

A Study on Obstetric Outcome of Postdated Pregnancy among Private Hospital Patients in Sylhet

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ABSTRACT

Introduction: Any pregnancy which has passed beyond expected date of delivery (EDD) is called postdated pregnancy or prolonged pregnancy.

Objective: Main goal of this study is to evaluate obstetric outcome in postdated pregnancy.

Method: This was a prospective observational type study. Patients whose pregnancy extended beyond 40 weeks of gestational age, patients who were sure of the date of last menstrual period (LMP) along with 1st trimester obstetrics scan were included for this study. Patients not sure of LMP were excluded in this study. The study was conducted in the Department of Obstetrics and Gynecology, of different private hospital Sylhet for study duration of 3 years. Total 223 cases were selected purposively for this study.

Results: The study result shows fetus condition among the 223 pregnant women highest 96.41% were alive and only 3.59% were dead. Male baby and female baby was almost same male 49.33% and female baby 50.67%. After delivery baby admitted in hospital 76.23%, NICU 6.28% not admitted 17.49%. Most of the pregnant women's (88.34%) management was oligo induction failure and rest was laparoscopy. Per operative finding of the patients shows highest 74.89% preterm

pre-mature rupture of membrane, 18.83% Ectopic pregnancy and 6.28% rupture uterus.

Conclusion: Postdated pregnancy having 50% risk of recurrence in next pregnancy. It is a high risk pregnancy the foetal complication in the form of foetal distress, meconium aspiration syndrome, birth trauma etc. It also increases rate of instrumental delivery and operative delivery.

Keyword: Obstetric Outcome, Postdated Pregnancy, Last Menstrual Period.

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INTRODUCTION

The pregnancy which has crossed expected date of delivery called post dated pregnancy on the other hand pregnancy more than 42 weeks or more than 294 days is called post term pregnancy. Fernandos Arias also defined prolonged pregnancy as those pregnancies advancing beyond the expected date of delivery (EDD).¹ However, prolongation of pregnancy complicates up to 10% of all pregnancies and carries increased risk to mother and fetus.^{2,3}

Prolonged pregnancy Incidence is 3-14 % of all gestations.⁴ It is still difficult to understand why some women go into premature labour while others have prolonged pregnancy. Some specific factors are related to postdated pregnancy, these are hereditary factor, high standard of living, sedentary habits, anencephaly, elderly primigravidae, elderly multigravidae etc.

Different studies show that previous history of postterm pregnancy has 50% risk of recurrence.⁵ When any pregnancy advances beyond the EDC (Expected Date of Confinement) perinatal mortality and foetal morbidity also increases. According to national birthday trust data from Britain in 1958, the perinatal mortality rate increases after 42 weeks gestation, doubles at 43 weeks and quadruples at 44 weeks gestation.^{4,6,7} These postterm infants have higher rate of mortality up to two years of age.⁴

Postmaturity syndrome (Foetal dysmaturity) related with 5%-10% of prolonged pregnancy. These foetuses have decreased amount of subcutaneous fat and wrinkled skin (because they have lost the vernix caseosa), long hair and long finger nails. Prolonged pregnancy complications ideally should be discovered before labour because these foetuses are fragile, tolerate labour

poorly and frequently are acidotic at birth. These groups of babies have higher rate of perinatal mortality.⁸ About 1/3 rd death occur antepartum, 1/2 intrapartum and about 1/6 th neonatal. ⁶Any pregnancy that goes beyond 41 weeks of confirmed gestational age foetal well-being must be assessed. Proper management is a prerequisite to reduce the rate of perinatal mortality and morbidity in this group of patient.⁴

OBJECTIVE

General Objective

- To evaluate Obstetric Outcome of Postdated Pregnancy among Private Hospital Patients in Sylhet.

Specific Objective

- To determine the fetus condition during delivery;
- To identify the complications in patients presenting with postdated pregnancy;
- To find out the after delivery condition of the baby;

METHODOLOGY

Study Type: This was a prospective observational type study.

Study Place and Period: This study was conducted at Private Hospital and hospital from 2015 January to 2018 January.

Method: Patients who have completed 40 weeks of gestational age, patients who were sure of the date of last menstrual period (LMP) along with 1st trimester obstetrics scan were included for this study. Patients not sure of LMP were excluded in this study. The study was conducted in the Department of Obstetrics and Gynecology, of a private hospital Sylhet for a period of 3 years. 223 cases were selected purposively for this study.

Data Analysis: During the study all the data were checked and edited after collection. Then the data were entered into computer and statistical analyses of the results were obtained by using window-based computer software devised with Statistical Packages for Social Sciences (SPSS-23) (SPSS Inc, Chicago, IL, USA). The results were presented in tables and figures.

Table 1: Age of the pregnant women

Age	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 16year - 20 years	23	10.3	10.3	10.3
21 years - 25 years	58	26.0	26.0	36.3
26 years - 30 years	142	63.7	63.7	100.0
Total	223	100.0	100.0	

Table 2: Parity distribution of the patients

Description	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Primigravida	127	57.0	57.0	57.0
2nd pregnant	2	.9	.9	57.8
Multigravida	94	42.2	42.2	100.0
Total	223	100.0	100.0	

Table 3: Delivery method of the pregnancy

Delivery Method	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Cesarean delivery	194	87.0	87.0	87.0
Normal delivery	29	13.0	13.0	100.0
Total	223	100.0	100.0	

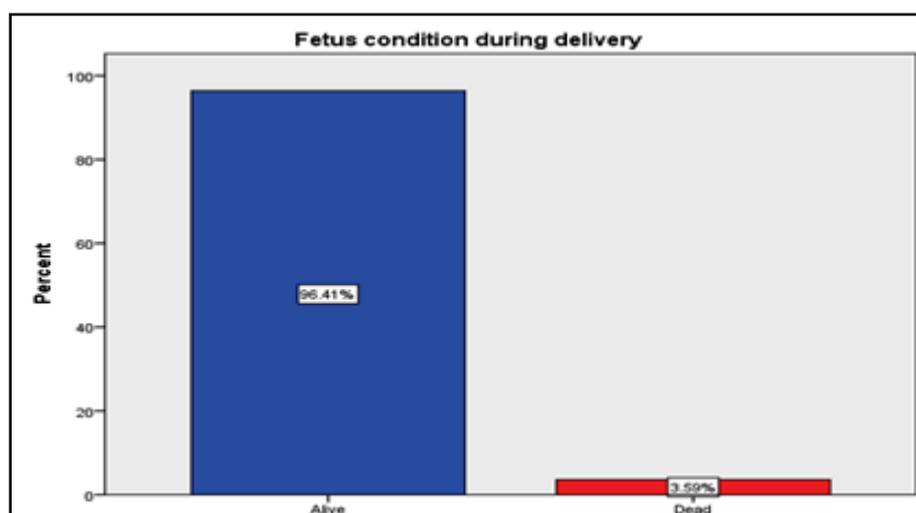


Figure 1: Fetus condition during delivery

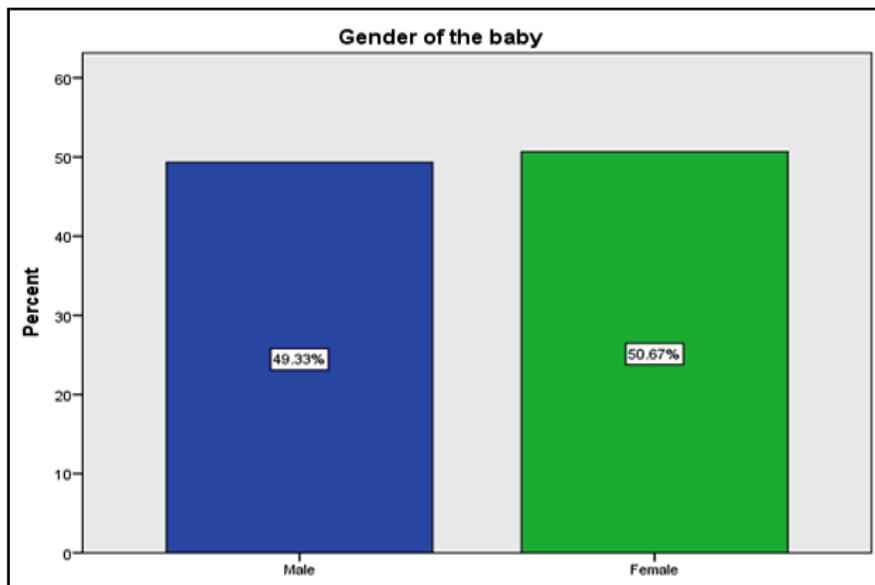


Figure 2: Gender wise distribution

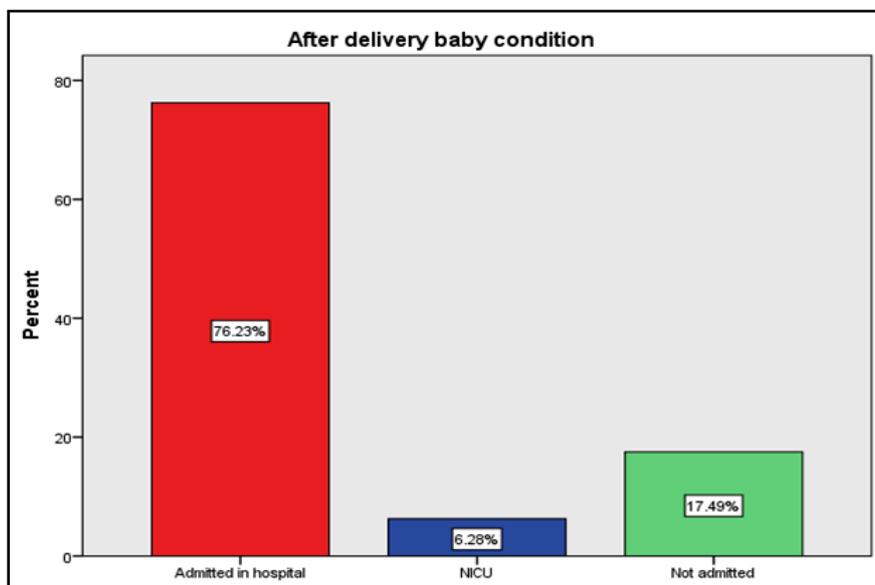


Figure 3: After delivery Baby Condition.

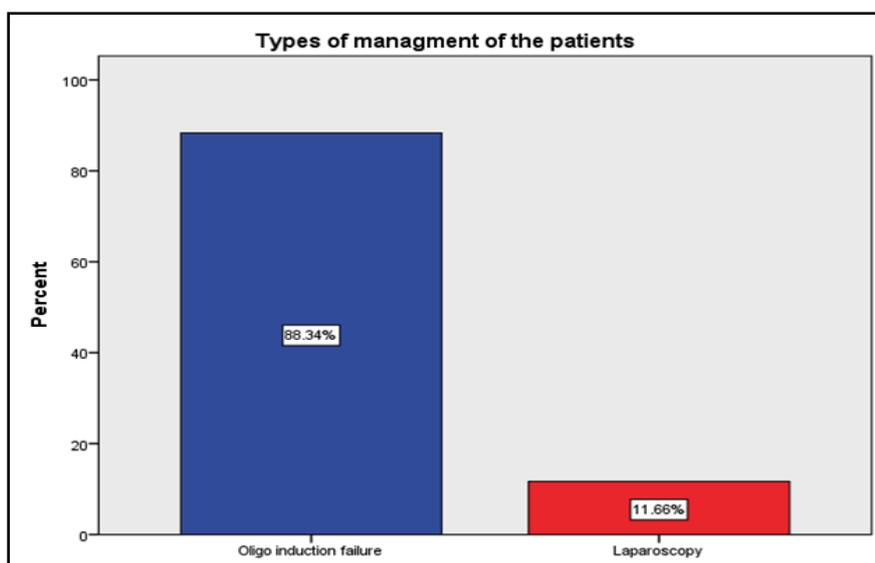


Figure 4: Types of management of the patients

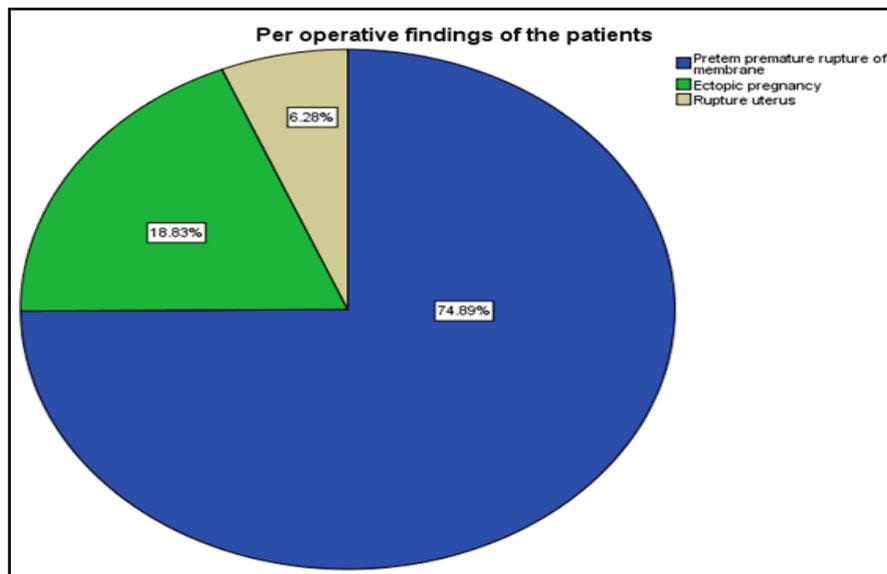


Fig 5: Peroperative findings of patients

RESULTS

Age distribution of patients where age of pregnant women ranged from 16-30 years. Among the 223 pregnant women highest 63.7% were in the age of 26-30 years.

Parity distribution among the 223 pregnant women highest 57% were Primigravida followed by Multigravida 42.2% and 2nd pregnant were only .9% (Table 2).

Delivery method among the 223 pregnant women highest 87% were cesarean delivery followed by normal delivery only 13% (Table 3).

Fetus condition among the 223 pregnant women highest 96.41% were alive and only 3.59% were dead (Figure 1). Male baby and female baby was almost same male 49.33% and female baby 50.67% (Figure 2). After delivery baby admitted in hospital 76.23%, NICU 6.28% not admitted 17.49% (Figure 3). Most of the pregnant women's (88.34%) management were oligo induction failure and rest were laparoscopy (Figure 4). Per operative finding of the patients shows highest 74.89% preterm pre-mature rupture of membrane, 18.83% Ectopic pregnancy and 6.28% rupture uterus (Figure 5).

DISCUSSION

Postdated pregnancy is a high risk obstetrics situation. The perinatal mortality and morbidity are increased in several folds when pregnancy advanced beyond term i.e. 40 weeks. During this study period a total of 2000 patients were admitted in Sylhet in antenatal and labour ward. Among these 223 pregnant women exceeded EDD by 14 days (that is postmaturity). Previous studies showed incidences were 3-14% and 11% respectively. Prolongation of pregnancy beyond 40 weeks occurs much more frequently than postmaturity¹. It was noted 10-15% beyond 41-42 weeks^{6,7}. So the incidence is within the standard limit.^{9,10}

In this study Incidence of postdated pregnancies was more in age group of 26-30 years. Beischer in his study found that majority of postdated patients belonged to the age group of 25-30 years, while Bancroft et al found that majority of patients belonged to 21-30 years.^{11,12} Reddy UM et al found in their study that women who are of advance maternal age are at higher risk of still birth throughout gestation, the peak risk period is 37 to 41 weeks.¹³

Mode of delivery was not significantly associated with postdated pregnancy compared with term pregnancy. Similar finding was also observed in a study conducted by Katz et al who tested non-aggressive approach to the management of post-date pregnancies involving 156 patients who had reached 294 days of amenorrhea and had a Bishops score of 4 or less.¹⁴

CONCLUSION

Postdated pregnancy having 50% risk of recurrence in next pregnancy. Therefore we can say that it is a high risk pregnancy the foetal complication in the form of foetal distress, meconium aspiration syndrome, birth trauma etc. It also increases rate of instrumental delivery and operative delivery.

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