



# **A pilot study on Impact of demonstration skilled program on behavioral outcomes with regards to initiation of breastfeeding by breast crawl and its effective management among midwives at birthing center from selected hospital at puducherry.**

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## **ABSTRACT**

Every newborn when placed on the mother's abdomen soon after delivery has the ability 3 to 4 babies find its mother's breast all on its own and decide when to take the first breastfeed this is called as breast crawl. Breastfeeding also provides benefits to the mother. **Methods and material:** A Quantitative research approach with pre- experimental (one group pre and posttest ) design was used, midwives from selected hospital and who were fulfilling the inclusion criteria were selected by using probability sampling technique with simple random technique. Total 30 midwives were included in the study. The structured questionnaire was used to assess the knowledge, Likert scale and check list was used to assess initiation of breastfeeding by breast crawl and its management. Prior to collect the data, the tool was validated from 10 experts by using Cronbach's Alpha. Data collected from 30 midwives, following pretest skill demonstration programme was provided to the midwives after one week of teaching programme posttest done by using same tool were used during pretest and data coded and tabulated for result analysis.

## **Conclusion**

The skill demonstration programme was effective in initiation of breast feeding by breast crawl and its management was proved its beneficial effects in terms of behavior scores of acquiring knowledge, favorable attitude and good practice regarding different aspects of breast crawl.

**Key words:** breast feeding, breast crawl, demonstration skill programme, behavioural outcome, midwives.

## Introduction

Breastfeeding is the best method of nourishing a newborn. One of the World Health Organization's proposals to preserve breastfeeding in maternal and child health services is to help mothers to start breastfeeding within the first one hour of birth. There is a time period of 15 minutes after birth, where the newborn is inactive. After the less active period, a sudden rooting and sucking activities of new-born are observed which help for a systematic feeding behaviour that help the new-born to latch on mothers' breast (World Health Organization 2017). Like any other mammal's baby, human babies also can move and find their mother's breast for initial feed. The phenomenon in which a new-born baby is kept on mother's chest immediately after the delivery, he/she has the ability to move towards the breast and start latching the breast, is known as Breast Crawl.

Being skin to skin contact with the mother is the newborn infant's "natural habitat" — the one place where all his needs are met. This is true for all mammals and can readily be seen in the animal world. Everywhere one looks in nature, mother and newborn mammals are as close as they can get to each other skin to skin or fur to fur. Nature is wise and provides instincts that drive behaviors designed to assure survival of the species.

The term breast crawl was first used by Klaus (1998), Mumbai based Prashantganga, mother support and training coordinator of the breastfeeding promotion network of India was the one who tried breast crawl for the first time in India. Righard and Alade in the year 1990 conducted a study on effects of delivery room practices on early initiation of breast feeding revealed that the newborns placed over the mother's abdomen initiated sucking within 50 minutes than the newborns who are not in contact with their mothers.

Skin-to skin contact immediately after delivery will help in the promotion of early initiation of breast feeding which would save 1.45 million lives of newborns. Thus the investigator was motivated to initiate the breast feeding using breast crawl technique which is safe and can be easily practiced by the health personnel.

Midwives in the labor room can practice breast crawl effectively and efficiently as a technique on the basis of maternal comfort during episiotomy suturing. Nurse educators can update the nursing personnel at the birthing units on benefits of early skin-to-skin contact for the infant and its influence on the physical and mental growth and development. The bonding benefit of breast crawl can be a useful non-pharmacological measure in providing diversion to the mother during episiotomy suturing. Nurses as health professionals can bring forth and promote breast crawl initiative into maternity hospitals, it will be beneficial for mother and baby as well as for the entire family and country. The investigator therefore takes this study to educate and motivate the antenatal mothers for practicing this initiative which will be in turn contributing to healthy children and thereby healthy future citizens of our country.

### OBJECTIVES:-

1. To assess the pre-existing level of knowledge, perception and practice regarding initiation of breastfeeding by breast crawl and its effective management among midwives.

2. To prepare demonstration skilled programme on initiation of breastfeeding by breast crawl and its effective management among midwives.
3. To implement the demonstration skilled programme among midwives regarding to initiation of breastfeeding by breast crawl.
4. To determine the effectiveness of demonstration skilled programme on behavioral outcomes among midwives regarding to initiation of breastfeeding by breast crawl.
5. To compare post test results with pre-test results on behavioral outcomes among midwives regarding to initiation of breastfeeding by breast crawl.
6. Association between demonstration skilled programme on behavioral outcomes regarding midwives regarding initiation of breastfeeding by breast crawl with their selected demographic variables.

### HYPOTHESIS

$H_{01}$  : There will be no significant difference between Pre-test knowledge, attitude and practice scores among midwives regarding initiation of breastfeeding by breast crawl and its effective management.

$H_1$  : There will be significant improvement in Post-test knowledge, attitude and practice scores among midwives regarding initiation of breastfeeding by breast crawl and its effective management.

$H_{02}$  : There will be no significant association between Pre-test knowledge attitude and practice score with behavioural outcomes among midwives regarding initiation of breastfeeding by breast crawl and its effective management.

$H_2$  : There will be significant association between post-test knowledge, attitude and practice score with behavioural outcomes among midwives regarding initiation of breastfeeding by breast crawl and its effective management.

### Limitations:

1. The study is limited to Midwives working at SMVMCH, Puducherry.
2. The study is limited to for the period of one year.
3. The study is limited to mother admitted in labour room.

### Operational Definitions

**Impact:** In this study it refers to the effectiveness of demonstration skilled programme on initiation of breastfeeding by breast crawl.

**Demonstration:** In this study it refers live planned teaching activity directed towards meeting the learning needs regarding knowledge and practice among midwives on initiation of breastfeeding by breast crawl and its effective management. It consists of two sessions (theory and demonstration) for each group.

**Skill programme:** It refers to practice acquired by the midwives in practicing initiation of breastfeeding by breast crawl. Observational check list was prepared by the investigator which comprises of 28 items.

**Behavioral outcomes:** in this study it refers to in this study it refers to midwives behavior modification on practicing initiation of breastfeeding by breast crawl. Attitude scale was by Prepared investigator which comprises of 40 items and was categorized into 8 components.to assess the perceptual modification by initiation of breastfeeding by breast crawl.

**Initiation Breast feeding:** In this study it refers to midwives place the new born baby on mother's breast immediately after birth. Knowledge questionnaire was prepared by the investigator which comprises of 20 items and was categorized into 6 components to assess the initiation of breastfeeding.

**Breast crawl:** In this study it refers to when a newborn baby is placed on their mother chest or belly immediately after birth and given time to find the mother's nipple and begin to feed on their own knowledge questionnaire was categorized by 8 components.

**Midwives:** All registered nursing and midwives irrespective of their educational qualification.

## **Material and Methods:**

**Research approach:** Quantitative approach was adopted for this present study.

**Research design:** Pre experimental one group pre-test and post-test research design was adopted for this present study.

**Setting:** The study was conducted in Sri Manakula Vinayagar Medical College and Hospital, a 1050 bedded hospital in puducherry. The hospital has a separate obstetric unit.

**Population:** The study population consists of all midwives and antenatal mother admitted in labour room.

**Sample:** Midwives working at SMVMCH and Mother admitted in labour room.

**Sampling technique:** simple random sampling technique was adopted for this present study.

**Sample size:** 30 samples were selected for the study based on convenient sampling technique.

**Variables:**

**Independent variables:** demonstration skill programme on initiation of breastfeeding by breast crawl and its effective management.

**Independent variables:** knowledge, perception and practice of midwives regarding initiation of breastfeeding by breast crawl and its effective management.

**Criteria for sample selection:**

**Inclusion Criteria:**

1. All registered staff nursing working at SMVMCH.
2. Who are all available at the time of data collection.
3. Who are willing to participate in study.

**Exclusion Criteria:**

1. Staff nursing who are all working at administrative level.
2. All the multipurpose health care workers like ANM and nursing assistant.

**Data collection procedure:**

Data collection period was (Aug 2022-july 2023) based on simple random sampling technique 30 midwives were selected.



Concern was taken from individual subjects to maintain the confidentiality and not to disclose any information related to the practice session to their colleagues the knowledge was assessed for 300 midwives by using a structured questionnaire before demonstration skill programme on day 1.



On day 2 onwards midwives were asked to demonstrate the initiation of breast feeding by breast crawl and their practice was assessed by using observational check list for a period of 10 days. 31-32 staff nursing per day, for each shift 11-12 midwives were scheduled for morning, afternoon and evening shift respectively.



After pre-test demonstration skill programme was conducted for midwives totally 30 sessions (each session 10 midwives) were scheduled and implemented by the researcher.



On 7<sup>th</sup> day after intervention for each batch post-test knowledge and practice was assessed by structured questionnaire, attitude scale and check list.



Once in 3 months reinforcement demonstration skill programme was conducted for midwives who are all posted in labour on rotation.

**Tool consists of four sections.**

**Section A** – It consists of a socio-demographic data and obstetric variables of the mother of the samples under the study.

**Section B** – It consists of a knowledge questionnaire regarding breast feeding and breast crawl.

**Section C** – It consists of attitude scale regarding breast feeding and breast crawl.

**Section D** - It consists of check list regarding breast feeding and breast crawl.

**Section A consists of**

**Section A 1: demographic data of the sample such as** age, religion, language, members of the family, type of family, source of income, marital status, residence, educational status, source of information, Department of working area, Designation of the staff nurse, Years of experience, Any in-services education attended, Have you undergone any vaccination, Are you having history of medical management, if any specify

**Section A 2: obstetrical variables of the sample such as** Gravida, Gestational weeks, Weight of the baby, Apgar score, Time taken for latch is, Temperature after breast crawl in 'F', Breast feeding initiation within an hour

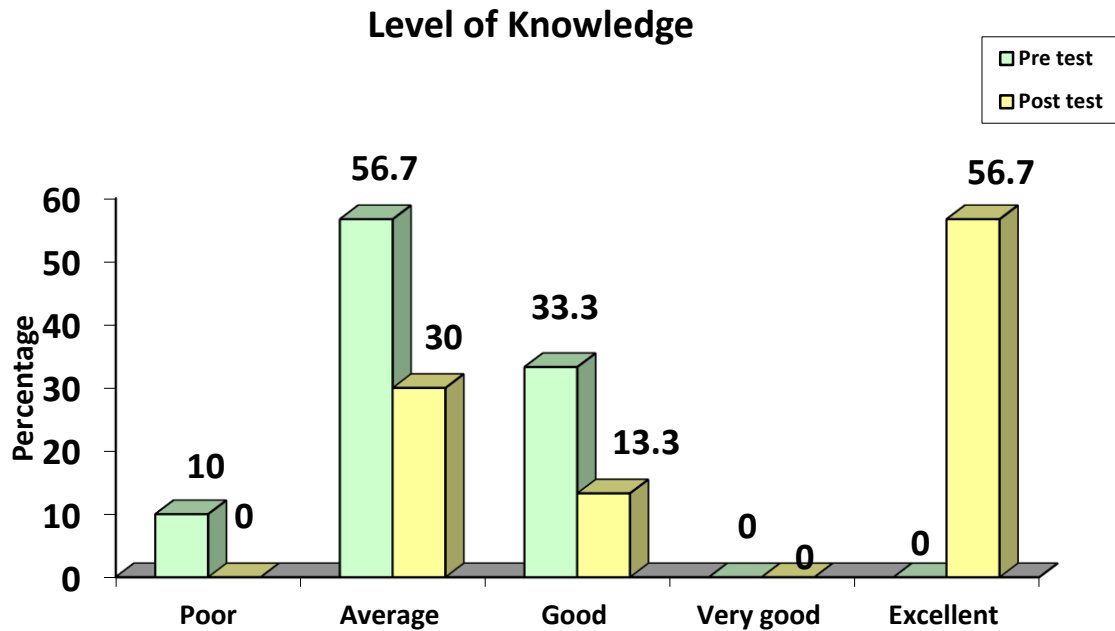
**Table-1: Frequency and percentage wise to evaluate the effectiveness of level of knowledge on behavioral outcomes with regards to initiation of breastfeeding by breast crawl and its effective management among midwives at birthing centre from selected hospital.**

Level of knowledge	Knowledge score			
	Pre test		Post test	
	f	%	f	%
Poor	3	10	0	0
Average	17	56.7	9	30
Good	10	33.3	4	13.3
Very good	0	0	0	0
Excellent	0	0	17	56.7
Overall	30	100	30	100

**Table-1** It is evident from the data presented in the table that, majority of them 17[56.7%] had average knowledge, 10[33.3%] had good knowledge and 3[10%] in the pre-test. Data also revealed that in the post-test

majority of 17[56.7%] had excellent knowledge, in average knowledge 9(30%) and 4[13.3%] had good knowledge of midwives.

**Figure-1: bar diagram to evaluate the effectiveness of level of knowledge on behavioral outcomes with regards to initiation of breastfeeding by breast crawl and its effective management among midwives at birthing centre from selected hospital.**

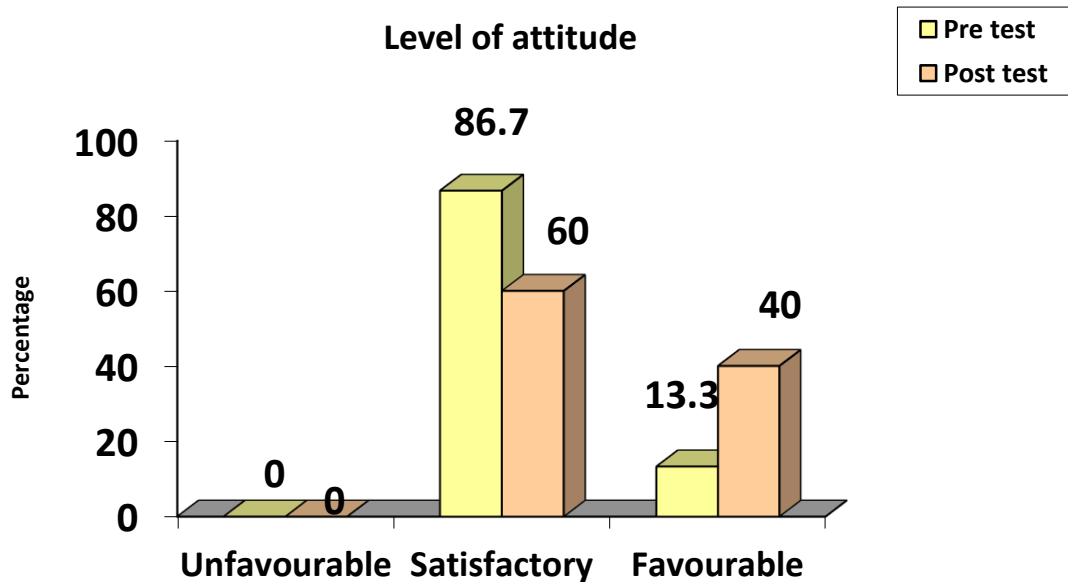


**Table-2 Frequency and percentage wise to evaluate the effectiveness of level of attitude on behavioral outcomes with regards to initiation of breastfeeding by breast crawl and its effective management among midwives at birthing centre from selected hospital.**

Level of attitude regarding initiation of breastfeeding	Attitude score			
	Pre test		Post test	
	Frequency	%	Frequency	%
Unfavourable	0	0	0	0
Satisfactory	26	86.7	18	60
Favourable	4	13.3	12	40
overall	30	100	30	100

**Table-2** It is evident from the data presented in the table that, majority of them 26[86.7%] had satisfactory attitude and 4[13.3%] had favorable attitude in the pre-test. Data also revealed that in the post-test 22 [73.3%] had favorable attitude and 8[26.7%] had in satisfactory attitude in midwives.

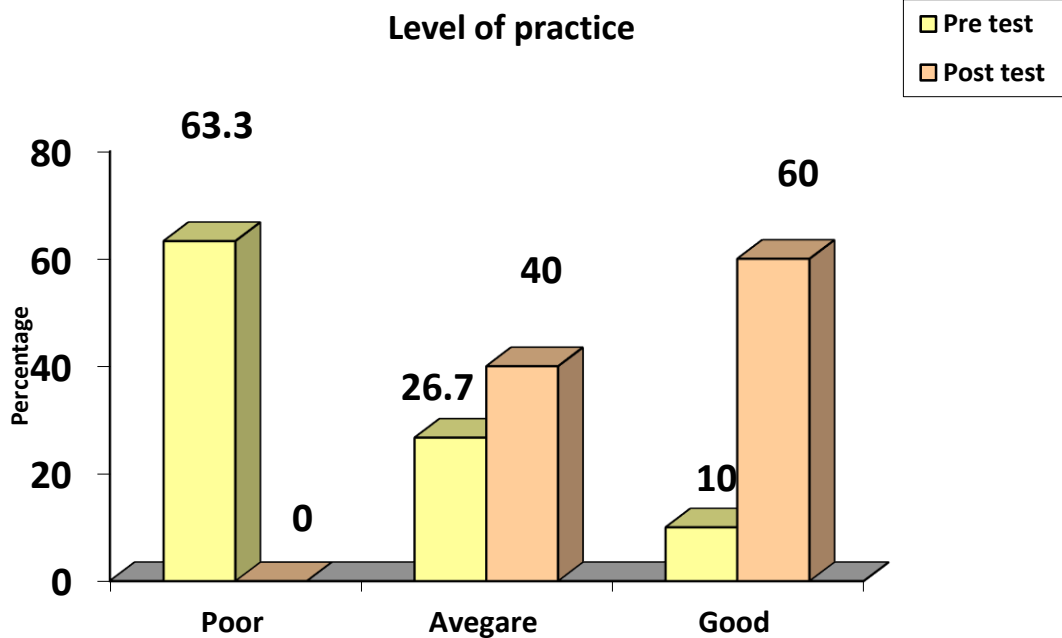
**Figure -2 bar diagram shows Frequency and percentage wise to evaluate the effectiveness of level of attitude on behavioral outcomes with regards to initiation of breastfeeding by breast crawl and its effective management among midwives at birthing centre from selected hospital.**



**Table-3** Frequency and percentage wise to evaluate the effectiveness of level of practice on behavioral outcomes with regards to initiation of breastfeeding by breast crawl and its effective management among midwives at birthing centre from selected hospital.

Level of practice	Practice score			
	Pre test		Post test	
	Frequency	%	Frequency	%
<b>Poor</b>	19	63.3	0	0
<b>Average</b>	8	26.7	12	40
<b>Good</b>	3	10	18	60
<b>Overall</b>	<b>30</b>	<b>100</b>	<b>30</b>	<b>100</b>

**Table-3** It is evident from the data presented in the table that, majority of them 19[63.3%] had poor practice, 8[26.7%] had average practice and 3[10%] had good practice in the pre-test. Data also revealed that in the post-test majority 24[80%] had good practice and 6[20%] had average practice of midwives.



**Table-4: Mean, Standard deviation of pre-test and post-test knowledge score of Midwives. (N=30)**

Test	Mean	SD	MD	't'-value
Pretest	20.2	5.52	19.87	7.90
Posttest	40.07	14.07		

**Table-4** The data presented in the above table shows that the pre-test knowledge score mean from 20.2 and pre-test standard deviation of  $\pm 5.52$  and the post-test knowledge means score 40.07 and post-test standard deviation of  $\pm 14.07$ , mean difference 19.87, 't'-value 7.90.

**Table- 5: Mean, Standard deviation of before-test and after-test attitude score of Midwives (N=30)**

Test	Mean	SD	MD	't'-value
Pre test	93.4	28.18	34.1	5.67
Post test	127.5	17.29		

**Table-5** The data presented in the above table shows that the before-test attitude score mean from 93.4 and before-test standard deviation of  $\pm 28.18$  and the after-test attitude means score 127.5 and after-test standard deviation of  $\pm 17.29$ , mean difference 34.1, 't'-value 5.67.

**Table- 6 : Mean, Standard deviation of pre-test and post-test practice score of Midwives (N=30)**

Test	Mean	SD	MD	't'-value
Pre test	11.07	4.68	6.13	5.12
Post test	17.2	3.99		

**Table-6**, The data presented in the above table shows that the before-test practice score mean from 11.07 and before-test standard deviation of  $\pm 4.68$  and the after-test practice means score 17.2 and after-test standard deviation.

### Conclusion:-

Findings of this pilot study showed that implementation of skill programme on behavioral outcomes with regards to initiation of breastfeeding by breast crawl and its effective management among midwives. The study highlighted the need for creating awareness among midwives because examination is a potential strategy for dissemination of information and their knowledge to the mothers and public in the society regarding breast feeding practice.

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