

OBSTETRIC INTERVENTIONS DURING LABOR: EFFECTS ON THE BIRTH PROCESS AND THE HEALTH OF THE NEWBORN

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ABSTRACT

Aim: This study aimed to analyze the impact of nursing involvement between primi moms while childbirth in selected maternity healthcare centers

Method: A cross-sectional analyses research including 354 primigravidae who delivered in a hospital was conducted. The researchers' data collecting form was used to gather the data. In the SPSS 21.00 application, descriptive and inferential statistics were used for data analysis.

Results: The second process of delivery's interventional duration was protracted, and there was a larger proportion of caesarean sections. Fetal pain (55.6%) is one of the more blatant caesarean reasons. It was discovered that for 34.5% of first-time mothers, the time between entering the time spent in the operating theatre during the second stage of labour ranged from 5 to 9 hours, however for 10.2percent of total of women, it must have been 21 minutes. In total, it needed 9.37 up to 12.5 hours on an average (minimum: 5 mins; maximum: 58 hours) before entry to the operation room to the 2nd quarter.)

Conclusion: It's been demonstrated that first-phase labour treatments have a detrimental impact on deliveries and newborn mortality and increase the requirement for second-phase procedures.

Keywords: *Childbirth, Obstetric Interventions, newborn, primi moms*

INTRODUCTION

Labouring during childbirth is a completely healthy physiological process that should be allowed to run its course naturally. Birth is a physiological process, and the International Midwives Confederation has said that midwives should refrain from intervening during the stage of labor unless absolutely necessary. Worldwide, the practice of frequent and routine delivery interventions has recently increased. In their research of low-risk primiparous and multiparous women, Humphrey, T., and Tucker, J. S. (2009) found that induction was used Surgical instruments were used in 15.7% of first-time mothers, vacuuming in 6.8%, epidural anaesthesia in 25.1%, and surgical removal in 28.6%. Intervention operations were also performed on cell bodies in a ratio similar to that of sensitive receptors, according to the same study.

Many possible difficulties in the birthing process can be greatly reduced with adequate obstetric care and intervention throughout the birth stage. The administration of such therapies frequently and prematurely is likely to have negative consequences on the functioning of hormone secretion, fetal, maternal, and birth processes, and may even necessitate additional interventions. Only a few studies have shown that interventions are frequently used during childbirth and are the root cause of complications (Caughey, A. B. et al., 2014). Additionally, this attempts to clarify pertinent policies and provide therapeutic guidelines by identifying the impact of birth-related therapies on the maternal and baby (Kauffman E et al., 2016). The primary objective of this study is to evaluate the effects of nurse participation among primi mothers during birthing in particular maternity healthcare facilities.

MATERIALS & METHODS

Study Design

This research was done out as a cross-sectional mathematical modeling.

Sample

Primi pregnant ladies who had given birth in a Government Maternity hospital in Hyderabad's downtown made up the study's population. The sample contained 354 primi moms who were chosen from the population using an unlikely sampling approach among those who had met the requirements for participation. 4419 women gave birth via vaginal delivery. 354 women were thus included in the sampling, according to the calculations. Education at the elementary and secondary levels, being at least 18 years old, knowing and comprehending Hindi or the vernacular, carrying a child at the hospital where another study was done, not

establishing a plan for the child that called for a caesarean section at conceptions, and providing permission to engage in the study were inclusion criteria for the primi moms in this study. The study did not include Primi mums whose mental health was insufficient to finish the survey.

Data Collection

After evaluating the available literature, researcher took research data to build a 36-question survey questionnaire. This questionnaire, which was developed by scientists, had 8 questions regarding the sociodemographic traits of primi moms and 14 questions concerning obstetric and birth-related topics. Both the acute care process as well as the admission of women to the clinical area were included in the questionnaire. The two researchers collected information from primiparous moms between one to twenty hours afterwards delivering a baby using in-person interviewing, documentary (patient file) analysis methods, and survey participation. Documentation on different treatment approaches, the labour and delivery process, and newborns were acquired by examining at the physical medication prescriptions and notes mostly in patient file while also reviewing the treatment statistics and comments in the lactation consultant observation forms.

Statistical Analysis

A software application called SPSS 21.0 was used to analyze the research's data. The computer modelling used summary statistics such the mean, confidence interval, amount, and percentage distribution. The study's recognised threshold of relevancy was $p < 0.05$.

RESULTS

The research revealed that the vast majority of primi mothers were between the ages of 20 and 34, with a mean age of 26.62 ± 5.42 (ranging from minimum [min] 18 to maximum [max] 42), 48.6% having given birth to one or more children, and 92.4% doing so between 37 and 41 gestational weeks. 95.4% of the research's newborns had weights between 2.500 and 4.499 grams at delivery.

Table 1: Characteristics of primi moms Related to Birth (n=354)

| Features | | f | % |
|--|--|-----|------|
| Way of birth | Vaginal | 300 | 84.7 |
| | Caesarean | 54 | 15.3 |
| Indications for caesarean section (n=54) | Fatal distress | 30 | 55.6 |
| | Non-progressive labor | 17 | 31.4 |
| | Fatal presentation | 7 | 13.0 |
| Tissue damage in the perineum* | Perineal injury | 54 | 15.3 |
| | Suture other than episiotomy | 44 | 12.4 |
| Time between admission to the delivery room and the second stage of birth* | 1–4 hours | 116 | 32.8 |
| | 5–9 hours | 122 | 34.5 |
| | 10–14 hours | 53 | 15.0 |
| | 15–20 hours | 27 | 7.6 |
| | 21–58 hours | 36 | 10.2 |
| Complications developing at the third stage of birth* | Shoulder dystocia | 2 | 0.6 |
| | Separation time of the placenta exceeding 30 minutes | 48 | 13.6 |
| | Removal of placenta by hand | 27 | 7.6 |

15.3% of the primi mothers who took part in the study and gave birth via Caesarean section did so. Are among the most obvious causes of caesarean delivery (55.6%) is foetal distress. It was discovered that the time among entering the hospital room and the second layer of labour for 34.5% of primigravidae was between 5 and 9 hours, and for 10.2% of women, it became 21 hours or longer (Table 1). Additionally, it took 9.37 8.93 hours on average from admitting to the operating theatre to the second part (max:58 minutes; minimum:15 hours). Pudendal nerve abrasion was seen in 15.3% of primigravid women, and suturing was performed immediately after a surgical intervention in 12.4% of women. Inside this second stage of labour, risks were seen in 2 instances (0.6%) of shoulders neural tube defects, 13.6% of uterine separations took longer than thirty minutes, and 7.6% of placentas had to be manually removed (Table 1).

DISCUSSION

Fetal monitoring during low-risk pregnancy is advised to be done once every 30 minutes in the first stage of labor and once every 15 minutes in the second (Lawrence A et al.,2009). In its intrapartum care recommendations, the WHO advises against using the continuous EFM procedure. However, it was shown that more than half of the women who participated in our research received continuous EFM. Continuous EFM procedure was found to improve birth length and C/S birth fractions, but this finding is supported by the current literature. Other research revealed that continuous EFM significantly increased the ratios of C/S births and interventional births. In their 14-year retrospective investigations that looked at 55 million pregnant women, Ozkan et al. (2013) reported that the frequency of continuous EFM procedures gradually increased. Similar to this, it was observed that continuous EFM procedure did not significantly vary from discontinuous EFM process in terms of APGAR scores and admission to critical care unit in the guideline published by (Lawrence A et al., 2009). According to the results of this study, it is reasonable to conclude that continuous EFM has a detrimental impact on the health of new-borns rather than having any protective effects.

CONCLUSION

Based on these findings, it is advised that healthcare professionals working in the field of childbirth reduce the number of interventions they regularly utilize in labor and delivery rooms and instead choose to provide treatment using an evidence-based technique. Hospital managers should discover the underlying causes of the increasing likelihood of assistance at delivering and devise solution-based measures to address the relevant problem. An concrete proof perspective to nursing at birth should then be advocated.

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