UHSR International Journal of Health Sciences and Research

www.ijhsr.org

Original Research Article

# Effectiveness of Peripartum Protocol on Maternal and Fetal Outcome among Mothers in NMCH, Nellore, A.P.

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#### ABSTRACT

**Background:** The child birth experience is consistently profound experience of powerful psychological importance in a woman's life. The way the woman responds psychologically to this event, is to some extent, dependent on the type of support she receives. A satisfying or positive experience with childbirth increases when the women's expectations are met, Quality nursing care for laboring women combines a variety of skills and behaviors to ensure a positive birth experience. <sup>[1]</sup>

**Objectives:** 1. To evaluate the effectiveness of peripartum protocol on maternal and fetal outcome among mothers in experimental group and control group. 2. To associate the effectiveness of peripartum protocol on maternal outcome and fetal outcome with socio demographic variables of the mothers in experimental group and control group.

**Methods:** The study was conducted by using quantitative approach with quasi-experimental nonequivalent post-test only with control group design at Narayana general hospital, Nellore. Data was collected from 60 postnatal mothers by using purposive sampling technique. Post test score was assessed through observation checklist, pain scale, APGAR score.

**Results:** In relation to maternal outcome, in experimental group, 63.3% had satisfied outcome and 36.7% had no satisfied outcome, In control group, 30% had satisfied outcome, 70% had poor outcome. The post test mean in experimental group, the mean was 7.4 with SD of 1.2. In control group; the mean was 6.3 with SD of 1.3. The calculated value was (3.91) and the table value was (3.46). So it was significant at< 0.05 level.

**Conclusion:** The study findings showed that there was an effective improvement in maternal and fetal outcome among mothers after implementing the peripartum protocol.

Key Words: Peripartum protocol, Child birth, maternal and fetal outcome.

#### **INTRODUCTION**

Child birth is a profound experience in woman's life. The way the woman responds psychologically to this event, is to some extent, dependent on the type of support she receives. Complications during pregnancy and child birth are leading cause of death and disability among women of reproductive age in developing countries. The quality of support provided, influences the women's satisfaction with the birth process. by providing non-pharmacologic pain relief and support to laboring women. [2]

Quality nursing care for laboring women ensures a positive birth experience. Labour support is defined as "international human interaction between the intrapartum

nurse and the labouring woman that assists the client to cope in a positive manner by a professional registered nurse is a critical component to achieve improved birth outcome.<sup>[3]</sup>

# Need For the Study

Acc. to WHO (2014) globally 39% of pregnant women were complicated. In India annually 24% were estimated that women die during child birth, and 36% are chronically afflicted with complications which occur during the pregnancy.<sup>[4]</sup> In order to attain optimum level of health during pregnancy and the best possible maternal and fetal health outcomes, effective interventions need to be delivered. A study concluded that women who had continuous support in childbirth were likely to have a slightly shorter labour, were more likely to have a spontaneous vaginal birth and less likely to report dissatisfaction with their childbirth experience. Lamaze breathing techniques used to help the pregnant mother to relax and decrease the pain perception associated with delivery during labour.<sup>[3]</sup>

Maternal mortality continues to be burning issue worldwide. Maternal deaths are the greatest inequity of the 21<sup>st</sup> century. 99% of maternal deaths occur in developing countries. Pregnancy and childbirth are among the leading causes of death and disability for girls and women in developing countries.<sup>[4]</sup>

A population-based cohort study was conducted at the Swedish Medical Birth Register. They taken Primiparous women with singleton births from 1992 through 2010 (N=798 674) the study population was grouped according to maternal age into seven subgroups: <17; 17–19; 20–24, 25– 29, 30–34; 35–39 and 40+ years. In the outcome analyses, we selected the group of women aged 25–29 years as reference group. The obstetric outcome variables studied were gestational age, mode of delivery (normal vaginal birth (defined as neither instrumental vaginal delivery), CS, instrumental vaginal delivery divided into

forceps and vacuum extraction), mode of labour. perineal onset of laceration. preeclampsia, abruptio placenta, placenta previa, use of epidural analgesia and PPH exceeding 1000 ml. The fetal and neonatal outcomes evaluated were Apgar score at 5 min, fetal distress (ICD code P20.0, P20.1 and P20.9), aspiration of meconium (ICD code P24.0), shoulder dystocia (ICD code O66.0) and stillbirth. The results imply that there is a need for individualizing antenatal surveillance programmes and obstetric care based on age grouping in order to attempt to improve the outcomes in the age groups with less favourable obstetric and neonatal outcomes. Such changes in surveillance programmes and obstetric interventions need to be evaluated in further studies.<sup>[5]</sup>

# **Problem Statement**

"A study to assess the effectiveness of peripartum protocol on maternal and fetal outcome among mothers in NMCH, Nellore".

# Objectives

- 1. To evaluate the effectiveness of peripartum protocol on maternal and fetal outcome among mothers in experimental group and control group.
- 2. To associate the effectiveness of peripartum protocol on maternal outcome with socio demographic variables of the mothers in experimental group and control group.
- 3. To associate the effectiveness of peripartum protocol on fetal outcome with selected socio demographic variables of the mothers in experimental group and control group.

# **RESEARCH HYPOTHESIS**

H<sub>1</sub>- There is a statistical significant difference in post test maternal outcome score in experimental and control group.

H<sub>2</sub>- There is a statistical significant difference in post test fetal outcome score in experimental and control group.

 $H_3$ - There is a statistical significant association between the post test score on maternal, fetal outcome with selected socio demographic variables.

#### **Delimitations:-**

The study is delimited to;

- Mothers admitted for safe confinement in NMCH, Nellore.
- Sample size of the study is 60 mothers.
- Data collection duration is 6 weeks.

## **MATERIALS AND METHODS**

**Research Approach:** Quantitative research **Design:** Quasi experimental non-equivalent post-test only with control group

Setting: Narayana Medical College and Hospital

#### **Population:**

#### Target population:

Mothers who were admitted in the labour room for safe confinement in maternity hospitals, Nellore.

#### Accessible population:

Mothers who were admitted in labour room for safe confinement in NMCH Nellore.

**Sample:** Postnatal mothers who fulfilled the inclusion criteria were selected for the study.

Sample size: 60 samples

Sampling Technique: Purposive sampling technique

# Sampling criteria:

## **Inclusion criteria**

- Primigravida and multigravida mothers.
- Completed 36 weeks of gestation
- Without any complications
- Mothers who are willing to participate in study.

## **Exclusion criteria**

- Posted for elective L.S.C.S.
- With high risk conditions.
- Who do not understand Telugu/ English

#### Variables:-

**Independent Variables:** - Peripartum Protocol.

**Dependent Variables: -** Maternal and Fetal Outcome

**Demographic Variables:** - Age, educational status, occupation, family monthly income, place of residence, gravida, number of children, and source of health information.

Extraneous Variable:- Medications.

# **Description of the Tool:**

The tool consists of two parts.

**PART I:** Demographic data

**PART II:** Section (a): Observational checklist to assess maternal outcome

Section (b): Pain scale to assess the level of labor pain

Section (c): APGAR score to assess fetal outcome

## **Scoring Key and Interpretation:**

I. Observational Checklist for Maternal Outcome

Score	Interpretation
7-12	Satisfied Outcome
0-6	No Satisfied Outcome

#### II. Pain Scale for Labor Pain

Range	Interpretation					
0	No Pain					
1-3	Mild Pain (Nagging, Annoying, Interfering Little					
	ADLS)					
4-6	Moderate Pain (Interfering Significantly With ADLS)					
7-10	Severe Pain (Disability, Unable To Perform ADLS)					

#### III. APGAR Score for Fetal Outcome

Score	Interpretation
7-10	Absence Of Distress
4-6	Moderate Distress
0-3	Severe Distress

## **Intervention protocol:**

It includes four aspects, they are:

**1. Physical Labor Support** 

a) Maintain environmental control to create a comfort atmosphere.

b) Provide proper positioning during First & Second stage of labor

c) Touch: which conveys an attitude of caring and encourages comfort

d) Application of cold and heat

2. Emotional Labor Support:

# 3. Instructional/ Informational Labor Support:

a) Deep breathing & relaxation technique

b) Music therapy

c) Guided Imaginary

d) Instruct the woman regarding the pushing technique

# 4. Provide Instructions Regarding, Postnatal Care:

Assessing the health status of the mother Encourage immediate breastfeeding

# **RESULTS AND DISCUSSION**



Figure-1: Percentage distribution of maternal outcome in experimental and control group. (N=60)



Figure-2: Frequency and percentage distribution of effectiveness peripartum protocol on labor pain. (N=60)

Fig 1: Reveals that, in experimental group, 19(63.3%) had satisfied maternal outcome, 11(36.7%) had non-satisfied maternal outcome. Whereas, in control group, 9(30%) had satisfied outcome and 21(70%) had non-satisfied maternal outcome.

Fig-2: Shows that, in experimental group 17(56.6%) had moderate labour pain, and 13(43.4%) had severe labour pain, whereas in control group, 21(70%) had severe labour pain and 9(30%) had moderate labour pain.



Figure-3: Fetal outcome with APGAR score in experimental and control group.  $\quad (N{=}60)$ 

Fig-3: Indicates that, in experimental group 19(63.3%) newborn had normal APGAR score, 8(26.7%) newborns had moderate distress, and 3(10%) newborn had severe distress. In control group 10(33.3%) were had normal APGAR score and 15(50%) newborns had moderate distress and 5(16.7%) newborns had severe distress.

S. no	Criteria	Experimental group (n=30)		Control group(n=30)		Independent 't' test
		Mean	SD	Mean	SD	
1.	Maternal outcome	9.6	2.6	6.5	1.8	C=5.380
						T=3.46
						Df=58
						P<0.001
						S***
2.	Labour pain	5.2	1.3	7.3	1.8	C=0.79
						T=3.46
						Df=58
						P<0.001
						NS
3.	Fetal outcome (APGAR Score)	7.4	1.2	6.3	1.3	C=3.91
						T=3.46
						Df=58
						P< 0.001
						S***

Table-1: Comparison of post test mean and Standard deviation of experimental and control group in relation to maternal outcome, pain level and fetal outcome.

#### CONCLUSION

The study findings show that there was an effective improvement in maternal and fetal outcome among mothers by implementing peripartum protocol.

#### **Recommendations:**

- A similar study can be conducted for large sample size.
- A similar study can be done by comparing the effectiveness of peripartum protocol on maternal and fetal outcome among mothers in community settings
- A comparative study can be done to assess the effectiveness of structured teaching program among mothers on maternal and fetal outcome.

#### REFERENCES

- 1. Annemarie Lawrence. (2012). "The relationship between the parturient's positions and perceptions of labour pain intensity". Nursing Research 52(1), 47-51.
- 2. Frank Chervenak, Laurence McCullough. Current progress in obstetrics and gynecology. Vol. 5, The Relevance of Ethics in Gynecology Practice.
- 3. Latha. P Lamaze breathing techniques during labour, NNJ, September (2015), 4(3); 3-4. (Cited).
- 4. Martin JA. Are birth on the decline. National vital statistics system, NCHS data. 2010: 1-8.
- 5. Ashmawy AA, et al knowledge, attitudes and practices related to ante-natal care. J of Obstetrics, Gynecology and Neonatal Nursing. 2012. p.436- 445.

How to cite this article: Padmaja Ch, Latha P, Indira S. Effectiveness of peripartum protocol on maternal and fetal outcome among mothers in NMCH, Nellore, A.P. Int J Health Sci Res. 2017; 7(5):200-204.

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