

# Retrospective Analysis to Assess the Occurrence of Abnormal Deliveries in a Tertiary Care Hospital

Sreeja L

Associate Professor

**Abstract:** ***Aim and objective:** Child birth is a very complex process. Complications can rise within a fraction of a second during the birth process. Abnormal deliveries occur in 13% of the hospital admitted cases as per the WHO report published in 2015. Here we present a retrospective analysis of the occurrence of abnormal deliveries conducted in a tertiary care hospital. **Materials and methods:** A retrospective study was conducted to evaluate the occurrence of abnormal deliveries conducted in a tertiary care hospital. A total of 1284 deliveries were conducted in this selected tertiary-care hospital between January 2018 to December 2018. Data analysis was done from birth register where the major events were documented and analysed. **Results:** Out of 1284 patients, 664 (51.7%) patients delivered abnormally whereas 620(48.3%) underwent the process of normal labour. It was also observed that majority of the abnormal deliveries were LSCS i.e. 468 (70.4%) Majority of the women who had abnormal labour was found to be hypothyroidism on treatment i.e. 86 (25.67%). Out of 664 patients who delivered abnormally it was seen that 214(32.2%) were Post LSCS whereas only 3(0.45%) were detected Cephalo Pelvic Disproportion. **Conclusion:** Abnormal deliveries are prevalent due to increasing medical conditions complicating pregnancies. Constant supervision and care during antenatal period can decrease the maternal and neonatal mortality and morbidity drastically.*

**Keywords:** retrospective study, occurrence, abnormal deliveries

## 1. Introduction

Globally at least 585,000 women die each year by complication of pregnancy and childbirth. More than 70% of all maternal death is due to five major complications: haemorrhage, infection, unsafe abortion, hypertensive disorders of pregnancy, and obstructed labour. Among these etiologies, obstructed labour is one of the most common causes of maternal illness and death in sub-Saharan Africa and Southeast Asia. Worldwide, obstructed labour occurs in an estimated 5 % of pregnancies and accounts for an estimated 8% of maternal deaths<sup>1</sup>. It is an indicator of inadequacy and poor quality of obstetric care and immediate causes of maternal and prenatal morbidity and mortality due to uterine rupture, complications of caesarean deliveries, postpartum haemorrhage, anaesthesia complications, puerperal sepsis, asphyxia, and brain damage.

## 2. Review of Literature

A survey conducted by Priyanka Singh et al among 22,111 deliveries conducted in various districts of South India in 2014 revealed that 59.74% were abnormal deliveries which included 48 % Caesarean deliveries and remaining included hospital and home based vaginal deliveries. The higher rate of caesarean birth was found among private sector and was three times more than public sector health care facilities.

An article in Medscape India reveals epidemiology of abnormal deliveries where in all cephalic deliveries; 8-11% are complicated by an abnormal first stage of labour. Dystocia occurs in 12% of deliveries in women without a

history of prior caesarean delivery. Dystocia may account for as many as 60% of abnormal deliveries.

## 3. Materials & Methods

A retrospective analysis was undertaken from medical records and birth register. Samples were all deliveries conducted in the obstetric unit of a tertiary care hospital for a period of one year. A general information sheet to collect basic reproductive data, type of deliveries, causes of abnormal deliveries and disease conditions were prepared. Reviews of labour register were done to collect necessary information. Data analysis was done by descriptive statistics.

## 4. Results

- Majority of the deliveries i.e. 664 (51.7%) were abnormal, whereas 620 (48.3%) cases delivered normally.
- Majority of abnormal deliveries were due to LSCS i.e. 468 (70.4 %) whereas Vaginal Birth After Caesarean Section was the least abnormal case i.e. 1(0.15%) observed
- Instrumental deliveries like Vacuum Delivery 11 (1.65 %) & Forceps Delivery 34 (5.12%) were seen
- Abnormal presentation like Breech Delivery 43 (6.47%) were responsible for abnormal deliveries
- Preterm delivery 73(10.9 %) and Twin delivery 26 (3.91%) contributed to abnormal deliveries
- Intra Uterine Fetal Death /Still Birth 08 (1.20%) were also observed

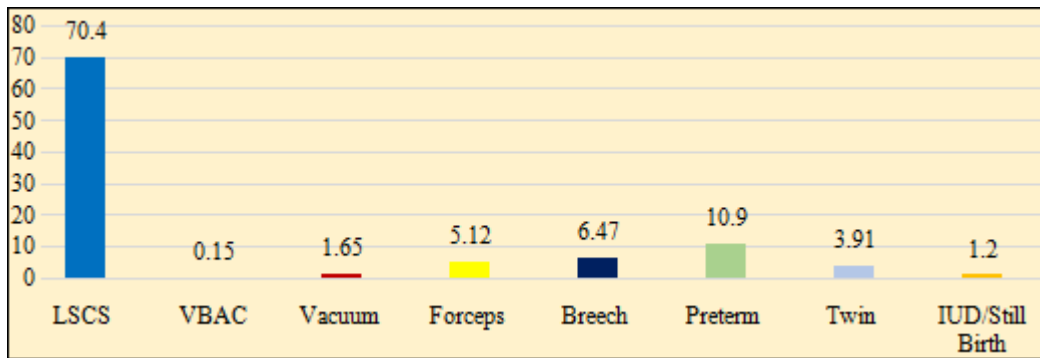


Figure 1: Description of samples as per the type of deliveries, n=1284

Fig No: 1 below depicts the description of samples according to the type of deliveries. The results reveals 664 (51.7%) abnormal, whereas 620 (48.3%) cases delivered normally.

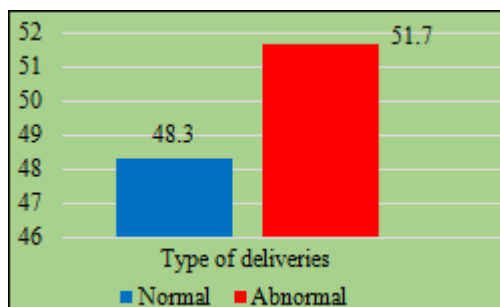


Figure 2: Description of samples as per the type of abnormal deliveries, n=664

Fig 2 shows that majority of abnormal deliveries were due to LSCS i.e. 468 (70.4 %) whereas VBAC was the least abnormal case i.e. 1(0.15%) observed.

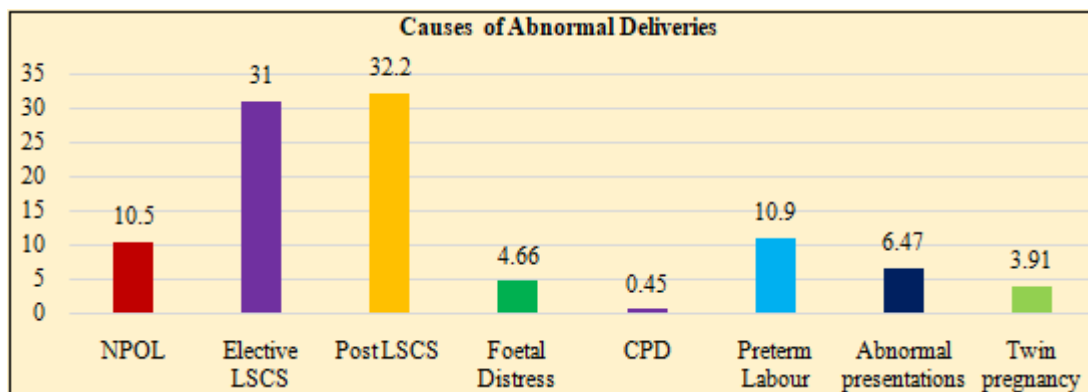


Figure 3: Description of samples as per the causes of abnormal deliveries, n =664

Figure 3: Shows that majority of causes of abnormal labour were Post LSCS pregnancy i.e. 214 (32.2 %) whereas CPD was the least cause of abnormal deliveries i.e. 3(0.45%) observed.

## 5. Conclusion

The present study results throw light on few important aspects on the type of deliveries conducted in a tertiary care hospital out of which majority of them being Lower Section Caesarean sections. However Post LSCS and Elective LSCS were the major causes for abnormal deliveries. It is imperative to note that a patient is at risk for abnormal delivery irrespective of the gravida, parity and risk factors associated with the previous and present pregnancies.

## References

- [1] Kayongo M, Rubardt M, Butera J, Abdullah M, Mboninyibuka D, Madili M. Making EmOC a reality-CARE's experiences in areas of high maternal mortality in Africa. *Int J Gynecol Obstet.* 2006; 92:308–319.
- [2] Alehagen S, Wijma K, Wijma B. Fear during labor. *Acta Obstet Gynecol Scand.* 2001; 80:315–320.
- [3] Bagheri A, Masoodi-Alavi N, Abbaszade F. [Effective factors for choosing the delivery method among the pregnant women in Kashan] *Feyz J.* 2012;16:146–153.
- [4] Shakeri M, Mazlounzade S, Mohamaian F. [Factors affecting the rate of cesarean section in Zanjan maternity hospitals in 2008] *Zanjan Univ Med Sci J.* 2012;20:98–104.

- [5] Lee AS, Kirkman M. Disciplinary discourses: rates of cesarean section explained by medicine, midwifery, and feminism. *Health Care Women Int.* 2008;29:448–467.
- [6] Shariat M, Majlesi F, Azari S, Mahmoudi M. [Cesarean section in maternity hospitals in Tehran] *Payesh.* 2002;1:5–10.
- [7] Cunningham F, Leveno K, Bloom S, Spong CY, Dashe J. Williams Obstetrics. 23rd Ed. Mcgraw-hill; 2010.