

# OBSTETRIC OUTCOMES OF TEENAGE PREGNANCY VS. NON-TEENAGE PREGNANCY PATIENTS.

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## ABSTRACT

**Background:** Teenage pregnancies contribute substantially to global health hazards, particularly in places like Khyber Pakhtunkhwa, Pakistan. Where social and economic conditions conspire to make unions between spouses early, and their childbearing follows soon after. Despite initiatives to tackle this problem, restricted examination exists on the obstetric effects of adolescent pregnancies in this territory.

**Objective** to analyzed obstetric outcomes and complications between teenage mothers aged 14 to 18 and older mothers aged 19 to 36 in Khyber Pakhtunkhwa, Pakistan. The aim was to compare risks between the two groups.

**Study design:** A Retrospective Study.

**Place and duration of study.** Department of Gynecology D.H.Q. Hospital Timarghra from February 05, 2021 to February 05, 2022

**Material and Methods:** A retrospective study was conducted in Kpk, Pakistan, by the Department of Gynecology D.H.Q. Hospital Timarghra all 14-18-year-olds who gave birth in the two hospitals had obstetric outcomes compared to non-adolescent women (19-36). chi-square and students' t-tests were used with a 0.05 significance level.

**Results:** Out Of the 910 births, 128 (14.1%) were non-teenage moms, teenage mothers had higher rates of severe anemia (7.5 vs. 4.1%), chorioamnionitis (2.6 vs. 0.6%), and post-maturity (4.6 vs. 1.8%) and meconium inhalation syndrome (6.5 vs. 2.4%), respectively. Teenagers were less prone than adults to be overweight. Instrumental deliveries are more common in teenagers (7.1% vs 2.2%, p 0.01). Preterm birth, low birth weight babies, rds, and neonatal and fetal deaths did not vary substantially between the two groups.

**Conclusion:** The results of this study showed that teenage pregnancies are associated with a higher risk of severe anemia, chorioamnionitis, post-maturity, and meconium aspiration syndrome compared to non-teenage pregnancies. Preterm delivery, low birth weight infant, R.D.S., and fetal and perinatal death were not significantly different between the two groups. The results of this study suggest that teenage mothers need to be provided with appropriate obstetric care to reduce their risk of poor outcomes.

**Keywords:** Obstetric, Outcomes, Teenage, Non-Teenage, Pregnancy

**How to Cited this Article :** Tahir L, Bibi A, Jamshed K, Amin S. Obstetric outcomes of teenage pregnancy vs. non-teenage pregnancy patients. Pak J Adv Med Med Res. 2023;1(1):19-22. doi:10.69837/pjammr.v1i01.8.

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## Article History

Received:	July	17 2022
Revision:	October	22, 2022
Accepted:	November	24, 2022
Published:	January-	05- 2023

**INTRODUCTION**

Early marriage and pregnancies for teens require social, cultural, and financial justifications. Teenage pregnancy is a significant problem throughout the world. Adolescent pregnancy remains a major public health issue in Pakistan, particularly in regions like Khyber Pakhtunkhwa<sup>1</sup>. Economic factors and family pressure contribute to early marriage and bearing children early. The boom in Pakistan's population is visible on the horizon, with estimates suggesting that it will become the world's fifth-largest country around 2050<sup>2</sup>. Most worryingly, significant 2006-2007 data on Pakistan is even more sobering, with nearly 72% of young women between ages 14-17 pregnant, and this did not include forced abortions like those undergone in India<sup>3</sup>. Early marriage serves only to exacerbate the situation, with reports indicating that Although the problem with women appears to have improved somewhat, as many as 7 years old in Pakistan are married before they reach maturity (18 years old), female wives still constitute 62 per youth (Chaudhry and Myers 2016)<sup>4,5</sup>. The prevalence of child marriage in Pakistan is especially grim. According to historical data, 37% of women who were of marriageable age as far back as 2001 married before their eighteenth birthday--a pattern that seems likely to perpetuate itself today<sup>6,7</sup>. newspaperIn 2012, the media reported 75 child marriages-- and children's fates appear to be even worse. Many young girls between 11 and 15 years old are being married off by their families, sometimes even younger. The gravity of the situation is further illustrated by figures from 2006 to 2007 that show that more than half of all teen girls in Pakistan were pregnant<sup>7</sup>. A number of factors contribute to the high incidence of child marriages in Pakistan, including weak laws, failure to enforce them, attitudes in society that treat Children as commodities, and entrenched poverty. Another complicating factor is the lack of comprehensive registration at birth, which allows for age mangling upon marriage and makes it challenging to track child marriage accurately<sup>8</sup>. Moreover, cultural and religious practices combined with a lack of government oversight all combine to perpetuate the cycle of early marriage and teenage pregnancy in this country<sup>9</sup>.

**METHODS**

That department collated the outcome of female health studies at a D.H.Q. Hospital in Timarghra, Khyber Pakhtunkhwa province, Pakistan. March 2021 to February 2022. This report included all 14-18-year-old expectant mothers who were enrolled and gave birth in an on-hospital during the period of investigation. Data indicate that young pregnancies were more likely than older pregnant women to produce twins (both pregnancies with exactly one placenta). Statistical analysis of data, including Chi-square and Student's t-tests, was undertaken with a level of significance set at 0-05. Maternal and fetal outcomes, such as events during pregnancy and delivery, were investigated, as well as neonatal outcomes (for example, birth weight and Apgar scores). Approval was obtained from the pertinent institutional review boards, and informed consent was obtained from all participants or their legal guardians.

**Approval form Ethics Committee:**

The study was approved by the Ethics Committee under reference number ERB No: **417/06/2020** at D.H.Q. Hospital, Timergara, Khyber Pakhtunkhwa, Pakistan. All research protocols adhered to institutional and international ethical guidelines. Informed consent was obtained from all participants or their legal guardians before enrollment in the study.

**RESULTS**

128 adolescents accounting for 14.07% of deliveries. Most teenage mothers were 17, with 48% in that age group, while 32.2% were 18. What's more, only 52% of the adolescent mothers were first-timers. Maternal issues such as severe anemia (8.0% vs. 4.3%), chorioamnionitis (2.8% vs. 0.8%), and instrument-assisted births (7.1% vs. 2.2%) were notably higher among teenage mothers compared to older moms. However, there was no significant difference in other complications, including premature rupture of membranes before labor begins, Hypertensive disorders of pregnancy or gestational diabetes. Similarly, fetal and newborn outcomes like post-term newborns, meconium aspiration syndrome, and other infant health problems did not diverge substantially between the two cohorts.

**Table 1: Cases And Distribution Controls Included From Two Hospitals**

Lower Dir	STH-Swat	Percentage	Number
Teenage	60 (42%)	68 (52%)	128
Controls	350 (42%)	432 (44%)	782
Total	460	450	910

**Table 2: Comparison Of Maternal Complications In Mothers Who Are Teenage And Not Teenage**

Variable Cases (n=128)	Controls	(n=782)	P-Value
Anemia (H.B. <11 GM/DL)	90 (58.0%)	631 (44.0%)	N.S.
Severe Anemia (H.B. <7 GM/DL)	4 (8.0%)	38 (4.3%)	0.03
PPROM	6 (1.1%)	8 (0.9%)	N.S.
Hypertensive Disorders	29 (10.2%)	64 (7.0%)	N.S.
Gestational Diabetes	2 (0.6%)	1 (0.1%)	N.S.
Oligohydramnios	1 (0.6%)	7 (0.8%)	N.S.
Polyhydramnios	0 (0.0%)	4 (0.4%)	N.S.

**Table 3: Fetal and Neonatal Outcomes for Teenage and Non-Teenage Mothers**

Outcome	Teenage Mothers (n=128)	Non-Teenage Mothers (n=782)	P-Value
Post-term Infants	55	400	>0.05
Meconium Aspiration Syndrome	55	200	>0.05
Other Newborn Problems	18	182	>0.05

## DISCUSSION

The findings of this study about obstetric outcomes in teenage pregnancies build on and add to the existing literature on this topic<sup>10</sup>. Earlier research has consistently highlighted the doubly dangerous situation of young mothers compared to older mothers in terms of both obstetrical and maternal-fetal outcomes occurring with teenage births. Our research fits with that corpus of evidence and provides particular insight into obstetric outcomes in a Pakistan population<sup>11</sup>. Our results showed that adolescent mothers had a higher proportion suffering from severe anemia, chorioamnionitis, and instrumental deliveries compared to those who were not adolescents<sup>12</sup>. Such findings have also been reported in studies in many different settings (Abenham & Glezerman, 2001<sup>3</sup> Farr & Farr, 2002; Jain & Upadhyay, 2010). For example, a systematic review and meta-analysis of 10 studies by Gribble and Zhang (2020) found teenage mothers to be twice as likely as other pregnant women to suffer anemia and swollen membranes. Similarly, Yancey et al. (2004) found the odds of an instrumental delivery were higher among teenage mothers than non-teenage ones<sup>14,15</sup>. Nevertheless, our study also reveals specific differences with past Study. In contrast to some studies (Dyer et al., 2017; Kiran et al., 2019), we found no higher incidence of preterm delivery, low birth weight infants, or maternal mortality among teenage mothers because of demographic disparities or sample size in these studies being conducted across many healthcare systems that might result in different outcomes<sup>16,17</sup>. Our research highlights the importance of context in shaping obstetric outcomes in teenage pregnancies. For example, we found that adolescent mothers in Pakistan had much higher risks than older women of developing anemia, chorioamnionitis, and other infections of pregnancy, mainly because of disparities in wealth and access to good healthcare services as well as nutritional deficiencies within this population<sup>18</sup>. Such findings are characteristic of

research that has highlighted the importance of socio-economic factors regulating and controlling maternal and neonatal health outcomes (Alio et al., 2016; Ofori-Adjei et al., 2014)<sup>19</sup>. In addition study implies that more attention should be paid to how Care can be improved for teenage mothers in the obstetric ward. The higher level of anemia and chorioamnionitis among teenage mothers makes it essential to start early and adequately study these patients through prenatal care, giving them nourishment support, as well as educate them about health. These findings are aligned with calls from global health organizations that advocate for comprehensive reproductive health services aimed at adolescents (Bhattacharya et al., 2011; Centers for Disease Control and Prevention, 2020)<sup>20</sup>.

## CONCLUSION

This Study highlights the amplified risks of grave anemia, chorioamnionitis, and instrumental deliveries among adolescent mothers when contrasted with non-teenage mothers in Khyber Pakhtunkhwa, Pakistan. While young pregnancies are related to explicit obstetric difficulties, for example, grave anemia and chorioamnionitis, there were no considerable contrasts in untimely birth, low birth weight, or maternal mortality between the two gatherings. These evelations underscore the need to Concentrate endeavors on upgraded prenatal care and giving valuable assets to adolescent custodians in the locale. By providing suitable help and wellbeing administrations through focused projects and through arrangement choices that advance access, medical services suppliers and approach producers can help assuage the unfortunate results identified with young pregnancies and advance more advantageous maternal and neonatal wellbeing results overall.

**Disclaimer:** Nil

**Conflict of Interest:** No

**Funding Disclosure:** Nil

## Authors Contribution

**Concept & Design of Study:** Lubna Tahir

**Drafting:** Aysha Bibi

**Data Analysis:** Kiran Jamshed

**Critical Review:** Seema Amin

**Final Approval of version:** All Authors Mentioned Above.

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