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"Effect Of Sitz Bath Versus Cold Ice Pack Application On Reduction Of Episiotomy Pain Among Postnatal Mothers Admitted At Selected Hospitals Of Goalpara, Assam- Comparative Interventional Study"

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ABSTRACT:

Background: Episiotomy is a common surgical procedure performed during second stage of labor to enlarge the vaginal introitus and facilitate delivery. Although episiotomy aids in safe delivery of the child, the discomfort of episiotomy is an added concern in the already over stressed situation of puerperium. Considering the high rates of episiotomy, following vaginal deliveries, we need to offer patients treatment alternatives for perineal pain, based on scientific evidence. Sitz bath relieves discomfort as well as significantly promotes wound healing, also reduces surface contaminants which contribute in wound healing process. Cold application is also an another simple and common method used to relieve pain. It is safe, effective, low-cost and gives immediate pain relief. ***Objectives:*** 1. To assess the level of episiotomy pain reduction (experimental group 1- sitz bath and experimental group 2- cold ice pack) before and after the interventions among the postnatal mothers who are admitted in the selected hospitals of Goalpara, Assam. 2. To compare the pre-test and post-test level of pain score who received sitz bath as an intervention to reduce episiotomy pain among the postnatal mothers who are admitted in the selected hospitals of Goalpara, Assam. 3. To compare the pre-test and post-test level of pain score who received cold ice pack as an intervention to reduce episiotomy pain among the postnatal mothers who are admitted in the selected hospitals of Goalpara, Assam. 4. To compare the post-test level of pain scores of both sitz bath vs cold ice pack group among the postnatal mothers who are admitted in the selected hospitals of Goalpara, Assam. 5. To find out the association between the pre-test level of episiotomy pain reduction among the postnatal mothers who received sitz bath with selected socio-demographic variables. 6. To find out the association between the pre-test level of episiotomy pain reduction among the postnatal

mothers who received cold ice pack application with selected socio-demographic variables. ***Methods:*** Quasi-experimental one group pre-test post-test design was used to accomplish the objectives. Study was undertaken on 42 postnatal mothers (21 for sitz bath and 21 for cold ice pack) admitted in the postnatal ward in Goalpara Civil Hospital, Assam by using non-probability purposive sampling technique and quantitative approach was adopted to achieve the study objectives. Postnatal mothers were selected on the basis of inclusion criteria. Pre-test pain score was assessed using Visual Analogue Scale before each intervention. Intervention was conducted for 20mins twice a day in two consecutive days for both the groups. Post-test pain score was assessed after each intervention using Visual Analogue Scale. ***Results:*** Descriptive and inferential statistics were used to analyze the data. A total of 42 postnatal mothers, majority of the respondents that is 26(61.9%) belongs to the age group of 21-25 years, 32(76.19%) were having the first delivery, 28(66.6%) have high school level of education, all 42(100%) were unemployed, 22(52.38%) belonged to Islam religion, 41(97.61%) were non vegetarian, all the 42(100%) family monthly income was Rs. 6768-20273, 39(92.8%) resides in rural area, 36(85.71%) live in a joint family, 38(90.47%) present pregnancy was planned and all the 42(100%) have not received any education related with coping on episiotomy pain. On assessment of effectiveness of sitz bath and cold ice pack in reducing episiotomy pain, the calculated paired t-test of pre-test and post-test pain score among postnatal mothers who received sitz bath and cold ice pack was 33.6 and 62.16 respectively which was more than the tabulated value 2.09 at 20 degrees of freedom. The study further revealed that the unpaired t-test of post-test level of pain score of both sitz bath and cold ice pack group was 0.011 which was less than the tabulated value 2.02 at 40 degrees of freedom. It was observed that demographic variables such as number of delivery **(p=0.029)** and planned pregnancy **(p=0.014)** showed statistically significant association with the pre-test level of episiotomy pain among postnatal mothers who received sitz bath at $p<0.05$ level and there was no association between pre-test level of episiotomy pain reduction among postnatal mothers who received cold ice pack application with none of the demographic variables. ***Conclusion:*** After analyzing the collected data, this study showed that sitz bath and cold ice pack application were highly effective in reducing episiotomy pain among postnatal mothers. There was no significant difference on the effectiveness of sitz bath versus cold ice pack application on episiotomy pain reduction among the postnatal mothers. After this study, it is recommended that there should be more awareness programmes for nurses regarding importance of the use of cold ice pack and sitz bath for postpartum women to reduce episiotomy pain, encourage the postnatal women to apply the cold ice pack and sitz bath at the hospital as well as home to improve their episiotomy wound healing and maintain their comfort and educate the pregnant mothers during antenatal visits about the importance of cold ice pack and sitz bath and how to take it after delivery.

KEYWORDS: Effect, sitz bath, cold ice pack, episiotomy pain, postnatal mothers

INTRODUCTION:

To become “mother” is a beautiful gift given by God to woman. Giving birth is a powerful and life changing event with a lasting impact on women and their families. Today an average Indian woman considers pregnancy and child birth as a natural process. Every woman who became pregnant have to undergo the process of delivery. Sometimes it may be normal or forceps, vacuum and caesarean section. In normal process of delivery the baby is delivered per vagina. To enhance easy delivery, the perineum has to stretch for beyond its ordinary limits as the baby is born. Most women’s body is capable of achieving this, but some are not and the skin gives a way and tears. Episiotomy is a common surgical procedure performed during second stage of labor to enlarge the vaginal introitus and facilitate delivery. Although episiotomy aids in safe delivery of the child, the discomfort of episiotomy is an added concern in the already over stressed situation of puerperium. Considering the high rates of episiotomy, following vaginal deliveries, we need to offer patients treatment alternatives for perineal pain, based on scientific evidence. Sitz bath relieves discomfort as well as significantly promotes wound healing, also reduces surface contaminants which contribute in wound healing process. Cold application is also an another simple and common method used to relieve pain. It is safe, effective, low-cost and gives immediate pain relief.

OBJECTIVES:

1. To assess the level of episiotomy pain reduction (experimental group 1- sitz bath and experimental group 2- cold ice pack) before and after the interventions among the postnatal mothers who are admitted in the selected hospitals of Goalpara, Assam.

2. To compare the pre-test and post-test level of pain score who received sitz bath as an intervention to reduce episiotomy pain among the postnatal mothers who are admitted in the selected hospitals of Goalpara, Assam.

3. To compare the pre-test and post-test level of pain score who received cold ice pack as an intervention to reduce episiotomy pain among the postnatal mothers who are admitted in the selected hospitals of Goalpara, Assam.

4. To compare the post-test level of pain scores of both sitz bath vs cold ice pack group among the postnatal mothers who are admitted in the selected hospitals of Goalpara, Assam.

5. To find out the association between the pre-test level of episiotomy pain reduction among the postnatal mothers who received sitz bath with selected socio-demographic variables.

6. To find out the association between the pre-test level of episiotomy pain reduction among the postnatal mothers who received cold ice pack application with selected socio-demographic variables.

NEED OF THE STUDY:

In this era of advanced modern technology all mothers are looking hopefully at nurses to help in bringing down the maternal morbidity rate and relieve them from suffering, Pain and discomfort after child birth. Thus, it becomes the nurse's responsibility to identify the ways of preventing and reducing maternal morbidity as well as to identify the cost Effective measures in relieving Pain.

One of the research studies have recommended that further studies need to be performed in order to make maternity nurse aware with non–pharmacological Pain relief measure for Episiotomy Pain.

Based on the various review and the personal experience of the investigator during her clinical posting she have found that in many hospitals of Assam, non-pharmacological interventions for reducing the Episiotomy Pain among Postnatal Mothers are rarely practiced. The investigator had gone through the previous study and no studies have been conducted to determine the comparison between the Effect of Sitz Bath and Cold Ice Pack application on reduction of Episiotomy Pain among Postnatal Mothers, hence the investigator is interested to conduct a research study to determine the difference in Effectiveness of both the interventions.

As the nurses are having a vital role in caring of Postnatal Mothers during postpartum period in accordance with postpartum Pain and Episiotomy Pain. Nurses should make the mothers to feel more comfort, initiate early breast feeding and increase health care utilization. Therefore, from this study the investigator will be able to get an idea of the best intervention that can be practiced for Episiotomy Pain reduction and will disseminate the result of the study through the research findings to the staffs who are working in the hospital and to the patients as well.

METHODS AND MATERIALS:

Quasi-experimental one group pre-test post-test design was used to accomplish the objectives. Study was undertaken on 42 postnatal mothers (21 for sitz bath and 21 for cold ice pack) admitted in the postnatal ward in Goalpara Civil Hospital, Assam by using non-probability purposive sampling technique and quantitative approach was adopted to achieve the study objectives. Postnatal mothers were selected on the basis of inclusion criteria. Pre-test pain score was assessed using Visual Analogue Scale before each intervention. Intervention was conducted for 20mins twice a day in two consecutive days for both the groups. Post-test pain score was assessed after each intervention using Visual Analogue Scale.

DESCRIPTION OF THE TOOL:

The tools used for the study consisted of two sections:

(Section I)- Dealt with demographic variables

(Section II)- Dealt with visual analogue scale

DATA COLLECTION PROCEDURE:

A brief self-introduction and the purpose of the study were explained to the sample prior to data collection and keeping in mind the ethical aspect of research, the data was collected after obtaining the informed consent of the sample for their willingness to participate in the study. The samples were assured anonymity and confidentiality of information provided by them. Samples were divided into two groups, one for sitz bath and one for cold ice pack. Pre-test pain score was assessed before each intervention using visual analogue scale. Intervention was administered for 20mins to each sample twice a day for two consecutive days for both groups. Post-test pain score was assessed after each intervention using visual analogue scale. All the samples were collected from Goalpara Civil Hospital, Assam.

RESULTS:

SECTION-I: Frequency and percentage distribution of postnatal mothers according to their socio-demographic characteristics

Table 1: Frequency and percentage distribution of postnatal mothers according to their socio-demographic characteristics

n=42

DEMOGRAPHIC VARIABLES	FREQUENCY (f)	PERCENTAGE (%)
AGE IN YEARS		
15-20 YEARS	8	19%
21-25 YEARS	26	62%
26-30 YEARS	8	19%
30-35 YEARS	0	0%
NUMBER OF DELIVERY		
1^{st}	32	76%
2^{nd}	10	24%
$>2^{nd}$	0	0%
EDUCATIONAL STATUS		
No formal education	0	0%
Primary	1	2%

Secondary	10	24%
High School education	28	67%
Graduate and above	3	7%
OCCUPATIONAL STATUS		
Unemployed	42	100%
Daily wage earner	0	0%
Govt. employee	0	0%
Private employee	0	0%
RELIGION		
Hinduism	20	48%
Islam	22	52%
Christianity	0	0%
Others	0	0%
DIETARY PREFERENCE		
Vegetarian	1	2%
Non vegetarian	41	98%
SOCIO-ECONOMIC STATUS		
< Rs. 6,293	0	0%
Rs. 6,294 – 18,858	42	100%
Rs. 18,859 – 31,435	0	0%
Rs. 31,456 - 47,034	0	0%
Rs. 47,035 – 62,874	0	0%
Rs. 62,875 – 1,25,752	0	0%
>Rs. 1,25,753	0	0%
PLACE OF RESIDENCE		
Rural	39	93%

Urban	3	7%
TYPE OF FAMILY		
Nuclear	6	14%
Extended	0	0%
Joint	36	86%
Others, specify	0	0%
PLANNED PREGNANCY		
Yes	38	90%
No	4	10%
EDUCATION RECEIVED		
Yes	0	0%
No	42	100%

Table 1 depicts that, majority of the respondents that is 26(61.9%) belongs to the age group of 21-25 years, 32(76.19%) were having the first delivery, 28(66.6%) have high school level of education, all 42(100%) were unemployed, 22(52.38%) belonged to Islam religion, 41(97.61%) were non vegetarian, all the 42(100%) family monthly income was Rs. 6768-20273, 39(92.8%) resides in rural area, 36(85.71%) live in a joint family, 38(90.47%) present pregnancy was planned and all the 42(100%) have not received any education related with coping on episiotomy pain.

SECTION II: Frequency and percentage distribution of pre-test and post-test level of pain at the episiotomy site among postnatal mothers who received sitz bath

Table 2: Frequency and percentage distribution of pre-test and post-test level of pain at the episiotomy site among postnatal mothers who received sitz bath

n=21

Sl. No.	Level of pain	1st day								2nd day							
		Intervention 1				Intervention 2				Intervention 3				Intervention 4			
		Pretest		Posttest		Pretest		Posttest		Pretest		Posttest		Pretest		Posttest	
		f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1.	No pain 0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
2.	Mild pain 1-3	0	0%	0	0%	0	0%	1	5%	0	0%	4	19%	0	0%	13	62%
3.	Moderate pain 4-6	0	0%	15	71%	0	0%	20	95%	13	62%	17	81%	21	100 %	8	38%
4.	Severe pain 7-10	21	100 %	6	29%	21	100 %	0	0%	8	38%	0	0%	0	0%	0	0%

Table 2 depicts that, in the pre-test before first intervention of sitz bath out of 21 study samples all the samples 21(100%) had severe pain, before second intervention shows 21(100%) had severe pain, before the third intervention, the pre-test shows 13(62%) were in moderate pain and 8 (38%) had severe pain, before the fourth intervention, the pre-test score shows all 21(100%) had moderate pain.

The above table is also showing the post-test scoring of numerical pain rating scale after each intervention sessions. After the first intervention 6(29%) had severe pain, 15(71%) had moderate pain. After the second intervention 20(95%) had moderate pain, and 1(5%) had mild pain. The post-test scoring after the third intervention shows majority 17(81%) had moderate pain and other 4(19%) had mild pain. The post-test scoring after the fourth intervention shows 13(62%) had mild pain and 8(38%) had moderate pain.

SECTION III: Frequency and percentage distribution of pre-test and post-test level of pain at the episiotomy site among postnatal mothers who received cold ice pack application

Table 3: Frequency and percentage distribution of pre-test and post-test level of pain at the episiotomy site among postnatal mothers who received cold ice pack application

n=21

Sl. No.	Level of pain	1st day								2nd day							
		Intervention 1				Intervention 2				Intervention 3				Intervention 4			
		Pretest		Posttest		Pretest		Posttest		Pretest		Posttest		Pretest		Posttest	
		f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1.	No pain 0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
2.	Mild pain 1-3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	7	33%
3.	Moderate pain 4-6	0	0%	21	100 %	0	0%	20	95%	5	24%	21	100 %	19	90 %	14	67%
4.	Severe pain 7-10	21	100 %	0	0%	21	100 %	1	5%	16	76%	0	0%	2	10 %	0	0%
TOTAL		21	100 %	21	100 %	21	100 %	21	100 %	21	100 %	21	100 %	21	100 %	21	100 %

Table 3 depicts that, in the pre-test before first intervention of cold ice pack application out of 21 study samples all the samples 21(100%) had severe pain, before second intervention shows 21 (100%) had severe pain, before the third intervention, the pre-test pain score shows 16 (76%) were in severe pain and 5 (24%) had moderate pain, before the fourth intervention, the pre-test score shows 19 (90%) had moderate pain and 2 (10%) had severe pain.

The above table is also showing the post-test scoring of numerical pain rating scale after each intervention sessions. After the first intervention all the samples 21(100%) had moderate pain. After the second intervention 20(95%) had moderate pain, and 1 (5%) had mild pain. The post-test scoring after the third intervention shows all the samples 21(100%) had moderate pain. The post-test scoring after the fourth intervention shows 14 (67%) had moderate pain and 7 (33%) had mild pain.

SECTION IV: Comparison of pre-test and post-test level of episiotomy pain among postnatal mothers who received sitz bath as an intervention to reduce episiotomy pain

Hypothesis:

H_{01}- There is no significant difference on episiotomy pain reduction before and after providing sitz bath among the postnatal mothers.

H_1- There is a significant difference on episiotomy pain reduction before and after providing sitz bath among the postnatal mothers.

Table 4: Comparison of pre-test and post-test level of episiotomy pain among postnatal mothers who received sitz bath as an intervention to reduce episiotomy pain

n=21

Variables	Mean	SD	Calculated t-test value	Tabulated t-test value	Df	Remark
Pre-test	**6.86**	**10.35**	**33.6**	**2.09**	**20**	**There is significant difference**
Post-test	**4.55**	**6.90**				

Table 4 depicts that calculated t-test value (33.6) is greater than tabulated t test value (2.09), therefore the research hypothesis is accepted and the null hypothesis is rejected which implies that there is significant difference on episiotomy pain reduction before and after providing sitz bath among the postnatal mothers.

SECTION V: Comparison of pre-test and post-test level of episiotomy pain among postnatal mothers who received cold ice pack application as an intervention to reduce episiotomy pain

Hypothesis:

H_{02}- There is no significant difference on episiotomy pain reduction before and after cold ice pack application among the postnatal mothers.

H_2- There is a significant difference on episiotomy pain reduction before and after cold ice pack application among the postnatal mothers.

Table 5: Comparison of pre-test and post-test level of episiotomy pain among postnatal mothers who received cold ice pack application as an intervention to reduce episiotomy pain

n=21

Variables	Mean	SD	Calculated t-test value	Tabulated t-test value	Df	Remark
Pre-test	**7.06**	**21.20**	**62.16**	**2.09**	**20**	**There is significant difference**
Post-test	**4.59**	**13.84**				

Table 5 depicts that calculated t-test value (62.16) is more than tabulated t-test value (2.09), therefore the research hypothesis is accepted and the null hypothesis is rejected which implies that there is significant difference on episiotomy pain reduction before and after cold ice pack application among the postnatal mothers.

SECTION VI: Comparison of post-test level of episiotomy pain among postnatal mothers of both sitz bath vs cold ice pack group

Hypothesis:

H_{03}- There is no significant difference on the effectiveness of sitz bath versus cold ice pack application on episiotomy pain reduction among the postnatal mothers.

H_3- There is a significant difference on the effectiveness of sitz bath versus cold ice pack application on episiotomy pain reduction among the postnatal mothers.

Table 6: Comparison of post-test level of episiotomy pain among postnatal mothers of both sitz bath vs cold ice pack group

n=42

Variables	Mean	SD	Calculated t-test value	Tabulated t-test value	Df	Remark
Post-test of sitz bath	**4.55**	**6.90**	**0.011**	**2.02**	**40**	**No significant difference**
Post-test of cold ice pack	**4.59**	**13.84**				

Table 6 depicts that the calculated t-test value (0.011) is less than tabulated t-test value (2.02), therefore the research hypothesis is rejected and the null hypothesis is accepted which implies that there is no significant difference on the effectiveness of sitz bath versus cold ice pack application on episiotomy pain reduction among the postnatal mothers.

SECTION VII: Association of pre-test level of episiotomy pain reduction among the postnatal mothers who received sitz bath with their selected demographic variables

Hypothesis:

H_{04}- There is no significant association between the pre-test level of episiotomy pain reduction among postnatal mothers who received sitz bath with the selected demographic variables.

H_4- There is a significant association between the pre-test level of episiotomy pain reduction among postnatal mothers who received sitz bath with the selected demographic variables.

Table 7: Association of pre-test level of episiotomy pain reduction among the postnatal mothers who received sitz bath with their selected demographic variables

n = 21

Demographic Variables	**Moderate**		**Severe**		**Fisher Exact test p-value**
	f	**%**	**f**	**%**	
Age (in years)					p = 0.057 (N.S)
15 – 20	0	0	4	19.0	
21 – 25	0	0	13	61.9	
26 - 30	2	9.5	2	9.5	
31 – 35	-	-	-	-	
Number of delivery					**p = 0.029* (S)**
1st	0	0	17	81.0	
2nd	2	9.5	2	9.5	
>2nd	-	-	-	-	
Educational status					p = 0.429 (N.S)
No formal education	-	-	-	-	
Primary	-	-	-	-	
Secondary	0	0	2	9.5	
High school	1	4.8	15	71.4	
Graduate and above	1	4.8	2	9.5	
Occupational status					-
Unemployed	2	9.5	19	90.5	
Daily wage earner	-	-	-	-	
Government employee	-	-	-	-	

Demographic Variables	Moderate		Severe		Fisher Exact test p-value
	f	%	f	%	
Private employee	-	-	-	-	
Religion					
Hinduism	1	4.8	9	42.9	p = 1.000 (N.S)
Islam	1	4.8	10	47.6	
Christianity	-	-	-	-	
Others	-	-	-	-	
Dietary preference					p = 1.000 (N.S)
Vegetarian	0	0	1	4.8	
Non-vegetarian	2	9.5	18	85.7	
Socio-economic status					-
< Rs. 6,293	-	-	-	-	
Rs. 6,294 – 18,858	2	9.5	19	90.5	
Rs. 18,859 – 31,435	-	-	-	-	
Rs. 31,456 - 47,034	-	-	-	-	
Rs. 47,035 – 62,874	-	-	-	-	
Rs. 62,875 – 1,25,752	-	-	-	-	
>Rs. 1,25,753					
Place of residence					p = 1.000 (N.S)
Rural	2	9.5	18	85.7	
Urban	0	0	1	4.8	
Type of family					-
Nuclear	-	-	-	-	
Extended	-	-	-	-	
Joint	2	9.5	19	90.5	
Others	-	-	-	-	
Planned pregnancy					**p = 0.014*** **(S)**
Yes	0	0	18	85.7	
No	2	9.5	1	4.8	

Demographic Variables	Moderate		Severe		Fisher Exact test p-value
	f	%	f	%	
Any education received related with coping on episiotomy pain					-
Yes	-	-	-	-	
No	2	9.5	19	90.5	

N.S – Not Significant, p>0.05

Table 7 depicts that demographic variables number of delivery **(p=0.029)** and planned pregnancy **(p=0.014)** had statistically significant association with pre-test level of episiotomy pain among postnatal mothers who received sitz bath at p<0.05 level.

The other demographic variables did not show statistically significant association with pre-test scores of episiotomy pain among postnatal mothers who received sitz bath at p<0.05 level.

Hence the research hypothesis (H_4) was accepted and null hypothesis (H_{04}) was rejected, and infers that there is an association between the pre-test level of Episiotomy Pain reduction among Postnatal Mothers who received Sitz Bath with the selected demographic variables like number of delivery and planned pregnancy.

SECTION VIII: Association of pre-test level of episiotomy pain reduction among the postnatal mothers who received cold ice pack aplication with their selected demographic variables

Hypothesis:

H_{05}- There is no significant association between the pre-test level of episiotomy pain reduction among postnatal mothers who received cold ice pack application with the selected demographic variables.

H_5- There is a significant association between the pre-test level of episiotomy pain reduction among postnatal mothers who received cold ice pack application with the selected demographic variables.

Table 8: Association of pre-test level of episiotomy pain reduction among the postnatal mothers who received cold ice pack aplication with their selected demographic variables

n = 21

Demographic Variables	≤Mean (7.14)		>Mean (7.14)		Fisher Exact test p-value
	f	%	f	%	
Age (in years)					p = 0.531 (N.S)
15 – 20	4	19.0	0	0	
21 – 25	10	47.6	3	14.3	
26 – 30	4	19.0	0	0	
31 – 35	-	-	-	-	
Number of delivery					p = 0.526

Demographic Variables	≤Mean (7.14)		>Mean (7.14)		Fisher Exact test p-value
	f	%	f	%	
1st	12	57.1	3	14.3	(N.S)
2nd	6	28.6	0	0	
>2nd	-	-	-	-	
Educational status					
No formal education	-	-	-	-	
Primary	-	-	-	-	p = 0.603
Secondary	1	4.8	0	0	(N.S)
High school	6	28.6	2	9.5	
Graduate and above	11	52.4	1	4.8	
Occupational status					
Unemployed	18	85.7	3	14.3	
Daily wage earner	-	-	-	-	-
Government employee	-	-	-	-	
Private employee	-	-	-	-	
Religion					
Hinduism	10	47.6	0	0	p = 0.214
Islam	8	38.1	3	14.3	(N.S)
Christianity	-	-	-	-	
Others	-	-	-	-	
Dietary preference					
Vegetarian	-	-	-	-	-
Non-vegetarian	18	85.7	3	14.3	
Socio-economic status					-
< Rs. 6,293	-	-	-	-	
Rs. 6,294 – 18,858	18	85.7	3	14.3	
Rs. 18,859 – 31,435	-	-	-	-	
Rs. 31,456 - 47,034	-	-	-	-	
Rs. 47,035 – 62,874	-	-	-	-	

Demographic Variables	≤Mean (7.14)		>Mean (7.14)		Fisher Exact test p-value
	f	%	f	%	
Rs. 62,875 – 1,25,752	-	-	-	-	
>Rs. 1,25,753					
Place of residence					
Rural	18	76.2	3	14.3	p = 1.000
Urban	2	9.5	0	0	(N.S)
Type of family					
Nuclear	4	19.0	2	9.5	p = 0.184
Extended	-	-	-	-	(N.S)
Joint	14	66.7	1	4.8	
Others	-	-	-	-	
Planned pregnancy					p = 1.000
Yes	17	81.0	3	14.3	(N.S)
No	1	4.8	0	0	
Any education received related with coping on episiotomy pain					-
Yes	-	-	-	-	
No	18	85.7	3	14.3	

N.S – Not Significant, p>0.05

Table 8 depicts that none of the demographic variables showed statistically significant association with pre-test level of episiotomy pain reduction.

Hence the null hypothesis (H_{05}) was accepted and research hypothesis (H_5) was rejected, and infers that there is no significant association between the pre-test level of episiotomy pain reduction among postnatal mothers who received cold ice pack application with the selected demographic variables.

CONCLUSION:

Based on the analysis of the findings of the study, the following inferences were drawn:

Out of 42 postnatal mothers, majority that is 26(61.9%) belonged to the age group of 21-25 years, 32(76.19%) were having the first delivery, 28(66.6%) have high school level of education, all 42(100%) were unemployed, 22(52.38%) belonged to Islam religion, 41(97.61%) were non vegetarian, all the 42(100%) family monthly income was Rs. 6768-20273, 39(92.8%) resides in rural area, 36(85.71%) live in a joint family, 38(90.47%) present pregnancy was planned and all the 42(100%) have not received any education related with coping on episiotomy pain.

The findings of the pre-test among the sitz bath group were, before first intervention out of 21 study samples all the samples 21(100%) had severe pain. Pre-test score before second intervention also shows 21(100%) had

severe pain. Before the third intervention, the pre-test pain score shows 13(62%) were in moderate pain and 8 (38%) had severe pain. Before the fourth intervention, the pre-test score shows all 21(100%) had moderate pain. The study reveals that majority of the samples were experiencing severe level of pain in pre-test score of numerical pain rating scale with a mean pain score of 6.86 and standard deviation of 10.35 among the postnatal mothers who received sitz bath. The findings of the post-test among the sitz bath group are after the first intervention 6(29%) had severe pain, 15(71%) had moderate pain. After the second intervention 20(95%) had moderate pain, and 1(5%) had mild pain. The post-test scoring after the third intervention shows majority 17(81%) had moderate pain and other 4(19%) had mild pain. The post-test scoring after the fourth intervention shows 13(62%) had mild pain and 8(38%) had moderate pain. Overall mean pain score of post-test was 4.55 and standard deviation 6.90. Hence, the findings showed that sitz bath is effective in reducing episiotomy pain among postnatal mothers.

The findings of the pre-test among cold ice pack group are before first intervention out of 21 study samples all the samples 21(100%) had severe pain. Pre-test score before second intervention also shows 21 (100%) had severe pain. Before the third intervention, the pre-test pain score shows 16 (76%) were in severe pain and 5 (24%) had moderate pain. Before the fourth intervention, the pre-test score shows 19 (90%) had moderate pain and 2 (10%) had severe pain. The study also reveals that the mean pain score of pre-test was 7.06 and standard deviation 21.20 among postnatal mothers who received cold ice pack application. The findings of the post-test among cold ice pack group are after the first intervention all the samples 21(100%) had moderate pain. After the second intervention 20(95%) had moderate pain, and 1 (5%) had mild pain. The post-test scoring after the third intervention shows all the samples 21(100%) had moderate pain. The post-test scoring after the fourth intervention shows 14 (67%) had moderate pain and 7 (33%) had mild pain. The mean pain score of post-test was 4.59 and standard deviation 13.84. Hence, the finding showed that application of cold ice pack is effective in reducing episiotomy pain among postnatal mothers.

The paired t-test for numerical pain rating scale score of pre-test and post-test among postnatal mothers who received sitz bath was computed and the value was 33.6 which was more than the tabulated value 2.09 at 20 degrees of freedom. The statistical test showed that the sitz bath was effective in reduction of episiotomy pain. The paired t-test for numerical pain rating scale score of pre-test and post-test among postnatal mothers who received cold ice pack application was computed and the value was 62.16 which was more than the tabulated value 2.09 at 20 degrees of freedom. The statistical test showed that the application of cold ice pack was effective in reduction of episiotomy pain.

The study further revealed that the unpaired t-test of post-test level of pain score of both sitz bath and cold ice pack group was computed and the value was 0.011 which was less than the tabulated value 2.02 at 40 degrees of freedom. The statistical test showed that there is no significant difference on the effectiveness of sitz bath versus cold ice pack application on episiotomy pain reduction among the postnatal mothers.

The study also found out that there was an association between the pre-test level of episiotomy pain reduction among postnatal mothers who received sitz bath with the selected demographic variables like number of pregnancy and planned pregnancy. The study also found out that there was no association between pre-test level of episiotomy pain reduction among postnatal mothers who received cold ice pack application with none of the demographic variables.

Through this study, the investigator concluded that sitz bath and cold ice pack application were highly effective in reducing episiotomy pain among postnatal mothers. There was no significant difference on the effectiveness of sitz bath versus cold ice pack application on episiotomy pain reduction among the postnatal mothers. Therefore regular implementation of sitz bath and cold ice pack application in the form of standard non pharmacological measure of episiotomy pain reduction will be helpful for the postnatal mothers and thus reduces the need for pain medications and thereby will reduce the related complications.

REFERENCES:

1. Kumawat A, Kaur A,(2020): A quasi experimental study to assess the effect of sitz bath in reduction of episiotomy pain among postnatal mothers in selected hospitals of district Amritsar, Punjab. Universe International Journal of Interdisciplinary Research (UIJIR); Available at: www.uijir.com.
2. Khosla P. Effect of sitz bath on episiotomy wound healing and level of pain among post natal mothers. Int J Adv Nurs Manag [Internet]. 2017;5(3):227. Available from: http://dx.doi.org/10.5958/2454-2652.2017.00048.8
3. Geetha P, Shanmugam R.S., (2015):Effectiveness of Ice Pack Application on the Level of Pain in Episiotomy Wound ; International Journal of Science and Research (IJSR) 4(11);1607- 1611, Available at: www.ijsr.net .
4. Simpson, K.R., Creahan P.A., (2014): AWHONN's Perinatal Nursing, Labor and birth, chapter 14, Wolters Kluwer Health, 5th ed., pp. 379-382.
5. Shehta MS, Fahmy NM, Ramadan SA, Almeniem SO,.(2017): Effect of cold–gel packing on episiotomy pain among postnatal mothers admitted at the postpartum unit of obstetrics and gynecology department in Benha University Hospital; Egyptian Journal of Health Care; Available at: www.ejhc.net.