

# A Clinical Study of Post-dated Pregnancy among Government and Private Hospital Patients in Patuakhali

Md Mujibur Rahman<sup>1\*</sup>, Mosammat Ferdousi Akhter<sup>2</sup>, Md Mahamudur Rahman<sup>3</sup>

<sup>1\*</sup>Assistant Professor, Gynae & Obs, Patuakhali Medical College (PkMC), Bangladesh.

<sup>2</sup>Junior Consultant, 250-bed Patuakhali General Hospital, Bangladesh.

<sup>3</sup>Professor, Gynae & Obs, Patuakhali Medical College (PkMC), Bangladesh.

## ABSTRACT

**Introduction:** Any pregnancy that has passed past expected date of delivery (EDD) is called post-dated pregnancy or prolonged pregnancy.

**Objective:** The main objective of this study is to appraise obstetric outcome for post-dated pregnancy in Patuakhali.

**Method:** This was a potential observational type study. Patients whose pregnancy protracted beyond 40 weeks of gestational age, patients who were certain 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 gynaecology, of different private hospital Patuakhali for study duration of 2 years. Total 150 cases were selected purposively for this study.

**Results:** Age segmentation of patients where the age of pregnant women ranged from 16 to 30 years. Among the 150 pregnant women highest 64% were in the age of 26-30 years. Delivery method amongst the 150 pregnant women are highest at 86% were caesarean delivery followed by normal delivery only 14%. Parity distribution among the 150 pregnant women highest 57.33% were Primigravida followed by Multigravida 41.34% and 2<sup>nd</sup> pregnant were only 1.33%. Babies' condition amongst the 150 pregnant women, highest 96.30% foetus were alive upon delivery and only 3.70% of the foetus were dead. In the gender distribution of the foetus, 49.33% were born as male and 50.67% were female. After delivery, the babies that were admitted in hospital were 76.40%, in NICU

6.40%, and not admitted in the hospital after delivery were at 17.20% and 88.40% of the pregnant women's management resulted in oligo induction failure and the rest 11.60% were conducted upon laparoscopy. Per operative findings of the selected patients show that the highest 74.40% were preterm pre-mature rupture of membrane, 18.80% were ectopic pregnancy and 6.80% had ruptured uterus.

**Conclusion:** Post-dated pregnancy having almost 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 raises rate of instrumental delivery and operative delivery.

**Keywords:** Obstetric Outcome, Last Menstrual Period, Post-Dated Pregnancy.


## \*Correspondence to:

**Dr Md Mujibur Rahman,**  
Assistant Professor,  
Gynae & Obs,  
Patuakhali Medical College (PkMC), Bangladesh.

## Article History:

**Received:** 03-10-2018, **Revised:** 16-11-2018, **Accepted:** 28-12-2018

## Access this article online

Website: <a href="http://www.ijmrp.com">www.ijmrp.com</a>	Quick Response code 
DOI: 10.21276/ijmrp.2019.5.1.070	

## INTRODUCTION

The pregnancy which has crossed expected date of conveyance called post-dated pregnancy then again pregnancy over 42 weeks or over 294 days is called post term pregnancy. Fernandes Arias likewise characterized delayed pregnancy as those pregnancies progressing past the normal date of conveyance (EDD).<sup>1</sup> However, prolongation of pregnancy entangles up to 10% everything being equal and conveys expanded hazard to mother and hatchling. Drawn out pregnancy incidence is 3-14 % of all gestations.<sup>2</sup> It is as yet hard to comprehend why a few ladies go into premature work while others have prolonged pregnancy. Some particular components are identified with post-dated

pregnancy, these are exclusive expectation of living, sedentary habits, anencephaly, elderly primigravidae, elderly multigravidae and so on. Various examinations demonstrate that past history of post-term pregnancy has half danger of recurrence. All things considered, when any pregnancy propels past the edc (expected date of confinement) perinatal mortality and foetal morbidity additionally increments. As indicated by national birthday trust information from Britain in 1958, the perinatal mortality rate increments following 42 weeks gestation, doubles at 43 weeks and quadruples at 44 weeks gestation.<sup>2</sup> These post term babies have higher rate of mortality as long as two years of age.<sup>2</sup>

Postmaturity syndrome (foetal dysmaturity) related with 5%-10% of prolonged pregnancy. These fetuses have diminished measure of subcutaneous fat and wrinkled skin (since they have lost the vernix caseosa), long hair and long finger nails. Delayed pregnancy difficulties in a perfect world ought to be found before work on the grounds that these fetuses are delicate, endure work inadequately and every now and again are acidotic during childbirth. These gatherings of children have higher rate of perinatal mortality. around 1/3rd passing happen antepartum, 1/2 intrapartum and around 1/6th neonatal.<sup>3</sup> Any pregnancy that goes past 41 weeks of affirmed gestational age Foetal prosperity must be evaluated. Appropriate administration is an essential to diminish the rate of perinatal mortality and morbidity in this gathering of patient.

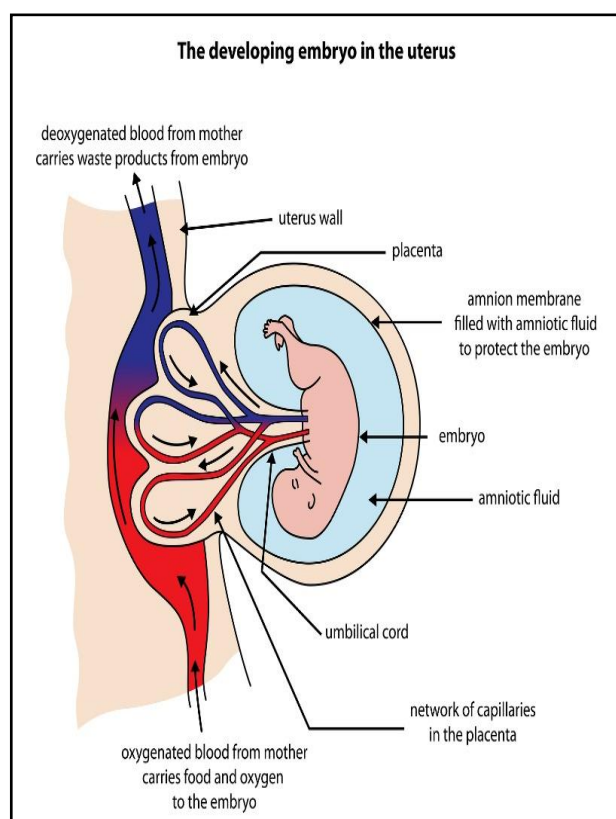


Figure 1: The developing embryo in uterus

## OBJECTIVE

### General Objective

- To gauge the Obstetric Outcome of Post-dated Pregnancy in Private Hospital Patients in Patuakhali.

### Specific Objective

- To conclude the foetus condition upon delivery;
- To find out the difficulties in the patients with post-dated pregnancy;
- To find out the condition of the baby after the delivery.

## METHODOLOGY

### Study Type

The study was a prospective observational type study.

### Study Place and Period

The study was conducted in the Department of Obstetrics and Gynaecology of Government and Private hospital in Patuakhali for a period of 2 years.

## 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.
- 150 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.

## RESULTS

Age segmentation of patients where the age of pregnant women ranged from 16 to 30 years. Among the 150 pregnant women highest 64% were in the age of 26-30 years. The following table 1 shows the age distribution of the selected samples.

Delivery method amongst the 150 pregnant women are highest at 86% were caesarean delivery followed by normal delivery only 14% (Table 2). Parity distribution amongst the 150 pregnant women highest 57.33% were Primigravida followed by Multigravida 41.34% and 2<sup>nd</sup> pregnant were only 1.33% (Table 3).

Fetus condition amongst the 150 pregnant women, highest 96.30% foetus was alive upon delivery and only 3.70% of the foetus was dead (Figure 2). In the gender distribution of the foetus, 49.33% were born as male and 50.67% were female (Figure 3). After delivery, the babies that were admitted in hospital were 76.40%, in NICU 6.40%, and not admitted in the hospital after delivery were at 17.20% (Figure 4). 88.40% of the pregnant women's management resulted in oligo induction failure and the rest 11.60% were conducted upon laparoscopy (Figure 5).

Per operative findings of the selected patients show that the highest 74.40% were preterm pre-mature rupture of membrane, 18.80% were Ectopic pregnancy and 6.80% had ruptured uterus (Figure 6).

Table 1: Age Distribution

Age	n	%
Valid 16year - 20 years	15	10
21 years - 25 years	39	26
26 years - 30 years	96	64
Total	150	100.0

Table 2: Delivery Method

Delivery Method	n	%
Valid Caesarean delivery	129	86.0
Normal delivery	21	14.0
Total	150	100.0

Table 3: Parity Distribution

Description	n	%
Valid Primigravida	86	57.33
2nd pregnancy	02	1.33
Multigravida	62	41.34
Total	150	100.0

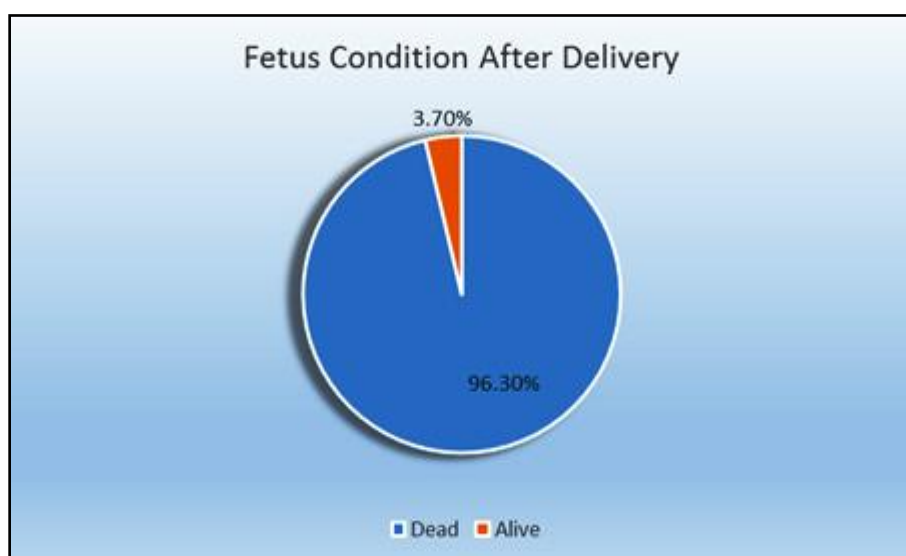


Figure 2: Foetus Condition after Delivery

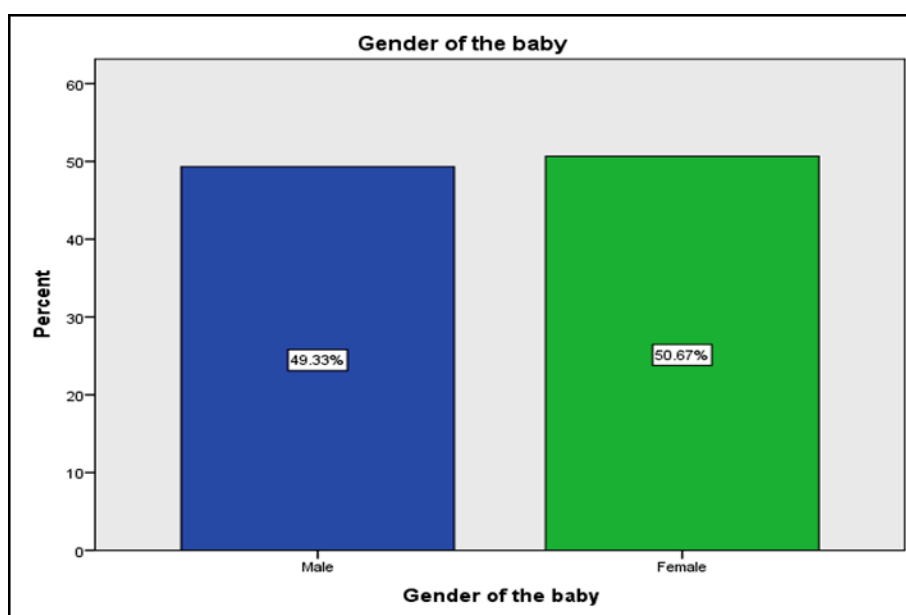


Figure 3: Gender of the Baby

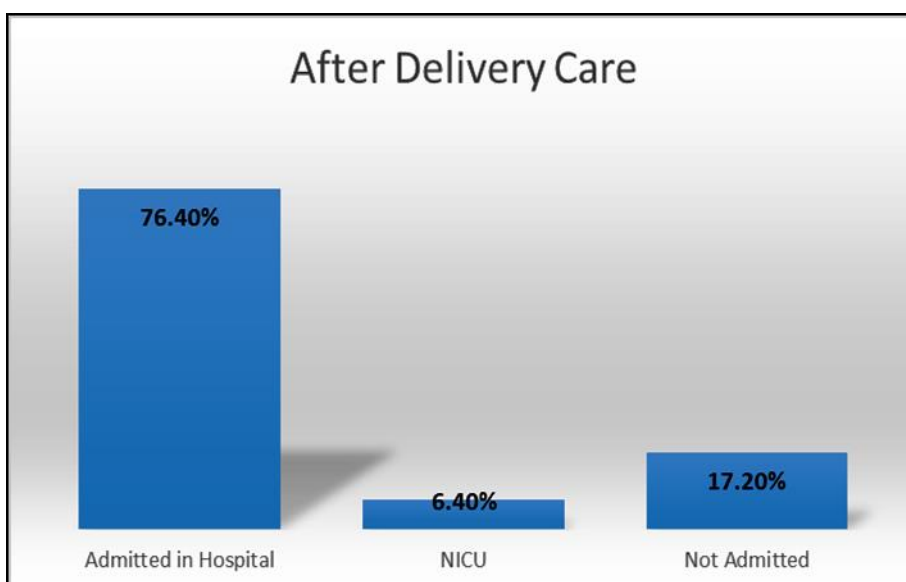


Figure 4: After Delivery Care

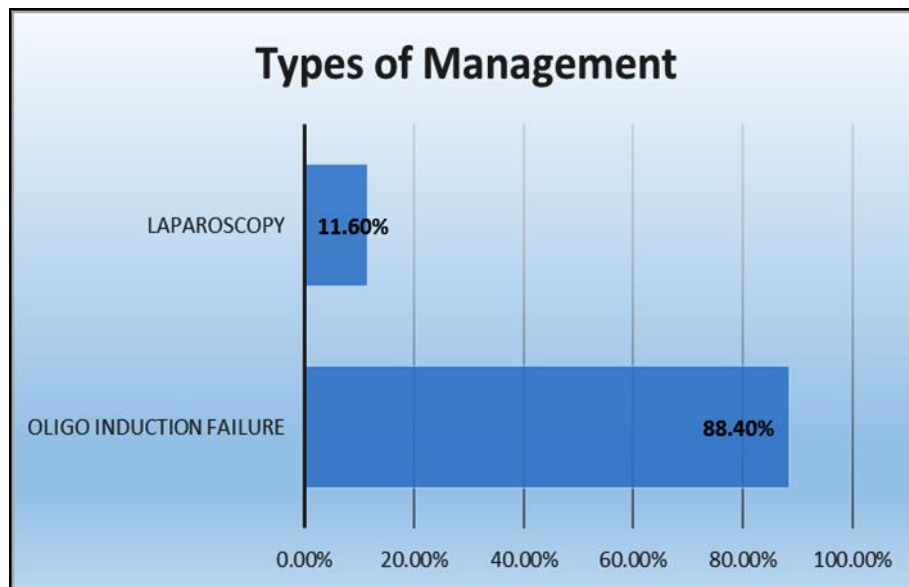


Figure 5: Types of Management

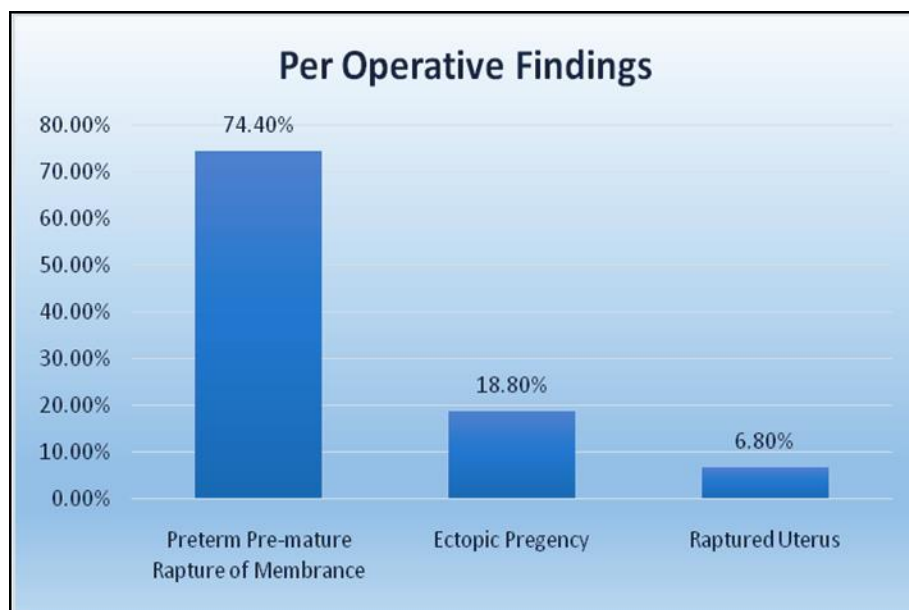


Figure 6: Per Operative Findings

## DISCUSSION

Post-dated pregnancy is comparatively a high-risk obstetrics situation. The Perinatal mortality and morbidity are augmented several times when pregnancy advances beyond term i.e. 40 weeks. During this study period, a total of 2200 patients were admitted in patuakhali in antenatal and labour ward. Among these 150 pregnant women, they exceeded EDD by 14 days (that is postmaturity) give or take. Previous studies indicate that the incidences were 3-14% and 11% respectively. Extension of pregnancy beyond 40 weeks arises much more commonly than postmaturity<sup>1</sup>. It was noted 10-15% beyond 41-42 weeks.<sup>3</sup> So the incidence is within the normal limit.

Partial reports suggest that surgery throughout pregnancy may be linked with a greater risk of pregnancy related death or premature labor. Levine found that intraabdominal procedures were connected with a greater propensity for premature labor than which were extra-abdominal procedures.<sup>4</sup> Smith reported similar findings, and added that, surgery requiring cervical manipulation

amplified the risk for premature labor as much as intra-abdominal manipulation.<sup>5</sup> Even so, it is not as clear whether the growth in premature labor is secondary to the underlying pathologic condition or because of the surgical technique itself. This is most appropriately demonstrated in the case of appendicitis, where damage of the appendix is connected with at least 4 times higher risk of preterm labor than non-perforated appendicitis.<sup>6-9</sup> Fever and pyrogen might induce uterine contractions. Ahlgren confirmed that elevated temperature amplified the motility of human uterine muscle *in vitro*.<sup>10</sup> Thus, it is more than probable that the inflammation and infectious progressions that require surgical intervention cause premature contractions and increase the risk of preterm deliveries and pregnancy losses rather than surgery itself. In this study, incidence of post-dated pregnancies was found more in age group of 26-30 years. Beischer in his study indicated that, majority of post-dated patients fitted to the age group of 25-30 years, while Bancroft found that most of the patients belonged to 21-30 years.<sup>11,12</sup> Reddy U.M. et al found in their study, that women

whom are of advanced maternal age are at higher risk of still-birth throughout gestation, the highest risk period is 37 to 41 weeks.<sup>13</sup> Manner of delivery was not significantly linked with post-dated pregnancy compared to term pregnancy. Similar findings were also detected in a study conducted by Katz et al who established non-aggressive approach to the management of post-date pregnancies concerning 156 patients who had reached 294 days of amenorrhea and had a Bishop's score of 4 or less.<sup>14</sup>

## CONCLUSION

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

## REFERENCES

1. Fernando Arias. Practical guide to high risk pregnancy and delivery 3 Edition; India Harcourt private limited; 2008:255-70.
2. Ratnam, SSK Bhasker Rao, S Arulkumaran. Obstetrics and Gynaecology for Post-Graduates. Orient Lengmen Ltd, India, 1994; Vol 2: 90-5.
3. Rahim Ayesha. Dissertation on Diagnosis, Management and Outcome of Prolonged Pregnancy. A Study of 50 Cases in Bangobandhu Sheikh Mujib Medical University Hospital in 2000.
4. Levine W, Diamond B. Surgical procedures during pregnancy. Am J Obstet Gynecol. 1961; 81: 1046–52.
5. Smith BE. Fetal prognosis after anesthesia during gestation. Anesth Analg. 1963; 42: 521–26. [PubMed] [Google Scholar]
6. Babaknia A, Parsa H, Woodruff JD. Appendicitis during pregnancy. Obstet Gynecol. 1977; 50: 40–4. [PubMed] [Google Scholar]
7. Bronstein E. Acute appendicitis in pregnancy. Am J Obstet Gynecol. 1961; 86: 514. [PubMed] [Google Scholar]
8. Saunders P, Milton PJD. Laparotomy during pregnancy: an assessment of diagnostic accuracy and fetal wastage. Br Med J. 1973; 3: 165–67. [PMC free article] [PubMed] [Google Scholar]
9. Shnider SM, Webster GM. Maternal and fetal hazards of surgery during pregnancy. Am J Obstet Gynecol. 1965; 92: 891–900. [PubMed] [Google Scholar]
10. Ahlgren M. The influence of temperature on the motility of the human uterus in vitro. Acta Obstet Gynecol Scand. 1959; 38: 243. [PubMed] [Google Scholar]
11. Beischer NA, Evans JH, Townsend L. Studies in prolonged pregnancy. I: Incidence of prolonged pregnancy. Am J Obstet Gynecol. 1969; 103: 476.
12. Bancroft-Livingston G, Neill DW. Studies in prolonged pregnancy, Cord blood oxygen levels at delivery. J Obstet Gynaecol. 1957; 64: 498-503.
13. Reddy UM, KO CW, Willinger M. Maternal age and risk of stillbirth throughout pregnancy in the United States. Am J Obstet Gynecol. 2006; 195(3): 764-70.
14. Fernando Arias. Practical guide to high risk pregnancy and delivery 3 Edition; India Harcourt private limited; 2008:255-70.

**Source of Support:** Nil.

**Conflict of Interest:** None Declared.

**Copyright:** © the author(s) and publisher. IJMRP is an official publication of Ibn Sina Academy of Medieval Medicine & Sciences, registered in 2001 under Indian Trusts Act, 1882.

This is an open access article distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Cite this article as:** Md Mujibur Rahman, Mosammat Ferdousi Akhter, Md Mahamudur Rahman. A Clinical Study of Post-dated Pregnancy among Government and Private Hospital Patients in Patuakhali. Int J Med Res Prof. 2019 Jan; 5(1):312-16. DOI:10.21276/ijmrp.2019.5.1.070