

A Study to Assess the Effectiveness of Prone Position on Afterpains among Postnatal Mothers at Selected Hospital, Chennai

K. Latha*, Grace T.**

Author Affiliation: *Associate Professor and Head, **MSc. (Nursing), Department of Obstetrics and Gynaecology, SRM College of Nursing, SRM University, SRM Nagar, Kattankulathur, Kancheepuram District -603203 Tamil Nadu.

Abstract

Despite the fact that pregnancy and delivery are normal physiological phenomena, it involves varieties of changes in physical, physiological as well as emotional aspects of the mothers. Pain after birth is not quite the same as pain after surgery or the kind of pain we feel when we suffer from an injury. There are several causes of pain after birth and one among them is after birth contraction which is normally stronger and more uncomfortable for mothers for the first few days postpartum. To determine the effect of prone position on afterpains among postnatal mothers, an quantitative approach a randomised clinical trial on 60 postnatal mothers (30 in study and 30 in control group) who met the inclusion criteria selected by simple random sampling was conducted at C.S.I Kalyani Multispeciality Hospital, Chennai. Subjects were assessed for their pre test level of after pains using by visual analogue scale. Prone position was given to the postnatal mothers in 3 successive sessions for 20 minutes each for the study group. Followed by the Intervention, the post test level of after pains in both the study and control group was assessed by the visual analogue scale. Results showed that a very high statistical significant difference in the post test level of after pain between the study group and control group at ($t=6.793, p<0.001^{***}$). Study concludes that prone position was found to be effective in reduction of after pains

Keywords: Assess Effectiveness; Prone Position; Afterpains; Postnatal Mothers.

Introduction

Childbirth includes different stages, and in every stage, the mother plays a unique role in experiencing the important events that occur throughout her journey. The different stages are broadly classified into three main aspects, namely, antenatal period, intranatal period, and postnatal period. Postnatal period is the most vulnerable period for the mother and the newborn baby. Many mothers experience physiological, psychological and social changes during this period. There are many types of postnatal

ailments experienced by the mother such as afterpains, irregular vaginal bleeding, leucorrhoea, cervical ectopic (erosion), backache, retroversion of the uterus, anaemia, breast problems and episiotomy discomforts.

Afterpains refer to the infrequent, spasmodic pain felt in the lower abdomen after delivery for a variable period of 2-4 days. These abdominal cramps are caused by postpartum contractions of the uterus as it shrinks back to its pre-pregnancy size and location.

Cramping will be most intense during the 1st day after the delivery and should taper off on the 3rd

Reprint Request: Latha K., Associate Professor and Head, Department of Obstetrics and Gynaecology, SRM College of Nursing, SRM University, SRM Nagar, Kattankulathur, Kancheepuram District -603203 Tamil Nadu.
E-mail: lathanursing29@gmail.com

(Received on 28.11.2016, Accepted on 13.12.2016)

day. Afterpain will be relieved if the womb remains firmly contracted. When the bladder is full it is unable for the uterus to contract and it tends to relax, thus prohibiting relief from afterpain. Once the bladder is empty, the women may lie prone with a pillow under her lower abdomen. Prone position places constant pressure against mother's uterus, the pillow creates more pressure which keeps it contracted and thus eliminates afterpains since there is no uterine relaxation.

There are varieties of non pharmacological methods for pain relief which are important for postnatal period. They are massage, counter pressure, hydrotherapy, breathing patterns, heat and cold packs, position changes, relaxation techniques, music, aromatherapy, birth doulas and acupressure points. Among non pharmacological methods, position change, abdominal muscle exercise and uterine massage are more effective.

Statement of the Problem

A study to assess the effectiveness of prone position on afterpains among postnatal mothers at selected hospital, Chennai

Objectives

1. To assess and compare the pre test level and post test level of afterpains among postnatal mothers between study group and control group.
2. To determine the effectiveness of prone position on afterpains among postnatal mothers in study group.
3. To associate the post test level of afterpains among postnatal mothers with their demographic and obstetrical variables in study group and in control group.

Methods and Materials

A quantitative approach was adopted for the study. True experimental research design was selected for the study. Simple random sampling technique was used in this study. The study was conducted at C.S.I Kalyani Multi Speciality Hospital, Chennai after getting official permission from the authorities. The sample size comprised of 60 postnatal mothers admitted in postnatal mothers, who met the inclusion criteria. Simple random sampling technique was followed to obtain the samples for the study. Written consent was obtained

from individual participants. The tool used for this study were divided into two sections, section A deals with the demographic variables and obstetrical variables and section B consists of combined categorical numerical pain scale to assess afterpains of postnatal mothers. Subjects were assessed for their pre test level of after pains using by visual analogue scale. Prone position was given to the postnatal mothers in 3 successive sessions for 20 minutes each for the study group. Followed by the Intervention, the post test level of after pains in both the study and control group was assessed by the visual analogue scale.

The data thus collected was subjected to analysis by SPSS package version 18. Both descriptive and inferential statistics was used for data analysis.

Findings

Section A: Analysis of Demographic Variables with Respect to Postnatal Mothers in Study and in Control Group

Considering the age distribution of postnatal mothers in study group, 1(3.3%) of them were in the age <21 years; 15(50%) of them were in the age between 26-30 years. With respect to the education 2 (6.7%) of them had completed middle school; 21 (70%) of them had completed graduate or post graduate. Considering the religion of postnatal mothers 14 (46.7%) of them were Hindus; 5 (16.7%) of them were Muslims. Regarding the occupation of postnatal mothers, 23 (76.7%) of them were unemployed; 7 (23.3%) of them were skilled work. Considering the family type of postnatal mothers in study group 20 (66.7%) of them were in nuclear family; 10 (33.3%) of them were in joint family. The age distribution of postnatal mothers in control group 15 (50%) of them were in the age between 26-30 years; 2 (6.7%) of them were in the age between 31-35 years. With respect to the education of postnatal mothers 1 (3.3%) of them had completed primary school; 20 (66.7%) of them had completed graduate or post graduate.

Considering the religion of postnatal mothers in control group 14 (46.7%) of them were Hindus; 14 (46.7%) of them were Christians; 2 (6.7%) of them were Muslims. Regarding the occupation of postnatal mothers 22 (73.3%) of them were unemployed; 2 (6.7%) of them were clerical, shop-owner, farmer. Considering the family type of postnatal mothers 19 (63.3%) of them were in nuclear family; 11 (36.7%) of them were in joint family.

Section B: Analysis of Obstetrical Variables with Respect to Postnatal Mothers in Study and Control Group

Regarding the parity of postnatal mothers in study group 16 (53.3%) of them was one; 1 (3.3%) of them was three and above parity. Considering the gravida of postnatal mothers 16 (53.3%) of them was one; 1 (3.3%) of them was three gravida. Regarding the initiation of breast feeding 15 (50%) of them were initiated one hour later; 1 (3.3%) of them were initiated three hours later and more. Considering the frequency of feeding in an hour 24 (80%) of them fed their child one hour once; 6 (20%) of them fed two hours once. Regarding the ambulation of postnatal mothers in study group 2 (6.7%) of them were confined to bed; 18 (60%) of them had frequent ambulation. Considering the emptying of bladder of postnatal mothers in study group 24 (80%) of them had frequent voiding every hour; 1 (3.3%) of them had voiding every three hours once and more. Regarding the parity

of postnatal mothers in control group 15(50%) of them was two; 2(6.7%) of them was three and above parity. Considering the gravida of postnatal mothers 15(50%) of them was two; 2(6.7%) of them was three and above gravid. Regarding the initiation of breast feeding 12(40%) of them gave immediate breast feeding after birth; 18(60%) of them were initiated one hour later. Considering the frequency of feeding in an hour 29(96.7%) of them fed their child one hour once; 1(3.3%) of them fed two hours once. Regarding the ambulation of postnatal mothers in control group 4(13.3%) of them had restricted movements; 26(86.7%) of them had frequent ambulation. Considering the emptying of bladder of postnatal mothers in control group 29(96.7%) of them had frequent voiding every hour; 1(3.3%) of them had voiding every two hours once.

Section C: Comparison the pre-test and post-test level of after pains among postnatal mothers between study and control group

Table 1: Comparison the pre-test and post-test level of after pains among postnatal mothers between study and control group
N=60

Groups	Pre test		Post test		Unpaired t Test P value
	Mean	SD	Mean	SD	
Study group (n=30)	5.7933	1.38039	3.8267	1.30137	t=6.793 p<0.001 ***
Control group (n=30)	6.1000	1.13259	6.0767	1.26407	t=0.941 p=0.351

***very high significance at p £0.001

In Table 1, The analysis in study group reveals that the pre test level of afterpains shows the mean value 5.7933 with SD 1.38039 and in the post test level of afterpains shows the mean value of 3.8267 with SD 1.30137 and the projected 't' value was 6.793, which was statistically significant at P £0.001 level. Whereas, in control group, it was revealed, that the pre test level of afterpains showed a mean value of 6.1000 with SD 1.13259 and in the post test level of

afterpains shows the mean value of 6.0767 with SD 1.26407 and the projects 't' value was 0.941 which was statistically not significant at P>0.05 level. Hence prone position was considered effective in reduction of after pains among the postnatal mothers.

Section D Association of Post-Test Level of After Pains among Postnatal Mothers with Their Demographic and Obstetrical Variables in Control Group

Table 2: Chi square analysis of post-test level of after pains among postnatal mothers with their obstetrical variables in control group
n=30

Obstetrical variables	Control group										Chi Square Test P Value	
	No Pain		Mild Pain		Moderate Pain		Severe Pain		Worst Possible Pain			
	No	%	No	%	No	%	No	%	No	%		
Frequency of feeding in an hour	One hr	0	0	0	0	8	27.6	20	69	1	3.4	$\chi^2=14.48$ $df=2$ $p <0.001$ ***
	Two hr	0	0	0	0	0	0	0	0	1	100	

***very high significance at p £0.001

In Table 2, There was a statistical significant association found between the level of afterpains with obstetrical variable in frequency of feeding in

an hour with $\chi^2 = 14.483$ at $p \leq 0.001$ level but remaining variables such as (no of parity, no of gravida, ambulation, emptying of bladder) are found

to be not statistically significant with the post test level of after pains in control group at $p > 0.05$. No statistical significant association was found between the level of after pain with any of the variables in the study group.

Conclusion

This study was done to assess the effectiveness of prone position on afterpains among postnatal mothers at of C.S.I Kalyani Multispecialty Hospital. From the result of the study, it was concluded that rendering of prone position to the postnatal mother was effective in reducing the level of after pains. Therefore, the investigator felt that, more important should be given to assess the postpartum period must be properly planned and delivered.

References

1. Dutta.D.C.. "Textbook of Obstetrics". 2001; 151-153.
2. Mc Kinney ES, James SR. "Maternal child health nursing". 2009; 475-95.
3. Varney, Kriebs.. "Textbook of Midwifery". 2005.p. 140-144.
4. Gamble RV, Brown LK. "Myles textbook for midwives". 2003.p.130-134.
5. Jacob A. "A comprehensive textbook of midwifery". 2012.p.208-16.
6. Claire M. Andrews. Maternal position and comfort.. Journal of Midwifery & Women's Health. 2006 Jul; 51(4):242-8.
7. Roets L, MoruM M. Midwives utilization of nonpharmacological pain management methods during the early days of postpartum. Available from: <http://www.ncbi.nih.gov/pubmed.com>.
8. Annamma Jacob. "Comprehensive textbook of midwifery". 2008.p.141-147.
9. ES Linda.. "Maternal Child health nursing". 2009.p. 136-140.
10. Heidi Gonzales, Dowla. How to ease afterbirthpain. Available from: <http://www.thebirthprofessional.com>.