

# Effectiveness of prone position on reduction of afterpain among postnatal mothers who had normal vaginal delivery at Government Headquarters General Hospital, Thiruvallur

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## ABSTRACT:

An interventional study was conducted to assess the effectiveness of prone position on reduction of after pain among postnatal mother who had normal vaginal delivery at Government Hospital Thiruvallur .Quasi Experimental design was adopted 30 postnatal mothers in experimental group and 30 postnatal mothers in control group were selected by purposive sampling technique who were in the second day of delivery to third day of delivery and out of the effect of pillow were included for the study. Informed consent was obtained from the selected mothers after brief explanation of the study and intervention. A post-test was done using the Numerical rating score scale. The postnatal mothers were explained about the procedure and the assessment tool. The postnatal mothers were encouraged to empty the bladder, to assess the pretest level of after pains numerical pain scale was used, followed by selected nursing interventions such as prone position along with supporting pillow .This procedure was repeated for 3 days in the interval of 10 mins for 3times within the 24 hours morning, afternoon, evening of the same day. Then at the end of the procedure the post intervention level of after pains was assessed by using the same 0-10 Numeric Rating Scale. The findings proved prone position along with pillow support was very effective to improve the level of after pain among postnatal mothers who had normal vaginal delivery.

**KEY WORDS:** Prone position, pain reduction, afterpain, vaginal delivery, postnatal mothers, alternative therapy

## INTRODUCTION :

**Tucker .S, (2000)** stated that postpartum period is a time of restoration and return to the non pregnant state. This 6 to 8 weeks duration is generally defined as the postpartum period from the delivery of the placenta to the involution and return of the reproductive organs to their non-pregnant state. The postpartum period is characterized by significant anatomic, physiologic and endocrinology changes related to the involution and lactation process. It is also a time of major psychological and social change as the new mother bonds with her infants, assuming responsibility for incorporating her infant into the family system.

It is one of the most natural events that can ever be experienced by a women .For a healthy women a completely natural childbirth experience is possible. Our society usually view the safest birth is sterile, fast, and entirely pain free for mother. Many women believe they can simply rely on the medication to control their "pain" and even induce their delivery with no ill effects for themselves or their babies. It is occasionally true, but most medications complicate the normal process of birth.

The first 6 weeks after the birth of the baby is known as postpartum period or puerperium. During this time, mothers experience numerous physiological and psychological changes. Main changes occur for uterus is involution of the uterus and descent of the funds. Involution begins immediately after the delivery of the placenta. During involution uterine muscles contracts firmly around the maternal blood vessels at the area where the placenta is attached . This contraction controls bleeding from the area when the placenta is separated.

There are many reasons for the sub involution of the uterus. Sometimes it can be associated with certain factors such as inadequate breast feeding, lack of maternal care during pregnancy and puerperium. Other complications of puerperium include early postpartum haemorrhage, hypovolemic shock, thromboembolism, puerperal infections. Certain complications may be fatal and would be recognized early and dealt with prompt care. Maternal mortality and morbidity rates measures the risk of women dying from puerperal causes.

The recent study on maternal mortality jointly carried out by the WHO and UNICEF is estimated that globally some 585,000 maternal deaths occur every year. About 92% occur in developing countries like India and some other Asian countries. The Indian Government estimates that 301 women die annually for every 100,000 live births. An estimated 80,000 pregnant women or new mothers die each year in India often from preventable causes including haemorrhage, eclampsia, sepsis and anaemia. Many of the complications may occur due to lack of antenatal care and negligence of minor disorders of puerperium.

It is very essential to give care during puerperium even for a minute discomfort to prevent further complications. There are number of discomforts of puerperium such as excessive perspiration, breast engorgement, perineal pain, constipation, haemorrhoids and afterpain. Among them afterpain is the one which gives more discomfort during early days of postpartum. Sometimes it will make hesitation for the mother to feed the baby.

Soon after the baby is born the placenta separates from the wall of uterus and expelled. Immediately the uterus contracts tightly to seal off open blood vessels on uterine wall at placental site. These uterine contractions called afterpain and this may felt as strong cramp sensations for 3 postnatal days. When the uterus begins to contract again after the birth it shrinks in size. This process involves the muscles in the uterus 'retracting' to achieve this. Most women are unaware of these contractions feeling or cramping at this time.

#### **OBJECTIVES:**

1. To Asses the level of after pains among postnatal mothers after administration of selected nursing intervention.
2. To evaluate the effectiveness of selected nursing interventions on reduction of after pains among postnatal mothers.
3. To associate the pre intervention and post intervention level of after pains among postnatal mothers with their demographic variables.

#### **MATERIALS AND METHODS:**

The postnatal mothers were encouraged to empty the bladder, to assess the pretest level of afterpains numerical pain scale was used, followed by selected nursing intervention such as prone position along with pillow support .This procedure was repeated for 3 days in the interval of 10 mins for 3 times within the 24 hours morning, afternoon & evening of the same day. Then at the end of the third day procedure the post intervention level of after pains was assessed by using the same 0-10 Numeric Rating Scale

The data were analyzed in terms of the objectives of the study using descriptive and inferential statistics. Demographic variables of the postnatal mothers were analysed in terms of frequency and percentage distribution. Mean and standard deviation was used to compute pre and post intervention level of after pains among postnatal mothers .Paired 't' test was used to evaluate the effectiveness of selected nursing interventions among Postnatal mothers.

Chisquare test was used to test the association between categorical variables.

$P < 0.05$  was taken as statistically significant.

The mean value of pre intervention level of afterpain was 8.13, standard deviation 1.46

The mean value of post intervention level of afterpain was 1.70, standard deviation .98

The paired 't' value of 22.78, was very high significant at  $p < 0.001$  level.

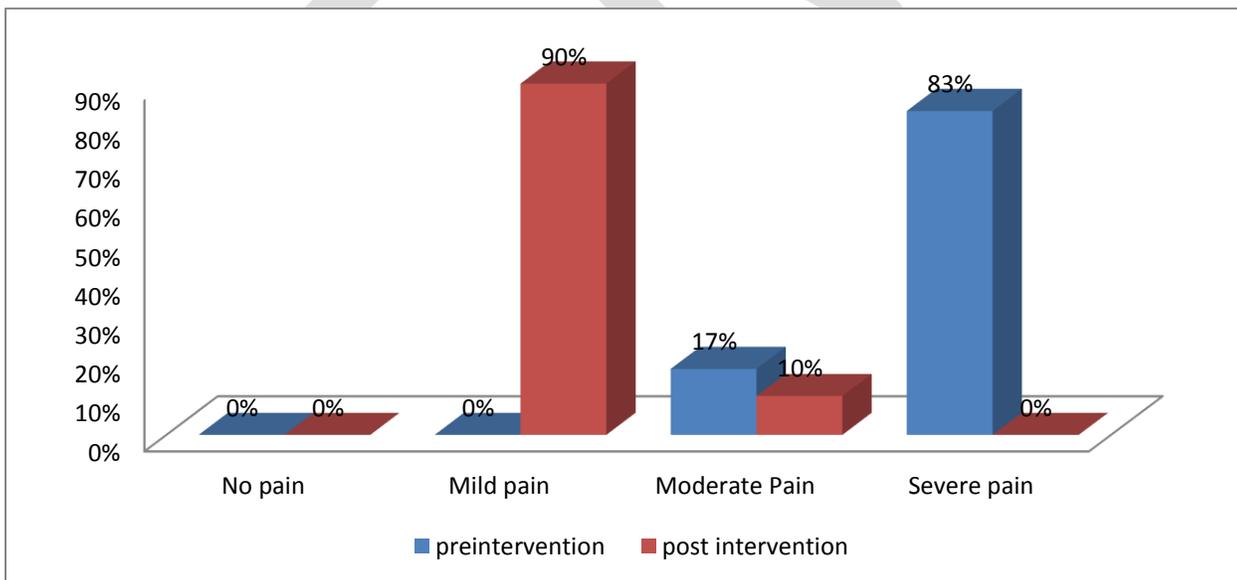
It indicates the effectiveness of selected nursing interventions on reduction of after pains among postnatal mothers.

**RESULT:**

The Chi-square value of 4.51 showed that there was a significant association between education of postnatal mothers and post intervention level of after pains after administration of selected nursing interventions such as pillows supports similarly the other variables like dietary pattern, workpattern, vaginal bleeding were significantly associated with post intervention level of after pains. With regard to dietary pattern the chi-square value 5.47 was significant at the level of  $p < 0.05$ . In concern with work pattern chi-square value 5.76 was significant at the level of  $p < 0.05$ . Regarding vaginal bleeding the chi-square value 4.36 was significant at the level of  $p < 0.05$ . There was no statistical significant association was found with other demographic variables and obstetrical variables such as age, education, locality, parity, baby weight, duration of labour, number of breast feeding per day.

**Table 1: Comparison between pre intervention and post intervention level of After pains among postnatal mothers .**

LEVEL OF AFTERPAINS	PREINTERVENTION		POST INTERVENTION	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
No Pain	0	0	0	0
Mild pain	0	0	27%	90%
Moderate pain	5	17%	03%	10%
Severe pain	25	83%	0	0



**Table 2: Comparison of mean and standard deviation of pre intervention and post intervention level of after pains among postnatal mothers**

Assessment	Mean	Standard deviation	Paired "t" value
Pre intervention	8.13	1.46	22.78**
Post intervention	1.70	.98	

\*\*\*p<0.001

### DISCUSSION:

The findings of the study were supported by Baby center staff (2004) has written an article on postpartum cramps (after pains). Postpartum cramps are caused by postpartum contraction of the uterus as it shrinks back to its pre pregnancy size and location. Breast feeding also brings pain as the baby sucks, it releases a hormone called oxytocin which helps in uterine contraction, which speeds up the process of involution. The cramping is more intense during first 24-48 hours after birth. She suggests some relief measures such as urinating as often as possible and prone position along with pillows support helps to bring down the postpartum cramps.

After pains are caused by involuntary contractions and usually last for 2 to 3 days after child birth. It is more evident for women who have previously had a baby breast feeding stimulates the uterus to contract and increases the severity of after pains. There are many remedies are there to reduce the after pains, such as analgesics, fundal massage, pillows support and alternative therapies.

An experimental study was conducted to determine effectiveness of prone position in reducing the intensity of afterpain during early days of postpartum. Pain intensity was measured using Numeric rating scale on 60 postnatal women who assumed prone position along with pillows support for 5 minutes for an interval of 10 minutes for half an hour. The study results revealed that pain score was relatively less after the practice of prone position along with pillows support. The study concluded that prone position with pillows support was effective in reducing intensity of afterpain.

During active phases of labour there are so many members available with mother to take care of her pain and discomforts. But after the delivery; in the postnatal ward the mother may be neglected with her pain and other discomforts. In some cases the mother experiences intolerable pain, for this the health professionals are not taking any measures for managing pain. Apart from pharmacological pain relief, nurses can implement certain non pharmacological methods in to practice.

Moreover studies on non pharmacological pain management were recommending practice of prone position as an effective and easy method for reduction of afterpain it was not commonly practiced in the postnatal wards. This made investigator to consider practice of prone position and pillows support to study the prone position along with pillows support on reduction of afterpain and improving level of comfort of mother in that position.

The comparison between pre intervention and post intervention level of after pains among postnatal mothers. the pre intervention level of after pains 5 (17%) mothers had moderate pain, 23 (83%) mothers had severe pain and none of them had no pain and mild pain, where as in post intervention 27(90%) mothers had mild pain, 3 (10%) mothers had moderate pain, none of them had severe pain and no pain and it also found that there was statistical difference in 't' test at the level of p<0.001.

Findings of the present study proved that mean & standard deviation of pre intervention pain score of postnatal mothers M=8.13, S.D = 1.46 were higher than the post intervention level of pain M = 1.70, SD = 0.98. The paired't' test value of 22.78 was very high significant at the level of p<0.001. It indicates that the selected nursing intervention was effective on reduction of after pains.

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### **CONCLUSION:**

The role of a nurse is to find out a very good way to alleviate the pain and make the postnatal period of the mother indeed the happiest period of her life. From the result of the study, it was concluded that rendering nursing interventions such as prone position along with pillows support to the postnatal mothers were effective in reducing the level of after pains. Therefore, the investigator felt that, more importance should be given to assess the post partum after pains and discomfort experienced by the mother and measures should be taken seriously in order to reduce the after pains.

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