## **Original Research Paper**

Gynaecology

# "Pregnancy Outcome in Elderly Gravida"

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## **Background**

Elderly pregnancy leads to many complications during pregnancy, labour and also for the baby. Delayed pregnancy can also have ectopic pregnancy and also cause complication during pregnancy and health risks in the child. Older the women, higher the risk and abnormalities in the child leading to Down's syndrome, premature baby, low birth weight baby.

#### Aims and objectives

To determine pregnancy outcome between women aged 40 years & above.

#### **Material and Methods**

Total 100 pregnant women of age 40 or above having gestational age in between 28-42 weeks attending labour ward & in patient department of obstetrics & gynaecology Ummaid hospital, attached Hospital of S. N. Medical College, Jodhpur were enrolled in study.

#### Result

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.

#### Conclusion

Maternal complications were more during pregnancy in advanced maternal age requiring increased need for induction of labour & caesarean section. There was increase in perinatal mortality and morbidity in advance maternal age.

## **KEYWORDS**

Pregnancy outcome, Complication, Advanced maternal age, Caesarean

#### INTRODUCTION

Once a woman ages, her chances of conceiving automatically decreases, as most fertility experts agree that fertility actually decreases with age as the age of fertility is defined and vary according to individual. Delayed pregnancy is found in present scenario because women are involved in their career and various other problems, creating lot of risks. Elderly Gravida or late pregnancy occurs due to late marriages, women in education & career, Infertility, Lack of knowledge, Lack of interest in family planning methods or Eagerness for male child.

Delayed pregnancy is associated with the risk of miscarriage, which is believed to increase with age; it is 15% at the age of 35 years while it is 30% at above 40 years. <sup>1</sup>Studies have also showed that ectopic pregnancy is also a complication of delayed pregnancy. Advanced maternal age beyond 35 years is considered to have more complicated pregnancy outcomes as compared younger gravida. Many studies have documented the more impact of complicated pregnancy in form of preterm delivery, 2 low birth weight, <sup>3</sup> perinatal mortality and morbidity, <sup>4</sup> and increased prevalence of medical disorders like diabetes, hypertension, placenta previa etc. 5,6 Delayed pregnancy leads to increased risk of complications in pregnancy along with labour which include antepartum and postpartum haemorrhage before and after child birth, malpresentation resulting in difficult labour or forceps delivery or caesarean section delivery, delay in expulsion of placenta, low birth weight babies etc. <sup>7</sup>Global statistics show that there are now more mothers in advancing age of 30-34 years than in the 25-29 age group. Additionally there is almost 50% increase from 10 years ago in the number of women over 40 years who are now having babies. In India the number of mothers aged above 35 years is increasing. 8

## MATERIAL AND METHODS

Total 100 pregnant women of age 40 or above having gestational

age in between 28-42 weeks attending labour ward & in patient department of obstetrics & gynaecology Ummaid hospital, attached Hospital of S. N. Medical College, Jodhpur were enrolled in study.

#### Inclusion criteria:

- Married women who are in the reproductive age group irrespective of parity
- Married women who are present at the time of data collection.
- Married women who are willing to participate in the study.

#### **Exclusion criteria:**

- Married women who have underwent permanent sterilization.
- Married women who have attained menopause.

#### **RESULT**

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.

Table 1: Status of delivery of Elderly Gravida

Status of Delivery	Number (Percent)
Pregnancy needed inductions of labour	66
Pregnancy delivered by Caesarean section	62
Pregnancy having low birth weight babies	58
Babies admitted in ICU	40

Table 2: Maternal medical complications associated in Elderly Gravida

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Maternal Medical Complication	Number (Percent)
Diabetes	13
Essential / Chronic Hypertension	9

Cardiac Disease	3
Hepatitis/Jaundice	1
Hypothyroidism	4
Tuberculosis	5
Anemia (Hb<10gm%)	11
Bronchial asthma	1

Table 3: Fetal Complications in Elderly Gravida

Fetal Complications	Number (Percent)
Breach Presentation	16
Oblique Presentation	1
Fetal distress	3
Oligohydramnios	7

#### DISCUSSION

The rate of caesarean section is higher in elderly gravida mainly due to complications like - maternal medical disorder, obstructed labour, and fetal distress etc. In the present study preterm delivery occurred more in the elderly gravida due to the use of induction of labour and caesarean section.

In a study done by Edge and Laros <sup>9</sup>the rate of preterm delivery was higher in the older women, similar findings is seen in our study even when potential confounder factors for preterm birth like increased parity, malpresentations, placenta previa, diabetes and hypertension are not involved.

Hypertension either chronic hypertension or pregnancy induced hypertension (PIH) was more common in elderly gravida. Similar finding was also reported by Goldman J et al 5 whereas Bobrowski et al <sup>6</sup> reported that three times more rate of preeclampsia in multiparous women > 35 year old is found compared to younger counterpart. Also chronic hypertension is five times more associated in elderly gravida. Many author like Naqvi MM et al, 10 Shivalingam N et al, 11 Achanna S et al, 12 Amarin VN et al 13 and Ziadeh SM et al 14 reported higher incidence of pregnancy induced hypertension (PIH) in patients with advancing age as compared to younger ones. Findings of the present study show the higher incidence of PIH in elderly gravida. Anate M and Akeredolu O 15 have also supported this in their study. The incidence was higher due to patient age of 40 years or more as compared to the most study group having age of 35 years or more.

Incidence of placenta previa and abruption placentae was high in elderly gravida also. The increased risk of gestational diabetes and placenta previa in advnaced maternal age secondary to progressive vascular endothelial damage have been documented in the literature.

Increased risk of operative or instrumental delivery is also found in patient with advancing age. The possible hypothesis is reduced maternal efforts, decrease in estrogen receptors, decreased pelvic compliance and anxiety by mother and obstetrician.  $^{\rm 16,17,18,19}$  Present study shows that induction of labor is commonly used in patients with advancing age due to cervix dystopia is also significantly more common in elderly gravida as concluded by Bachhav AA et al 20 and Bhagat M et al. 21 This present study shows that vertex presentation is not a significant issue in elderly women compared to younger women, where in pregnancy with advancing age other presentations were of more concern that's why breech presentation was found in elderly patients with much more probability than non-elderly like in other studies. Breech presentation was found in 16 while oblique presentation was found in 1 elderly woman. Other authors also reported the similar incidence like Allahabadia G et al,  $^{22}$  Achanna S and Monga D  $^{12}$  and Naqvi MM and Naseem A  $^{10}$  Jahan MK et al  $^{23}$  found increased incidence of malpresentation, was found significantly high in case group (80%) compared to control group (51%).

It was also found that LSCS and assisted instrumental delivery was done in elderly patients compared to vaginal delivery because of more risk to the life of mother and baby. Naqvi MM et al <sup>10</sup> reported that 30.76% of patients with advancing age were delivered by caesarean section as compared to 16.02% in younger age group. Jahan MK et al 23 also observed that the rate of caesarean section was more among the cases with advancing age. Achanna S et al 12 found an increased incidence of breech presentation (6.78% vs. 3.33%) and Caesarean sections (74.6% vs. 10%) among the elderly gravida. In our study the incidence was higher due to patient age of 40 years or more as compared to the most study group having age of 35 years or more.

#### CONCLUSION

Maternal complications were more during pregnancy in advanced maternal age requiring increased need for induction of labour & caesarean section. Therefore advance maternal age is definitely a high risk group with lots of maternal perinatal complications but these problems can be overcome and one can expect a good pregnancy outcome.

#### REFERENCE

- Delayed pregnancy. {Serial online} 2009 Jan : Available from: URL: http://www.seasonsindia.com Berkowitz GS, Skovron ML, PH Lapinski RH et al. Delayed child bearing and the
- outcome of pregnancy. N Engl J Med 1990; 322:659-64
- Lee KS, Ferguson RM, Corpuz M et al. Maternal age and incidence of low birth weight at term: a population study. Am J Obstet Gynecol 1988; 158: 84-9. Fretts RC, Schmittdiel J, McLean FH et al. Increased maternal age and the risk of
- fetal death. N Engl J Med 1995; 333: 953-7. Cleary-Goldman J, Malone FD, Vidaver J et al. Impact of maternal age on obstetric
- outcome. Obstet Gynecol 2005; 105: 983-90.
- Bobrowski RA, Bottoms SF. Underappreciated risks of the elderly multipara. Am J Obstet Gynecol 1995; 172: 1764-70. Gulani KK. Community health nursing, Principles and Practices. Kumar Publishing
- House New Delhi. 2005. p.351
- Older mothers–facts and figures. (Serial online) 2006: Avalilable from :URL: http://www.mothers35plus.co.uk/ Edge VL, Laros RK Pregnancy outcome in nulliparous women aged 35 or older. Am J
- Obstet Gynecol 1993; 168: 1881-5. Nagyi MM, Naseem A. Obstetrical risks in the older primigravida. J Coll Physicians
- Surg Pak 2004; 14(5):278-81.
- Sivalingam N, Avalani C. The elderly primigravida—evaluation of 90 cases. Singapore Med J 1989; 30(5):460-5.

  Achanna S, Monga D. Performance of elderly primigravidae in Kelantan. Med J
- Malaysia 1995; 50(1):37-41 Amarin VN, Akasheh HF. Advanced maternal age and pregnancy outcome. East Mediterr Health J 2001; 7(4-5):646-51
- Ziadeh SM. Maternal and perinatal outcome in nulliparous women aged 35 and
- older. Gynecol Obstet Invest 2002;54(1):6-10 Anate M, Akeredolu O.Pregnancy outcome in elderly primigravidae at University of Ilorin Teaching Hospital, Nigeria. East Afr Med J 1996;73(8):548-51
- Bell JS, Campbell DM, Graham WJ et al. Can obstetric complications explain the high levels of obstetric interventions and maternity service use among older women? A retrospective analysis of routinely collected data. Br J Obstet Gynaecol 2001; 108: 910-8.
- Rosenthal AN, Paterson-Brown S. Is there an incremental rise in the risk of obstetric intervention with increasing maternal age? Br J Obstet Gynaecol 1998; 105: 1064-
- Gordon D, Milberg J, Daling J et al. Advanced maternal age as a risk factor for cesarean delivery. Obstet Gynecol 1991; 77: 493-7. Adashek JA, Peaceman AM, Lopez-Zeno JA et al. Factors contributing to the
- increased cesarean birth rate in older parturient women. Am J Obstet Gynecol 1993: 169: 936-40
- Bachhav AA1, Waikar M. Low amniotic fluid index at term as a predictor of adverse perinatal outcome. J Obstet Gynaecol India 2014; 64(2):120-3
- $Bhagat\,M\,and\,Chawla\,I.\,Correlation\,of\,amniotic\,fluid\,index\,with\,perinatal\,outcome.$ J Obstet Gynaecol India 2014; 64(1):32-5.
- Allahbadia G, Vaidya P, Ambiye VR. Obstetric hazards among elderly primigravidae. J Indian Med Assoc 1994; 92(5):144-6. Jahan MK, Shafiquzzaman M, Nahar K, Rahman M, Sultana N,Rahman MM, et. Al.
- Outcome of pregnancy in women 35 years of age and above. Mymensingh Med J 2009; 18(1):7-12