

## Maternal and early neonatal outcome among the elderly pregnant women delivered in a tertiary care hospital

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### Abstract

**Background:** Elderly primigravida is defined as women thirty five years of age or above who is pregnant for the first time. The advancement in the artificial reproductive technology have played an important part in delaying the pregnancy. Maternal age is no longer only important factor in women wishing for conception. Nevertheless, the increased fetomaternal complication and consideration as a high risk leading to early intervention among these age group is of concern. Many women who wish to get pregnant on and after the age of 35 years are not fully aware of age-related decrease of fertility rate in female and the risk associated with this. **Methods:** This was institution based, observational descriptive study. Study was conducted at Bankura Sammilani Medical College & Hospital from May 2019 to October 2020 including 106 elderly pregnant women. Thorough history taking and clinical examination was done. Template was generated in MS excel sheet and analysis was done on SPSS software. **Results:** Among 106 elderly pregnant women 83 (78.30%) were 35 – 37 yrs. of age group. Cause of delay in pregnancy of 42 (39.62%) was unknown. Whereas only 3 (2.83%) mothers' cause of delay in pregnancy was Infertility. Mean value of gestational age of participants was 37.78. Mode of delivery of 55 (51.89%) was normal. Most of the new – born 101 (92.66%) have born lively whereas 8 (7.34%) new – born were stillborn. Most of the new – born i.e. 45(41.28%) out of 106 were LBW whereas only 5 (4.59%) new – born were IUGR. **Conclusions:** The elderly mothers with age more than 35 have increased risk during pregnancy and perinatal period. The role of the married couple and family is very important who should be discouraged for late marriage and late pregnancy.

**Keywords:** Elderly pregnant women, maternal and neonatal outcome,

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### Introduction

Elderly pregnant women are those groups of women becoming pregnant at the age of 35 years or more. This is known as an advanced maternal age pregnancy. In the medical world, it's also sometimes known as a "geriatric pregnancy." Today, however, for obvious reasons, doctors don't use the term geriatric pregnancy any more.

In obstetric practice, maternal age is an important determinant of the outcome of pregnancy. Increasing maternal age specially women aged 35 years or more leads to many complications during pregnancy, Labour and also for the baby[1]. A study done in 29 countries (Africa, Asia, Middle East, and Latin America) revealed that the magnitude of pregnant women with advanced maternal age was 12.3%[2].

A previous study conducted in the united states of America showed that the average age of women at first birth has consistently increased over the last four decades, with the birth rate for women aged 40-44 more than doubling from 1990 to 2012[3]. A retrospective comparative study done in a South Africa tertiary hospital revealed that the prevalence of advanced maternal age was 17.5%[4].

These pregnancies are called high risk pregnancy and require special attention and mandatory hospital delivery. Advanced maternal age is associated with various economic, social and health complications to the mother and to the foetus or neonate as well[2,5]. Conceptions after age 35 currently comprise approximately 15 percent of pregnancies in the united states (Martin, 2012). After the age of 35 years, the risks for obstetric complications and for perinatal morbidity and mortality rise (Cunningham, 1995; Waldenstrom, 2015). The older women who has a chronic illness or who is in poor physical condition usually has readily apparent risks. For the physically fit women without medical problems, however, the risks are much lower than previously reported[6]. Overall, the maternal mortality rate is higher in women aged 35 aged older. Compared with women in their 20s, women aged 35 to 39 are 2.5 times more likely and women aged 40 or older are 5.3 times more likely to suffer pregnancy related mortality (Geller, 2006)[7]. Creanga and coworkers (2015) analyzed pregnancy-related deaths in the United States poor 2006 through 2010[8]. Although women older than 35 years contributed less than 15 percent of all live births, they constituted 27 percent of maternal deaths[9]. There is a greater predisposition to in fertility, spontaneous abortion, congenital anomaly, ectopic pregnancy due to increased maternal age[9,10]. Pregnancy after age 35 years brings a higher risk of complications both for the mother and the delivery outcome, are considered to be high risk obstetric patients[11]. They are more prone to developing complications in pregnancy such as miscarriages, hypertensive disorders in pregnancy, gestational diabetes, 4 malpresentation; pre-term labour and antepartum haemorrhage[12]. Caesarean section and instrumental vaginal delivery[13].

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Incidence of prolonged labour, breech and multiple pregnancy were also found to be increased[14].

There is increasing rate of caesarean section in elderly gravidae because of increasing medical & obstetrical complication with advancing age. Rate of caesarean section varies from 22% to 54.6% in different studies[9,15]. A high rate of instrumental delivery is also noted[16,17].

These elderly pregnancies also affect the fetus or neonate as well which results in neonatal complications, such as low Apgar score, NICU admission, pre-term delivery, low birth weight, birth defects, chromosomal abnormalities and perinatal death[2,4,5,18,19]. Overall perinatal morbidity and mortality is shown to be increased in elderly women[14].

Fertility in women also starts to decline in these elderly women aged more than 35 years. The probability of achieving pregnancy in a single menstrual cycle, fecundability, is decreased in these age groups[20].

So, now a days there is a definite increase in the number of women bearing children in their older age and pregnancy in women with advanced age is considered as high risk. The management of these elderly mothers requires a balance of decision by the obstetrician regarding the best mode of delivery at an optimum gestation with least hazards to the mother and foetus. There is death of study showing maternal and early neonatal outcome among the elderly women in this remote South-Western part of West Bengal. This observational follow up study will help to anticipate possible risks of mother and foetus in advanced and of pregnancy and help to formulate strategy for preventive as well as the therapeutic interventions accordingly.

### Objectives

The objective of the study is

1. To find out the maternal morbidity and mortality among the study subjects.
2. To ascertain the early neonatal morbidity and mortality among the newborns.
3. To assess the factors influencing the maternal and early neonatal outcomes.

### Method and Materials

- **Study Design:** Observational descriptive study.
- **Study setting and timeline:** Bankura Sammilani Medical College & Hospital from May 2019 to October 2020.
- **Place of study:** Antenatal ward, Labour room, postnatal ward, Gynae OT and SNCU of BSMCH.
- **Study Population:** All the elderly pregnant women of aged 35 years or more getting admission in the antenatal ward of BSMCH during my study period.
- **Sample Size & Sampling design:** Sample Size (SS) for the proposed was calculated based on the formula used for incidence study. It is  $N = (Z/E)^2$ , where  $Z=1.96$  (two tailed) at 95% confidence interval,  $E$ =Error around the reported incidence. Accordingly, SS for the proposed study was  $N =$

$(1.96/0.2)^2$  assuming 20% error. So,  $N=96$  and considering 10% dropout the revised SS was  $96+10\%$  of  $96 \approx 106$ .

- **Sampling Design:** Data collection for the proposed study was done for a period of 1 year i.e. 52 weeks. As per plan 2 days in each week by simple random sampling was allotted for data collection.
- **Inclusion criteria:** All pregnant mothers aged 35 years or more admitted in the antenatal ward of BSMCH irrespective of their gestational period.
- **Exclusion criteria:** Mothers confined outside and admitted through Emergency room, who is unwilling to participate.
- **Study Variables :**
  - **Input variables-**Age, parity, literacy, occupation, socio-economic status, addiction, ante-natal care received or not with number of visit, duration of gestation, bad obstetric history.
  - **Outcome variables-**Single/multiple birth, Birth weight, mode of delivery, other outcomes like intranatal as well as post-natal complication in relation to the mother & newborn; admission in SNCU; length of hospital stay; and final outcome
- **Data collection and Interpretation:** Relevant data was collected from the subjects who was taken as samples for the study as per the inclusion criteria for a period of 18 months. Written informed consent was taken from all patients enrolled in the study. The required information was collected via interview, clinical examination and scrutinizing relevant
- **Statistical analysis:** The data was compiled and codified in Micro Soft Excel spread sheet. Analysis was done by calculating different parameter e.g. mean, median, standard deviation (SD) for continuous variable and proportion, interquartile range for categorical variable. Data display was done by the help of tables and charts. Relationship between independent and dependent variables was done by using various inferential statistical tests like independent t test, ANOVA test, Mann-Whitney U test, Pearson and Spearman co-relation tests for continuous variables and 2-test, Fischer test, Odds ratio (OR) with its 95% confidence 31 interval for categorical variables. Multivariate analysis e.g. multiple linear/logistic regression was adopted for exploring inter-relationship of the variables further. P value of  $<0.05$  at 5% level of precision was considered significant. For the purpose of analysis-software packages like SPSS was utilized.
- **Ethical clearance:** The study will be conducted only after obtaining written approval from the Institutional Ethics Committee. Written informed consent will be taken from every study patient or their logical representative

### Results

This observational descriptive study was conducted in Bankura Sammilani Medical College & Hospital from May 2019 to October 2020. During the period 106 Elderly primigravida was enrolled to study maternal and early neonatal outcome among the elderly pregnant women based on inclusion criteria.

### Section A: Findings related to background information of Pregnant mother

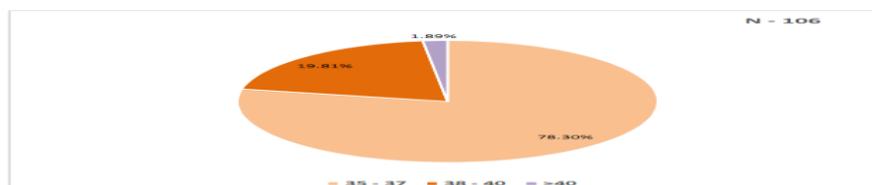


Fig. 1: Distribution of participants according to Age of pregnant mother.

Fig. 1 depicted that most of the pregnant mother i.e. 83 (78.30%) were 35 – 37 yrs. of age group whereas only 2 (1.89%) were > 40 yrs. of age group.

**Table – 1: Frequency and Percentages distribution of Participants in terms of Religion, Residency, educational status, ANC status and Per capita per month income. (n=106)**

Sl. No.	Participant's Characteristics	Frequency	Percentages (%)
1.	Religion	84	79.25
	● Hindu	22	20.75
	● Muslim		
2.	Residence	85	80.2
	● Rural	21	19.8
	● Urban		
3.	Educational Status	5	4.72
	● Illiterate	4	3.77
	● Primary	3	2.84
	● V – VIII	64	60.38
	● Secondary	23	21.69
	● H. S.	7	6.60
	● Graduate		
4.	ANC status	90	84.91
	● Booked	16	15.09
	● Un booked		
5.	Per capita per month income of pregnant mother. (According to B.J. Prasad Scale)		
	● 1050 & below	32	30.19
	● 1051 – 2101	27	25.47
	● 2102 – 3503	39	36.76
	● 3504 – 7007	3	2.83
	● 7008 & above	5	4.72

Table – 1 depicted that most of the participant i.e. 84 (79.25%) out of 106 were Hindu whereas only 22 (20.75%) participants were Muslim. This table also revealed that maximum participants 85 (80.2%) were belongs to Rural Area whereas only 21 (19.8%) were belongs to urban area. This table also depicted that most of the participants i.e. 64 (60.38%) have passed Secondary class. Whereas only 3 (2.84%) mothers have passed up to V – VIII class. Table 1 also showed that most of the mothers 90 (84.91%) have booked for ANC whereas only 16 (15.09%) mothers have not booked for ANC. Most of the mother i.e. 39 (36.79%) whose family's per capita per month income were 2102 – 3503 whereas only 3 (2.83%) mothers' family's per capita per month income was 3504 – 7007 (According to B.J. Prasad Scale).

**Table 2: Distribution of participants according to causes of delay in pregnancy, Nutritional Status (BMI) (n=106)**

Parameters	Frequency	Percentages (%)
<b>Causes of delay in pregnancy</b>		
Un known cause	42	39.62
Unawareness	21	19.82
Preference for Male Child	23	21.69
Late marriage	17	16.04
Infertility	3	2.83
<b>Nutritional Status (BMI)</b>		
Under Weight (<18.5kg./m <sup>2</sup> )	2	1.89
Normal Weight (18.5 - 25 kg./m <sup>2</sup> )	77	72.64
Over Weight (>25 - 30kg./m <sup>2</sup> )	27	26.42

Table 2 depicted that most of the mothers' 42 (39.62%) cause of delay in pregnancy was unknown. Whereas only 3 (2.83%) mothers' cause of delay in pregnancy was Infertility. Most of the mothers' 77 (72.64%) B.M.I. was within Normal limit. Whereas only 2 (1.89%) mother was Under weight.

**Section B: Findings related to maternal morbidity and mortality****Table – 3: Distribution of Gestational Age of Participants in terms of Mean and Standard Deviation (SD). (n=106)**

Variables	Mean	SD
Gestational Age	37.78	2.41

Data given in table 3 depicted that mean value of Gestational age of participants was 37.78 and Standard Deviation was  $\pm 2.41$ .

**Table – 4: Distribution of participants according to Gestational age, Parity and Gravida. (n=106)**

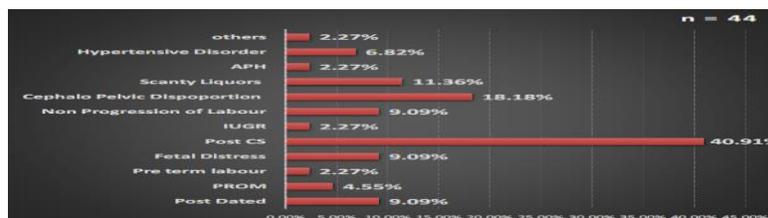
Parameters	Frequency	Percentages (%)
<b>Gestational age</b>		
31 wks. - 34 wks	12	11.32
34 wks. 1 day - 38 wks	46	43.39
38 wks. 1 day - 42 wks	48	45.28
<b>Parity</b>		
P0+0	24	22.64
P1+0	30	28.30
P0+1	7	6.60
P2+0	20	18.87
P1+1	5	4.72
P1+2	4	3.77
P3+0	10	9.43
P4+0	3	2.83
P5+0	2	1.87
P4+1	1	0.94
<b>Gravida</b>		
G1	24	22.64
G2	37	34.91
G3	25	23.58
G4	14	13.21
G5	3	2.83
G6	3	2.83

Table 4 depicted that most of the participants 48 (45.28%) gestational age was within 38wks 1 day to 42 wks. Whereas only 12 (11.32%) participants gestational age was 31 wks to 34 wks. most of the mothers' 30 (28.30%) parity was P 1+0 whereas only 1(0.94%) mothers' parity was P 4+1. Most of the mother, 37 (34.91%) was 2nd gravida whereas only 3(2.83%) mother were 5th gravida as well as 6th gravida

**Table 5 : Distribution of participants according to Mode of Delivery, Associated Medical Complication, Post-Partum Complication (n=106)**

Parameters	Frequency	Percentages (%)
<b>Mode of Delivery</b>		
Normal Delivery	55	51.89
LUCS	44	41.51
Vaginal Delivery with Twin	1	0.94
Breech Delivery	5	4.72
Emergency Laparotomy	1	0.94
<b>Associated Medical Complication</b>		
PIH	16	15.09
PRE ECLAMPSIA	3	2.83
ECLAMPSIA	1	0.94
GDM	1	0.94
ANAEMIA	6	5.66
OTHERS	1	0.94
NOTHING SIGNIFICANT	78	73.58
<b>Post-Partum Complication</b>		
PPH	8	7.55
Retained Placenta	1	0.94
Nil	97	91.51

Table 5 depicted that most of the mothers' i.e. 55 (51.89%) mode of delivery was normal whereas only 1 (0.94%) mothers' mode of delivery was vaginal delivery with twin. most of the pregnant mother i.e. 78 (73.58%) don't have any associated medical complication whereas only 1 (0.94%) mother has suffered from eclampsia, 1 (0.94%) mother has suffered from GDM and 1 (0.94%) has suffered from other reason of medical complication. Most of the mother 97 (91.51%) didn't have any problem. Whereas only 1 (0.94%) mother have retained placenta



**Fig. 2: Distribution of pregnant mother according to Indication of C – Section.**

(\*Data are not mutually exclusive and exhaustive)

Fig. 2 showed that most of the participants' 18 (40.91%) indication of C – section was Post CS whereas only 1 (2.27%) participants' indications of C – section was APH, IUGR, Preterm labour and others.

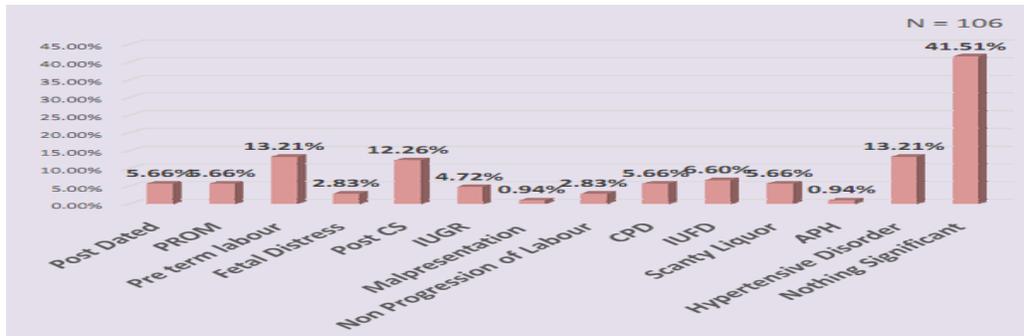


Fig. 3: Distribution of pregnant mother according to Associated Obstetrical Complication. (\*Data are not mutually exclusive and exhaustive)

Fig. 3 showed that most of the mother 44 (41.51%), didn't have any significant problem whereas only 1 (0.94%) mother have malpresentation obstetrical complication and another 1 (0.94%) mother have suffered from APH.

**Section C: Findings related to Perinatal Mortality and Morbidity.**

**Table 6 : Distribution of neonates according to condition at after birth, Birth Weight, Admission of SNCU, Discharge from SNCU**

Parameters	Frequency	Percentages (%)
<b>Condition at after birth (n=106)</b>		
Still Birth	8	7.34
Live Birth	98	92.66
<b>Birth Weight (n=106)</b>		
>3.5 kg.	3	2.75
>2.5 - 3.5 kg.	56	53.21
1.5 - 2.5 kg.	42	39.45
<1.5 kg.	5	4.59
<b>Admission of SNCU (n=99)</b>		
Admitted in SNCU	26	26.26
Not Admitted in SNCU	73	73.74
<b>Discharge from SNCU (n=26)</b>		
Death	9	34.62
Favourable Condition	17	65.38

Table 6 depicted that most of the new – born 98 (92.66%) have born lively whereas 8 (7.34%) new – born were stillborn. most of the new – born i.e. 56 (53.21%) weight was within >2.5 – 3.5 kg. whereas only 3 (2.75%) number of new – borns' birth weight was >3.5 kg. Most of the new – born i.e. 73 (73.74%) were no admitted in the SNCU whereas only 26 (26.26%) number of new – born were admitted at SNCU after birth. Most of the new – born i.e. 17 (65.38%) were discharged from SNCU in favourable condition whereas only 9 (34.62%) number of new – born were death at SNCU.

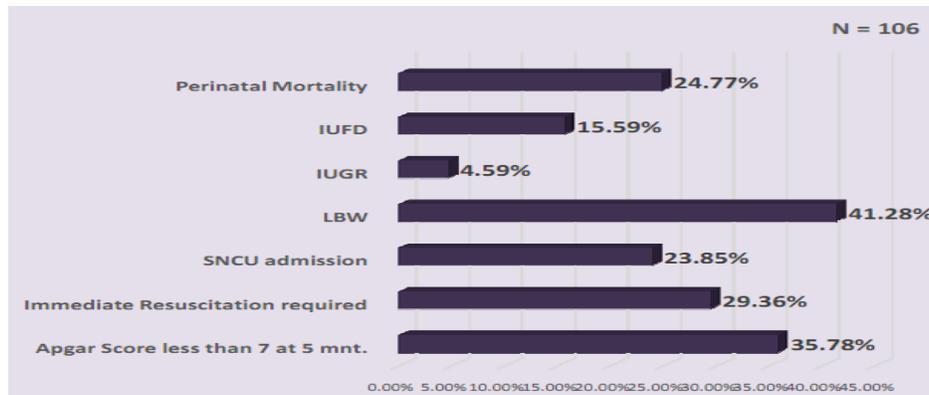


Fig. 4: Distribution of New-born according to Neonatal Outcome

Fig. 4 depicted that, most of the new – born i.e. 45(41.28%) out of 106 were LBW whereas only 5 (4.59%) new – born were IUGR.

**Discussion**

This study was conducted in Bankura Sammilani Medical College and Hospital among 106 elderly pregnant women who were selected from Bankura Sammilani Medical College & Hospital after applying inclusion and exclusion criteria and after that data was collected. The data was entered in an excel sheet and the results were written in a tabulated form and then the results of this study was compared with

the previous studies results and statistical analysis was done which has found to be significant.

**In this study** most of the pregnant mother i.e. 83 (78.30%) were 35 – 37 yrs. of age group whereas only 2 (1.89%) were > 40 yrs. of age group. Most of the participant i.e. 84 (79.25%) out of 106 were Hindu whereas only 22 (20.75%) participants were Muslim. Maximum participants 85 (80.2%) were belongs to Rural Area whereas only 21

(19.8%) were belongs to urban area. Most of the participants i.e. 64 (60.38%) have passed Secondary class. Whereas only 3 (2.84%) mothers have passed up to V – VIII class. Most of the mothers 90 (84.91%) have booked for ANC whereas only 16 (15.09%) mothers have not booked for ANC. 39 (36.79%) mother whose family's per capita per month income were 2102 – 3503 whereas only 3 (2.83%) mothers' family's per capita per month income was 3504 – 7007 (According to B.J. Prasad Scale). 42 (39.62%) mothers' cause of delay in pregnancy was unknown. Whereas only 3 (2.83%) mothers' cause of delay in pregnancy was Infertility.

According to study of Rajput N., Paldiya D. and Verma Y.S.[21]. It was observed that Majority 89.93% patient were from age group of 35 year to 39 years. Only 6 patients (2.08%) were found above the age of 45 year. Maximum patient (92.91%) belong to lower Socio -economic status. Only 1.7% patient were from upper socio -economic class, 5.0% cases belong to upper middle and 55.55% belong to lower middle class. Education status analysis shows that 30.55% patient were uneducated, 19.79% were educated up to primary, 46.52% were educated up to Middle, 3.81% were educated up to High school. 01.44% were educated up to Higher secondary. Almost two third of the patients (65.97%) were from urban areas and 34.03% were from rural areas. Majority of the cases were unbooked (82.98) only 17.02 % cases were booked for antenatal care. Observation of Causes of Delay in pregnancy reveals that preference for male child (23.95%) and lack of awareness (21.52%) were two major reasons for delaying pregnancy and delivery till late age. According to study of Galikwad S.S., Chaudhuri K.R. and Bapat S.S.<sup>22</sup> 47% of patients were in 33 - 35 yrs age group and 42% were in group 36- 40 yrs, maximum age of the patient was 46yrs. Preference for male child was observed in 8.67% of patients.

In this study most of the participants 48 (45.28%) gestational age was within 38 wks. 1 day to 42 wks. Whereas only 12 (11.32%) participants gestational age was 31 wks to 34 wks. Mean value of Gestational age of participants was 37.78 and Standard Deviation was  $\pm 2.41$  Most of the mothers' 30 (28.30%) parity was P 1+0 whereas only 1 (0.94%) mothers' parity was P4+1 37 (34.91%) mother was 2nd gravida whereas only 3 (2.83%) mothers were 5<sup>th</sup> gravida as well as 6<sup>th</sup> gravida. 55 (51.89%) mothers' mode of delivery was normal whereas only 1 (0.94%) mothers' mode of delivery was vaginal delivery with twin. 18 (40.91%) mothers' indication of C – section was Post CS whereas only 1 (2.27%) participants' indications of C – section was APH, IUGR, Preterm labour and others. Most of the pregnant mother i.e. 78 (73.58%) don't have any associated medical complication whereas only 1 (0.94%) mother has suffered from eclampsia, 1 (0.94%) mother has suffered from GDM and 1 (0.94%) has suffered from other reason of medical complication. Most of the mother 44 (41.51%), didn't have any significant problem whereas only 1 (0.94%) mother have malpresentation obstetrical complication and another 1 (0.94%) mother have suffered from APH. 97 (91.51%) mothers didn't have any problem. Whereas only 1 (0.94%) mother have retained placenta. According to study of Rajput N., Paldiya D. and Verma Y.S.[21] analysis of parity status shows that 71.87% patient were Multi gravida and 22.22% are Grand multi gravid only 5.9% patient were primigravida. Analysis of pregnancy outcome reveals that half (53.2%) of the patients delivered vaginally, 35.41% underwent LUCS, 10.06% underwent suction and Evacuation for abortion, Laparotomy were performed in 1.38% forectopic pregnancy. It was observed that 53.81% patient had uneventful outcome. Remaining patient had complication including abortion (9.72%), Ectopic Pregnancy (1.38%), Anemia (4.86%), Pregnancy induced Hypertension (2.77%), Eclampsia (2.77%), Preterm Delivery (96.25%), Oligohydramios (6.25%), Malpresentation (4.16%), Twin Delivery (1.04%), Premature rupture of membrane (5.90%), Antepartum haemorrhage (6.25%) and Postpartum hemorrhage (9%) According to study of Dixit P.V. and Mehendale M.A.[23] in the study group, number of primigravida was 15 (25%) and Multigravida patients were 45 (75%). Among 18 patients there was preterm delivery in 10 cases and 8 patients delivered at term. In patients of

study group spontaneous onset of labour was seen in 50% cases, induction of labour was done in 26.7 % patients and LSCS was done in 23.3%. Two eclampsia patients presented at 28 and 34 weeks of gestation, delivered vaginally had IUFD. Among patients in study group 16.67% patients had diabetes among which 6.67% cases were pregestational diabetes mellitus and 10% were Gestational diabetes mellitus, Preterm birth was more common with elderly gravida and the most common cause for preterm deliveries was pre-eclampsia.

According to study of Ramchandran N., Sethuraman D., Nachimu thu V. and Natrajan T.[24] The mean gestational age at birth was 37.6 weeks for the study group. 61.9% patients in the study group had Cesarean section. 26.5% underwent vaginal delivery. The incidence of pre -gestational diabetes, gestational diabetes and preeclampsia was found to be higher in the study group. There were 2 (4.76%) of patients with abruption in the study group secondary to severe preeclampsia. This study did not find any increased incidence of malpresentation in elderly women. According to study of Paliwal P., Desai R. and Jodha BS. in about 100 cases studied, 66 needed inductions of labour, 62 delivered by Caesarean section, 58 had low birth weight babies while 40 babies were admitted in ICU. The most common medical complication associated in elderly gravida is Diabetes followed by Anaemia, Essential or chronic hypertension, hypothyroidism etc. along with various fetal complication.

According to study of Galikwad S.S., Chaudhuri K.R. and Bapat S.S.[22] 50.8% of cases delivered full term (>37 weeks) and rest were preterm deliveries. 12.2% of patients delivered very preterm (<34 weeks). Out of 14% of patients who had delivered vaginally almost all had required induction of labour (10.5%). In our study preterm delivery was as high as 49%. Operative vaginal delivery was required in only 1 patient. In this study 101 (92.66%) new - born have born lively whereas 8 (7.34%) new - born were stillborn. 58 (53.21%) new - borns' weight was within >2.5 – 3.5 kg. whereas only 3 (2.75%) number of new - borns' birth weight was >3.5 kg. Most of the new - born i.e. 73 (73.74%) were not admitted in the SNCU whereas only 26 (26.26%) number of new - born were admitted at SNCU after birth. Most of the new - born i.e. 17 (65.38%) were discharged from SNCU in favourable condition whereas only 9 (34.62%) number of new - born were death at SNCU. Most of the new - born i.e. 45 (41.28%) out of 109 were LBW whereas only 5 (4.59%) new - born were IUGR. According to study of Rajput N., Paldiya D. and Verma Y.S.[21] Perinatal outcome was uneventful in 75.34% of patients. Congenital anomaly was seen in 2.8% of babies, 13.19% of neonates were Low Birth Weight baby, 6.94% required NICU admissions, Intrauterine Death was seen in 2.77%, and Intra Uterine Growth Retardation were 3.81%. According to study of Ramchandran N., Sethuraman D., Nachimuthu V. and Natrajan T incidence of low APGAR score (<7 at 5 minutes) was high (10.8%) in the study group. None of the babies were found to have congenital anomalies.

According to study of Dixit P.V. and Mehendale M.A.[23] Most of the babies had poor Apgar score (<7) and 11 babies had NICU admission (61%). Among NICU admissions 5 cases were neonatal deaths. It was found that IUGR was very common in elderly gravid in comparison to control group patients (8.3% cases in study group and 0.0% in control group). According to study of Galikwad S.S., Chaudhuri K.R. and Bapat S.S.[22] majority of babies were born with weight between 2.5 -3Kg (28.98%), 20.28% of babies were of 1.5-2Kg weight. Maximum weight of the baby born was 3.4Kg. Special care baby unit (NICU) admissions were required for majority of babies (55.8%). Very Preterm delivery and low birth weight was the cause for neonatal death. We found 8.57% of cases of neonatal deaths.

#### Conclusion and Recommendations

As the medical and obstetrical complications increase with maternal age and also the fertility is greatly reduced, elderly pregnant women remain a big challenge for the obstetrician. Every pregnancy above the maternal age of 35 years should be considered as valuable pregnancy and the healthcare providers must pay attention in order to meet the needs of older pregnant women. As older pregnant women

have always a desire for knowledge, in formation given by healthcare provider is very much important for older pregnant women. So, health care professionals, should be sensitive, communicative and who can allow and make available sufficient time for the older pregnant women, as well as being up-to-date and well informed of all the risks related to elderly pregnant mothers. In our study analysing the data. Some of these data match with international studies but some does not match because different parameters of the elderly mothers of developed countries with us, particularly with limited resources and manpower in such a peripheral tertiary care centre where the patient load is very high. So, more studies involving larger samples are needed to define the actual risk during pregnancy in elderly mothers.

#### Acknowledgements

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