



EFFECTIVENESS OF BREAST CRAWL TECHNIQUE ON MATERNAL OUTCOME – AN EXPERIMENTAL STUDY

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Abstract

Background

Breast crawl technique is placing the newborn directly on the mother's abdomen (nose in the middle of mother's chest and eyes at the level of nipple) soon after the delivery of the newborn and allow to crawl on their own up to the breast and then latch on. The aim of the study was to evaluate the effectiveness of breast crawl technique on maternal outcome.

Method

A quasi experimental post test only research design with a sample size (N=60) were selected by using purposive sampling technique. The breast crawl technique was introduced to experimental group after delivery of baby. Effectiveness of breast crawl technique on maternal outcome (expulsion of placenta and involution of uterus) were assessed after 1 hour of delivery, 1st and 2nd postnatal day, which observed by Clinical assessment checklist. The statistical analysis was done by using descriptive and inferential statistics.

Result

The mothers with breast crawl technique had early expulsion of placenta and early involution of uterus than the mothers in control group .

Conclusion

Breast crawl technique had positive impact on maternal outcome.

Key words: Breast crawl, maternal outcome.

Introduction

The physiological changes from pregnancy to motherhood heralds enormous changes in each woman physically and psychologically. Labour, the culmination of pregnancy, is an event with great psychological, social and emotional meaning for the mother and her family. The woman may experience stress and physical pain and danger may lurk around the corner. The goal of maternity care is a healthy pregnancy with a physically safe and emotionally satisfying outcome for mother, infant, and family. Consistent health supervision and surveillance are important aspect in achieving this outcome. During intrauterine life, the uterus and the placenta provided nutrition, oxygen, warmth and protection, to the fetus. But after birth, the mother's body and breasts take over the function of the uterus and placenta. Breast milk is divine gift for baby and plays vital role not only for providing best nutrition to newborn, but it also provides warmth through skin to skin touch and bonding while feeding.ⁱ

The global criteria for the WHO/ UNICEF gave ten steps to successful breastfeeding that form the basis of Baby Friendly Hospital Initiative as well-known initiatives for the welfare of the neonates. It was started to strengthen by focusing on nature's miraculous way of breastfeeding initiation. This phenomenon called "Breast Crawl".ⁱⁱ

Breast crawl is the natural instinctive behavior of the human newborn. It is the simplest method that provide prolonged skin to skin contact and culminates in the first breastfeed. The mother and newborn mutually responsive in the most sensitive period of first half to one hour following delivery . This period is crucial for laying the foundation for successful breast feeding.ⁱⁱⁱ

Material and method

After obtaining administrative permission from the concerned authorities, the study was conducted at government Doon medical college and hospital, Dehradun. The mothers admitted in labour room, full term pregnancy (37-42 weeks) without any complication and were willing to participate in the study were randomly assigned to control and experimental group. The sample size was 60 mothers with their live neonates, 30 in each control and experimental group. The purpose of the study was explained, confidentiality was assured and written informed consent was obtained. The sample characteristics were obtained by record analysis and interviewing the mothers and data was recorded on predesigned and pretested tools.

The independent variable (breast crawl technique) was introduced to experimental group after delivery of newborn. Soon after the delivery baby had cried and started breathing well, APGAR Score was recorded baby was thoroughly dried (except the hands) with soft pre warmed cotton cloth.

The baby as placed on mothers abdomen and the baby allow to crawl in order to identify the nipple for rooting and sucking. Maximum 60 minutes was taken by each baby to start breast feeding.

Effectiveness of breast crawl technique on maternal outcome was assessed by clinical assessment checklist. In mother expulsion of placenta and involution of uterus were assessed after 1 hour of delivery and 1st and 2nd postnatal day. The data collected was organized, tabulated, analyzed and interpreted using descriptive and inferential statistics.

The background data of sample subject was analyzed in terms of frequency and percentage distribution. For effectiveness of breast crawl technique on maternal outcome were computed by mean, standard deviation and 't' value in both the group.

Result

1. Finding related to demographic variables of samples

- More than half of the mothers (93.3%) in experimental group and (83.3%) in control group were of age 21-26 years.
- 66.7% in experimental group and 56.7% in control group were having graduation degree.
- Majority of mothers were not working in both the group.
- Majority of the participants were from nuclear family in both the group.
- Majority of mothers 86.7% were having with the family income of 6000-10,000 per month.
- Majority of mothers were from rural area.

Finding related to clinical data of mother:

- In both the groups, majority of mothers are primigravida with 39-40 weeks of gestational age.
- Most of mothers were not used medicine to induce labour pain
- Majority of mothers were having duration 9-12 hours in 1st stage and 1.5-2 hours in 2nd stage of labour.

Findings to birth related data of newborns:

- Majority of babies in the study were male with the birth weight of 2.5-3.0 kg .
- Most of babies were having APGAR score of 9-10.

2. Mean, standard deviation and 't' test value of experimental and control group on maternal outcome

Maternal outcome	Experimental Group (n=30)	Control Group (n=30)	Independent t-test	DF	P-value	Result
	Mean \pm SD	Mean \pm SD				
Time taken for expulsion of placenta	9.80 \pm 2.833	14.90 \pm 2.354	7.583	58	0.001	Significant
Height of the uterus on 1st postpartum day	1.883 \pm 0.215	1.283 \pm 0.252	9.919	58	0.001	Significant
Height of the uterus on 2nd postpartum day	3.80 \pm 0.407	2.50 \pm 0.509	10.933	58	0.001	Significant

Above table, shows that the mean score of the experimental group is significantly greater than the control group. The calculated 't' value (t=7.5), (t=9.9) and (t=10.9) is greater than the t tabulated value (t=2.000) therefore the research hypothesis is accepted and null hypothesis is rejected and it revealed that breast crawl technique is effective in early expulsion of placenta and early involution of uterus.

Discussion

- The present study shows that statistically significant effect of breast crawl technique on early expulsion of placenta and early involution of the uterus.

Similar findings were reported by a study carried out at government Rajaji Hospital Madurai, Chennai.¹

Conclusion

Breast crawl technique has positive impact on maternal and neonatal outcome. It also led to newborn attaching to the nipple by himself, ending breastfeeding by himself, successful breastfeeding and longer duration of first breast feeding.

Recommendation

Breast crawl technique being a fairly easy technique to perform without having any extra need in terms of financial or manpower. Written policies and protocols regarding breast crawl technique should be developed and implemented in the labour room in every setting including PHCs, CHCs as well as tertiary care centers.

References

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