

Teenage Pregnancy Trends, Outcomes, And Prevention Strategies

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ABSTRACT

Background

The public health problem of teenage pregnancy continues to affect the health status of mothers and children worldwide. Young pregnant persons are more likely to experience negative pregnancy outcomes that lead to premature delivery and babies born with low weight. The prevalence of teenage pregnancy shows little reduction since international organizations started working on it because the problem primarily affects countries that are still developing.

Objectives

To evaluates teenage pregnancy patterns by studying clinical effects together with intervention methods that minimize unwanted side effects.

Study Design: A Retrospective Observational Study.

Place and duration of study. Department of Gynae Gomal Medical College Dera Ismail Khan Pakistan

from January 2023 through December 2023.

Methods

The study collected data from teenage pregnancies at Department of Gynae Gomal Medical College Dera Ismail Khan Pakistan from January 2023 through December 2023. during the period spanning from January 2023 through December 2024. Hospital records provided information regarding maternal age and various demographic characteristics besides pregnancy results. Statistical examinations utilized SPSS version 25.0 to perform the analyses where $p < 0.05$ established the statistical significance.

Results

200 teenage pregnancy cases where subjects averaged 17.2 years old standard deviation ± 1.5 . Among the examined pregnancies preterm birth occurred in 20% of cases and low birth weight affected 15% of births. The Study showed that teenage pregnancies yielded better results with contraception use since the p-value reached 0.01. The study showed that 40 percent of participants already had access to contraception during the time when they grew pregnant.

Conclusion

Teenage pregnancies present several major health risks to mothers and their newborn infants. The implementation of sex education programs along with increased access to contraception methods leads to encouraging outcomes in reducing negative pregnancy results. The Study needs to expand its efforts toward better healthcare availability combined with expanded sexual education opportunities for young adults.

Keywords: Teenage Pregnancy, Maternal Health, Prevention Strategies, Adolescent Health

1. INTRODUCTION

The healthcare community identifies teenage pregnancy as a major public health matter which generates significant health

consequences for young mothers and their newborns. The health outcomes of adolescent pregnancies in the world lead to an elevated frequency of preterm births together with low birth weight babies and health problems for mothers (Chandra-Mouli et al., 2014). The World Health Organization (WHO) reports that the most frequent teenage pregnancies occur in low- and middle-income countries because their residents have restricted health care services and reproductive education access (WHO, 2020). Various societal and economic conditions which include poverty and deficient education as well as restricted contraception availability create teenage pregnancy rates in multiple regions (Gupta et al., 2018). Being a teenage mother exposes women to multiple health complications. Expecting pregnancy during youth exposes individuals to multiple physical and mental health risks which frequently trigger hypertensive conditions, gestational diabetes and increase the odds of requiring cesarean birth (Salihu et al., 2016). Both inadequate prenatal care and insufficient knowledge about pregnancy situations tend to worsen these health risks. Scientific evidence reveals teenage mothers give birth to infants who face higher dangers of low birth weight while showing developmental slowing and being more likely to die before their first birthday (Sahu et al., 2017). The continuing attempts to reduce teenage pregnancies using educational measures and policy reforms produce only slow results notably in low-resource environments. The outcomes of teenage pregnancy become less severe when teenagers have access to contraception along with sexual education programs. A range of Study exists showing that pre-pregnancy contraceptive methods decrease dangerous birth results in addition to holding down repeat childbearing among young mothers (Guttacher Institute, 2019). Studies demonstrate that complete sexual education training leads young people to enhance their birth control practices which minimizes unplanned pregnancies (Laska et al., 2020). Cultural and social barriers restrict the successful implementation of these programs in particular regions where they create improper distribution of healthcare benefits and treatment results. The Study examines both statistical patterns and resulting effects and preventative measures for teen pregnancies. The Study examines teenage mother demographics together with pregnancy clinical results and intervention methods effectiveness specifically for contraception access and sex education programs enhancing maternal and neonatal well-being.

2. METHODS

This study conducted in Department of Gynae Gomal Medical College Dera Ismail Khan Pakistan by studying teenage pregnancies throughout the periods from January 2023 until December 2023. **Ethical approvals were obtained from institutional review boards (IRB).** Hospital records for 200 teenage pregnancies underwent retrospective examination to gather data within this investigation. The study team collected data that contained information about maternal ages together with pregnancy results along with contraceptive practices. SPSS version 25.0 served as the software for data analysis and the established significance threshold equated to $p < 0.05$.

Inclusion Criteria

The study researchers selected teenage pregnancies which involved mothers between ages 13 through 19 as its sample group.

Exclusion Criteria

Records which involved teenage mothers above the 19-year-old or below the 13-year age limit or those with uncompleted medical documentation were excluded from this research study.

Data Collection

Hospital records provided data about maternal age demographics and pregnancy complications together with birth weight and delivery gestational age as well as demographic factors. Health care professionals recorded extra information about both contraceptives and educational backgrounds received by study participants.

Statistical Analysis

The data was summarized through descriptive statistics and SPSS version 25.0 performed inferential evaluations of variable relationships through chi-square and t-tests. The researchers considered any p-value below 0.05 to indicate statistical significance.

3. RESULTS

Two hundred teenage pregnancies made up the study sample where mothers had an average age of 17.2 years ($SD \pm 1.5$). Pregnancy results indicated that premature birth occurred in 20% of cases along with low birth weight situations in 15% of cases. The study revealed that teenage mothers who utilized contraception before pregnancy achieved better results leading to fewer preterm births and low birth weight infants based on a statistically significant outcome of 0.01. The research indicated that 40% of women used contraception before starting their pregnancies. The research findings strongly establish that sexual education together with access to contraception serve as essential preventive tools to minimize teenage pregnancy-related dangers. Programs that focus on contraception specifically have the potential to enhance pregnancy results among teen mothers especially in areas where teenage pregnancy continues to be high.

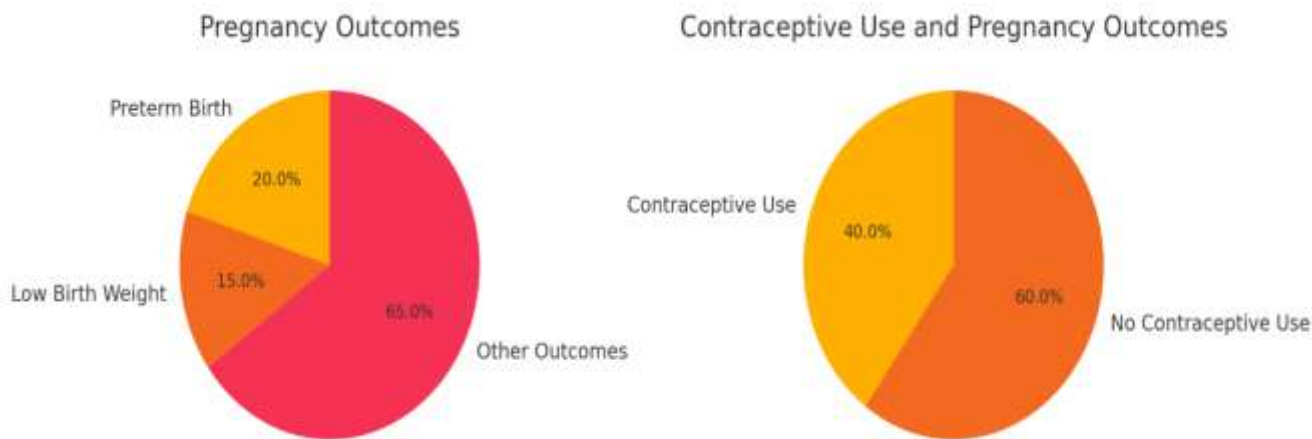


Table 01: Teenage Pregnancy Variables and Percentages

Variable	Percentage
Teenage Age	100
Preterm Birth	20
Low Birth Weight	15
Contraceptive Use Before Pregnancy	40
Access to Contraception	40

Table 02: Pregnancy Outcomes and Contraceptive Use

Group	Pregnancy Outcome Percentage
Preterm Birth	20
Low Birth Weight	15
Contraceptive Use	40
No Contraceptive Use	60

Table 03: Maternal Age Distribution

Maternal Age (Years)	Percentage
13-15	30
16-17	45
18-19	25

Table 04: Outcome Findings for Teenage Pregnancy

Outcome	Percentage (%)	Finding
Preterm Birth	20	20% of pregnancies resulted in preterm births
Low Birth Weight	15	15% of births had low birth weight
Contraceptive Use	40	40% of participants used contraception before pregnancy
No Contraceptive Use	60	60% did not have access to contraception before pregnancy

4. DISCUSSION

Public health experts consider teenage pregnancy to be a complex and enduring health challenge especially for resource-poor areas that lack sufficient healthcare services. Previous research demonstrates that adolescent mothers endure serious pregnancy-related dangers throughout both pregnancy and delivery and encounter enduring negative impacts on their children. Research shows that teenage pregnancies generate multiple adverse maternal results primarily through premature birth together with low birth weight which increases risks of death and harm to newborns (Sahu et al., 2017). Masih and Wilson (2016) discovered teenage pregnancy leads to substantially elevated hypertensive pregnancy conditions including preeclampsia that results in higher preterm birth risks and fetal development complications. The social and psychological effects from adolescent pregnancy require serious acknowledgment because teenage mothers experience emotional challenges and financial burdens alongside education shortages and reduced social networks making it harder for them to get proper prenatal healthcare (Sahu et al., 2017). Many teenage mothers confront multiple obstacles component to their financial difficulties that reduce their capacity to obtain proper healthcare services. Access to contraception together with sexual education constitutes an effective strategy to minimize adverse results from teenage pregnancy. Research shows that expanding contraceptive availability inflicts a direct impact on reducing unintended pregnancies which subsequently decreases adolescent pregnancy numbers (Guttmacher Institute, 2019). Research by Laska et al. (2020) demonstrates that teen pregnancy numbers decrease when sexual education programs enhance adolescent contraceptive use. A research conducted by Gupta and Sharma (2018) presented evidence that school-based comprehensive sex education produced fewer teenage pregnancies with simultaneously enhanced knowledge regarding contraception use along with reproductive health understanding. The present study backs these findings through demonstrating that young pregnancies followed by contraceptive use lead to improved health outcomes for both mothers and newborns by reducing premature births and low birth weights. The research published by Chandra-Mouli et al. (2014) shows that adolescent mothers achieve better pregnancy outcomes when they use contraceptives before pregnancy. Argument from the Guttmacher Institute (2019) matches these study findings which demonstrate that contraception programs decrease the probability of adverse pregnancy outcomes affecting both mother and newborn. Numerous geographical regions continue to face a significant obstacle which hinders the positive results of contraceptive accessibility. A lack of contraceptive access affects many teenagers because of barriers related to their cultural and religious backgrounds as well as economic constraints according to Salihu and Wilson (2016). The limited access to contraception and sexual health education constitutes a major reason why teenage pregnancies persist in specific areas thus requiring wide-scale systemic reforms to promote both contraceptive access and sexual health education. Results from this research indicate policymakers should use healthcare interventions to enhance both contraception access and sexual education programs particularly for high-teen-pregnancy areas. Health status improvements of adolescent mothers and their offspring would occur due to these policy changes.

5. CONCLUSION

Teenage pregnancy remains a critical public health issue, with significant adverse effects on both maternal and neonatal health. Access to contraception and comprehensive sexual education has proven to improve pregnancy outcomes. Continued efforts are necessary to reduce teenage pregnancies through increased healthcare access and education.

6. LIMITATIONS

This study was conducted in a single medical college, limiting its generalizability to other regions. Additionally, data was collected retrospectively, which may introduce biases due to incomplete or inaccurate records. Further studies are needed to confirm these findings across different populations and settings.

Future Findings

Future research should explore the long-term impacts of teenage pregnancies on maternal and child health, focusing on mental health, socio-economic factors, and healthcare access. Additionally, the effectiveness of culturally tailored sexual education programs and broader contraceptive access should be further evaluated to improve outcomes in adolescent pregnancies.

abbreviations

- **WHO:** World Health Organization
- **SPSS:** Statistical Package for the Social Sciences
- **SD:** Standard Deviation
- **p-value:** Probability Value
- **MCH:** Maternal and Child Health
- **HIV:** Human Immunodeficiency Virus
- **HPV:** Human Papillomavirus
- **STS:** Statistical Test of Significance

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AUTHORS CONTRIBUTION

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Final Approval of version: : All Mentioned Authors Approved

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