



ORIGINAL RESEARCH PAPER

Obstetrics & Gynecology

ANEMIA IN TEENAGE PREGNANCY AND ITS MATERNAL AND NEONATAL COMPLICATIONS- AN ANALYSIS

KEY WORDS:

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ABSTRACT

The main aim of the study is to analyse the prevalence of anemia in teenage pregnancy cases who are followed up and admitted in our institution- Government RSRM lying in hospital during the study period. This study is a Prospective Cohort Study done with data collected from 150 teenage pregnant anemia cases followed up in our hospital from January 2017 to June 2017. To compare the study groups in terms of socioeconomic status, education, dietary habits, reason for early marriage, awareness of anemia, various maternal and neonatal outcomes. Inclusion criteria includes teen pregnant women aged 17 -19 years with varying gestational ages and maternal complications. For these patients statistical analysis and tabulations are made.

INTRODUCTION:

Adolescent pregnancy is defined as a pregnancy that occurs in girls aged < 19 years, which is a complex issue in itself. About 2/3<sup>rd</sup> of teen pregnancies occurs in girls aged between 18-19 years.

The Center for Disease Control and Prevention(CDC) defined anemia as Hb < 11g/dl in 1<sup>st</sup> and 3<sup>rd</sup> trimester and Hb < 10.5 g/dl in 2<sup>nd</sup> trimester. Anemia is most common among teen pregnant women requiring replenishment of iron stores either in form of blood transfusion, iron sucrose injection or oral iron supplements. The diagnosis of anemia is made by hemoglobin estimation. Based on hemoglobin level, ICMR (Indian Council of Medical Research) has classified anemia as mild (Hb 10-10.9 g), moderate (Hb 7-9.9 g), severe (Hb 4-6.9 g) and very severe (Hb <4g %). Other investigations being done include Peripheral smear study most commonly showing microcytic hypochromic blood picture, urine routine and culture, stool examination for occult blood, motion and ova cyst, ECG, ECHO and USG abdomen to rule out any organomegaly in cases of severe anemia.

The main causes depends on multiple factors like ethnicity, nutritional status, socioeconomic status, lack of knowledge, preexisting iron status, poverty.

The main aim of this study is to analyse the prevalence of anemia in teenage pregnancy cases who are followed up in our institution and to instill them about the awareness to prevent anemia and teenage pregnancy.

MATERIALS AND METHODS:

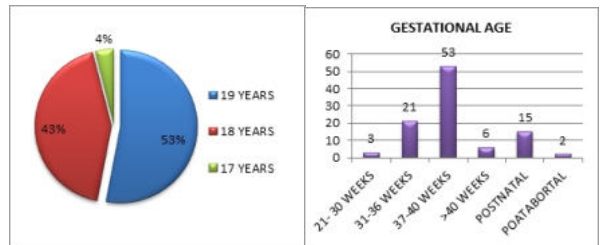
This study is a Prospective Cohort Study done with data collected from 150 teenage pregnant anemia cases followed up and admitted in Government RSRM Lying in Hospital from January 2017 to June 2017. Inclusion criteria includes teen pregnant women aged 17 -19 years with varying gestational ages and maternal complications.

All the 150 cases who were being followed up were evaluated with detailed clinical history regarding age, parity, gestational age, educational status, socioeconomic conditions, regular antenatal check ups, dietary habits, weight gain, reason for early marriage, mode of delivery, associated maternal and neonatal complications and duration of hospital stay for whom statistical analysis and tabulations are made.

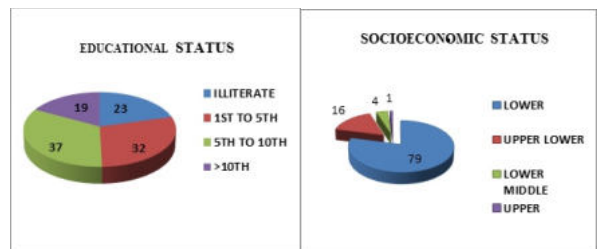
RESULTS:

Based on the study, the following observations are made.

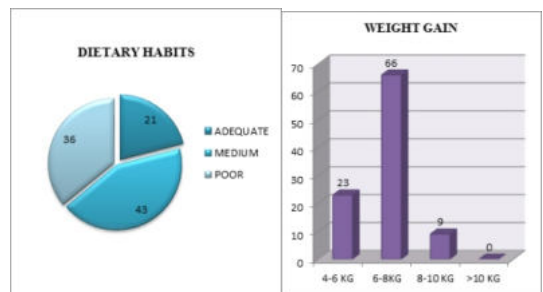
- According to age distribution 53% belongs to 19 years, 43% for 18 years and 4% for 17 years.
- Almost 95% of women being primigravida, with 53% belonging to gestational age 37 to 40 weeks, 21% from 31-36 weeks, 6% > 40 weeks, 15% delivered outside our hospital and being referred as postnatal anemia.



- Based on socioeconomic status, 23% being illiterate, 32% studied upto 5th, 37% upto 10th standard and 19% studied > 10th.
- Based on socioeconomic status, 79% belonged to lower class, 16% for upper lower class, 4% being lower middle class and 1% for upper class.

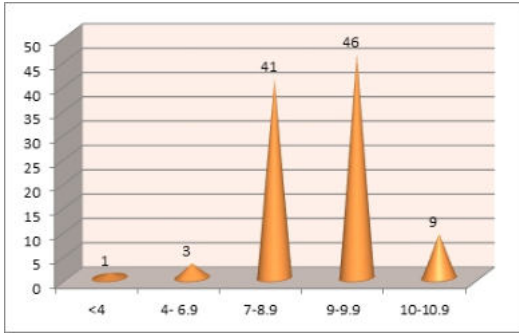


- Among the study groups, 76% had regular antenatal visits and 23 % had irregular visits.
- Regarding dietary habits, only 21% of teen mothers had adequate nutrition, 43% medium supplies and 36% with poor nutritional supplies.
- Based on weight gain, 66% gained about 6 to 8 kg, 23% gained 4-6%, 9% gained 8-10kg and none for adequate >10kg weight gain.



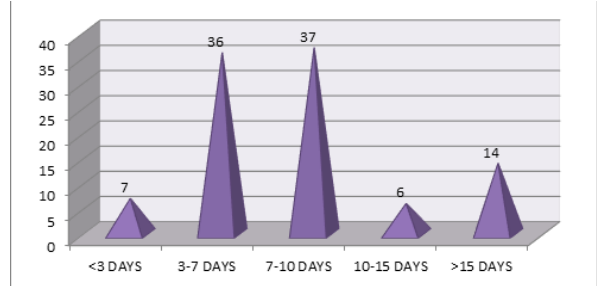
- Regarding reason for early marriage, peer family pressure accounts 66%, love marriage 29%, lack of awareness 3% and lack of proper support 2%.

HEMOGLOBIN STATUS:



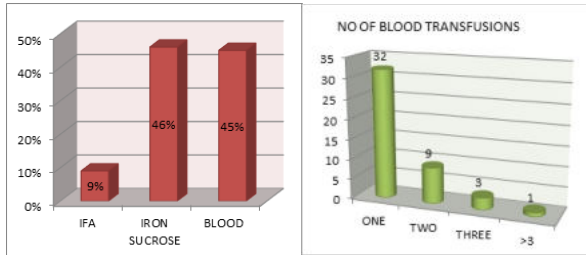
**DURATION OF HOSPITAL STAY:**

Increased hospital duration is mainly because of baby admission in NICU for low birth weight and preterm and for anemia correction.



**TREATMENT:**

It mainly depends on blood transfusion, iron sucrose or oral iron supplements based on hemoglobin status.



**PREVENTION:**

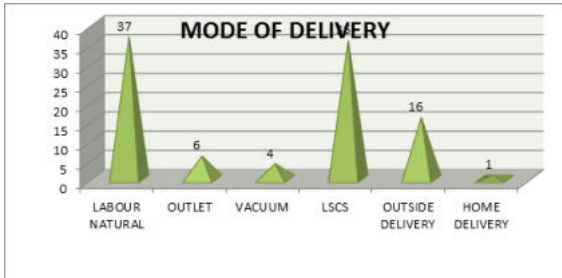
Treatment without prevention is simply unsustainable. Hence following methods of prevention and awareness should be created in minds of teenage girls like iron rich diet, iron fortification, National Nutritional Anemia Prophylaxis Programme, 12 by 12 initiative and WIFS (Weekly Iron and Folic Acid Supplementation Programme for adolescents).

**CONCLUSION:**

Child bearing is not an easy thing. It takes a toll both mentally and physically on patients. Teen mothers lack this knowledge how to condition her body and also how to take care of her baby. Hence it is important to take right decision at the right time to avoid such pregnancies and to instill them with proper knowledge about the consequences of anemia and teen pregnancy in an earlier period during their adolescent school time.

**MODE OF DELIVERY:**

In teenage mothers, mode of delivery can be labour naturale or LSCS. Now a days, instrumental deliveries are on increasing trend because of the lack of their maternal efforts and tolerance.



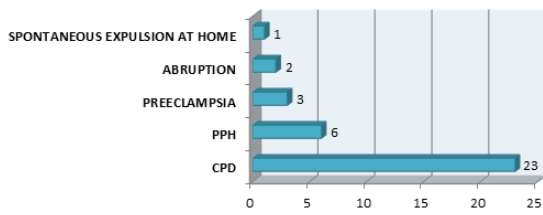
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**MATERNAL AND NEONATAL COMPLICATIONS:**

In teenage pregnancy, the incidence of maternal complications like anemia, gestational hypertension, abruption, CPD and also neonatal complications like preterm labour, low birth weight and abortions is most common because of lack of awareness and proper care.

**MATERNAL COMPLICATIONS**



**NEONATAL OUTCOME:**

