

Effectiveness Of Breast Crawl Technique On Intensity Of Episiotomy Suturing Pain Among Primi Mothers At Karpaga Vinayaga Institute Of Medical Sciences And Research Centre In Chengalpattu District

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Abstract

. “A study was conducted to assess the effectiveness of breast crawl technique on intensity of episiotomy suturing pain among primi mothers at Karpaga Vinayaga Institute of Medical Sciences and Research Centre, in chengalpattu District”.

The objectives were, to evaluate the effectiveness of breast crawl technique, to identify the effectiveness of breast crawl technique on intensity of episiotomy suturing pain among primi mothers, to associate the selected demographic and obstetrical variables intensity of episiotomy suturing pain among primimothers.

A randomized controlled trial with post test only design was chosen for this study. By using purposive sampling technique a total of 60 samples were included for the study. It consisted of 30 each in experimental and control group. Breast crawl technique was implemented for experimental group participants along with routine care where as control group participants were only on routine care. Post test was done for both experimental and control group participants. Both descriptive and inferential statistics were used for the analysis.

The results revealed that there was a statistically significant difference between experimental and control group on intensity of episiotomy suturing pain at level $p < 0.001$. These study findings implied that the simple measure like breast crawl technique is easy to do and practice to reduce the intensity of episiotomy suturing pain among primi mothers.

Keywords: Breast crawl technique, Intensity of episiotomy suturing pain and primimothers.

INTRODUCTION

Child birth is one of the greatest events in early women's life. The physiological process by which the fetus, placenta and membranes are expelled from the uterus is called labour. Although labor is often thought

of as one of the most painful events in human experience, supportive care is intended to ease a woman's anxiety and discomfort. A wide variety of pain relief measures, pharmacological and nonpharmacological are available for women in labor. The pharmacological management for pain during episiotomy suturing is the administration of 10 ml of 2% lignocaine before the suturing. Many of nonpharmacological management can be used. Breast crawl is one of the methods to distract the mother from pain during episiotomy suturing. episiotomy as a surgical procedure to reduce the risk of severe perineal tear, shorten delivery and prevent damage to the pelvic floor. However, the procedure can cause pain in the immediate postpartum period,

Everything in breast crawl is perfectly designed by nature. The skin-to-skin contact helps the baby to remain warm and initiates mother-baby bonding. Baby's kicking on mother's abdomen stimulates uterus to contract thereby reducing bleeding and enhances expulsion of placenta and reduces the episiotomy suture pain.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of breast crawl technique on intensity of episiotomy suturing pain among primimothers at KarpagaVinayaga Institute of Medical Sciences and Research Centre in chengalpattu District.

OBJECTIVES OF THE STUDY

To identify the effectiveness of breast crawl technique on intensity of episiotomy suturing pain among primimothers.

To associate the selected demographic and obstetrical variables with intensity of episiotomy suturing pain among primimothers.

HYPOTHESIS

H1 – There is a significant difference in the intensity of episiotomy suturing pain among primimothers who was subjected to breast crawl technique than those who do not.

DELIMITATIONS

The study is delimited to

1. Mothers who are primigravida and in third stage of labour, aged between 18- 30 years.
2. Primimothers who were able to understand Tamil or English.
3. Primimothers admitted at the labor ward in KarpagaVinayaga Medical Institution and Research Centre in chengalpattu District during the period of study.

PROJECTED OUTCOME

The findings of the study will help the nurses to assist the primimothers to reduce the perception of intensity of episiotomy suturing pain through breast crawl technique.

RESEARCH APPROACH

A quantitative research approach was adopted for this study.

RESEARCH DESIGN

A randomized controlled trail with post test only design was adopted for this study.

Table – I

GROUP	INTERVENTION	POST TEST
R -Experimental group	X *	O1
R - Control group	- *	O1

Schematic Representation of Research Methodology

R – Randomization

X * - Breast Crawl Technique And Routine Care

O1 - Post–Test –

* - Routine Care

VARIABLES

Independent variable: Breast crawl technique

Dependent variables intensity of episiotomy suturing pain.

SETTING OF THE STUDY

This study was conducted in the labour ward at KarpagaVinayaga Institute of Medical Sciences and Research Centre, Chinnakolampakkam, Maduranthagam Taluk chengalpattu District. It has 100 beds in obstetrics unit and 2 labour units. Each labourunit has got 4 labour tables. The average monthly normal spontaneous full term vaginal delivery is 60-80. Each labour unit is designed with the state of the art technology in relation to the good maternal and fetal outcome.

POPULATION

Target Population

It refers to primimothers in third stage of labour.

Accessible Population

It refers to the primimothers who were admitted at labour ward in KarpagaVinayaga Institute of Medical Sciences and Research Centre, chengalpattu District from which sample were drawn.

Sample

It refers to the primimothers admitted at KarpagaVinayaga Institute of Medical Sciences and Research Centre, chengalpattu District, who were in third stage of labour and fulfils the inclusion criteria.

Sample Size

A total of 60 samples were recruited for this study which composed of 30 each in experimental and control group.

Sampling Technique

Purposive sampling technique was adopted to recruit the sample from the accessible population.

CRITERIA FOR SAMPLE SELECTION

Inclusion Criteria

Primimothers aged 18- 30 years who were undergoing full term normal spontaneous vaginal delivery.

Primimothers with newborn and Apgar score more than 7.

Primimothers who were willing to participate in the study.

Primimothers who were able to talk and understand the language Tamil or English.

Exclusion Criteria

Primimothers who had high risk conditions

.Newborn who had high risk conditions.

SELECTION OF THE TOOL

The standardized structured instrument was selected Numerical pain rating scale to identify the effectiveness of breast crawl technique on intensity of episiotomy suturing pain among primimothers at KarpagaVinayaga institute of Medical Sciences and Research Centre. A thorough review of literature, suggestions from guide and experts helped in the selection and development of the tool for this study.

Development And Description Of The Tool

The structured instrument composed of 3 parts, which included

Part - I Demographic variables

Part - II Obstetrical variables

Part – III Numerical Pain Rating scale

Part - I Demographic Variables

It was devised by the investigator which consists of demographic variables like age of the primimothers, religion, educational status of primimothers, occupational status of primimothers, occupational status of spouse, family income / month (Rs), type of the family, diet pattern of primimothers, and residence of primimothers.

Part - II Obstetrical Variables

It was designed by the investigator which included age at menarche, age at marriage, type of marriage, gestational age, birth weight of the newborn.

Part –III - Numerical pain rating scale

This instrument was devised by Mc. Caffery, Beebe,et. al, (1989). It is an 11 point rating scale used to assess the subjective experience of intensity of pain for adults by self- report. It is a segmented numerical version of the Visual Analog Scale, in which a study participant selects a whole number (0-10 integers) that best reflects the intensity of their pain. It is reliable tool ($r = 0.97$).

SCORE INTERPRETATION

Part – I Demographic Variables

The numerical values were assigned for the demographic variables.

Part – II Obstetrical Variables

The numerical values were assigned for the obstetrical variables for the item 1-5.

PART – III - Numerical Pain Rating Scale

This is a numerical pain rating scale which has a minimum score ‘0’ and maximum score of ‘10’. An 11 point numerical scale with ‘0’ representing one pain extreme that is “no pain” and ‘10’ representing the other pain extreme that is “severe pain”. It depends on the number that the participant indicates on the scale to rate their pain intensity. The total score was categorized as follows.

- 1 – 3 = mild pain
- 4 – 6 = moderate pain
- 7 – 10 = severe pain.

PLAN FOR DATA ANALYSIS

The plan of data analysis was drawn on the basis of objectives and testing of hypothesis by using descriptive and inferential statistics.

DISTRIBUTION OF DEMOGRAPHIC VARIABLES AMONG EXPERIMENTAL AND CONTROL GROUP

N=60

S.no	Demographic variables		Group			
			Experimental		Control	
			No	%	No	%
1	Age of the primiparas	21–23years	2	6.7	4	13.3
		24–26years	22	73.3	8	26.7
		27–30years	6	20.0	18	60.0
2	Religion	Hindu	15	50.0	12	40.0
		Christian	11	36.7	13	43.3
		Muslim	4	13.3	5	16.7
3	Educational status of primiparas	Literate	11	36.7	12	40.0
		Primary	10	33.3	9	30.0
		Secondary	7	23.3	7	23.3
		Graduate	2	6.7	2	6.7
4	Occupational status of primiparas	Homemaker	15	50	14	46.7
		Daily labour	13	43.3	9	30.0
		Professional	0	0.0	0	0.0
		Business	2	6.7	7	23.3
5	Occupation	Daily labour	13	43.3	12	40.0

	alstatus of thespouse	Driver	6	20.0	6	20.0
		Professional	5	16.7	6	20.0
		Business	6	20.0	6	20.0
6	Familyincome/ month(Rs)	BelowRs5,000	11	36.7	12	40.0
		Rs5,001toRs10,000	7	23.3	7	23.3
		Rs10,001to Rs15,000	9	30.0	8	26.7
		AboveRs15,000	3	10.0	3	10.0
7	Typeoffamily	Nuclear	15	50.0	12	40.0
		Joint	9	30.0	6	20.0
		Extended	6	20.0	12	40.0
8	Diet patternofprimi mothers	Vegetarian	5	16.7	14	46.7
		Non-Vegetarian	5	16.7	4	13.3
		Mixeddiet	20	66.7	12	40.0
9	Residenceofthepr imimothers	Rural	19	63.3	20	66.7
		Urban	11	36.7	10	33.3

**DISTRIBUTIONOF OBSTETRICALVARIABLES AMONG
EXPERIMENTALANDCONTROLGROUP**

N=60

S.No	Obstetricalvariables		Group			
			Experimental		Control	
			No	%	No	%
1	Ageatmenarche	10 –11years	3	10.0	11	36.7
		12 –13years	19	63.3	9	30.0
		14 –15years	8	26.7	7	23.3
		16 –17years	0	0.0	3	10.0
2	Ageatmarriage	18years	2	6.7	8	26.7
		19 –22years	10	33.3	5	16.7
		23 –26years	14	46.7	10	33.3
		27 –30years	4	13.3	7	23.3
3	Typeof marriage	Maternalrelation	4	13.3	6	20.0
		Paternalrelation	8	26.7	7	23.3
		Non-consanguineous	18	60.0	17	56.7
4	Gestational age(completed)	37weeks	2	6.7	6	20.0
		38weeks	12	40.0	16	53.3

		39weeks	16	53.3	6	20.0
		40weeks	0	0.0	2	6.7
5	Birthweightofthe newborn	2.5–2.8kg	1	3.3	18	60.0
		2.9–3.00kg	22	73.3	7	23.3
		3.1–3.5kg	7	23.3	5	16.7

ASSOCIATION OF SELECTED DEMOGRAPHIC VARIABLES WITH INTENSITY OF EPISIOTOMY SUTURING PAIN AMONG EXPERIMENTAL GROUP

N=30

S.No	Demographic variables		Intensity of episiotomy suturing pain						Chi square	'p' value
			Mild		Moderate		Severe			
			No	%	No	%	No	%		
1	Age of the primiparous Mothers	21-23 years	2	6.7	0	0.0	0	0.0	0.436	0.804 (NS)
		24-26 years	18	60.0	4	13.3	0	0.0		
		27-30 years	5	16.7	1	3.3	0	0.0		
2	Educational status of primiparous Mothers	Literate	9	30.0	2	6.7	0	0.0	0.527	0.913 (NS)
		Primary education	8	26.7	2	6.7	0	0.0		
		Secondary education	6	20.0	1	3.3	0	0.0		
		Graduate	2	6.7	0	0.0	0	0.0		
3	Occupational status of primiparous Mothers	Homemaker	14	46.7	1	3.3	0	0.0	3.065	0.216 (NS)
		Daily labour	10	33.3	3	10.0	0	0.0		
		Professional	0	0.0	0	0.0	0	0.0		
		Business	1	3.3	1	3.3	0	0.0		
4	Family income/month (Rs)	Below Rs 5,000	9	30.0	2	6.7	0	0.0	1.532	0.675 (NS)
		Rs 5,001 to Rs 10,000	5	16.7	2	6.7	0	0.0		
		Rs 10,001 to Rs 15,000	8	26.7	1	3.3	0	0.0		
		Above Rs 15,000	3	10.0	0	0.0	0	0.0		

				0						
5	Type of family	Nuclear	13	43.3	2	6.7	0	0.0	0.32	0.852(NS)
		Joint	7	23.3	2	6.7	0	0.0		
		Extended	5	16.7	1	3.3	0	0.0		
6	Diet pattern of primiparous	Vegetarian	4	13.3	1	3.3	0	0.0	1.2	0.549(NS)
		Non-vegetarian	5	16.7	0	0.0	0	0.0		
		Mixed diet	16	53.3	4	13.3	0	0.0		

NS-Not significant

There was no association of selected demographic variables with initiation of breast feeding among experimental group.

ASSOCIATION OF SELECTED OBSTETRICAL VARIABLES WITHIN TENSITY OF EPISIOTOMY SUTURING PAIN AMONG EXPERIMENTAL GROUP

N=30

S.No	Obstetrical variables		Intensity of episiotomy suturing pain						Chi square	'p' value
			Mild		Moderate		Severe			
			No	%	No	%	No	%		
1	Age at menarche	10-11 years	3	10.0	0	0.0	0	0.0	0.963	0.618(NS)
		12-13 years	15	50.0	4	13.3	0	0.0		
		14-15 years	7	23.3	1	3.3	0	0.0		
		16-17 years	0	0.0	0	0.0	0	0.0		
2	Age at marriage	18 years	2	6.7	0	0.0	0	0.0		
		19-22 years	8	26.7	2	6.7	0	0.0		

	age			7					0.737	0.864(NS)
		23–26years	12	40.0	2	6.7	0	0.0		
		27–30years	3	10.0	1	3.3	0	0.0		
3	Gestational age (completed)	37weeks	2	6.7	0	0.0	0	0.0	0.45	0.799(NS)
		38weeks	10	33.3	2	6.7	0	0.0		
		39weeks	13	43.3	3	10.0	0	0.0		
		40weeks	0	0.0	0	0.0	0	0.0		
4	Birth weight of the newborn	2.5-2.8kg	1	3.3	0	0.0	0	0.0	0.265	0.876(NS)
		2.9–3.0kg	18	60.0	4	13.3	0	0.0		
		3.1-3.5kg	6	20.0	1	3.3	0	0.0		
5	Apgar score of the newborn	8	0	0.0	0	0.0	0	0.0	0.231	0.631(NS)
		9	3	10.0	1	3.3	0	0.0		
		10	22	73.3	4	13.3	0	0.0		

NS-Not significant

The above table unfolds that there was no association of selected obstetrical variables with intensity of episiotomy suturing pain in post test among experimental group.

ASSOCIATION OF SELECTED DEMOGRAPHIC VARIABLES WITHIN TENSITY OF EPISIOTOMY SUTURING PAIN AMONG CONTROL GROUP

N=30

S.No	Demographic variables		Intensity of episiotomy suturing pain						Chi square	'p' value
			Mild		Moderate		Severe			
			No	%	No	%	No	%		
1	Age of the primiparous	21-23 years	0	0.0	4	13.3	0	0.0	10.909**	0.012(SS)
		24-26 years	0	0.0	8	26.7	0	0.0		
		27-30 years	0	0.0	10	33.3	8	26.7		
2	Educational status of primiparous	Literate	0	0.0	8	26.7	4	13.3	9.058*	0.029(SS)
		Primary education	0	0.0	9	30.0	0	0.0		
		Secondary education	0	0.0	5	16.7	2	6.7		
		Graduate	0	0.0	0	0.0	2	6.7		
3	Occupational status of primiparous	Homemaker	0	0.0	8	26.7	6	20.0	5.162	0.076(NS)
		Daily labour	0	0.0	9	30.0	0	0.0		
		Professional	0	0.0	0	0.0	0	0.0		
		Business	0	0.0	5	16.7	2	6.7		
4	Family income/month (Rs)	Below Rs 5,000	0	0.0	8	26.7	4	13.3	3.123	0.373(NS)
		Rs 5,001 to Rs 10,000	0	0.0	4	13.3	3	10.0		
		Rs 10,001 to Rs 15,000	0	0.0	7	23.3	1	3.3		
		Above Rs 15,000	0	0.0	3	10.0	0	0.0		

5	Type offamily	Nuclear	0	0.0	7	23.3	5	16.7	3.58	0.167(NS)
		Joint	0	0.0	6	20.0	0	0.0		
		Extended	0	0.0	9	30.0	3	10.0		
6	Dietpatternof primothers	Vegetarian	0	0.0	9	30.0	5	16.7	2.058	0.357(NS)
		Non-vegetarian	0	0.0	4	13.3	0	0.0		
		Mixeddiet	0	0.0	9	30.0	3	10.0		

Key: *p<0.05, **p<0.01

SS-Statisticallysignificant, NS-Notsignificant

The table 12 shows that there was a statistically significant association of age of the primimothers and educational status of primimothers in posttest among controlgroupat levelp<0.01and p<0.05respectively.

ASSOCIATION OF SELECTED OBSTETRICAL VARIABLES WITH INTENSITY OF EPISIOTOMY SUTURING PAIN AMONG CONTROL GROUP

N=30

S.No	Obstetricalvariables		Intensityofepisiotomysuturing pain						Chi square	'p'value
			Mild		Moderate		Severe			
			No	%	No	%	No	%		
1	Ageatmenarche	10-11years	0	0.0	7	23.3	4	13.3	1.724	0.632(NS)
		12-13years	0	0.0	8	26.7	1	3.3		

		14–15years	0	0.0	5	16.7	2	6.7		
		16–17years	0	0.0	2	6.7	1	3.3		
2	Ageatmarriage	18 years	0	0.0	6	20.0	2	6.7	1.071	0.784(NS)
		19–22years	0	0.0	3	10.0	2	6.7		
		23–26years	0	0.0	7	23.3	3	10.0		
		27–30years	0	0.0	6	20.0	1	3.3		
3	Gestationalage(completed)	37weeks	0	0.0	5	16.7	1	3.3	1.342	0.719(NS)
		38weeks	0	0.0	11	36.7	5	16.7		
		39weeks	0	0.0	5	16.7	1	3.3		
		40weeks	0	0.0	1	3.3	1	3.3		
4	Birthweightofthenewborn	2.5–2.8kg	0	0.0	12	40.0	6	20.0	1.071	0.585(NS)
		2.9–3.0kg	0	0.0	6	20.0	1	3.3		
		3.1–3.5kg	0	0.0	4	13.3	1	3.3		
5	Apgarscoreofthenewborn	8	0	0.0	0	0.0	0	0.0	0.682	0.409(NS)
		9	0	0.0	10	33.3	5	16.7		
		10	0	0.0	12	40.0	3	10.0		

NS-Not significant

The above table unfolds that there was no association of selected obstetrical variables with intensity of episiotomy suturing pain in post test among control group.

To identify the effectiveness of breast crawl technique on intensity of episiotomysuturing pain among primimothers.

The distribution of perception of intensity of episiotomysuturing pain unveiled that majority of 25 (83.3%) primimothers in experimental group had mild pain during suturing of episiotomy. But majority of 22 (73.3%) primimothers in control group had severe pain during suturing of episiotomy. The independent 't' value on comparison of intensity of episiotomysuturing pain proved the statistically significant difference at level $p < 0.001$. This finding was supported by another study conducted by Alvarez. Z. H (2012) which revealed that breast crawl immediately after the birth of the newborn was very effective ($p < 0.001$) to reduce the perception of intensity of episiotomy suturing pain. Betty, (2011), reported that there was a reduction of episiotomy suturing pain when the breastfeeding is practiced by newborn immediately after birth. These findings proved that breast crawl was effective to reduce the perception of intensity of episiotomy suturing pain. Hence the H_2 "There is a significant difference in the intensity of episiotomy suturing pain among primimothers who was subjected to breast crawl technique than those who do not" is accepted.

To associate the selected demographic and obstetrical variables with intensity of episiotomy pain among primimothers

The association of selected demographic and obstetrical variables with intensity of episiotomy suturing pain revealed that there was no statistically significant association of variables among experimental group. But in the control group there was a statistically significant association of age of the primimother's and educational status of the primimother' at level $p < 0.01$ and $p < 0.05$ respectively. This study findings was substantiated by another study conducted by Betty, (2011), revealed that intensity of episiotomy suturing pain by breast crawl was effective ($p < 0.001$) and reported that the newborn is prepared to suckle shortly after birth. Already the newborn has been making motions to suck and swallow the amniotic fluid. The newborn also has a rooting reflex that helps to turn and grasp the mother's nipple. The newborn adapts to breast feeding readily by the breast crawl method and there is reduction of episiotomy pain during the suture.

There was a statistically significant association of age of the primimothers and educational status of the primimothers in post test among control group at level $P < 0.01$ and $p < 0.05$ respectively.

The above findings proved that the breast crawl was effective to initiate breast feeding and it also reduces the episiotomy suturing pain among primimothers. Thus breast crawl enhances the good maternal outcome and promotes the newborn ability to initiate breast feeding at the earliest.

CONCLUSION

Breast crawl technique was very effective and significantly reduced the episiotomy suturing pain among primimothers. Over to this it is a simple measure which is very cost effective to maintain episiotomysuturing pain. Breast crawl technique was an easiest method which can be practiced by the all midwives to initiate the breast feeding among new borns.

MAJOR FINDINGS OF THIS SYUDY

- ❖ There was no association of selected obstetrical variables with intensity of episiotomy suturing pain in post test among experimental group.
- ❖ There was nostatistically significant association of selected demographic and obstetrical variables with intensity of episiotomy suturing pain in post test among experimental group.
- ❖ There was a statistically significant association of age of the primimothers and educational status of the primimothers in post test among control group at level $p < 0.01$ and $p < 0.05$ respectively.
- ❖ There was no statistically significant association of selected obstetrical variables with intensity of episiotomy suturing pain in post test among control group.

RECOMMENDATIONS

Based on the findings of their study the following recommendations were drawn.

- ❖ A study can be carried out to evaluate the effect of breast crawl technique on expulsion of placenta and blood loss among primimothers.
- ❖ A similar study can be conducted with the large sample size to generalize the findings.
- ❖ A similar study can be conducted in the community setting.

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