



Effectiveness of early skin-to-skin contact on neonatal outcome

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ABSTRACT

Background and Aim: Motherhood is the state of being a mother or raising a child. Skin-to-skin contact begins ideally at birth and should last continually until the end of the first breastfeeding. All mothers irrespective of parity, age, education, religion, or working status can provide effective skin-to-skin contact. The time frame immediately post birth may represent a 'sensitive period' for programming Skin-to-skinny behavior. Much research finds post-birth that skin-to-skin contact is safe, effective in maintaining temperature, encourages exclusive and prolonged breastfeeding skin-to-skin child survival, and helps in better cognitive development. Both mother and baby prolonged to enjoy the experience; the baby goes to quiet sleep, which is most beneficiaries for his growth and development. The aim of the study was to assess the neonatal outcome after early skin-to-skin contact of mother and neonate. **Methodology:** Quantitative research approach with true experimental time series control growth the p the research design was adopted. Simple random sampling (Lottery method) was used to select 60 mothers and allocated randomly to control and experimental group. An interview lottery was used to collect the data. It includes Section-I: Socio-Demo the graphic variables, Section-II: Neonatal Clinical Variables, Section-III: Neonatal outcome. Collected data was analyzed by using both descriptive and inferential statistics. **Results:** LATCH total score at the time of birth ($t_{(58, 0.05)} = 6.425, 0.000; p < 0.05$), 12th hour ($t_{(58, 0.05)} = 11.128, 0.000; p < 0.05$), 24th hour ($t_{(58, 0.05)} = 9.602, 0.000; p < 0.05$) and 36th hour ($t_{(58, 0.05)} = 10.01,$



0.000; $p < 0.05$) shows it is very highly effective. Number of breastfeeding at 12th hour ($t_{(58, 0.05)} = 9.464$, 0.000; $p < 0.05$), 24th hour ($t_{(58, 0.05)} = 8.848$, 0.000; $p < 0.05$) and 36th hour ($t_{(58, 0.05)} = 6.963$, 0.000; $p < 0.05$) which shows it is very highly effective. Effectiveness of early skin-to-skin contact on number of wet nappies at 12th hour ($t_{(58, 0.05)} = 6.644$, 0.000; $p < 0.05$), 24th hour ($t_{(58, 0.05)} = 6.851$, 0.000; $p < 0.05$) and 36th hour ($t_{(58, 0.05)} = 7.350$, 0.000; $p < 0.05$) which shows it is very highly effective. Effectiveness of early skin-to-skin contact on number of stools passed at 12 hour ($t_{(58, 0.05)} = 7.469$, 0.000; $p < 0.05$), 24 hour ($t_{(58, 0.05)} = 8.323$, 0.000; $p < 0.05$) and 36 hour ($t_{(58, 0.05)} = 7.685$, 0.000; $p < 0.05$) which shows it is very highly effective. There is no significant association between LATCH score and socio-demographic variables such as age, education, occupation, family monthly income (Rs), type of family, marital status and area of residence.

Conclusion: present study shows that early skin-to-skin contact between mother and neonate was effective, and helps to improve the LATCH Score, number of breastfeeding, number of wet nappies, and number of stools passed.

Key words: Early skin-to-skin contact, True experimental study design, Time Series research design, LATCH Score.

Introduction

A mother is the one who cares for and nurtures her child with the deepest love and care. It gives a new sense of purpose and meaning in life, Mother-infant separation at post birth is common. The first minutes after birth are a very vulnerable period for both mother and newborn. The care that is provided during this time is essential to improve their longer-term health. Mother-infant skin-to-skin contact (SSC) immediately after birth creates an optimal environment for the adaptation of neonate to extrauterine life and should be a routine method in hospitals.

Yet there are many barriers to providing skin-to-skin contact immediately after birth. Nurses, in collaboration with other health care professionals, are in a unique position to adjust practices and policies to allow for skin-to-skin contact immediately after birth, thereby improving the birth experience for parents and newborns.

Objectives of study

- Assess the neonatal outcome after early skin-to-skin contact between mother and neonate
- Evaluate the effectiveness of skin-to-skin contact of mother and skin-to-skin neonatal outcome with selected socio-demographic variables



Methodology

Research approach

A quantitative research approach was used to find out the effectiveness of skin-to-skin contact.

Research design

True experimental time series with control group research design is adopted skin-to-skin.

Research setting

The present study was conducted in Labour room of Shri Vinoba Bhave Civil Hospital, Silvassa.

Population

In this study, target population was mother in labour pain.

Sample

In this study, mother in labour pain admitted in labour room of Shri Vinoba Bhave Civil Hospital, Silvassa, Dadra and Nagar Haveli.

Sample Size

In this study 60 mothers in labour pain were selected, 30 mothers were selected for control group and 30 mothers were selected for experimental group.

Sampling Technique

A simple random sampling technique with lottery method was used for the selection of mothers in labour pain.

Description of Tool

Based on the objectives of the study Interview schedule with clinical Performa was prepared to assess Breast/Latch Assessment, number of breastfeeding, number of wet nappies, and number of stools passed. The interview schedule consists of the following section.

Section-I: Socio-Demographic variables

It consists of selected demographic variables like age in years, Education, Occupation, Family monthly income in Rs, Type of family, Marital status, and Area of residence.

Section-II: Neonatal Clinical Variables

It consists of Sex, Birth weight in kg, Length in cm, Head circumference in cm, and Chest circumference in cm.

Section-III: Neonatal Outcome

It consists of the Breast/Latch Assessment Tool, number of breastfeeding, number of wet nappies, number of stools passed, and which were assessed four times with an interval of 12 hours.



TABLE 1: Effectiveness of early skin-to-skin contact on latch score by unpaired ‘t-test.

n=60

Sr. No.	Findings	At time of birth	12 th hour	24 th hour	36 th hour
1	Control group Mean	7	7	7	8
2	Experimental group Mean	8	9	9	9
3	Mean Difference	1.10	1.43	1.50	1.50
4	Standard Error Difference	0.17	0.128	0.15	0.14
5	‘t’ value	6.425	11.128	9.602	10.01
6	p value	0.000***	0.000***	0.000***	0.000***

***Significant at 0.05 level, ** Highly significant at 0.01 level, *** Very highly significant at 0.001 level and NS: Not Significant**

Table 2 shows the effectiveness of early skin to skin contact on breast/LATCH total score at the time of birth ($t_{(58, 0.05)} = 6.425, 0.000; p < 0.05$), 12th hour ($t_{(58, 0.05)} = 11.128, 0.000; p < 0.05$), 24th hour ($t_{(58, 0.05)} = 9.602, 0.000; p < 0.05$) and 36th hour ($t_{(58, 0.05)} = 10.01, 0.000; p < 0.05$), which shows it is very highly effective. Hence the research hypothesis is accepted at a 0.05 level of significance.

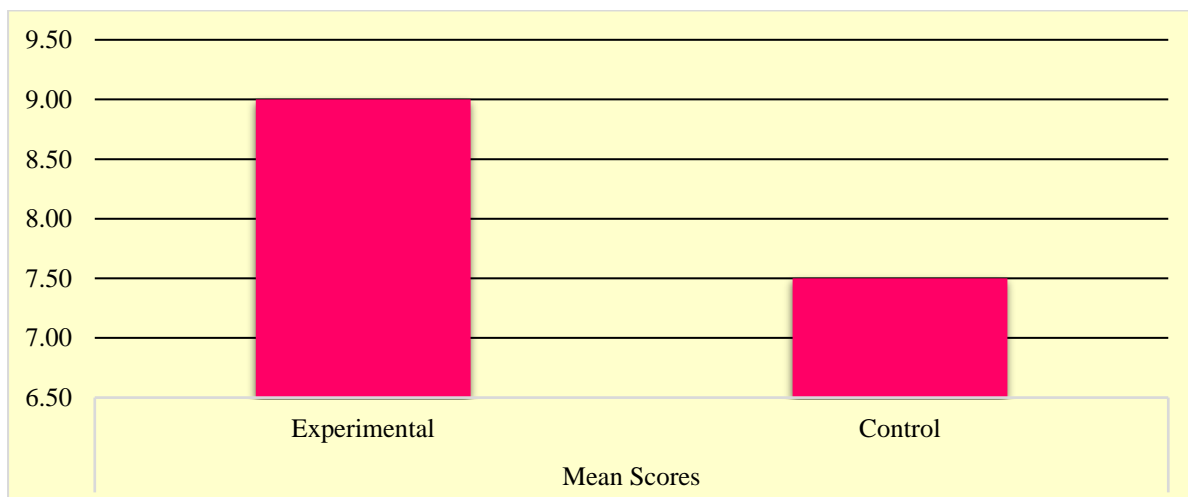


Figure 1: Comparison of neonates in the experimental and control group as per mean scores of latch score at 36th hourly.

Table 2: effectiveness of early skin-to-skin contact on the number of breastfeeding by unpaired ‘t-test

n=60

Sr. No.	Findings	12 th hour	24 th hour	36 th hour
1	Control group Mean	4	4	4
2	Experimental group Mean	6	6	6
3	Mean Difference	2.10	1.93	1.80
4	Standard Error Difference	0.22	0.21	0.25
5	't' value	9.464	8.848	6.963
6	p value	0.000***	0.000***	0.000***

***Significant at 0.05 level, ** Highly significant at 0.01 level, *** Very highly significant at 0.001 level and NS: Not Significant**

Table 2 shows the effectiveness of early skin to skin contact on number of breastfeeding at 12th hour ($t_{(58, 0.05)} = 9.464, 0.000; p < 0.05$), 24th hour ($t_{(58, 0.05)} = 8.848, 0.000; p < 0.05$) and 36th hour ($t_{(58, 0.05)} = 6.963, 0.000; p < 0.05$) which shows it is very highly effective. Hence the research hypothesis is accepted at 0.05 level of significance.

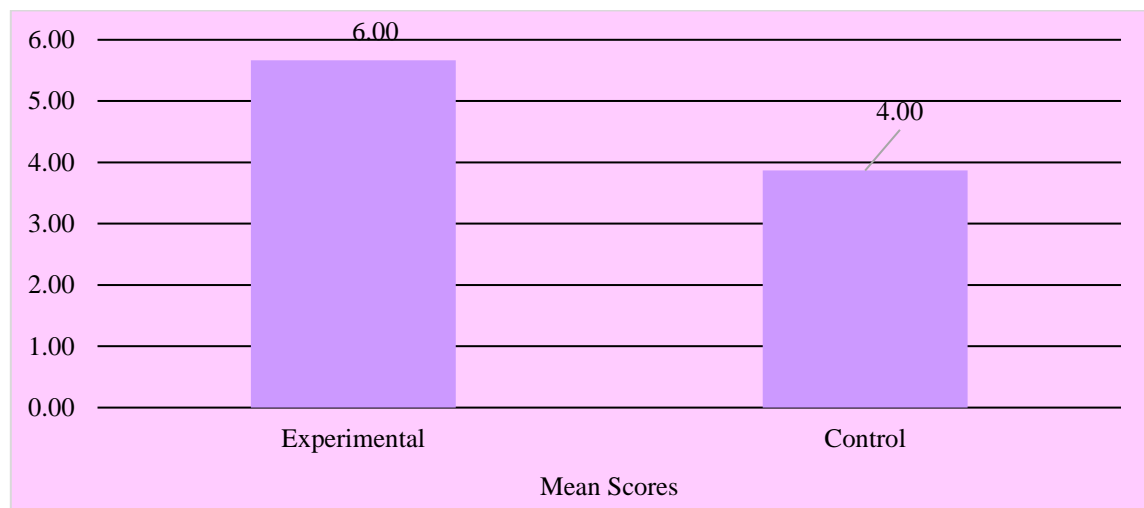


Figure 2: Comparison of neonates in the experimental and control group as per mean scores of breastfeeding at 36th hourly

Table 3: effectiveness of early skin-to-skin contact on a number of wet nappies by unpaired 't' test



n=60

Sr. No.	Findings	12 th hour	24 th hour	36 th hour
1	Control group Mean	2	2	2
2	Experimental group Mean	4	4	4
3	Mean Difference	1.53	1.40	1.63
4	Standard Error Difference	0.23	0.204	0.22
5	't' value	6.644	6.851	7.350
6	p value	0.000***	0.000***	0.000***

***Significant at 0.05 level, ** Highly significant at 0.01 level, *** Very highly significant at 0.001 level and NS: Not Significant**

Table 3 shows the effectiveness of early skin to skin contact on number of wet nappies at 12th hour ($t_{(58, 0.05)} = 6.644, 0.000; p < 0.05$), 24th hour ($t_{(58, 0.05)} = 6.851, 0.000; p < 0.05$) and 36th hour ($t_{(58, 0.05)} = 7.350, 0.000; p < 0.05$) which shows it is very highly effective. Hence the research hypothesis is accepted at 0.05 level of significance.

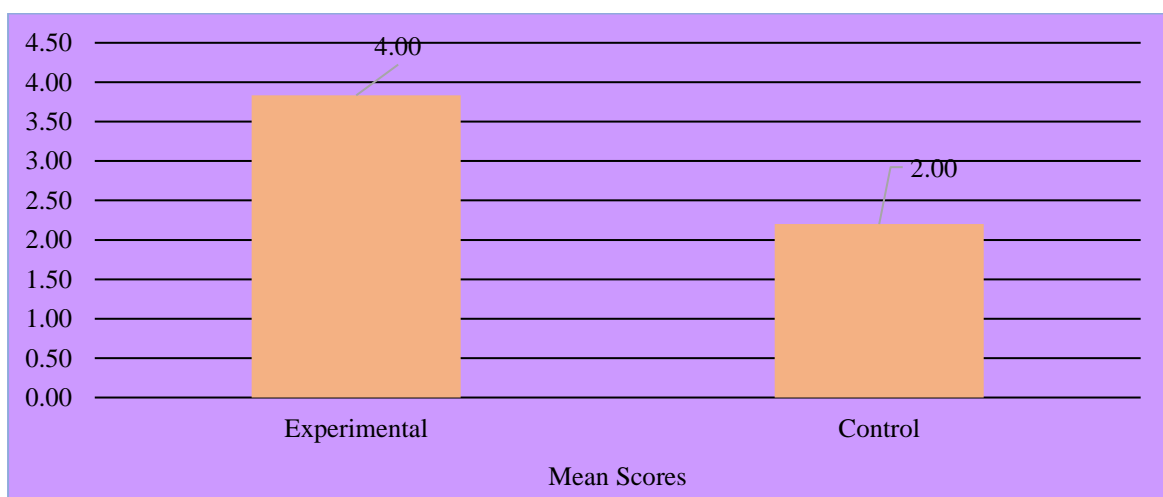


Figure 3: Comparison of neonates in the experimental and control groups as per mean scores of wet nappies at 36th hourly

Table 4: effectiveness of early skin-to-skin contact on number of stools passed by unpaired 't' test

n=60

Sr. No.	Findings	12 hours	24 hours	36 hours
1	Control group Mean	2	2	2
2	Experimental group Mean	4	4	4
3	Mean Difference	1.53	1.70	1.80
4	Standard Error Difference	0.20	0.20	0.23
5	't' value	7.469	8.323	7.685
6	p value	0.000***	0.000***	0.000***

***Significant at 0.05 level, ** Highly significant at 0.01 level, *** Very highly significant at 0.001 level, and NS: Not Significant**

Table 4 shows the effectiveness of early skin to skin contact on number of stools passed at 12 hour ($t_{(58, 0.05)} = 7.469, 0.000; p < 0.05$), 24 hour ($t_{(58, 0.05)} = 8.323, 0.000; p < 0.05$) and 36 hour ($t_{(58, 0.05)} = 7.685, 0.000; p < 0.05$) which shows it is very highly effective. Hence the research.

The hypothesis is accepted at a 0.05 level of significance.

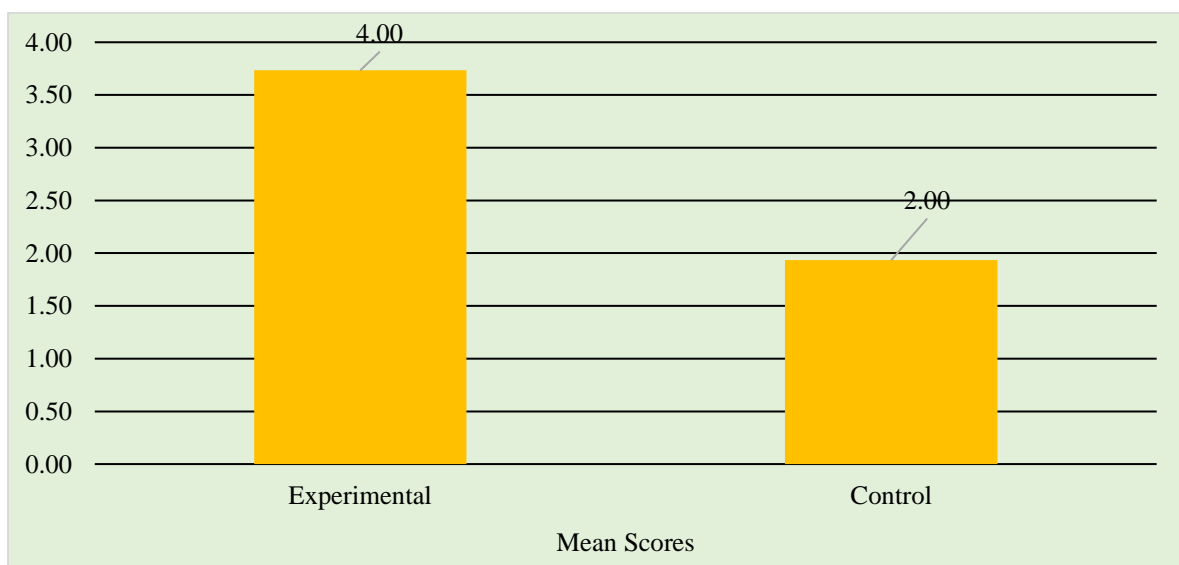


Figure 4: Comparison of neonates in the experimental and control groups as per mean scores of stools passed at 36th hourly.

Interpretation And Conclusion



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The present study shows that early skin-to-skin contact between the mother and neonate was effective in improving the LATCH Score, number of breastfeeding, number of wet nappies, and number of stools passed.

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