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Assess the Effectiveness of Clutch Hold Method of Breastfeeding on Comfort Level of Post Cesarean Mothers Admitted in Svbch, Silvassa.

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ABSTRACT

BACKGROUND: Women who had a cesarean section makes mothers positioning the baby for nursing more painful. The clutch-hold is a great hold for post cesarean nursing as the baby is not against the incision at all; the baby should rest on a pillow and be held along the side.

METHODOLOGY: A Quasi experimental- Time series nonequivalent control group research design was used to assess the effectiveness of clutch hold method of breastfeeding on comfort level of post cesarean mothers admitted in Shri Vinoba Bhave Civil Hospital, Silvassa. Total 60 mothers were assessed 30 in experimental and 30 in control group. The intervention was given every 2 hourly for duration of 8 hours for 2 days. Data was collected by using comfort assessment tool and numeric pain rating scale.

RESULT: In present study shows that effectiveness of clutch hold method of breastfeeding by repeated measures of ANOVA test in experimental group for comfort and pain level f value was 274.11(df=7), 454.19(df=7), and p value is <0.05 level of significance for comfort and pain level. Effectiveness by unpaired t test in 1st to 8th observations for comfort level (t=12.75, 13.41, 10.26, 11.33, 10.84, 17.99, 21.04, 21.87; p< 0.001) and for pain level (t=3.41, 6.65, 7.33, 10.03, 13.41, 13.25, 13.37, 14.65, p< 0.001). So calculated value of 't' at various observations are very much higher than the table value T58= 2.00, at p<0.05 in comfort and pain level. Hence research hypothesis is accepted and inferred that clutch hold method of breastfeeding is effective in increase the comfort while breastfeeding after caesarean section.

CONCLUSION: The study clutch hold method of breastfeeding after cesarean section is a safe, easy and effective method for increasing the level of comfort. Here mothers require more guidance and support for using clutch hold method of breastfeeding as most mothers don't know about this method.

Keywords: Clutch hold method, Breastfeeding, Cesarean section, Comfort level, Mothers

INTRODUCTION

Pregnancy is a time of psychological, physiological and emotional changes that can make a woman less comfortable.[1] The difficulty of experiencing the adaptation to change can lead to stress.[2] Prenatal stress can be caused by physiological, psychosocial, environmental and economic factors.[3] Low socioeconomic status, unemployment, low education level, single parenthood and marital problems are some of the factors that increase prenatal stress.[4] Insufficient support from family and spouse increases anxiety and depression during pregnancy.[5]

Pregnancy and childbirth are the most special experiences a woman can have. Although this process is a normal stage of life, it narrows the line between illness and health by affecting the mother physically and mentally. The postpartum period is a critical stage in the protection and development of the health of the mother, child and family, and also a critical time in family life of healing and psychosocial imbalances that coincide with these changes, causing great stress for the mother and family. This process requires providing comprehensive care, diagnosing individual needs and potential problems, taking necessary initiatives, implementing preventive measures and communicating with people about their needs, because a woman's level of health in her future life is closely linked to the nature of the care she receives during this period.[6]

Maternal and infant care is essential to promote postpartum compliance, facilitate early initiation and maintenance of breastfeeding, facilitate mother-infant interaction, promote the healing process, avoid complications, and ensure postpartum comfort. Midwives and nurses play a key role in this process. During labour and delivery, nurse-midwives focus on helping mothers, babies, and families adapt to the new situation on a physical and psychosocial level, supporting and guiding their educational needs.[6]

The difficult nine months will only be fruitful when breastfeeding is enough to improve the health, happiness, and survival of women and children around the world.[7] The breastfeeding is the right of every child is born.[8] Breastfeeding is the most natural progression for an infant's growth and development. Although breastfeeding is generally considered to be a pleasant experience, using the wrong breastfeeding positions and techniques can also cause significant discomfort.[9]

Pain at the incision site is a major problem seen in women undergoing cesarean section, leading to restricted movement and improper positioning of the infant during breastfeeding.[9] Breastfeeding rates are lower in women who have had a cesarean section.[8] The clutch hold (football) position is recommended for breastfeeding after cesarean section because it reduces pressure on the abdomen.[9]

STATEMENT OF THE STUDY

"Assess the effectiveness of clutch hold method of breastfeeding on comfort level of post cesarean mothers admitted in SVBCH, Silvassa."

OBJECTIVES OF THE STUDY

- To assess the level of comfort in post cesarean mothers while breastfeeding.
- To assess the effectiveness of clutch-hold method of breastfeeding on comfort level of post cesarean mothers
- To find out the association between clutch-hold method of breastfeeding on comfort level with selected demographic variables.

HYPOTHESIS

H1 - There is significant difference on the comfort level of mothers while breastfeeding in 'clutch hold' method between the experimental and control group at 0.05 level of significance.

H2 - There is significant association between the comfort level of mothers while breastfeeding in 'clutch hold' method with their selected demographic variable at 0.05 level of significance.

ASSUMPTION

The study assumes that:

1. The level of comfort while breastfeeding is different in each post cesarean mothers.
2. Clutch hold method of the breastfeeding increases the level of comfort while breastfeeding in post cesarean mothers.
3. The mothers will be ready to use clutch hold method of the breastfeeding

OPERATIONAL DEFINITIONS

- **Clutch Hold Method –** In this study clutch hold method refers to mothers will hold her baby like in a football with face up. If she is nursing on her right side, use her right arm to support the baby and guide his head to her breast while breastfeeding. If she is nursing on her left side, use her left arm to support the baby and guide his head to her breast while breastfeeding. That is observed 8 times by researchers.
- **Breastfeeding –** In this study breastfeeding refers to mothers, who will feed her baby by her breast.
- **Cesarean Section –** In this study cesarean section refers to C-section, or Cesarean birth is the surgical delivery of a baby through a cut (incision) made in the mother's abdomen and uterus who delivered at SVBCH. The baby should be at mother site.
- **Comfort Level –** In this study comfort level refers to a state of physical ease and freedom from pain or constraint. The level of comfort will be measured by comfort assessment tool and numeric pain rating scale.
- **Mothers –** In this study mothers refer to primipara mothers who have delivered a viable child by cesarean section.

RESEARCH METHODOLOGY

Research Approach - Quantitative Research approach
Research Design - Quasi experimental- Time series nonequivalent control group research design
Variables

- **Independent variable –** Clutch hold method of breastfeeding
- **Dependent variable –** Comfort level of post cesarean mothers
- **Socio- demographic variables**
- **For mother** - Age, Education of mother, Education of father, Occupation of mother, Residence, BMI of the mother, Pregnancy intendedness, Gestational week of mother, Previous Knowledge on breastfeeding techniques (Source of information regarding breastfeeding)
- **For baby-** Sex of baby, Birth weight of baby

Research Setting: Shri Vinoba Bhave Civil Hospital, Silvassa, Dadra and Nagar Haveli.
Population And Sample: Post natal mothers with caesarean section
Sample: 60 (30 for experimental group and 30 for control group) with caesarean section
Sampling Technique: Non-probability purposive sampling technique.
Inclusion criteria:
In this study inclusion criteria includes

a. Who are willing to participate in the study
b. Mothers who had delivered through cesarean section and have an alive baby.
c. Baby is at the mother side.
d. Mothers who had singleton pregnancy.
e. Primipara mothers.

Exclusion criteria:

In this study exclusion criteria includes

a. Mothers with multiple pregnancies.
b. Mothers who had major complications during or after surgery
c. Mothers with acute psychiatric conditions
d. Mothers who were not able to assume desired position due to some physical disability.
e. Mothers with nipple defects.
f. Mothers who are restricted to breastfeed due to any medical complications
g. Babies who were not to be directly fed from the breast due to- some reasons like (Cleft lip & cleft palate, Birth weight < 1.5 kg, Tracheo esophageal fistula, Prematurity (<34 weeks) etc.)

DESCRIPTION OF TOOL:

Part A: Socio- demographic variables

It consisted of 11 items for obtaining information regarding the socio demographic variables such as

- **For mother** - Age, Education of mother, Education of father, Occupation of mother, Residence, BMI of the mother, Pregnancy intendedness, Gestational week of mother, Previous Knowledge on breastfeeding techniques (Source of information regarding breastfeeding)
- **For baby-** Sex of baby, Birth weight of baby

PART B

1. Comfort assessment tool for caesarean mothers while breastfeeding (The Likert Scale)

Comfort assessment tool for caesarean mothers while breastfeeding (The Likert Scale) is a modified tool to assess the level of comfort while breastfeeding by asking a series of questions to the respondents. There are 10 statements included in the assessment of level of comfort while breastfeeding. The items were categorized as Strongly Disagree, Disagree, neutral, Agree, Strongly Agree. A minimum score of 10 and a maximum score of 50.

Interpretation of scores:

INTERPREATION OF SCORE	
No or little comfort	10-20
Mild comfort	21- 30
Moderate comfort	31-40
High comfort	41- 50

2.Numeric pain rating scale

This includes

Researcher will ask the mothers to rate her intensity of pain between 0-10 during the treatment. This numerical pain scale consists of 4 items.

Pain intensity interpretation is

0: No pain
1-3: Mild pain
4-6: Moderate pain
7-10: Severe

RESULTS

DATA ANALYSIS AND INTERPRETATION

SECTION 1: ANALYSIS OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF POST CESAREAN MOTHERS ACCORDING TO THE DEMOGRAPHIC VARIABLES IN EXPERIMENTAL AND CONTROL GROUP.

Table 4.1: Analysis of frequency and percentage distribution to effectiveness of clutch hold method of breastfeeding on comfort level of post caesarean mothers according to their demographic variables in experimental and control group (N=60)

Demographic variables	Experimental group (n=30)		Control group (n=30)	
	f	%	f	%
1.Age in years:				
21-30	29	96.7	27	90
31-40	0	0	3	10
Above 40	1	3.3	0	0
2.Education of the mother:				
Professional degree	2	6.7	2	6.7
Graduate	6	20	3	10
Intermediate/diploma	1	3.3	0	0
High school	13	43.3	15	50
Middle school	6	20	8	26.7
Primary school	0	0	1	3.3
No formal education	2	6.7	1	3.3
3. Education of the father:				
Professional degree	3	10	1	3.3
Graduate	7	23.3	5	16.7
Intermediate/diploma	1	3.3	1	3.3
High school	5	16.7	15	50
Middle school	13	43.3	8	26.7
Primary school	0	0	0	0
No formal education	1	3.3	0	0
Demographic variables	**Experimental group (n=30)**		**Control group (n=30)**	
	f	**%**	**f**	**%**
4.Occupation of mother:				
Professional	1	3.3	2	6.7
Semi profession	0	0	0	0
Clerical/shop/farm	1	3.3	2	6.7
Skilled worker	0	0	0	0
Semiskilled worker	0	0	0	0
Unskilled worker	1	3.3	2	6.7

Home maker	27	90	24	80
5.Residence:				
DD & DNH	26	86.7	25	83.3
Gujarat	3	10	3	10
Maharashtra	1	3.3	2	6.7
Others	0	0	0	0
6.BMI of mother:				
<18.5	0	0	1	3.3
18.5-25	21	70	17	56.7
25-30	7	23.3	11	36.7
>30	2	6.7	1	3.3
7.Pregnany Intendedness:				
Planned pregnancy	8	26.7	15	50
Unplanned pregnancy	22	73.3	15	50
8.Gestational week of mother:				
<37 weeks	1	3.3	5	16.7
37-40 weeks	21	70	19	63.3
>40 weeks	8	26.7	6	20
9.Previous knowledge on breastfeeding:				
Yes	6	20	10	33.3
No	24	80	20	66.7

Demographic variables	**Experimental group (n=30)**		**Control group (n=30)**	
	f	**%**	**f**	**f**
9.1.Soure of information for breastfeeding techniques:				
Health worker	0	0	0	0
Neighbour	0	0	0	0
Family member	6	100	10	100
Social media	0	0	0	0
Any other	0	0	0	0
10.Sex of the baby:				
Male	18	60	13	43.3
Female	12	40	17	56.7
11.Birth weight of baby:				
1.501g -2.500 g	8	26.7	8	26.7
2.501-3.500 g	21	70	20	66.7
>3.501 g	1	3.3	2	6.7

SECTION 2: DISTRIBUTION OF POST CESAREAN MOTHERS IN EXPERIMENTAL AND CONTROL GROUP ACCORDING TO THE LEVEL OF COMFORT.

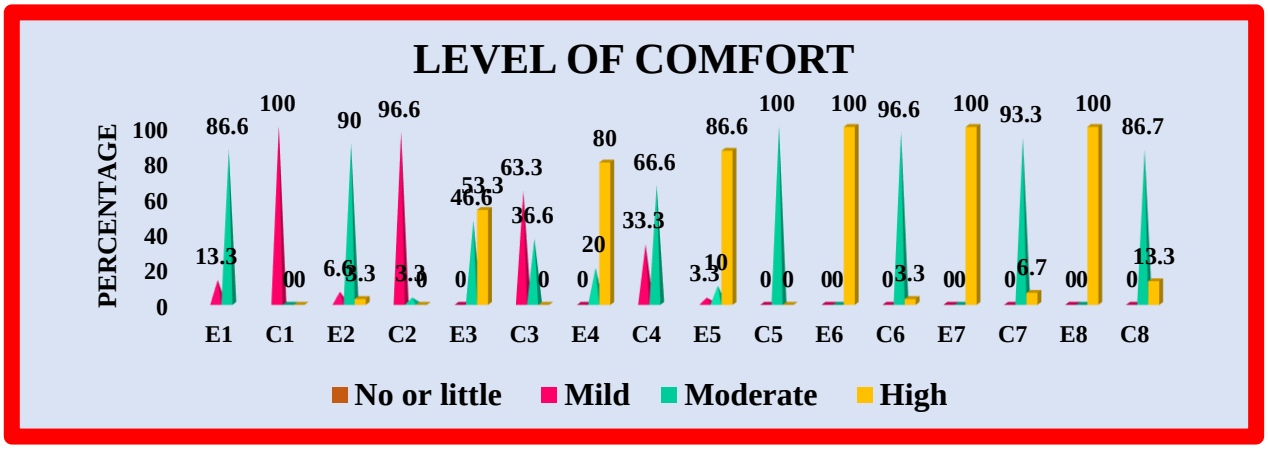
A. Level of comfort

Table-4.2: Frequency and percentage distribution of post cesarean mothers according to level of comfort in experimental group.

EXPERIMENTAL GROUP																
	O1		O2		O3		O4		O5		O6		O7		O8	
Level of comfort	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
No or little comfort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mild comfort	4	13.3	2	6.6	0	0	0	0	1	3.3	0	0	0	0	0	0
Moderate comfort	26	86.6	27	90	14	46.6	6	20	3	10	0	0	0	0	0	0
High comfort	0	0	1	3.3	16	53.3	24	80	26	86.6	30	100	30	100	30	100

Table-4.3: Frequency and percentage distribution of post cesarean mothers according to level of comfort in control group.

CONTROL GROUP																
	O1		O2		O3		O4		O5		O6		O7		O8	
Level of comfort	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
No or little comfort	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mild comfort	30	100	29	96.6	19	63.3	10	33.3	0	0	0	0	0	0	0	0
Moderate comfort	0	0	1	3.3	11	36.6	20	66.6	30	100	29	96.6	28	93.3	26	86.6
High comfort	0	0	0	0	0	0	0	0	0	0	1	3.3	2	6.6	4	13.3



B. Level of pain

Table-4.4: Frequency and percentage distribution of post cesarean mothers according to level of pain in experimental group.

EXPERIMENTAL GROUP																
	O1		O2		O3		O4		O5		O6		O7		O8	
Level of pain	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
No pain	0	0	0	0	0	0	0	0	0	0	0	0	4	13	11	37
Mild pain	0	0	0	0	2	6.7	2	6.7	19	63	28	93	25	83	19	63

Moderate pain	5	16.7	18	60	25	83.3	28	93.3	11	37	2	7	1	3.3	0	0
Severe pain	25	83.3	12	40	3	10	0	0	0	0	0	0	0	0	0	0

Table-4.5: Frequency and percentage distribution of post cesarean mothers according to level of pain in control group.

CONTROL GROUP																
	O1		**O2**		**O3**		**O4**		**O5**		**O6**		**O7**		**O8**	
Level of pain	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
No pain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mild pain	0	0	0	0	0	0	0	0	0	0	0	0	2	6.7	6	20
Moderate pain	0	0	0	0	5	16.7	10	33.3	24	80	25	83	26	86.7	24	80
Severe pain	30	100	30	100	25	83.3	20	66.7	6	20	5	17	2	6.7	0	0

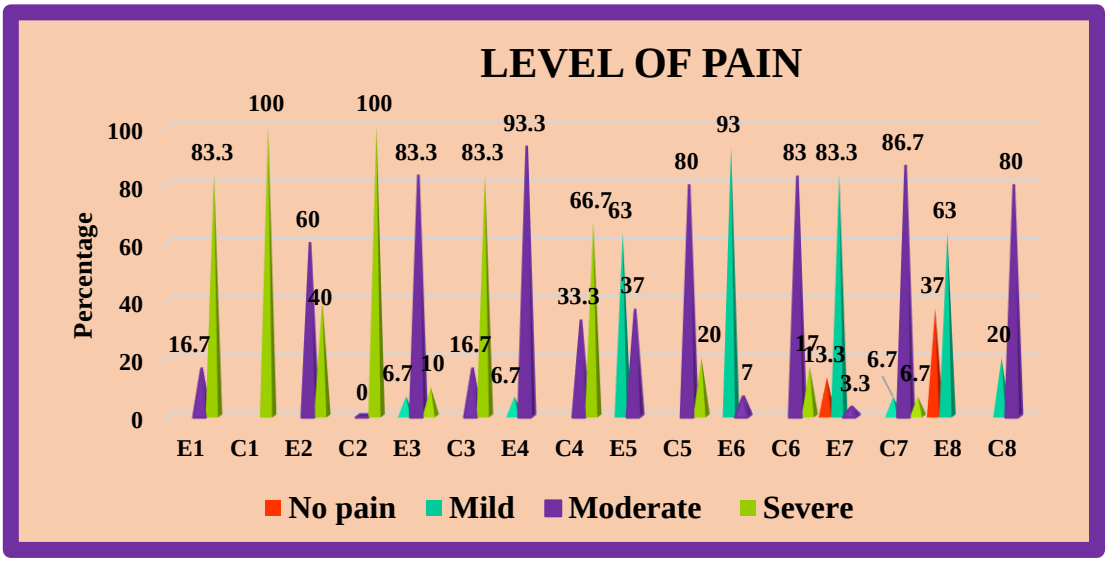


Table 4.6: Comparison of mean, standard deviation, mean percentage and mean difference of level of comfort between experimental group and control group

A. Level of comfort

LEVEL OF COMFORT	EXPERIMENTAL GROUP			CONTROL GROUP			DIFFERENCE IN MEAN %
	MEAN	SD	MEAN%	MEAN	SD	MEAN%	
O1	33.2	3.36	66	23.97	2.11	48	18
O2	36.03	3.39	72	26.1	2.23	52	20
O3	39	3.76	78	29.73	3.22	59	19
O4	41.9	3.65	84	32.27	2.89	65	19
O5	43.4	3.92	89	34.37	2.34	69	20
O6	45.47	2.09	91	36.27	1.86	73	18
O7	46.97	1.61	94	37.77	1.77	76	18
O8	48.77	1.61	98	39	1.84	78	20

Data presented in the table shows that, the mean score (7.23, 6.33, 5.43, 4.73, 3.1, 2.23, 1.57, 0.8) of experimental group is apparently lower than the mean score (7.97, 7.73, 7.13, 6.87, 6, 5.5, 4.9, 4.27) of control group.

SECTION 3- EVALUATE THE EFFECTIVENESS OF CLUTCH HOLD METHOD OF BREASTFEEDING ON POST CESAREAN MOTHERS

A. Level of comfort

Table- 4.8: Effectiveness of clutch hold method of breastfeeding on comfort level of post cesarean mothers in experimental group through repeated measures ANOVA test (N = 30)

EXPERIMENTAL GROUP		
OBSEARVATION	**MEAN**	**SD**
O1	33.2	3.36
O2	36.03	3.39
O3	39	3.76
O4	41.9	3.65
O5	43.4	3.92
O6	45.47	2.09
O7	46.97	1.61
O8	48.77	1.61

EXPERIMENTAL GROUP		**Sum of square (SS)**	**Mean square (MS)**	**DF**	**F statistic**	**P value**
LEVEL OF COMFORT	Between group	6188.5167	884.0738	7	**274.11**	**p<0.001 *** HS**
	within group	1524.7333	52.577	29		

-P<0.05, significant and **-P<0.01 &-P<0.001, Highly significant**

The data presented in the table depicts the mean standard deviation and comfort level in different observations of experimental group.

The comfort level in different observations of experimental group shows that obtained f value was 274.11(df=7) and p value <0.001. The p value is <0.05 level of significance. It shows that there is a wide difference in the comfort level in different observations and there was remarkable improvement in the experimental group and there was increase the comfort level among the subject. It shows that in experimental group there was a statistically significance because of the effect of clutch hold method of breastfeeding on comfort level of post cesarean mothers compare than control group. It helped in increase the comfort at different observations.

Hence the research hypothesis(H1) is accepted, the statistical significance was very high in the experimental group (p=<0.001) respectively, hence research hypothesis (H1) is accepted and inferred that clutch hold method of breastfeeding on comfort level of post cesarean mothers is very effective in increase the comfort level of post cesarean mothers while breastfeeding.

Table- 4.9: Effectiveness of clutch hold method of breastfeeding on comfort level of post cesarean mothers in control group through repeated measures ANOVA test (N = 30)

CONTROL GROUP		
OBSEARVATION	**MEAN**	**SD**
O1	23.97	2.11
O2	26.1	2.23
O3	29.73	3.22
O4	32.27	2.89
O5	34.37	2.34
O6	36.27	1.86
O7	37.77	1.77
O8	39	1.84

CONTROL GROUP		**Sum of square (SS)**	**Mean square (MS)**	**DF**	**F statistic**	**P value**
LEVEL OF COMFORT	Between group	6273.3333	896.1905	7	**433.2**	**p<0.001 *** HS**
	within group	843.6833	29.0925	29		

-P<0.05, significant and **-P<0.01 &-P<0.001, Highly significant**

The data presented in the table depicts the mean standard deviation and comfort level in different observations of control group.

The level of comfort in different observation of control group shows that obtained f value was 433.2(df=7) and p value is <0.001. The p value is <0.05 level of significance. It shows that there is a difference in the level of comfort values of different observation. This shows that in control group has a difference in level of comfort score. Hence research hypothesis (H1) is accepted.

B. Level of pain

Table- 4.10: Effectiveness of clutch hold method of breastfeeding on pain level of post cesarean mothers in experimental group through repeated measures ANOVA test (N = 30)

EXPERIMENTAL GROUP		
OBSEARVATION	**MEAN**	**SD**
O1	**7.23**	**0.82**
O2	**6.33**	**0.80**
O3	**5.43**	**1.04**
O4	**4.73**	**0.91**
O5	**3.1**	**0.92**
O6	**2.23**	**1.01**
O7	**1.57**	**0.94**
O8	**0.8**	**0.76**

EXPERIMENTAL GROUP		Sum of square (SS)	Mean square (MS)	DF	F statistic	P value
LEVEL OF PAIN	Between group	1156.2958	165.1851	7	**454.19**	**p<0.001 *** HS**
	within group	115.6708	3.9886	29		

-P<0.05, significant and **-P<0.01 &-P<0.001, Highly significant**

The data presented in the table depicts the mean standard deviation and level of pain in different observations of experimental group.

The level of pain score in different observation in experimental group shows that obtained f value was 454.19(df=7) and p value is <0.001. It shows that there is a wide difference in the level of pain score values of different observations and as there was remarkable improvement in the experimental group and there was reduction of pain among the subject. It shows that in experimental group there was a statistically significance because of the effect of clutch hold method of breastfeeding on pain level of post cesarean mothers compare than control group. It helped in reducing of pain at incision site while breastfeeding at different observations.

Hence the research hypothesis(H1) is accepted, the statistical significance was very high in the experimental group (p=<0.001) respectively, hence research hypothesis (H1) is accepted and inferred that clutch hold method of breastfeeding on pain level of post cesarean mothers is very effective in reducing the pain level of post cesarean mothers while breastfeeding.

Table- 4.11: Effectiveness of clutch hold method of breastfeeding on pain level of post cesarean mothers in control group through repeated measures ANOVA test (N = 30)

CONTROL GROUP		
OBSEARVATION	**MEAN**	**SD**
O1	7.97	0.85
O2	7.73	0.83
O3	7.13	0.73
O4	6.87	0.73
O5	6	0.74
O6	5.5	0.9
O7	4.9	0.99
O8	4.27	1.05

CONTROL GROUP		Sum of square (SS)	Mean square (MS)	DF	F statistic	P value
LEVEL OF PAIN	Between group	380.1625	54.3089	7	**256.6**	**p<0.001 *** HS**
	within group	128.8708	4.4438	29		

-P<0.05, significant and **-P<0.01 &-P<0.001, Highly significant**

The data presented in the table depicts the mean standard deviation and level of pain score status in different observations of control group.

The level of comfort in different observation of control group shows that obtained f value was 256.6(df=7) and p value is <0.001. The p value is <0.05 level of significance. It shows that there is a difference in the level of pain values of different observation. This shows that in control group has a difference in level of pain score. Hence research hypothesis (H1) is accepted.

Table- 4.12: Effectiveness of clutch hold method of breastfeeding on comfort level of post cesarean mothers in experimental group and control through independent "t" test (N = 60)

LEVEL OF COMFORT	Experimental group		Control group		Mean difference	't'-value	P-value
	Mean	SD	Mean	SD			
O1	33.2	3.36	23.97	2.11	9.23	12.75	**p<0.001***(HS)**
O2	36.03	3.39	26.1	2.23	9.93	13.41	**p<0.001***(HS)**
O3	39	3.76	29.73	3.22	9.27	10.26	**p<0.001***(HS)**
O4	41.9	3.65	32.27	2.89	9.63	11.33	**p<0.001***(HS)**
O5	43.4	3.92	34.37	2.34	9.03	10.84	**p<0.001***(HS)**
O6	45.47	2.09	36.27	1.86	9.2	17.99	**p<0.001***(HS)**
O7	46.97	1.61	37.77	1.77	9.2	21.04	**p<0.001***(HS)**
O8	48.77	1.61	39	1.84	9.77	21.87	**p<0.001***(HS)**

-P<0.05, significant and **-P<0.01 &-P<0.001, Highly significant**

The data presented in the table show that effectiveness of clutch hold method of breastfeeding on comfort level of post caesarean mothers by unpaired t test. It shows there is significant difference of the level of comfort at O1 (t=12.75, p< 0.001), at O2 (t=13.41, p< 0.001), at O3 (t=10.26, p< 0.001), at O4 (t=11.33, p< 0.001), at O5 (t=10.84, p< 0.001), at O6 (t=17.99, p< 0.001), at O7 (t=21.04, p< 0.001), at O8 (t=21.87, p< 0.001) so calculated value of 't' at various observation are very much higher than the table value T58= 2.00, at p<0.05 respectively, hence research hypothesis is accepted and inferred that clutch hold method of breastfeeding on comfort level of post caesarean mothers is very effective in increasing the comfort level while breastfeeding. Hypothesis (H1) is accepted.

Table- 4.13: Effectiveness of clutch hold method of breastfeeding on comfort level of post cesarean mothers in experimental group and control through independent "t" test (N = 60)

LEVEL OF PAIN	Experimental group		Control group		Mean difference	't'-value	P-value
	Mean	SD	Mean	SD			
O1	7.23	0.82	7.97	0.85	0.73	3.41	**0.001*(S)**
O2	6.33	0.80	7.73	0.83	1.4	6.65	**p<0.001***(HS)**
O3	5.43	1.04	7.13	0.73	1.7	7.33	**p<0.001***(HS)**
O4	4.73	0.91	6.87	0.73	2.13	10.03	**p<0.001***(HS)**
O5	3.1	0.92	6	0.74	2.9	13.41	**p<0.001***(HS)**
O6	2.23	1.01	5.5	0.9	3.27	13.25	**p<0.001***(HS)**

O7	1.57	0.94	4.9	0.99	3.33	13.37	**p<0.001***(HS)**
O8	0.8	0.76	4.27	1.05	3.47	14.65	**p<0.001***(HS)**

-P<0.05, significant and **-P<0.01 &-P<0.001, Highly significant**

The data presented in the table show that effectiveness of clutch hold method of breastfeeding on pain level of post caesarean mothers by unpaired t test. It shows there is significant difference of the level of comfort at O1 (t=3.41, p< 0.001), at O2 (t=6.65, p< 0.001), at O3 (t=7.33, p< 0.001), at O4 (t=10.03, p< 0.001), at O5 (t=13.41, p< 0.001), at O6 (t=13.25, p< 0.001), at O7 (t=13.37, p< 0.001), at O8 (t=14.65, p< 0.001) so calculated value of 't' at various observation are very much higher than the table value T58= 2.00, at p<0.05 respectively, hence research hypothesis is accepted and inferred that clutch hold method of breastfeeding on comfort level of post caesarean mothers is very effective in increasing the comfort level while breastfeeding. Hypothesis (H1) is accepted.

SECTION 4: ASSOCIATION BETWEEN LEVEL OF COMFORT WITH SELECTED DEMOGRAPHIC VARIABLE IN EXPERIMENTAL GROUP

Table 4.14: Association for level of comfort in experimental group with selected demographic variable of post cesarean mothers (N = 30)

Demographic variables	**≤Median**		**>Median**		**χ2-value**	**p-value**
	f	**%**	**f**	**%**		
1.Age in years:						
21-30	16	53.3	13	43.3	1.18	0.277
31-40	0	0	0	0	(df=1)	NS
Above 40	0	0	1	3.3		
2.Education of the mother:						
Professional degree	0	0	2	6.7	4.97	0.420
Graduate	3	10	3	10	(df=5)	NS
Intermediate/diploma	1	3.3	0	0		
High school	7	23.3	6	20		
Middle school	3	10	3	10		
Primary school	0	0	0	0		
No formal education	2	6.7	0	0		
Demographic variables	**≤Median**		**>Median**		**χ2-value**	**p-value**
	f	**%**	**f**	**%**		
0. **Education of the father:**						
Professional degree	0	0	3	10	5.93	0.313
Graduate	4	13.3	3	10	(df=5)	NS
Intermediate/diploma	1	3.3	0	0		
High school	2	6.7	3	10		
Middle school	8	26.7	5	16.7		
Primary school	0	0	0	0		
No formal education	1	3.3	0	0		
4.Occupation of mother:						

Professional	0	0	1	3.3	2.92	0.405
Semi profession	0	0	0	0	(df=3)	NS
Clerical/shop/farm	1	3.3	0	0		
Skilled worker	0	0	0	0		
Semiskilled worker	0	0	0	0		
Unskilled worker	1	3.3	0	0		
Home maker	14	46.7	13	43.3		
5.Residence:						
DD & DNH	14	46.7	12	40	1.36	0.507
Gujarat	2	6.7	1	3.3	(df=2)	NS
Maharashtra	0	0	1	3.3		
Others						
6.BMI of mother:						
<18.5	0	0	0	0	2.07	0.356
18.5-25	10	33.3	11	36.7	(df=2)	NS
25-30	4	13.3	3	10		
>30	2	6.7	0	0		
7.Pregnany Intendedness:						
Planned pregnancy	6	20	2	6.7	2.06	0.151
Unplanned pregnancy	10	33.3	12	40	(df=1)	NS
8.Gestational week of mother:						
<37 weeks	1	3.3	0	0	3.31	0.191
37-40 weeks	9	30	12	40	(df=2)	NS
>40 weeks	6	20	2	6.7		
9.Previous knowledge on breastfeeding techniques:	1	3.3	5	16.7	4.05	**0.044***
Yes	15	50	9	30	(df=1)	**S**
No						
Demographic variables	**≤Median**		**>Median**		**χ2-value**	**p-value**
	f	**%**	**f**	**%**		
9.1.Soure of information for breastfeeding techniques:	0	0	0	0	0	1
Health worker	0	0	0	0	(df=1)	NS
Neighbour	1	16.7	5	83.3		
Family member	0	0	0	0		
Social media	0	0	0	0		
Any other						
10.Sex of the baby:						
Male	12	40	6	20	3.21	0.073
Female	4	13.3	8	26.7	(df=1)	NS
11.Birth weight of baby:						
1.501g -2.500 g	6	20	2	6.7	3.31	0.191

2.501-3.500 g	9	30	12	40	(df=2)	NS
>3.501 g	1	3.3	0	0		

***p<0.05 significant, ** p<0.01 & ***p<0.001 Highly significant.**

Table no 4.14 shows that association between the control group comfort level and selected socio demographic variables which are assessed by chi- square test.

Present study shows that there is significant association between comfort level with socio demographic variable such as

- **For mother**

Previous knowledge on breastfeeding technique ($\chi2_{(1,0.05)}$ =4.05, 0.044, p<0.05), shows significance.

Hence, research hypothesis (H2) was accepted as the calculated value is more than table value at 0.05 level of significance for comfort level with their selected demographic variables which include previous knowledge on breastfeeding technique.

Age in years ($\chi2_{(1,0.05)}$ =1.18, 0.277: p>0.05), education of the mother ($\chi2_{(5,0.05)}$ =4.97, 0.420, p>0.05), education of the father ($\chi2_{(5,0.05)}$ = 5.93, 0.313, p>0.05), occupation of mother ($\chi2_{(3,0.05)}$ =2.92, 0.405, p>0.05), residence ($\chi2_{(2,0.05)}$ =1.36, 0.507, p>0.05), BMI of mother ($\chi2_{(2,0.05)}$ =2.07, 0.356, p>0.05), pregnancy intendedness ($\chi2_{(1,0.05)}$ =2.06, 0.151, p>0.05), gestational week of mother ($\chi2_{(2,0.05)}$ =3.31, 0.191, p>0.05), source of information ($\chi2_{(1,0.05)}$ =0, 1, p>0.05) shows non significance.

- **For baby**

Sex of the baby ($\chi2_{(4,0.05)}$ =0.037, 0.858, p>0.05), birth of the baby ($\chi2_{(2,0.05)}$ =0.717, 0.698, p>0.05) shows non significance.

Hence, research hypothesis (H2) was rejected as the calculated value is less than table value at 0.05 level of significance for pain level with their selected demographic variables which include for mother age in year, education of the mother, education of the father, occupation of mother, residence, BMI of mother, pregnancy intendedness, gestational week of mother, source of information. For the baby sex of the baby and birth weight of the baby.

Table 4.15: Association for level of pain in experimental group with selected demographic variable of post cesarean mothers (N = 30)

Demographic variables	≤Median		>Median		χ2-value	p-value
	f	%	f	%		
1.Age in years:						
21-30	19	63.3	10	33.3	0.517	0.472
31-40	1	3.3	0	0	(df=1)	NS
Above 40	0	0	0	0		
2.Education of the mother:						
Professional degree	1	3.3	1	3.3	3.86	0.569
Graduate	3	10	3	10	(df=5)	NS
Intermediate/diploma	1	3.3	0	0		
High school	10	33.3	3	10		
Middle school	3	10	3	10		
Primary school	0	0	0	0		

No formal education	2	6.7	0	0		
0. **Education of the father:**						
Professional degree	2	6.7	1	3.3	6.82	0.234
Graduate	3	10	4	13.3	(df=5)	NS
Intermediate/diploma	1	3.3	0	0		
High school	5	16.7	0	0		
Middle school	9	30	0	0		
Primary school	0	0	0	0		
No formal education	0	0	1	3.3		
4.Occupation of mother:						
Professional	0	0	1	3.3	4.67	0.198
Semi profession	0	0	0	0	(df=3)	NS
Clerical/shop/farm	1	3.3	0	0		
Skilled worker	0	0	0	0		
Semiskilled worker	0	0	0	0		
Unskilled worker	0	0	1	3.3		
Home maker	19	63.3	8	26.7		

Demographic variables	**≤Median**		**>Median**		**χ2-value**	**p-value**
	f	**%**	**f**	**%**		
9.Previous knowledge on breastfeeding techniques:						
Yes	5	16.7	1	3.3	0.937	0.333
No	15	50	9	30	(df=1)	NS
9.1.Soure of information for breastfeeding techniques:						
Health worker	0	0	0	0	0	1
Neighbour	0	0	0	0	(df=1)	NS
Family member	5	83.3	1	16.7		
Social media	0	0	0	0		
Any other	0	0	0	0		
10.Sex of the baby:						
Male	13	43.3	5	16.7	0.625	0.429
Female	7	23.3	5	16.7	(df=1)	NS
11.Birth weight of baby:						
1.501g -2.500 g	4	13.3	4	13.3	1.71	0.424
2.501-3.500 g	15	50	6	20	(df=2)	NS
>3.501 g	1	3.3	0	0		

. *p<0.05 significant, ** p<0.01 & ***p<0.001 Highly significant

Table no 4.15 shows that association between the control group pain level and selected socio demographic variables which are assessed by chi- square test.

Present study shows that there is significant association between pain level with socio demographic variable such as

- **For mother**

Pregnancy intendedness ($\chi2_{(1,0.05)}$ =4.17, 0.041, p<0.05), shows significance.

Hence, research hypothesis (H2) was accepted as the calculated value is more than table value at 0.05 level of significance for pain level with their selected demographic variables which include pregnancy intendedness.

Age in years ($\chi2_{(1,0.05)}$ =5.17, 0.27,0.472, p>0.05), education of the mother ($\chi2_{(5,0.05)}$ =3.86, 0.569, p>0.05), education of the father ($\chi2_{(5,0.05)}$ = 6.82, 0.234, p>0.05), occupation of mother ($\chi2_{(3,0.05)}$ =4.67, 0.198, p>0.05), residence ($\chi2_{(4,0.05)}$ =2.08, 0.354, p>0.05), BMI of mother ($\chi2_{(2,0.05)}$ =2.89, 0.235, p>0.05), gestational week of mother ($\chi2_{(2,0.05)}$ =0.964, 0.617, p>0.05), previous knowledge on breastfeeding technique ($\chi2_{(1,0.05)}$ =0.937, 0.333, p>0.05),source of information ($\chi2_{(1,0.05)}$ =0, 1, p>0.05) shows non significance.

- **For baby**

Sex of the baby ($\chi2_{(1,0.05)}$ =0.625, 0.429, p>0.05), birth of the baby ($\chi2_{(2,0.05)}$ =1.71, 0.424, p>0.05) shows non significance.

Hence, research hypothesis (H2) was rejected as the calculated value is less than table value at 0.05 level of significance for pain level with their selected demographic variables which include for mother age in year, education of the mother, education of the father, occupation of mother, residence, BMI of mother, gestational week of mother, previous knowledge on breastfeeding technique, source of information. For the baby sex of the baby and birth weight of the baby.

DISCUSSION

The finding of the study shows that the effectiveness of clutch hold method of breastfeeding by repeated measures of ANOVA test in experimental group for comfort and pain level f value was 274.11(df=7), 454.19(df=7), and p value is <0.05 level of significance for comfort and pain level. The effectiveness of clutch hold method of breastfeeding by repeated measures of ANOVA test in control group for comfort and pain level f value was 433.2(df=7), 256.6(df=7), and p value is <0.05 level of significance for comfort and pain level. It shows that there is a difference in the level of comfort and pain in different observation in experimental and control group. Hence research hypothesis (H1) is accepted. Effectiveness by unpaired t test in 1st to 8th observations for comfort level (t=12.75, 13.41, 10.26, 11.33, 10.84, 17.99, 21.04, 21.87; p< 0.001) and for pain level (t=3.41, 6.65, 7.33, 10.03, 13.41, 13.25, 13.37, 14.65, p< 0.001). So calculated value of 't' at various observations are very much higher than the table value T58= 2.00, at p<0.05 in comfort and pain level. Hence research hypothesis is accepted and inferred that clutch hold method of breastfeeding is effective in increase the comfort while breastfeeding after caesarean section.

CONCLUSION

Most of the post cesarean mother experienced problem related to breastfeeding like not able to hold the baby properly while breastfeeding, pain at the incision site while breastfeeding. The clutch hold method of breastfeeding is effective and simple method of breastfeeding to improve comfort level of the post cesarean mother while breastfeeding. Clutch hold method of breastfeeding is effective, which will motivate the mother for breastfeeding to the baby after caesarean section. Finding revealed that post cesarean mothers experienced significant level of comfort and clutch hold method of breastfeeding is effective in increase the level of comfort while breastfeeding. The study assessed the effectiveness of clutch hold method of breastfeeding on comfort level of post cesarean mother while breastfeeding and

conclude that clutch hold method of breastfeeding was effective in increase the level of comfort in post cesarean mothers while breastfeeding.

REFERENCES

1. Senol DK, Ozkan SA, Aslan E. Adaptation of the Prenatal Comfort Scale into Turkish: A validity and reliability study. Florence Nightingale J Nurse. 2021; DOI: 10.5152/FNJN.2021.20051.
2. Stojanowa K, Rauchfuss M, Bergner A, Maier B. Anxiety in high- and low-risk pregnancies and its influence on perinatal outcome. Ment Health Prev. 2017;6:51–6. doi: 10.1016/j.mhp.2017.03.001.
3. Dunkel SC. Psychological science on pregnancy: Stress processes, biopsychosocial models, and emerging research issues. Annu Rev Psychol. 2011;62:531–58. doi: 10.1146/annurev.psych.031809.130727.
4. Hara MW, Wisner KL. Perinatal mental illness: Definition, description and aetiology. Best Pract Res Clin Obstet Gynaecol. 2014;28(1):3–12. doi: 10.1016/j.bpobgyn.2013.09.002.
5. Cheng ER, Rifas-Shiman SL, Perkins ME, Rich-Edwards JW, Gillman MW, Wright R, Taveras ME. The influence of antenatal partner support on pregnancy outcomes. J Womens Health (Larchmt). 2016;25(7):672–9. doi: 10.1089/jwh.2015.5462.
6. Kartal YA, Ozsoy A, Uner K, et al. Determination of postnatal comfort levels of puerperants in a public hospital and affecting factors. Int J Health Sci Res. 2018;8(3).
7. Ezeukwu OA, Ojukwu CP, Okemuo AJ, Anih CF, Ikele IT, Chukwu SC, et al. Biomechanical analysis of the three recommended breastfeeding positions. Work. 2020;66:183–91. doi:10.3233/WOR-203162.
8. Kumar D, et al. A quasi-experimental study on the effect of 'clutch hold' method of breastfeeding on comfort level of post-cesarean mothers. Int J Health Sci. 2022; Manuscript submitted: 27 March 2022, Manuscript revised: 9 April 2022, Accepted: 18 May 2022.
9. Pehlivan N, Bozkurt OD, et al. Comparison of cradle hold versus football hold breastfeeding positions after cesarean section in primiparous mothers: A crossover study. Breastfeed Med. 2021;16(11). doi: 10.1089/bfm.2021.0029.
10. https://www.who.int/news/item/16-06-2021-caesarean-section-rates-continue-to-rise-amid-growing-inequalities-in-access
11. https://nhsrcindia.org/sites/default/files/practice_image/HealthDossier2021/DNH.pdf
12. Bency G, Maria P, Anusuya VP, et al. Comparison of maternal comfort between two breastfeeding positions. 2014. doi: 10.5958/j.0974-9357.6.1.023.
13. D'Souza S, Thomas T, Paul S, et al. Comparison of two breastfeeding positions on maternal comfort and infant feeding behaviors through video teaching among postnatal mothers. J Health Allied Sci NU. 2019;9(3):104–15.
14. Sharma SK. NURSING RESEARCH AND STATISTICS. 1ST edition. Elsevier publication. 2011.
15. Polit DF, Hungler BP. Nursing Research Principles and methods. 10th edition. Philadelphia: Lippincott co; 1999.p. 69-7, 37-43, 37-43, 68-78.