

## Original Research Article

# Effectiveness of Video Assisted Planned Teaching Programme on the Knowledge regarding Breast Crawl among Antenatal Mothers in Selected Hospital, Tumkur

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## Abstract

Seven pounds, ten fingers, ten toes, two eyes and zero instructions. Human being tends to think their own offspring as one of the most helpless newborns on planet Earth. But human baby is not as helpless as we might think. Mother Nature equips newborns with wonderful innate sense of cues. One such example called 'Breast Crawl' demonstrates process of initiating breastfeeding exclusively by baby's own ability. A pre experimental study was conducted to evaluate the effectiveness of video assisted planned teaching programme on the knowledge regarding breast crawl among antenatal mothers in selected hospital, Tumkur. The research design was one group pretest post test design. The total study sample consists of 50 antenatal mothers in a selected hospital at Tumkur, selected by purposive sampling technique. The mean of overall pre test knowledge score was 13.86 and the mean of overall post test knowledge score was 27.04. Improvement in the knowledge score of the samples from pre test to post was tested for statistical significance using paired t-test ( $t=2.70$ ), shows significant difference between pre and post test score ( $p<0.05$ ).

**Keywords:-**Video Assisted planned teaching Programme, Breast Crawl, Antenatal mothers.

## Introduction

*"A Newborn Baby Has Only Three Demands. They Are 'Warmth' In the Arms of Its Mother, 'Food' From Her Breasts And 'Security' In the Knowledge of Her Presence. Breastfeeding Satisfies All Three."*

-GRANT DICK READ-

Recent behavioral and physiological observations found that infant and mother are ready to begin interacting in the first few minutes of life and also observed infant's ability to crawl towards mother's breast to initiate breast feeding by itself. The most virtually striking observation of first minutes of life is the ability of a newborn if left quietly on the mother's abdomen after birth, to crawl towards her breast, find the nipple and begin to suckle [1]. It was first described in 1987 at the Karolinska Institute in Sweden. Marshall Klaus reviewed many studies on Breast Crawl and gave a beautiful description of Breast Crawl in 1998. The credit for using the word Breast Crawl as a noun for the first time should be given to Klaus. In India Breast Crawl was first experimented and continued as a method to initiate breast feeding in 'Grace Maternity Home', Mumbai [2].

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. The baby smells food close by, begins salivating, and reaches areola and initiates breast feeding by it [3]. A Baby is born with many instinctive abilities which enable her to perform the Breast Crawl. It is associated with a variety of sensory, central, motor and neuro endocrine components, all directly or indirectly helping the baby to move and facilitate her survival in the new world. It is found through studies that smell, vision and taste, all help the newborn to detect and find the breast [4].

The starting position for Breast Crawl (nose of newborn in the middle of mother's breast, eyes at the level of the nipples) had been specified by Varendi et al in 1996. Widstorm et al (1987) firstly described Breast Crawl at Karolinska Institute in Sweden conducted studies on it. The findings in this study suggested that an organized feeding behaviour develops in a predictable way during the first hours of life initially expressed only as spontaneous sucking and rooting movement, followed by hand-to-mouth activity and finally culminating in sucking of breast. Breast Crawl is evidence based and has been field tested. Initiation of breast feeding by Breast Crawl is a critical component of IYCF (Infant and Young Child Feeding). Breast Crawl generated such excitement and motivation and seemed to be best and easiest method to implement the BFHI Recommendation of early initiation of breast feeding [5].

Breast Crawl was described 20 years ago. In spite of its tremendous potential, it has failed to reach the beneficiaries (i.e. mothers and infants) at large because most article titles do not mention the term 'Breast Crawl', the internet search yields very few articles when search engines use this term and there is no widespread recommendation by BFHI (Baby Friendly Hospital Initiative) documents even though the body of scientific evidence is strong enough to recommend. Breast Crawl is the most natural, spontaneous and logical method of initializing breast feeding. It is a simplest method that provides prolonged skin-to-skin contact and will culminate in first breast feed. It is easy, does not require elaborate preparations, can be done in any settings and is readily reproducible [6].

WHO and UNICEF recommended early initiation of breast feeding which results in lower neonatal mortality. Each year approximately 4 million newborn die, mostly from preventable causes. Deaths in the neonatal period accounts 41% of all deaths in children below five years and almost 99% of neonatal deaths takes place in low and middle income countries. In which India is leading with 28% of global neonatal deaths [7]. Evidence shows that early initiation of breastfeeding can prevent 22% of all deaths among babies below one month in developing countries. About 16% of neonatal deaths could be prevented if all infants were breastfed from day 1 and 22% if breastfed within 1st hour after birth (Edmond et al. 2006)[4]. Like all other gifts of nature, this gift comes free of cost. However the health and nutrition benefits of Breast Crawl will save millions of life and also will save billions in terms of health cost. They will create a generation which will reach the highest human potential of growth and development [5].

### Objectives of the study

1. To determine the existing knowledge of the antenatal mothers regarding Breast Crawl.
2. To prepare and deliver Video Assisted Planned Teaching Programme on Breast Crawl to antenatal mothers.
3. To determine the effectiveness of Video Assisted Planned Teaching Programme on Breast Crawl among antenatal mothers in terms of gain in knowledge scores.
4. To find out the association between the knowledge scores of antenatal mothers with selected demographic variables.

### Hypothesis

**H1:** There is a significant increase in the level of knowledge among antenatal mothers regarding Breast Crawl after the administration of Video Assisted Planned Teaching Programme than the level of pre-test knowledge.

**H2:** There is a significant association between the selected demographic variables and the knowledge score.

### Materials and methods used

**Research design:** Pre-experimental (one –group) pre- test and post- test design was used for the present study.

**Research approach:** Descriptive evaluator approach was used for the present study

**Setting of the study:** The study was conducted in Government District hospital at Tumkur.

**Population:** Population for the present study included the antenatal mothers who are coming for antenatal check up at the time of data collection in Government District hospital, Tumkur.

**Sampling:** Purposive sampling technique was used to select 50 antenatal mothers who fulfilled the sampling criteria for the present study.

**Sample size:** 50 antenatal mothers

### Variables

**Dependant variable:** Knowledge of antenatal mothers regarding Breast Crawl.

**Independent variable:** In this present study Video Assisted Planned Teaching Programme on Breast Crawl was the independent variable

**Demographic variables:** Age, religion, parity, educational status, monthly family income, types of family and occupation.

### Sampling criteria

#### Inclusive criteria

1. Antenatal mothers who are available during the period of data collection.
2. Antenatal mothers who are in any trimester of pregnancy.
3. Antenatal mothers who are coming for checkup in selected hospital.
4. Antenatal mothers who are able to read and write either English or Kannada well.
5. Antenatal mothers who may be primipara or multipara mothers.
6. Antenatal mothers who are interested in the study

#### Exclusion criteria

1. Antenatal mothers who are not willing to participate in the study.

2. Antenatal mothers who are having major ailments of pregnancy and complicated medical disorders.
3. Antenatal mothers who are in close proximity of expected date of pregnancy.
4. Antenatal mothers who are advised with strict bed rest.
5. Antenatal mothers who are sick during the course of the study

### **Development and description of tools used in the study**

A structured self administered questionnaire was used to assess the knowledge of antenatal mothers on Breast Crawl was developed by the investigator on the basis of objectives of the study.

The structured questionnaire consisted of 2 sections.

#### **Demographic data:**

**Section A** consist of demographic data including age, religion, parity, educational status, monthly family income ,types of family and occupation.

**Questionnaire:** There are structured closed ended questionnaire to assess the knowledge of antenatal mothers regarding Breast Crawl .Total 44 items divided into 5 sections were selected for the questionnaire.

#### **Data Collection Procedure**

The data collection was done from 12-04-2011 to 17-05-2011. Before the data collection the investigator obtained prior permission from the Regional Medical Officer of Govt. District Hospital, Tumkur conduct the study in their hospital. Written consent taken from the samples.50 samples were selected by purposive sampling technique, who fulfill the inclusion criteria. The structured questionnaire was administered to collect the data from the antenatal mothers. The Video Assisted Planned Teaching Programme (VAPT) on Breast Crawl was administered on the same day. The evaluation of VAPT programme was assessed through post- test after 7 days.

#### **Plan for data analysis:**

The data obtained from 50 samples were analyzed by adopting the Descriptive statistics as frequency and percentage of samples, mean, standard deviation and inferential statistics. The analysis was to be done based on the objectives and hypothesis to be tested.

The investigator planned to analyze the data in the following manner-

Section I: Percentage wise distribution according to their demographic variables

Section II: Pre-test knowledge score regarding knowledge on Breast Crawl.

Section III: Post test knowledge score regarding knowledge on Breast Crawl.

Section IV: Effectiveness of Video Assisted Planned Teaching Programme on Breast Crawl.

Section V: Association of Pre–test knowledge score with selected demographic variables.

### **Data analysis and major findings**

#### **Section 1: Demographic data**

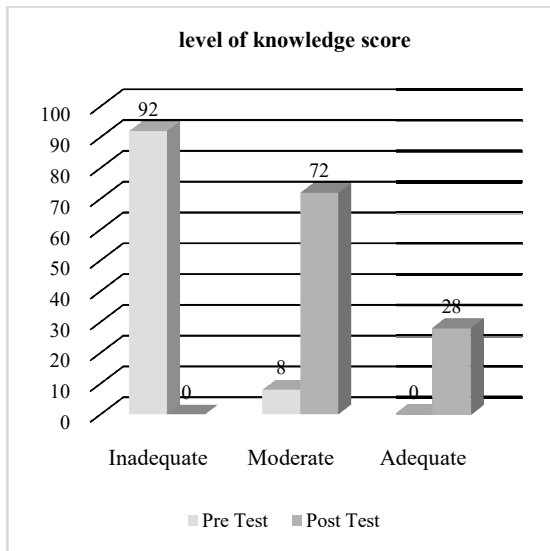
1. Majority of girls belonged to 21-25 years group (40%).
2. Majority of them belonged to Hindu religion (54%).
3. Majority of them were primiparous mothers (52%)
4. Most of them had not done schooling (46%)
5. Most of them had a family income below 2000 (48%).
6. Most of them belong to joint family (62%).
7. Most of them were home makers (46%)

#### **Section II: Level of Pre-Test Knowledge Score among Antenatal Mothers Regarding Breast Crawl**

Among 50 antenatal mothers, the majority of respondent (46) 92% had inadequate level of knowledge and 8% had moderate level of knowledge and 5% had adequate level of knowledge.

#### **Section III: Level of Post Test Knowledge Score among Antenatal Mothers Regarding Breast Crawl**

After Video Assisted Planned Teaching Programme the post test knowledge score among 50 antenatal mothers were, 72% had moderate level of knowledge and 28% had adequate level of knowledge.



**Figure 1: Bar diagram showing the level of pre and post test knowledge of antenatal mothers regarding Breast Crawl**

**Section IV: Effectiveness of video assisted planned teaching programme on Breast Crawl (Difference between Pre-Test Knowledge Score and Post- Test Knowledge Score)**

**Table 2: Overall mean, SD, and paired –t value of pre-test and post-test score**

Know-ledge score	Pre-test	N	Mean	SD	t-value	P
	Post-test	50	13.86	3.7		

The mean score before and after administration of video assisted planned teaching programme has shown a significant difference .The mean total knowledge score before intervention was 13.86 which has increased to 27.04 after intervention the paired t test 2.70 was found to be significance at a very high level (p=0.01).

From the above inference it is made clear that the video assisted planned teaching programme has a positive impact on knowledge of Breast Crawl (p< 0.01) so H1 is accepted

**Section V:-Association between the demographic variables and knowledge score of subjects on knowledge iron deficiency anemia**

There was no association between the pre-test knowledge score and selected demographic variables such as age in year, religion and occupation. There is an association of knowledge

score with parity, educational status, family income and type of family at 0.05 level of significant. The chi square value was used to check the association.

**Recommendations**

1. The similar study can be replicated on large sample with different demographic characteristics.
2. An Experimental study can be undertaken with control group.
3. A study can be conducted using other strategies like SIM, STP.

**Conclusion**

The study significantly proved that there is a remarkable improvement in the knowledge of antenatal mothers regarding Breast Crawl after video assisted planned teaching program. There was no significant association between age in year, religion and occupation with regards to Breast Crawl (p<0.05) where as there was an association found between parity, educational status, family income and type of family regarding Breast Crawl.

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