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# FACTORS INFLUENCING TEENAGE PREGNANCIES AND ITS COMPLICATIONS AMONG THE RURAL POPULATION OF CHENGALPATTU DISTRICT – A CROSS SECTIONAL STUDY

Community Medicine

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## ABSTRACT

**Introduction:** Teen pregnancy is a social and cultural issue that has widespread effects on people's psychological makeup, society, and the economy of the country. Teen pregnancy is mostly a social issue with medical implications. Pregnancy in the 13–19 age range is considered 'teenage pregnancy.' This research aims to study the various Clinico-socio-demographic factors that influence teenage pregnancies. **Materials & Methods:** This is a cross sectional study with a required sample size of 94, however, a total of 100 participants were enrolled. After obtaining the informed consent from the participants a pre-tested semi structured questionnaire was used to collect the details regarding the participants and was filled using interview method. The collected data was analyzed using IBM-SPSS software. **Results:** A majority of over 90% of pregnancies were seen in the ages 18 and 19, and from the educational status of middle and high school. Almost all of the pregnancies reported were from married women. Majority of the participants (62%) had normal labour, while 29% underwent LSCS. Forceps was used in 5% of the participants while 3% had an abortion (personal/ health reasons). Furthermore, 94% of the participants were primigravida. The percentage distribution of antenatal care among teenagers showed 24 patients were not booked and had just one check-up elsewhere. 76 patients were booked and had regular antenatal care and most of the participants were immunised with at least one dose of TT. **Conclusion:** Pregnancy can have a tremendous impact on the adolescent women and her family. The adolescents should be educated on both the physical and mental health complications of early pregnancy and regarding the safe sexual practices. Teenagers tend to book late for pregnancy and do not make proper use of the facilities for antenatal care. Once the teen is pregnant, the goal should be comprehensive, medical, psychosocial and educational support, and must continue to focus on the unique needs of adolescent parents and their children.

## KEYWORDS

Antenatal Care, Pregnancy Complications, Teenage Pregnancy.

## INTRODUCTION:

Teenage pregnancy is a socio-cultural problem with widespread consequences on the psychological makeup of the individual, over the society and on the economy of the nation. Teenage pregnancy is primarily a sociological problem with medical consequences. Teenage pregnancy is defined as pregnancy in the age group of 13-19 years. Approximately 12 million girls aged 15–19 years and at least 777,000 girls under 15 years give birth each year in developing regions [1]. The youngest mother who delivered by Caesarean section was Lina Medina who was just 5 years 8 months age! Teenage or adolescent period is a transformation phase from the tranquillity of childhood into adulthood. Teenage pregnancy is a high-risk pregnancy if she is primigravida. Of the estimated 5.6 million abortions that occur each year among adolescent girls aged 15–19 years, 3.9 million are unsafe, contributing to maternal mortality, morbidity and lasting health problems. Adolescent mothers (ages 10–19 years) face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years, and babies of adolescent mothers face higher risks of low birth weight, preterm delivery and severe neonatal conditions(*Adolescent Pregnancy*, n.d.). Poorly managed teenage pregnancies have higher antepartum and intra-partum complications apart from long standing psychological sequelae. In general, sexually active adolescent females are not only at risk for unintended pregnancy but also sexually transmitted diseases. The high-risk factors in teenage pregnancy are pregnancy induced hypertension, eclampsia, anaemia, urinary tract infection, placenta praevia, abruptio placenta, preterm labour and multiple pregnancy. Teenage girls need more attention for prevention and treatment of pre-eclampsia, eclampsia, anaemia, prematurity and low birth weight infants.

**Aims**:

- To study various demographic factors that influence teenage pregnancies
- To study the outcome of pregnancy with reference to complications of pregnancy

## Methodology:

This is a cross sectional study which was conducted in a teaching hospital which receives majority of its patients from Chennai, Kanchipuram and Chengalpattu district. Convenient sampling was done. The post-natal mothers from rural areas attending the Obstetrics department during their puerperal period were enrolled in the study. Study duration was two years (from Oct 2019 – Jun 2021).

Taking the prevalence of teenage pregnancies as 6.3 % (2015 – 16 in TN state according to NFHS 4)(*National Family Health Survey*, n.d.) and margin of error as 5% the minimum sample size required was calculated to be 95 and included 10% for non-response. However, a total of 100 participants were enrolled in the study but the response rate was 100%. A pre-tested semi structured questionnaire was used to collect the details regarding the participants. After obtaining the informed consent from the participants the questionnaire was filled using interview method. The collected data was analyzed using IBM-SPSS software.

## RESULTS:

**Table 1: Clinico-socio-demographic characteristics (N=100)**

| ITEMS | N (%) | | ITEMS | N (%) |
|---|---|---|---|---|
| Age | | | Period of Gestation at | |
| 16 | 2% | | Time of Labour | |
| 17 | 4% | | Abortion | 3% |
| 18 | 33% | | <36 Weeks | 13% |
| 19 | 61% | | 37- 40 Weeks | 83% |
| Religion | | | >40 Weeks | 1% |
| Hindu | 84% | | Gravida | |
| Islam | 9% | | Primigravida | 94% |
| Christianity | 7% | | Multigravida | 6% |
| Educational Status | | | Pregnancy Outcome | |
| Nil | 15% | | Labour Natural | 62% |
| Primary School | 8% | | LSCS | 29% |
| Middle School | 37% | | Forceps | 5% |
| High School | 40% | | Abortion | 3% |
| | | | Assisted Breech | 1% |
| Marital Status | | | Antenatal Care | |
| Married | 96% | | Booked case | 76% |
| Unmarried | 4% | | Unbooked case | 24% |

From Table 1 it is seen that majority of the pregnant women,61% were in the 19 years age group. 33% were in the 18 years age group. And only 4% and 2% were in the age group of 17 and 16 years respectively. Among the study participants 40% participants had studied 9th to 12th standard while 37% had studied 5th to 8th standard. 15% of the participants were illiterate. It is also seen that most of the participants were Hindus (84%) by religion. 96% of the participants were married and only 4% participants were unmarried. On comparing the distribution of period of gestation at the onset of labour and nature of labour. It is seen that 83% of the participants had onset of labour between 37-40 weeks and 13% of the participants had onset less than 36 weeks. Only 1 participant had onset of labour greater than 40 weeks. Majority of the participants (62%) had normal labour, while 29% underwent LSCS. Forceps was used in 5% of the participants while 3% had an abortion (personal/ health reasons). Furthermore, 94% of the participants were primigravida. The percentage distribution of antenatal care among teenagers showed 24 patients were not booked and had just one check-up elsewhere. 76 patients were booked and had regular antenatal care and most of the participants were immunised with at least one dose of TT.

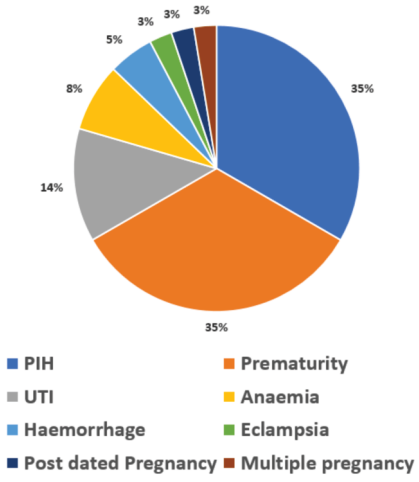


**Fig 1: Percentage distribution of complications in teenage pregnancies**

Fig.1 shows the percentage distribution of complications in teenage pregnancies. In the current study 37% participants with teenage pregnancies had complications (N=37). Majority of the complications were prematurity and anaemia, 35% each and UTI (urinary Tract Infections) 14% of the participants with complications.

## DISCUSSION:

In the present study it was found that most teenage pregnancies occur in lower socio-economic class. 94% of the participants were primigravida. Most of the participants were married (96%) and most of them were 19 years old (61%). Pregnancy induced hypertension and UTI were common among teenagers while problems like anaemia, multiple pregnancy, abruptio placenta and mal presentations did not have much difference from older mothers. William Gilbert et al stated that early and late teens demonstrated greater neonatal and infant mortality and major neonatal morbidities when compared to pregnancies in the older control women(Gilbert et al., 2004). Prianka Mukhopadhyay et al stated that teenage mothers had a higher proportion of preterm deliveries compared to adult mothers and had low-birth-weight babies(Mukhopadhyay et al., 2010). In another study Chandrika et al stated that live births were noted in 93.1% teenagers, stillbirths and abortions were present in 4.8% and 2.1% teens respectively. Age and previous pregnancies affected the outcome (Doddihal et al., 2015). As there is no method of preventing sexual activity among adolescents, it is imperative to initiate extensive sex education programs at an early age. Kaisa Raatikainen et al, stated that there is an increased risk for adverse pregnancy outcomes in teenage pregnancies and almost all of them can be overcome by the means of high quality maternity care (Raatikainen et al., 2006).

## Recommendations:

### Pre-pregnant state:

Education and advertisements directed towards safe sexual behaviour can be done and family planning regarding spacing and delaying the first pregnancy in cases of early marriages.

### Prenatal:

Encouragement of early referral for prenatal care and regular attendance should be done. Gestation must be confirmed with early USG. Advice on diet and adverse habits should be provided. Mobilization of social support and health education on pregnancy and children.

### Labour/Delivery:

Adequate psychological support should be ensured. If dystocia is anticipated then the delivery should be conducted in a tertiary care hospital/specialist unit.

### Post-natal:

Advice on infant feeding and care should be provided. General social and financial support should be provided especially if secondary education is to be continued. The importance of contraception should be emphasized.

## CONCLUSION:

Pregnancy can have a tremendous impact on the adolescent women and her family. The adolescents should be educated on both the physical and mental health complications of early pregnancy and regarding the safe sexual practices. Teenagers tend to book late for pregnancy and do not make proper use of the facilities for antenatal care. Once the teen is pregnant, the goal should be comprehensive, medical, psychosocial and educational support for the young mother and father. These programs should then ideally continue to focus on the unique needs of adolescent parents and their children, in the hopes of improving both the immediate and long-term prospects for them.

## REFERENCES:

1. *Adolescent pregnancy*. (n.d.). Retrieved July 28, 2021, from https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy
2. Doddihal, C., Katti, S., & Mallapur, M. (2015). Teenage pregnancy outcomes in a rural area of South India: A prospective study. *International Journal of Medicine and Public Health*, *5*(3), 222. https://doi.org/10.4103/2230-8598.161527
3. Gilbert, W., Jandial, D., Field, N., Bigelow, P., & Danielsen, B. (2004). Birth outcomes in teenage pregnancies. *The Journal of Maternal-Fetal & Neonatal Medicine*, *16*(5), 265–270. https://doi.org/10.1080/jmf.16.5.265.270
4. Mukhopadhyay, P., Chaudhuri, R., & Paul, B. (2010). Hospital-based Perinatal Outcomes and Complications in Teenage Pregnancy in India. *Journal of Health, Population and Nutrition*, *28*(5), 494–500. https://doi.org/10.3329/jhpn.v28i5.6158
5. *National Family Health Survey*. (n.d.). Retrieved July 28, 2021, from http://rchiips.org/NFHS/factsheet_NFHS-4.shtml
6. Raatikainen, K., Heiskanen, N., Verkasalo, P. K., & Heinonen, S. (2006). Good outcome of teenage pregnancies in high-quality maternity care. *European Journal of Public Health*, *16*(2), 157–161. https://doi.org/10.1093/eurpub/cki158