OUTCOME OF TEENAGE PREGNANCY: A RETROSPECTIVE STUDY

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ABSTRACT: OBJECTIVE: Determination of adverse pregnancy outcome and complications in teenage pregnancy. **MATERIAL AND METHODS:** Total 258 cases were studied from Hospital Records in the OBG dept of Navodaya Medical College, Raichur, which were enrolled during the study period. Out of cases, 43 were teenagers and others 215 were non-teenagers. **RESULTS:** Out of 43 cases, 29 (67.5%) were primigravida, 10(23.25%) were Gravida- 2, 3 (7%) were Gravida-3 and 1(2.25) were Gravida-4. All of these cases had complications like 12 (28%) Low birth weight babies, 10 (24%) had PIH, 6(14%) had CPD 5(12%) had IUD, 4(10%) were Anemic, Fetal distress cases were 3 (8%) and 1 (2.5%) was abortion and anencephaly each. All the 43 cases had worst outcome of pregnancy. 6(14%) delivered prematurely, 5 (11.5%) had macerated stillbirth, 19(44%) of cases had undergone Caesarean-section for which indications were CPD, fetal distress, breech presentation, PROM and previous LSCS history. Incidence of C Section in this study was 44% which is higher as compared to other studies. Reproductive losses in the form of abortions and stillbirth. Perinatal Mortality was 23.5%. **CONCLUSION:** In this study outcome of pregnancy was adverse in most of the teenage pregnancies. It is pointer towards a need to discourage teenage pregnancy and consequently reduce wastage of deliveries, low birth weight through an intensive campaign for proper marriage age of girls.

KEYWORDS: Teenage pregnancy, Adolescent, Stillbirth, Perinatal mortality.

INTRODUCTION: The pregnancy of female which ends below 20 yrs. of age usually refers to unplanned pregnancy which depends on number of societal and personal factors. Young women who become pregnant and have births experience a number of social, economical, emotional and health problems. In addition to the relatively high level of pregnancy complications among young mothers, physiological immaturity, inexperience associated with child care practices influences maternal and infant health. ⁽¹⁾ Pregnancy in adolescence constitutes between 10 and 20 percent of all pregnancies in most developing countries. In India rate ranges from 8 to 14 %^(4, 5) and in some developed countries such as USA., number is constantly rising. These are all a risk pregnancies. Many are undesired, and occur in unmarried adolescents who then resort to legal or illegal abortion, performed under unsatisfactory medical conditions. This leads to serious health and even life-threatening consequences for these women ⁽²⁾. 1 out of every 10 births worldwide is to an adolescent mother. Every year, at least 60,000 adolescents die from problems related to pregnancy and childbirth. ⁽³⁾

According to NFHS-3, 12 percent of women aged 15-19 have become mothers and 4 percent of women aged 15-19 are currently pregnant with their first child. One in six women aged 15-19 have childbirth. ⁽¹⁾ Study conducted at Bengal Hospital showed teenage pregnancy rate more than 14 percent. ⁽⁶⁾ Teenage pregnancy carries extra risk to mother as well as baby reflecting in the form of adverse pregnancy outcome and complications. Body of the teens is still in growing stage, development of the skeleton, pelvic bone occurs after 18 years of age, so she cannot deliver even

average size fetus resulting in increased cesarean section rate.⁽⁷⁾ As the teenage mothers are unaware of regular prenatal care, delays in pregnancy testing and do not disclose to others due to hesitations, they are at higher risk of Anemia, pregnancy induced hypertension, pre-term labor, low birth weight and congenital anomalies etc.

The risk of maternal death is twice as high among teenage girls over 15 than among mothers in their 20s. For girls under 15, the risk is five times greater. Each year, up to 4.4 million girls aged 15 to 19 undergo unsafe abortions.⁽³⁾ In view of this study was conducted to compare the incidences of various complications and pregnancy outcome of teenage mothers.

MATERIALS AND METHODS: This Retrospective Hospital based study was conducted in a department of Obstetrics and gynecology, Navodaya Medical College, Raichur. All the women were in the age group 15-20 years, irrespective of gravidity, parity, single tone pregnancies or previous LSCS who delivered from 1/09/2010 to 30/08/2011 were included in this study. Women with multiple pregnancies and systemic disorders like Hepatic, renal, cardiovascular, skeletal diseases and severe asthma were excluded from the study.

Data regarding complications and outcome of every pregnancy was obtained from Hospital Records and was tabulated in excel spreadsheet and proportions were calculated.

The study was conducted at rural setup where most of the people are illiterate and unaware of their exact date of birth and age; therefore upper age limit is considered beginning of 20yrs with more or less 3 months to 19 yrs.

RESULTS: The total numbers of the pregnant women registered during 1/09/2010 to 30/08/2011 were 258. Out of which, 43 were teenage pregnancies with satisfied inclusion criteria and 215 were non-teenagers. Incidence of teenage pregnancy in this study was 16.7%.

In table 1, out of 43 cases 5(11.5%) were below 18years and 19 (44.25%) were below 19 years and 20 years each. Table 2 shows, of the 43 teenage mother, 29 (67.5%) were primigravida, 10 (23.25%) were gravida 2, 3 (7%) were gravida 3 and 1(2.25%) was gravida 4.

Almost all of Teenage mothers had either single or multiple, above mentioned complications. Out of 43 teenage mothers 10(24%) had preeclampsia, 4 (10%) had Anemia, 12(28%) had LBW, 5(14%) had IUD, 3(8%) had fetal distress and 1 (2.5%) had Abortion and Anencephaly each. Remaining had normal Antenatal period without any antenatal complications (Table 3).

Table.4 shows pregnancy among teenage mothers was not satisfactory as compared to non-teenage mothers. In the second trimester 1(2.5%) had induced abortions, 6(14%) had preterm delivery, 11(25.5%) had full-term normal delivery, 5(11.5%) had macerated still birth and only one case was detected as anencephaly (2.5%). 19(44%) patient had undergone caesarean-section, of the 19 caesarian section 4 were done for CPD, 5 for fetal distress, 2 for breech presentation, 5 for previous LSCS, 2 for PROM and 2 for low birth weight (<2.5kg) babies were 12(28%) and only 31(72%) had birth weight >2.5 kg. This has revealed significant variation in birth weight with respective age of the mother. The mean birth weight in caesarean section patients was 2.67 kgs, with 9 LBW and 13 had appropriate weight.

The conventional belief is that , teenagers are less mature physically and the size of bony pelvis is smaller than adult women. This is supported by report that teenage pelvis is smaller and its growth lags behind statural growth.⁽⁷⁾

The 44% incidence of caesarean-section among our teenage mothers was significantly higher as compared to other studies. The finding of this study indicates teenage mothers are from poor socioeconomic status and are unaware of proper prenatal care, have higher caesarean-section rate but also present with Perinatal complication and show poor obstetric outcome. Reproductive losses in teenage pregnancy occurred in the form of abortions & still births. Perinatal mortality rate was 23.5%, there were macerated still births. There was no maternal mortality.

DISCUSSION: In developing country, like India teenage mothers are at higher risk of maternal anemia, PTB & caesarean-section delivery (8). In our study has proved that Caesarean-section delivery (44%) was maximum, followed by LBW (28%) & PIH (24%). As our hospital set up is in rural area with patients belong to low socioeconomic status, existing poverty, illiteracy and other social customs resulted indirectly an increase in incidence of caesarian section rate & other complications.

This may be a reflection of nature's design that human should reproduce when they are mentally and physically fit for child bearing age and deliver baby at peak fertile period but not at extremes of reproductive life.

Bratati B and GK Pandey, estimated incidence of teenage pregnancy is as high as 24.17 %⁽⁸⁾. In our study it was 16.7%. Incidence of anemia reported by Sen. was 19.5 %, ⁽⁵⁾ Bratati B and GK Pandey reported it to be significantly higher up to 62.96% ⁽⁸⁾ but in our study it was 10%. Next major antenatal complication was pregnancy induced hypertension. Kumar A and Singh T in their study reported 11.4 % ⁽⁹⁾ but in this study it was 24%.

Philip & shivkamasundari estimated the incidence of low birth wt babies in their series 30.8% ⁽⁴⁾ but in our study 28%, The incidence of low birth wt. increase as the maternal age decreases due to associated medical complication. Philip & shivkamasundari has recorded incidence of CPD just 2.6% but overall incidence of CPD in our group teenage pregnancy is about 14%, exactly correlates to our study.⁽⁴⁾ The incidence of caesarian section due to CPD was 21%, this proves that underdevelopment of pelvic bone in teenagers resulting in CPD, and this increases the risk of obstructed labor.

This study shows more incidences of PIH, LBW and caesarian sections in teenage pregnancies. Among caesarian section group previous LSCS, fetal distress & CPD were major indications. This indicates need for enhancing health education measures to delay the age at first pregnancy thereby decreasing multiple complications that may occur in teenage mother.

We recommend, to provide general health education about risk of teen age pregnancy, strict enforcement of minimum age of marriage law, screen all mothers for risk factors and sensitize them regarding child bearing and rearing for safe outcome.

CONCLUSION: In this study outcome of pregnancy was adverse in most of the teenage pregnancies. It is pointer towards a need to discourage teenage pregnancy and consequently reduce wastage of deliveries, low birth weight through an intensive campaign for proper marriage age of girls.

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TABLES:

Table 1: Age-wise distribution of Teenage pregnancies

Age	No. of cases	V. Del	C-Section	Abortion	Percent
<18 yrs	5	2	3	Nil	11.55%
<19 yrs	19	11	8	Nil	44.25%
<20 yrs	19	10	8	1	44.25%
Total	43	23	19	1	100%

Table 2: Shows parity wise distribution of cases

Parity	No of cases	Percent
Primigravida	29	67.5%
Gravida 2	10	23.25%
Gravida 3	3	7%
Gravida 4	1	2.25%

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Table 3: Shows the major Antenatal Complications among Teenage mothers

Complications	No. of cases	percentage
Low birth weight	12	28%
Pregnancy Induced Hypertension	10	24%
Cephalo pelvic disproportion	6	14%
Intra uterine death	5	12%
Anemia	4	10%
Fetal distress	3	8 %
Abortion	1	2.5%
Anencephaly	1	2.5%

Table 4: Shows pregnancy outcome in Teenage mothers

Outcome	<18 yrs	<19yrs	<20yrs	Total	Percent
Abortion induced	Nil	Nil	1	1	2.5%
Preterm delivery	1	3	2	6	14%
FTND	1	4	6	11	25.5%
C- Section	3	8	8	19	44%
Breech VD	Nil	1	Nil	1	2.5%
Macerated stillbirth	Nil	3	2	5	11.5%
Total	5	19	19	43	100

FTND- Full term normal delivery, **VD** –Vaginal delivery, **C-section** – Cesarean section

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