

# Fetomaternal Outcome of Teenage Pregnancy among Women Attending Antenatal Clinic at Peoples Medical College Hospital Nawabshah

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## ABSTRACT

**Background:** Pregnancy in teenage is a major public health problem throughout the world and is globally recognized as high risk pregnancy, leading to a vicious circle of various physical, social, and medical concerns from which it is very difficult for a girl and her fetus to get scape.

**Aim:** To determine fetomaternal outcome of teenage pregnancy.

**Methodology:** This was a cross sectional study, conducted in the department of Obstetrics & Gynecology Unit-I, Peoples University of Medical & Health Sciences, PUMHS Nawabshah from period of 1st May 2017 to 31st October 2017. The data on singleton teenage ladies > 2 4wh gestation was analyzed. The data retrieved after cross-examining the ladies and also from hospital based maternal health medical record (with demographic information, pregnancy complication & fetomaternal outcome) that was recorded on structured proforma & various maternal problems such as Anemia, Hypertensive disorders U.T.I Preterm labour, Postpartum hemorrhage (PPH), duration of labour, way of child birth and perinatal outcome as low birth weight, still birth.

**Result:** Mean age of patient in this study was 18.5 years average Gestational age at time of delivery was 37 weeks, mostly observed complication were anemia (52%) Pregnancy induced Hypertension (30%) Pre Eclampsia 20% Preterm delivery 29% while 14.5% deliveries ended in still birth and low birth weight was 15% in my study.

**Conclusion:** The teenage pregnancy is associated with increased risk of adverse obstetric outcome, to surmount these difficulties, mothers & child health care services in the country may have special attention.

**Keywords:** Teenage pregnancy, PIH, still birth, preterm Labour, Low Birth Weight, pre-Eclampsia.

## INTRODUCTION

Adolescent mothers exposed to medical social & Economical risk for both mothers and their new born. WHO defines the teenage pregnancy which occurs in girls aged between 10-19 years<sup>1</sup>. One third to one half of the ladies in developing countries become mother before she reaches the age of twenty and they are complicated by related problems, which are the main cause of death in these ladies<sup>2,3</sup>. Teenage pregnancy have been associated with adverse pregnancy outcome specially maternal anemia, hypertensive disorder, placental abnormalities, PPH, UTI, low birth weight, small for gestational age, pre maturity and a high neonatal and post neonatal mortality<sup>4,5</sup>, the babies born in this age group are have a high mortality rate in comparison to those babies born in more than 20 age group<sup>6</sup>.

The world health statistics in 2014 reveal that in 15-19 years old ladies the average worldwide birth rate among 15-19 years old women is 49/1000 women. The country

birth rate ranges from 1-299/1000 women, which is the highest rates in sub-saran Africa<sup>7</sup>. In US in the year 2015, there were 229715 babies born to women aged between 15-19 years for a birth rate of 22.3/1000 women<sup>8</sup>. In Pakistan birth rate per 1000 women was 113 in 1960 which decline to 38 in 2015<sup>9</sup>. Though the great decline, but the percentage of teenage pregnancy seems to be more in our society so I aimed to determine prevalence and fetomaternal outcome among teenage pregnant women attending antenatal clinic PUMHS so that possible efforts should be done to prevent early marriages and its consequences and in hope that this study may influence not only pregnancy rate in adolescent girls but also reinforce the knowledge base and empower health care provider to efficiently expand health services delivery to our population.

## METHODOLOGY

The current cross sectional study was conducted in department of Obstetrics and Gynecology Unit-I PUMHS from 1st May to 31st October 2017 on teenage singleton pregnancy of 24 weeks or above, multiple pregnancies Alcoholics, smokers, Diagnosed cases of major illness pre pregnancy were not included in the study. All the data was collected on structured proforma including demographic particulars, age booking status, gestational age, maternal outcome noted were; anemia, hypertension which is induced by pregnancy, pre-eclampsia, preterm and operative delivery. Perinatal outcome was measured by live birth, low birth weight perinatal death, NICU admission. The data was analyzed using SPSS version 20.

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## RESULTS

During this study period, total 6824 obstetric admissions from which 5620 were delivered among there 334 were teenage pregnancies (5.9%) 59/1000 women, the mean age of women was 18.5 years while mean gestational age was 36 weeks.

Mostly belong to rural areas 61% mostly were UN booked 74.2% (248 out of 334). Most prevalent complication was Anemia 52.3 (175 out of 334) pregnancy induced hypertension 32% (108 out of 334) preterm delivery 29% (98 out of 334) pre-eclampsia 9.7% (66 out of 334) while as for as fetal outcome considered there were 285 (85%) live birth, (14.6%) 49 stillborn, out of life born 14.9% were low birth weight. Regarding mode of delivery 250 (74.8) were delivered vaginally and rest via caesarean section (25.2%) (Mainly due to presumed fetal compromise and cephalopelvic disproportion and obstructed labour

Table % of Fetomaternal outcome in teenage Pregnancy

Maternal outcome	Count	%age
Anemia	175	52.3
PPH	108	32
Pre-Eclampsia	66	19.2
Preterm Delivery	98	29
Still birth	49	14.8
Low birth weight	50	14.99

Patient Variables	%age	No:
<b>Age</b>		
10-14 years	36.5%	122
15-19 years	63.4%	212
<b>Parity PG</b>		
2-3	31.0%	106
Ante natal visit single visit	12%	41
>2	9.8%	33
Unbooked	77.8%	260
<b>Gestational age 24-30 weeks</b>		
31-35	26.3%	88
36-38 weeks	55.08 %	184
>38 weeks	11.9 %	40

## DISCUSSION

Teenage parenthood is a problem with adverse obstetrical and Neonatal outcome being influenced by biological immaturity; un intended pregnancy inadequate perinatal care and poor maternal nutrition and stress. Worldwide 7.3 million girls become pregnant before 18 years. 2.5 million Girls 15 or younger give birth each year every year 3 million girls undergo unsafe abortion.

The prevalence of teenage pregnancy in our study is 5.9% while published literature reported its prevalence between 1.6% to 10.4%<sup>10,11</sup> and is comparable to study<sup>12</sup>. While more than study conducted by Zahiruddin S, Chetandas P et al which reported 2.9%<sup>13</sup>

Mean age of women was 18.5years almost near to study conducted in Hyderabad Sindh i-e 17.35 years<sup>10</sup> & also comparable to another study i.e., 17.9%<sup>14</sup> Booking status in our study was 22% this was quite low in contrast to research conducted by Althabef<sup>15</sup> et al, who reported same as those of adults, while shaikh F, Affan's et al<sup>12</sup>

show 33.3%, little high from our study suggesting lack of social support & awareness of pregnancy complication associated e teenage pregnancy.

The most common maternal complication in our study was Anemia (52.3%). While study<sup>12</sup> shows 34 % of teenage pregnancies were anemia in their study. Much higher from study conducted by Shan N et al whose study shows prevalence of anemia 8%<sup>16</sup>.

There for it is important for teenage girls to receive prenatal care which includes adequate intake of nutrients and vitamins in order to prevent iron or any other kind of nutritional deficiencies

Preterm labour (29%) pregnancy induced hypertension (32%) Pre-Eclampsia (19.2%) while Shaikh F reported Preterm delivery (23.89%) pregnancy induced hypertension (33.3%) and pre-Eclampsia (16.2%)<sup>12</sup>, while study by Naz U reported percentage of preterm labour 11.2%<sup>17</sup>.

Mode of Delivery was mostly vaginal (74.8%) more as compared to study<sup>12</sup>while caesarean section was performed in 25.2% of subject slightly lower than other studies conducted by Tyberg<sup>18</sup> and QaziG<sup>19</sup>.

As perinatal outcome is concerned, still birth was seen in 14.6% & low birth weight 8.14% of subject still birth risk was comparable to study by shaikh F<sup>10</sup> while LBW risk high more high in that study (21.57%) while a study conducted in india show high LBW risk no increased risk of still birth and perinatal death<sup>20</sup>

Teenage pregnancy a significant problem in developed as well as in developing countries with significant obstetrical complication for both mothers and her child.

Early Marriages are quite common in Pakistan hence proper pre pregnancy counseling planned prenatal care and essential newborn care is right of teenage women. With contraception, necessary component of counseling, as to have next child birth in stage of adult hood this study was limited as cross sectional which limit the ability to establish a causal direction between independent and dependent variables.

Further studies can address these limitations and combine quantitative and qualitative research in order to allow in depth understanding of adolescent pregnancies.

## CONCLUSION

This study was done to evaluate outcome and complications related to teenage pregnancy. The study concluded that the common complications were anemia, hypertensive disorder of pregnancy, preterm labour, low birth weight, still birth and operative delivery among teenage pregnancy.

The health care provider must consider the adolescent pregnancy as high risk and the teenagers need to be educated for more number of antenatal visits for screening tests so that various complications be assessed at an earlier time for appropriate management

Education of female child, their families regarding delaying marriages, hence delaying child bearing can intrrupt vicious circle of complications of teenage pregnancy .

There is a dire need of access to contraceptives services to married teenagers for the prevention of teenage pregnancies through promotion of contraceptive use.

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