data was collected and analyzed according to the plan of data analysis which includes both descriptive and inferential statistics. The findings have been tabulated according to the plan of data analysis and interpreted under the following objectives.

##### Objectives

- 1) To assess the level of pain among pregnant women admitted in maternity ward with labor pain.
- 2) To assess the level of pain among pregnant women who are admitted in maternity ward with labor pain before and after the implementation of hot application and tapping therapy.
- 3) To compare the effectiveness of hot application and tapping therapy among pregnant women admitted in maternity ward with labor pain.
- 4) To find out the association between hot application and tapping therapy with their selected socio demographic variables among pregnant women admitted in maternity ward with labor pain.

**Presentation of Data**

Raw data collected was entered in the master data sheet for the statistical analysis. The analysis was performed on statistical software SPSS 19.0V and Microsoft Excel. It was interpreted using descriptive and inferential analysis presented on the tables and interpreted. The findings was analyzed and presented under the following section:

**Section I:** Frequency and percentage distribution of hot application and tapping therapy among the pregnant women according to their socio demographic variables.

**Section II:** Assess the level of pain among pregnant women before implementation of

hot application and tapping therapy.

**Section III:** To assess the findings regarding level of pain before and after implementation of hot application.

**Section IV:** To assess the findings regarding level of pain before and after implementation of tapping therapy.

**Section V:** To compare the findings of labor pain after the implementation of hot application and tapping therapy.

**Section VI:** Association of hot application with selected socio demographic variable among pregnant women with labor pain.

**Section VII:** Association of tapping therapy with selected socio demographic variable among pregnant women with labor pain.

**Table 1.** Frequency and percentage distribution of hot application and tapping therapy among pregnant women according to their sociodemographic variables (N=60).

S.No.	Sociodemographic Variables	Hot Application(n <sub>1</sub> =30)		Tapping Therapy (n <sub>2</sub> =30)		χ <sup>2</sup> ,df,p-value
		f <sub>1</sub>	%	f <sub>2</sub>	%	
1	<b>Age(in years)</b>					6.000,1,.157*
	≤20	8	27	7	23	
	21-30	19	63	22	73	
	≥30	3	10	1	3	
2	<b>Nutritional Status</b>					3.000,1,.148*
	Healthy	27	99	28	93	
	Unhealthy	3	10	1	3	
	Malnourished	0	0	1	3	
3	<b>Educational status of women</b>					6.000,1,.157*
	8th-10th	13	43	13	43	
	12th	9	30	9	43	
	Graduate	8	27	8	13	
4	<b>Occupation of Women</b>					6.000, 1, .164*
	Housewife	24	80	28	93	
	Private Job	6	20	2	7	
	Govt. Employed	0	0	0	0	
5	<b>Religion</b>					8.000,1,.084*
	Hindu	23	77	26	87	
	Sikh	5	17	4	13	
	Muslim	2	7	0	0	
	Other	0	0	0	0	
6	<b>Marital Status of Women</b>					-
	Married	30	100	30	100	
	Unmarried	0	0	0	0	
	Single parent	0	0	0	0	
7	<b>Type of Pregnancy</b>					2.000,1,.157*
	Single	23	77	24	80	
	Multiple	7	23	6	20	
8	<b>Gravida of Women</b>					2.000,1,.157*
	Primigravida	21	70	20	67	
	Multigravida	9	30	10	33	
9	<b>Do you Have any Previous Exposure to Hot Application or Tapping Therapy</b>					2.000,1,.157*
	Yes	0	0	2	7	
	No	30	100	28	93	

(Ns-non significant, \*significant p<0.05)

Table 1 shows the frequency and percentage distribution of hot and tapping therapy according to their socio demographic variables.

According to age among the hot application women the majority 63% were in the age group of 21-30 and very least 10% in the after group of > 30 and 10% were having <20. Among the tapping therapy women the majority 73% in age group 21-30 and very least 3% in the age group of > 30 and 23% were having <20 year of age ( $\chi^2=6.000$ ,  $df=1$ ,  $p=.157$ ).

According to nutritional status among the hot application women the majority 99% were healthy group and least 0% were malnourished and 10% were unhealthy. According to nutritional status among the tapping therapy women the majority 93% were healthy group and least 3% were malnourished and 3% were unhealthy. ( $\chi^2=3.000$ ,  $df=1$ ,  $p=.148$ ).

According to educational status among the hot application women the majority 43% were 8th-10<sup>th</sup> and least 27% were graduate and 30% were 12<sup>th</sup>. According to educational status among the tapping therapy women the majority 43% were 8<sup>th</sup>-10<sup>th</sup> and least 13% were graduate and 43% were 12<sup>th</sup>. ( $\chi^2=6.000$ ,  $df=1$ ,  $p=.157$ ).

According to occupation, hot application women the majority 80% housewife and least 0% government job and least 20% were private job. According to occupation, tapping therapy women the majority 93% were housewife and least 0% were government employed and 7% were in private job. ( $\chi^2=6.000$ ,  $df=1$ ,  $p=.164$ ).

According to religion, hot application women the majority 77% were Hindu and none of those were belong to other and 17% were sikh and 7% were muslim. According to religion among the tapping therapy women the majority 87% were Hindu and least 0% were muslim and

others and 13% were sikh ( $\chi^2=8.000$ ,  $df=1$ ,  $p=.084$ ).

According to marital status among the hot application women the majority 100% was married and least 0% was unmarried and single parent. According to marital status among the tapping therapy women the majority 100% were married and least 0% were unmarried and single parent. (no calculation of chi square because group was homogenous).

According to types of pregnancy among the hot application women the majority 77% were single pregnancy and least 23% were multiple. According to types of pregnancy among the tapping therapy women the majority 80% were single pregnancy and least 20% were multiple pregnancy ( $\chi^2=2.000$ ,  $df=1$ ,  $p=.157$ ).

According to gravida of women among the hot application women the majority 70% were primigravida and least 30% were multigravida. According to gravida of women among the tapping therapy women the majority 67% were primigravida and least 33% were multigravida. ( $\chi^2=2.000$ ,  $df=1$ ,  $p=.157$ ).

According to any previous exposure to hot application among pregnant women the majority 100% were no and least 0% were yes. According to any previous exposure to tapping therapy among pregnant women the majority 93% were No and least 7% were yes (=  $\chi^2=2.000$ ,  $df=1$ ,  $p=.157$ ).

**Table 2.** Assess the level of pain among pregnant women before implementation of hot application and tapping therapy (N=60).

S. No.	Type of pain	Hot application (n <sub>1</sub> )		Tapping therapy (n <sub>2</sub> )	
		F <sub>1</sub>	%	F <sub>2</sub>	%
1.	Is your labor pain regular?				
	Yes	15	50	6	20
	No	15	50	24	84
2.	Is your labor pain irregular?				
	Yes	15	50	24	84
	No	15	50	6	20

3.	Is your labor pain knife like?				
	Yes	19	63	20	67
	No	11	37	10	33
4.	Is your labor pain pulsing?				
	Yes	15	50	10	33
	No	15	50	20	67
5.	Is your labor pain pricking?				
	Yes	15	50	10	33
	No	15	50	20	67
6.	Is your labor pain drilling?				
	Yes	8	27	10	33
	No	22	73	20	67
7.	Is your labor pain sharp?				
	Yes	24	80	23	77
	No	6	20	7	23
8.	Is your labor pain cutting?				
	Yes	20	67	12	40
	No	10	33	18	60
9.	Is your labor pain dull?				
	Yes	4	13	8	27
	No	26	87	22	73
10.	Is your labor pain itchy?				
	Yes	7	23	11	37
	No	23	77	19	63
11.	Is your labor pain aching?				
	Yes	10	33	12	40
	No	20	67	18	60
12.	Is your labor pain fearful?				
	Yes	25	83	21	70
	No	5	17	9	30
13.	Is your labor pain annoying?				
	Yes	11	37	11	37
	No	19	63	19	63
14.	Is your labor pain punishing ?				
	Yes	6	20	3	10
	No	24	80	27	90
15.	Is your labor pain cruel ?				
	Yes	4	13	4	13
	No	26	87	26	87

(Ns-non significant, \*significant  $p < 0.05$ )

Table 2 Show the level of pain among pregnant women before implementation of hot application and tapping therapy.

According to regular pain type among hot application women 50% was in pain and 50% was not in pain. According to regular pain among tapping therapy women the majority 80% was not in pain and least 20% was in pain.

According to irregular pain type among hot application women the majority 50% was in pain and 50% was not in pain. According to irregular pain among tapping therapy women the majority 84% was in pain and least 20% was not in pain.

According to knife like pain among hot application women the majority 63% was in pain and least 37% was not in pain. According to knife like pain among tapping therapy women the majority 67% were in pain and least 33% was not in pain.

According to pulsing pain among hot application women 50% was in pain and 50% was not in pain. According to pulsing pain among tapping therapy women majority 66% was not in pain and least 33% was in pain.

According to pricking pain among hot application women 50% was in pain and 50% was not in pain. According to pricking pain among tapping therapy women majority 67% was not in pain and least 33% was in pain.

According to drilling pain among hot application women the majority 73% was not in pain and least 27% was in pain. According to drilling pain among tapping therapy women the majority 67% was not in pain and least 33% was in pain.

According to sharp pain among hot application women the majority 80% was in pain and least 20% was not in pain. According to sharp pain among tapping therapy women the majority 78% was in pain and least 23% was not in pain.

According to cutting pain among hot application women the majority 67% was in pain and least 33% was not in pain. According to cutting pain among the tapping therapy women the majority 60% was not in pain and least 40% was in pain.

According to dull pain among hot application women the majority 87% was in pain and least 13% was not in pain. According to dull pain among tapping therapy women the majority 73% was not in pain and least 27% was in pain.

According to itchy pain among the hot application women the majority 77% was not in pain and least 23% was in pain. According to itchy pain among the tapping therapy the majority 64% was not in pain and least 37% was in pain.

According to aching pain among hot application women the majority 67% was not in pain and least 33% was in pain. According to aching pain among tapping therapy the majority 60% was not in pain and least 40% was in pain.

According to fearful pain among hot application women the majority 83% was in pain and least 17% was not in pain. According to fearful pain among tapping therapy the majority 70% was in pain and least 30% was not in pain.

According to annoying pain among hot application women majority 63% was not in pain and least 37% was in pain. According to annoying pain among tapping therapy women majority 63% was not in pain and least 37% was in pain.

According to punishing pain among hot application women the majority 80% was not in pain and least 20% was in pain. According to punishing pain among tapping therapy women the majority 27% was not in pain and least 3% was in pain.

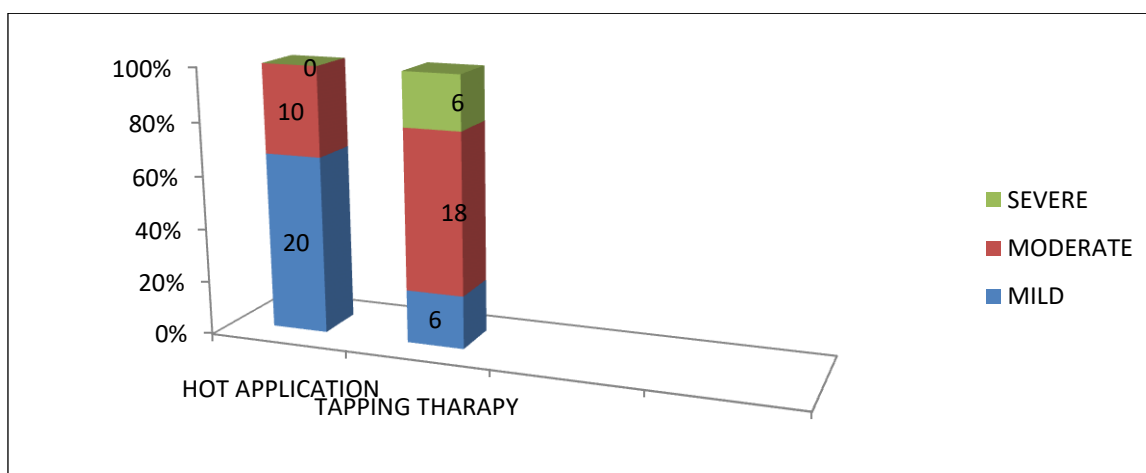
According to cruel pain among hot application women the majority 37% was not in pain and least 13% was in pain. According to cruel pain among tapping therapy women the majority 37% was not in pain and least 13% was in pain.

**Table 3.** To assess the findings of labor pain before and after the implementation of hot application (N=60).

Type of Pain	Hot Application				$\chi^2$ , df, p-value
	Before		After		
	n <sub>1</sub>	%	n <sub>2</sub>	%	
Mild	6	20	20	67	3.000,1,.148*
Moderate	18	60	10	33	
Severe	6	20	0	0	

(Ns-non significant, \*significant p<0.05)

Table 3 shows the findings of labor pain before and after the implementation of hot application. According to the type of pain before implementation of hot application the majority 60% were moderate pain and least 20% were mild pain and least 20% were severe pain. According to the type of pain after implementation of hot application the majority 67% were mild pain and least 0% were severe pain and 33% were moderate pain. The  $\chi^2$  value was (3.000,1,.148). The value of degree of freedom was 1 and the p value was < 0.05 it means findings found significant. The bar diagram 1 shows the findings of labor pain before and after the implementation of hot application.



**Fig. 1.** To assess the findings regarding level of pain before and after implementation of tapping therapy.



**Table 4.** To assess the findings of labor pain before and after the implementation of tapping therapy N=60).

Type of Pain	Tapping Therapy				$\chi^2$ , df,p-value
	Before		After		
	n <sub>1</sub>	%	n <sub>2</sub>	%	
Mild	1	3	6	20	.333,1,,564
Moderate	22	73	18	60	
Severe	7	23	6	20	

(Ns-non significant, \*significant p<0.05)

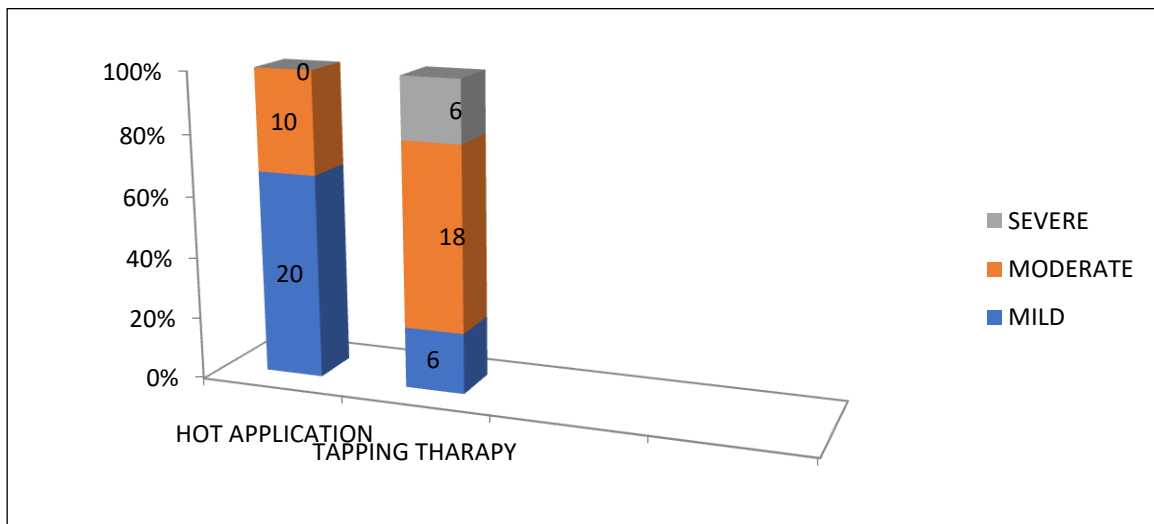
**Table 5.** To compare the finding of labor pain after implementation of hot application and tapping therapy. (N=60).

Type of pain	After implementation			
	Hot application		Tapping therapy	
	n <sub>2</sub>	%	n <sub>2</sub>	%
Mild	20	67	6	20
Moderate	10	33	18	60
Severe	0	0	6	20

Table 4 Show the findings of labor pain before and after the implementation of tapping therapy. According to the type of pain before implementation of tapping therapy the majority 73% were moderate pain and least 3% were mild pain and

23% were severe pain. According to the type of pain after implementation of tapping therapy the majority 60% were moderate pain and least 20% were mild and severe pain. The value was (.333,1,,564). The value of degree of freedom was 1 and the p value was >0.05 it means findings found non-significant.

Table 5 show the finding of labor pain after implementation of hot application and tapping therapy. According to type of pain among pregnant women after implementation of hot application the 20 women had mild pain and 10 women had moderate pain and no women had severe pain. According to type of pain among pregnant women after implementation of tapping therapy 6 women had mild pain and 18 women had moderate pain and 6 women had severe pain. The bar diagram 2 shows the findings of labor pain after implementation of hot application and tapping therapy.



**Fig. 2.** To compare the findings of labor pain after the implementation of hot application and tapping therapy.

**Table 6:** Association between hot applications with their selected socio demographic variables among pregnant women with labor pain. (N=60)

S. No.	Sociodemographic Variables	Hot application (n <sub>1</sub> =30)		$\chi^2$ ,df,p-value
		f <sub>1</sub>	%	
1	Age(in years)			2.004,1,,323*
	≤20	8	27	
	21–30	19	63	
	≥30	3	10	

2	<b>Nutritional Status</b>			
	Healthy	27	99	2.449,1,.373*
	Unhealthy	3	10	
	Malnourished	0	0	
3	<b>Educational Status of Women</b>			
	8th–10th	13	43	1.714,1,.751
	12 <sup>th</sup>	9	43	
	Graduate	8	13	
4	<b>Occupation of Women</b>			
	Housewife	28	93	2.449,1,.201*
	Private job	2	7	
	Govt. employed	0	0	
5	<b>Religion</b>			
	Hindu	26	87	5.275,1,.025*
	Sikh	4	13	
	Muslim	0	0	
	Other	0	0	
6	<b>Marital Status of Women</b>			
	Married	30	100	-
	Unmarried	0	0	
	Single parent	0	0	
7	<b>Type of pregnancy</b>			
	Single	24	80	1.429,1,.490*
	Multiple	6	20	
8	<b>Gravida of Women</b>			
	Primigravida	20	67	.408,1,.700
	Multigravida	10	33	
9	<b>Do you have any previous exposure to hot application</b>			
	Yes	2	7	2.449, 1, .158*
	No	28	93	

(Ns-non significant, \*significant  $p < 0.05$ )

Table 6 depicts that chi square test for the association of hot application with age in years (2.004,1,.323), nutritional status (2.449,1,.373), occupational status (2.449,1,.201), religion (5.275,1,.025), type of pregnancy (1.429,1,.490), previous exposure to hot application (2.449,1,.158)

found significant because p value was  $< 0.05$ . it means there was a significant association between variables. According to educational status (1.714,1,.751), gravida of women (.408,1,.700) p value was not  $< 0.05$  it means there was no significant association between variables.

**Table 7:** Association of tapping therapy with selected with sociodemographic variables among pregnant women with labor pain. (N=6)

S.No.	Sociodemographic Variables	Tapping therapy (n <sub>2</sub> =30)		$\chi^2$ ,df,p-value
		f <sub>2</sub>	%	
1	<b>Age(in years)</b>			2.98
	≤20	7	23	
	21–30	22	73	
	≥30	1	3	
2	<b>Nutritional Status</b>			2.17
	Healthy	28	93	
	Unhealthy	1	3	
	Malnourished	1	3	
3	<b>Educational status of Women</b>			.556,1,.507
	8th–10th	13	43	
	12 <sup>th</sup>	9	43	
	Graduate	8	26	

4	<b>Occupation of Women</b>			
	Housewife	24	80	.089,1,.765
	Private job	6	20	
	Govt. employed	0	0	
5	<b>Religion</b>			
	Hindu	23	76.6	.192, 1, .661
	Sikh	5	16.6	
	Muslim	2	6.6	
	Other	0	0	
6	<b>Marital status of Women</b>			
	Married	30	100	-
	Unmarried	0	0	
	Single parent	0	0	
7	<b>Type of Pregnancy</b>			
	Single	23	76.6	.312,1,.576
	Multiple	7	23.3	
8	<b>Gravida of women</b>			
	Primigravida	21	70	1.296,1,.255*
	Multigravida	9	30	
9	<b>Do you have any previous exposure to tapping therapy</b>			
	Yes	0	0	.089,1,.765
	No	30	100	

(Ns-non significant, \*significant  $p < 0.05$ )

Table 7 depicts that chi square test for the association of tapping therapy with age in years (2.971,1,.192), nutritional status (2.173,1,.239), gravida of women (1.296,1,.255) found significant because p value was  $< 0.05$ , it means there was significant association between variables.

According to educational status (.556,1,.507), occupation of women (.089,1,.765), religion (.192,1,.661), type of pregnancy (.312,1,.576), previous exposure to tapping therapy (.089,1,.765) p value was not  $< 0.05$  it means there was no significant association between these variables.

## DISCUSSION

### The Findings are Discussed Based on the Objectives of Study.

In the first part of analysis of present study, the result revealed that socio demographically majority of the hot application women 63% were in the age group of 21–30 and very least 10% in the after group of  $> 30$  and 10% were having  $< 20$ . Among the tapping therapy women

the majority 73% in age group 21–30 and very least 3% in the age group of  $> 30$  and 23% were having  $< 20$  year of age. According to nutritional status among the hot application women the majority 99% were healthy group and least 0% were malnourished and 10% were unhealthy. According to nutritional status among the tapping therapy women the majorities 9% were healthy group and least 3% were malnourished and 10% were unhealthy. According to educational status among the hot application women the majority 43% were 8<sup>th</sup>–10<sup>th</sup> and least 27% were graduate and 30% were 12<sup>th</sup>. According to educational status among the tapping therapy women the majority 43% were 8<sup>th</sup>–10<sup>th</sup> and least 13% were graduate and 43% were 12<sup>th</sup>. According to occupation, hot application women the majority 80% housewife and least 0% government job and least 20% were private job.

According to occupation, tapping therapy women the majority 93% were housewife and least 0% were government employed

and 7% were in private job. According to religion, hot application women the majority 77% were Hindu and least 0% were other and 17% were Sikh and 7% were Muslim. According to religion among the tapping therapy women the majority 87% was Hindu and least 0% was Muslim and others and 13% were Sikh.

According to marital status among the hot application women the majority 100% was married and least 0% was unmarried and single parent. According to marital status among the tapping therapy women the majority 100% was married and least 0% was unmarried and single parent. According to types of pregnancy among the hot application women the majority 77% were single pregnancy and least 23% were multiple.

According to types of pregnancy among the tapping therapy women the majority 80% were single pregnancy and least 20% were multiple pregnancy. According to gravida of women among the hot application women the majority 70% were primigravida and least 30% were multigravida. According to gravida of women among the tapping therapy women the majority 67% were primigravida and least 33% were multigravida. According to any previous exposure hot application among pregnant women the majority 100% were No and least 0% were yes. According to any previous exposure tapping therapy among pregnant women the majority 93% were No and least 7% were yes.

**Objective 1:** *To assess the level of pain among pregnant women admitted in maternity ward with labor pain.*

Based on the objective of the study according to the majority, it was found that according to regular pain type among hot application women 50% was in pain and 50% was not in pain. According to regular pain among tapping therapy women the

majority 80% was not in pain and least 20% was in pain. According to irregular pain type among hot application women the majority 50% was in pain and 50% was not in pain. According to irregular pain among tapping therapy women the majority 84% was in pain and least 20% was not in pain.

According to knife like pain among hot application women the majority 63% was in pain and least 37% was not in pain. According to knife like pain among tapping therapy women the majority 67% were in pain and least 33% was not in pain. According to pulsing pain among hot application women 50% was in pain and 50% was not in pain. According to pulsing pain among tapping therapy women majority 66% was not in pain and least 33% was in pain. According to pricking pain among hot application women 50% was in pain and 50% was not in pain.

According to pricking pain among tapping therapy women majority 67% was not in pain and least 33% was in pain. According to drilling pain among hot application women the majority 73% was not in pain and least 27% was in pain. According to drilling pain among tapping therapy women the majority 67% was not in pain and least 33% was in pain.

According to sharp pain among hot application women the majority 80% was in pain and least 20% was not in pain. According to sharp pain among tapping therapy women the majority 78% was in pain and least 23% was not in pain. According to cutting pain among hot application women the majority 67% was in pain and least 33% was not in pain. According to cutting pain among the tapping therapy women the majority 60% was not in pain and least 40% was in pain. According to dull pain among hot application women the majority 87% was in pain and least 13% was not in pain. According to dull pain among tapping

therapy women the majority 73% was not in pain and least 27% was in pain. According to itchy pain among the hot application women the majority 77% was not in pain and least 23% was in pain.

According to itchy pain among the tapping therapy the majority 64% was not in pain and least 37% was in pain. According to aching pain among hot application women the majority 67% was not in pain and least 33% was in pain. According to aching pain among tapping therapy the majority 60% was not in pain and least 40% was in pain. According to fearful pain among hot application women the majority 83% was in pain and least 17% was not in pain. According to fearful pain among tapping therapy the majority 70% was in pain and least 30% was not in pain.

According to annoying pain among hot application women majority 63% was not in pain and least 37% was in pain. According to annoying pain among tapping therapy women majority 63% was not in pain and least 37% was in pain. According to punishing pain among hot application women the majority 80% was not in pain and least 20% was in pain. According to punishing pain among tapping therapy women the majority 27% was not in pain and least 3% was in pain. According to cruel pain among hot application women the majority 37% was not in pain and least 13% was in pain. According to cruel pain among tapping therapy women the majority 37% was not in pain and least 13% was in pain.

**Objective 2:** *To assess the level of pain among pregnant women who are admitted in maternity ward with labor pain before and after the implementation of hot application and tapping therapy.*

Based on the objective of the study According to the type of pain before implementation of hot application the majority 60% was in moderate pain and

least 20% were in mild pain and least 20% were in severe pain. According to the type of pain after implementation of hot application the majority 66.6% was in mild pain and least 0% was in severe pain and 33.3% were in moderate pain. The  $\chi^2$  value was (3.000, 1, .148). The value of degree of freedom was 1 and the p value was < 0.05 it means findings found significant. According to the type of pain before implementation of tapping therapy the majority 73% were in moderate pain and least 3% were in mild pain and 23% were in severe pain. According to the type of pain after implementation of tapping therapy the majority 60% were in moderate pain and least 20% were in mild and severe pain. The value was (.333, 1, .564). The value of degree of freedom was 1 and the p value was >0.05 it means findings found non-significant.

**Objective 3:** *To compare the effectiveness of hot application and tapping therapy among pregnant women admitted in maternity ward with labor pain.*

Based on the objectives of study according to type of pain among pregnant women after implementation of hot application the 20 women had mild pain and 10 women had moderate pain and no women had severe pain. According to type of pain among pregnant women after implementation of tapping therapy 6 women had mild pain and 18 women had moderate pain and 6 women had severe pain.

**Objective 4:** *To find out the association between hot application and tapping therapy with their selected socio demographic variables among pregnant women admitted in maternity ward with labor. pain.* Based on the objective of the study depicts that chi square test for the association of hot application with age in years (2.004,1,.323), nutritional status (2.449,1,.373), occupational status (2.449,1,.201), religion (5.275,1,.025),

type of pregnancy (1.429,1,.490),previous exposure to hot application (2.449,1,.158) found significant because p value was <0.05. It means there was a significant association between variables. According to educational status (1.714,1,.751), gravida of women (.408,1,.700) p value was not <0.05 it means there was no significant association between variables. According to chi square test for the association of tapping therapy with age in years (2.971,1,.192), nutritional status (2.173,1,.239), gravida of women (1.296,1,.255) found significant because p value was <0.05, it means there was significant association between variables. According to educational status(.556,1,.507), occupation of women (.089,1,.765), religion (.192,1,.661), type of pregnancy(.312,1,.576), previous exposure to tapping therapy (.089,1,.765) p value was not < 0.05 it means there was no significant association between these variables.

## CONCLUSION

In this present study, hot application was more effective than the tapping therapy. According to type of pain among pregnant women after implementation of hot application the 20 women had mild pain and 10 women had moderate pain and no women had severe pain. According to type of pain among pregnant women after implementation of tapping therapy 6 women had mild pain and 18 women had moderate pain and 6 women had severe pain.

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