

A study to assess the effectiveness of breast crawl on selected maternal & neonatal outcome among mothers in labour room of selected hospitals of the city

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Abstract: Introduction: Breast crawl is the natural movement of new-born toward the breasts of its mother for the purpose of latching on to initiate breastfeeding.¹ Breast Crawl has tremendous potential to change initiation practices. It deserves worldwide dissemination for improving initiating rates, breast feeding success and ultimately reducing neonatal, infant and under five mortality rate and morbidity by early initiation of breast feeding.

Objectives Of the Study:

1. To assess the effectiveness of breast crawl on selected maternal outcomes.
2. To assess the effectiveness of breast crawl on selected neonatal outcomes.
3. To associate the maternal outcome with selected demographic variables.
4. To associate the neonatal outcome with selected demographic variables.

Material And Method: A quasi-experimental research design was used for this study. Non-Probability Purposive sampling technique was used to select 60 samples from a selected hospital. Self-structured questionnaire and standardized tool was used to collect the data from the subject.

Result: The data collected from 60 samples were analysed by Descriptive and inferential statistics. After intervention of breast crawl, in experimental group it depicted that majority of the samples 29(96.66%) had good level of clinical variables outcome were as in control group majority of the sample 19(63.33%) had poor clinical variable outcome. After intervention of breast crawl, in experimental group it depicted that majority of the samples 21(70%) had moderate pain 6(20%) had mild pain 3(10%) had severe pain were as in control group majority of the sample 18(60%) had severe pain, 10(33.33%) had moderate pain, 2(6.27%) had mild pain. After intervention of breast crawl, in experimental group it depicted that majority of the samples 26(86.67%) had good level of LATCH level, 4(13.33%) had average LATCH level were as in control group majority of the sample 16(53.33%) had average level of LATCH level, 7(23.33%) were poor and good level of LATCH respectively.

Conclusion: - The findings of the study indicated that the breast crawl is effective among maternal and neonatal outcome.

Key Words: Breast crawl, maternal outcome; neonatal outcome; effectiveness

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I.INTRODUCTION

Every new born, when placed on mothers abdomen soon after birth, has ability to find its mother's breast all on its own and to decide when to take the first breast feed.² The odour of breast acts as strong stimulus to drive the baby towards nipple because the odour of a substance secreted by breast is similar to smell of a substance in amniotic fluid. Nipple massage by baby makes it protract enhancing attachment and also helps to release oxytocin in mother thereby reducing bleeding and maternal anaemia. Baby starts to make mouthing movements. The amniotic fluid in baby's hands guides it to the nipple. The baby then reaches nipple, raises head and gets nicely attached onto the nipple with mouth wide open to take a mouthful of breast. The first skin-to-skin contact must continue until baby finishes her first breast milk.³ Various factors can effectively reduce neonatal mortality to greater levels, Breast crawl is one of them and it has benefits for survival and beyond. The World Health Organization (WHO) has recommended that all neonates to be breastfed within 1 h of birth. The deleterious effects of infections related infant deaths can be prevented by early initiation of breastfeeding (or human milk feeding) and exclusive breastfeeding which is the easiest, cost-effective and life-saving intervention for the health of a new born.⁴ The skin-to-skin contact helps the baby to remain warm and initiates mother-baby bonding.⁵

II METHODS

A quasi experimental research design was used for this study. The study was carried out in selected hospitals at Aurangabad. The research study consists of 60 full-term normal vaginal delivery mothers selected by Non-probability purposive sampling technique. Intrapartum mothers were divided into two groups: experimental and control group by using random sampling technique. Considering objectives and hypothesis of the study, a conceptual framework was prepared based on Modified Ernestine Widenbach's Model of Midwifery Practice. Formal written permission was obtained from subjects prior to data collection process. Data was collected by administering demographic variables, clinical variables, Numerical Visual Analogue Pain Scale & LATCH Scale after the administration of the breast crawl. The data was analysed using descriptive and inferential statistics.

III RESULTS AND DISCUSSION

After intervention of breast crawl, in the experimental group it depicted that majority of the samples 29(96.66%) had good level of clinical variables outcome were as in control group majority of the sample 19(63.33%) had poor clinical variable outcome. After intervention of breast crawl, in the experimental group it depicted that majority of the samples 21(70%) had moderate pain 6(20%) had mild pain 3(10%) had severe pain were as in control group majority of the sample 18(60%) had severe pain, 10(33.33%) had moderate pain, 2(6.27%) had mild pain. After intervention of breast crawl, in the experimental group it depicted that majority of the samples 26(86.67%) had good level of LATCH level, 4(13.33%) had average LATCH level were as in control group majority of the sample 16(53.33%) had average level of LATCH level, 7(23.33%) were poor and good level of LATCH respectively.

Section I: Frequency distribution of socio demographic variables among mother in experimental and control group.

Table No. 1 Frequency distribution of mother according to their socio demographic characteristics in experimental and control group

N=60

Sr. no	Demographic variable	Category	Experimental Group	Percentage (%)	Control Group	Percentage (%)
1	Age of the mother	18-24 years	15	50.00	14	46.67
		25-29 years	6	20.00	5	16.67
		30-34 years	6	20.00	5	16.67
		35 years & above	3	10.00	6	20.00
2	Education status	Illiterate	5	16.67	7	23.33
		Primary education	13	43.33	8	26.67
		Higher secondary	5	16.67	8	26.67
		Graduation	7	23.33	7	23.33
3	Occupation	Government employee	1	3.33	6	20.00
		Private employee	10	33.33	6	20.00
		House wife	13	43.33	18	60.00
		Worker	6	20.00	0	0.00
4	Religion	Hindu	12	40.00	13	43.33
		Christian	3	10.00	6	20.00
		Muslim	7	23.33	3	10.00
		Other	8	26.67	8	26.67
5	Type of family	Nuclear family	7	23.33	8	26.67

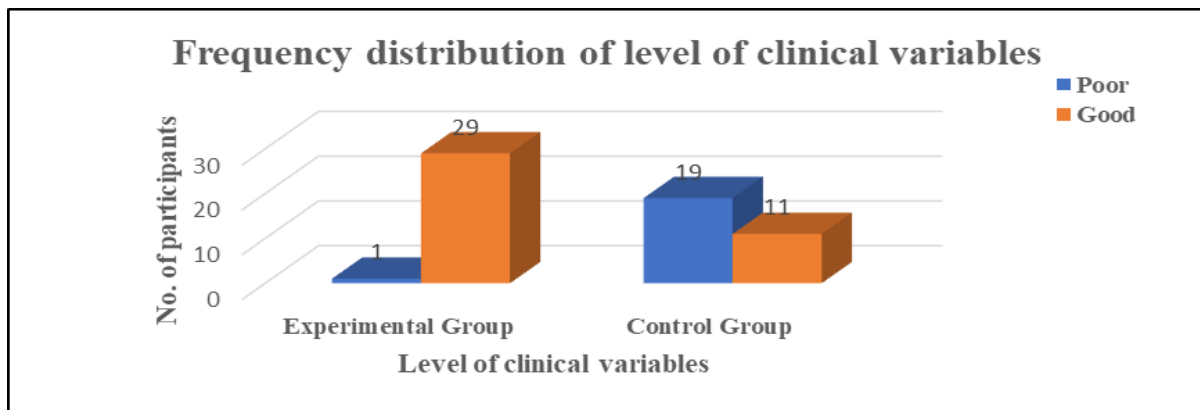
		Joint family	19	63.33	16	53.33
		Extended family	4	13.33	6	20.00
6	Parity	First	7	23.33	7	23.33
		Second	12	40.00	10	33.33
		Third	7	23.33	10	33.33
		More than three	4	13.33	3	10.00
7	Source of health care	Government hospital	18	60.00	16	53.33
		Private hospital	12	40.00	14	46.67
8	Baby gender	Male	15	50.00	17	56.67
		Female	15	50.00	13	43.33
9	Birth weight of the new born	2 kg-2.5 kg	4	13.33	8	26.67
		2.6 kg - 3 kg	19	63.33	19	63.33
		3 kg and above	7	23.33	3	10.00
10	APGAR score	Score of 10	14	46.67	13	43.33
		Score of 9	5	16.67	10	33.33
		Score of 8	9	30.00	6	20.00
		Score of 7	2	6.67	1	3.33

Section II: Assessment of effectiveness of breast crawl on selected maternal outcome among experimental and control group.

Table 2- Frequency and percentage distribution of clinical variables in experimental and control group

N=30+30=60

Group	Level of Clinical variable	Score	Frequency	Percentage	Mean	SD
Experimental Group	Poor	0-4	1	3.33	6.73	1.14
	Good	5-8	29	96.66		
Control Group	Poor	0-4	19	63.33	4.2	0.80
	Good	5-8	11	36.66		



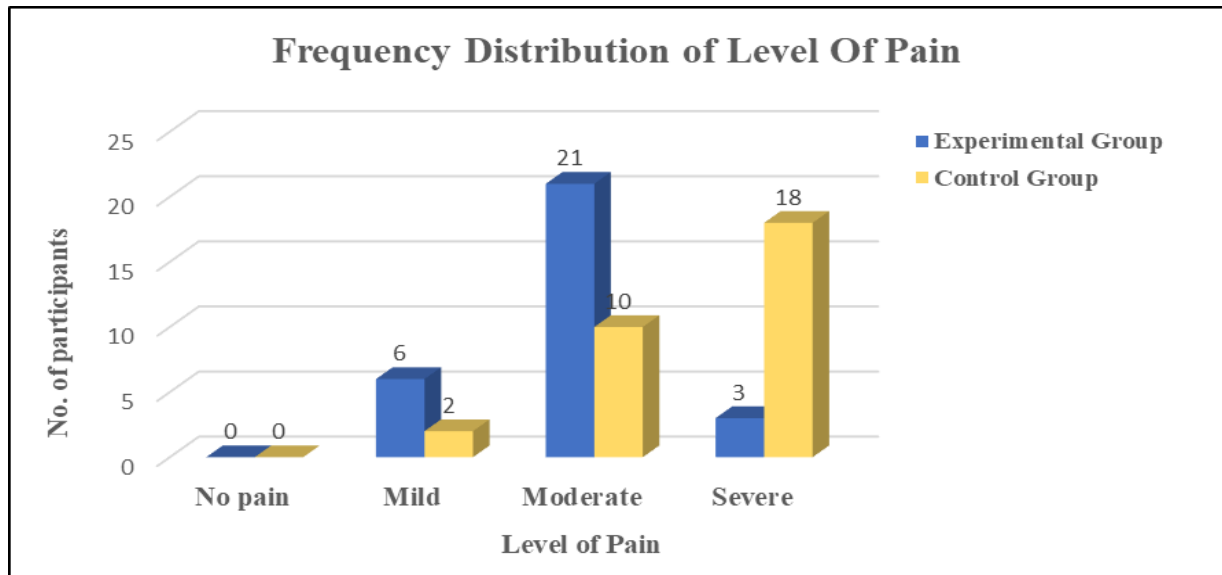
Bar no. 1: Bar graph showing frequency distribution of clinical variables among experimental and control group

Table 3- Frequency and percentage distribution of level of pain after delivery among mother in experimental and control group

N=30+30=60

Group	Level of Pain	Score	Frequency	Percentage	Mean	SD
Experimental Group	No pain	0	0	0	4.86	1.35
	Mild	1-3	6	20		

	Moderate	4-6	21	70		
	Severe	7-10	3	10		
Control Group	No pain	0	0	0	7.03	1.90
	Mild	1-3	2	6.37		
	Moderate	4-6	10	33.33		
	Severe	7-10	18	60.00		



Graph no.2: Bar graph showing frequency distribution of level of pain after delivery among experimental and control group

The table no 3 and the above bar graph shows that, after intervention of breast crawl, in experimental group it depicted that majority of the samples 21(70%) had moderate pain 6(20%) had mild pain 3(10%) had severe pain and none of the sample had no pain it also observed that the mean pain score was 4.86 with SD

1.35 were as in control group majority of the sample 18(60%) had severe pain, 10(33.33%) had moderate pain, 2(6.27%) had mild pain and none of the sample is in no pain level. The mean score was 7.03 with SD 1.90.

Section II: Evaluate the effectiveness of breast crawl on maternal outcome among mother in labour room

Table -4 Effectiveness of breast crawl on clinical variable of maternal outcome among mother in labour room
N=30+30=60

Group	Mean	SD	SEM	T	DF	P-value
Experimental Group	6.73	1.14	0.21	9.92	58	p<0.0001
Control Group	4.20	0.80	0.15			

Table -no.5 Effectiveness of breast crawl on pain level of maternal outcome among mother in labour room
N=30+30=60

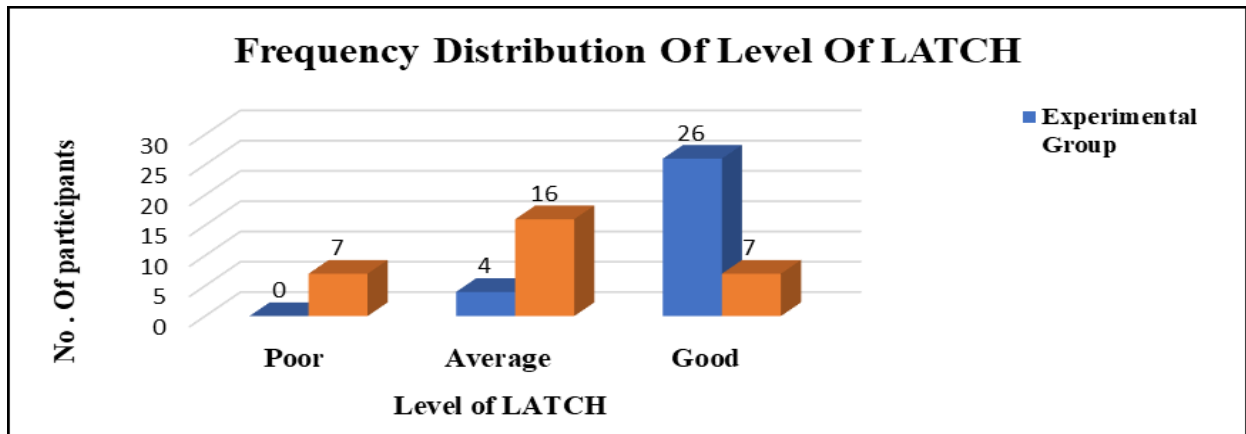
Group	Mean	SD	SEM	T	DF	P-value
Experimental Group	4.86	1.35	0.25	5.07	58	p<0.0001
Control Group	7.03	1.90	0.35			

Section III: Assessment of effectiveness of breast crawl on selected neonatal outcome among experimental and control group

Table no. 6 - Frequency and percentage distribution of level of LATCH among mother in experimental and control group

N=30+30=60

Group	Level of LATCH	Score	Frequency	Percentage (%)	Mean	SD
Experimental Group	Poor	<2	0	0	8.17	1.62
	Average	3-6	4	13.33		
	Good	7-10	26	86.67		
Control Group	Poor	<2	7	23.33	4.50	2.06
	Average	3-6	16	53.33		
	Good	7-10	7	23.33		



Graph no. 3: Bar graph showing frequency distribution of level of LATCH

The table no 6 and the above bar graph shows that, after intervention of breast crawl, in experimental group it depicted that majority of the samples 26(86.67%) had good level of LATCH level, 4(13.33%) had average LATCH level and none of the samples were poor level, it also depicts that the mean score of LATCH was 8.17

and SD was 1.62, were as in control group majority of the sample 16(53.33%) had average level of LATCH level, 7(23.33%) were poor and good level of LATCH respectively. it also observed that the mean score of LATCH was 4.50 and SD was 2.06.

Table -7 Effectiveness of breast crawl on LATCH of neonatal outcome among mother in labour room

N=30+30=60

Group	Mean	SD	SEM	T	DF	P-value
Experimental Group	8.17	1.62	.030	7.65	58	p<0.0001
Control Group	4.50	2.06	0.38			

IV.CONCLUSION

- In this research study shows that, after intervention of breast crawl, in experimental group it depicted that majority of the samples 29(96.66%) had good level of clinical variables outcome, it also observed that the mean level of clinical variable outcomes was 6.73 with SD 1.14 were as in control group majority of the sample 19(63.33%) had poor clinical variable outcome and 11(36.66%) had good clinical variable outcome.
- In this study shows that, after intervention of breast crawl, in experimental group it depicted that majority of the samples 21(70%) had moderate pain

6(20%) had mild pain 3(10%) had severe pain and none of the sample had no pain it also observed that the mean pain score was 4.86 with SD 1.35 were as in control group majority of the sample 18(60%) had severe pain, 10(33.33%) had moderate pain, 2(6.27%) had mild pain and none of the sample is in no pain level.

- In the study shows that, after intervention of breast crawl, in experimental group it depicted that majority of the samples 26(86.67%) had good level of LATCH level, 4(13.33%) had average LATCH level and none of the samples were poor level, it also depicts that the mean score of LATCH was 8.17 and SD was 1.62, were as in control group majority of the sample

16(53.33%) had average level of LATCH level, 7(23.33%) were poor and good level of LATCH respectively.

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