Fetal Outcome in Younger Age Pregnant Female; A Tertiary Care Hospital

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ABSTRACT
Background: The efficacy of Caesarean section in managing breech births surpasses that of a vaginal birth. Risk factors associated with breech presentation include prematurity, recurrent pregnancies, uterine anomalies, and fetal abnormalities. this study aimed to assess fetal outcomes in younger age pregnant female.
Materials and Methods: This cross-sectional study was performed in Department of Obstetrics and Gynecology at Mardan Medical Complex, Mardan. The study conducted in 12 months duration from January to December 2020. All data including patients' history, and clinical tests were collected through designed proforma. All recruited patients and fetal were monitor. All data were analyzed through Microsoft excel 2016.
Results: Fetal outcomes revealed that out of the total cases, 53.6% found in age group 18-25 years and 46.4% in age 26-33 years. Apgar scores found low in 16.1%, low birth weight fetus observed in 17.8%, birth asphyxia in 32.9%, brachial plexus in 12.5%, and fetal distress in 11.4%.
Conclusion: This study highlights that fetal birth issues including low birth weight, birth asphyxia, brachial plexus, and detal distress are common here in our region. It is a crucial to take additional precautions, including vigilant labor monitoring and thorough preparation for infant resuscitation, to mitigate these issues within our local Khyber Pakhtunkhwa community. Awareness of the risks associated with each option can aid in personalized decision-making regarding breech delivery, adding value to the decision-making process. Therefore, the choice of delivery method for breech presentations should be informed by the findings of this study.
Keywords: Outcome, Fetal, Apgar score, brachial plexus, young age, fetal distress.

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INTRODUCTION

Women are postponing having children in developed nations around the globe for a number of reasons, such as pursuing careers, being more financially independent, having access to better and more readily available contraception, and living longer.[1] When it comes to fertility and motherhood, women over 35 are regarded as advanced maternal age, and their chances of conceiving naturally and successfully with assisted conception are often significantly lower. The primary cause of these declines is believed to be oocyte aging, a theory that is supported by the shown effectiveness of younger donors donating oocytes to older recipients. There has been a growing trend over the past three decades to put off having children until after the age of forty.[2] The growing use of reproductive technologies as well as the significant shifts in the workplace and society, such as increased levels of female employment and educational attainment and an increase in the proportion of women in higher-level positions, might be the causes of this phenomenon. It is more difficult to balance work and family life when one is older and has a fixed-term employment contract.[3] Other factors that contribute to this difficulty include the low per capita income of young families, the scarcity of part-time jobs, the absence of flexible working hours, and late financial independence. For young working parents, the absence of reasonably priced daycare may provide additional challenges.[4]

The number of women who become pregnant after the age of 35 is constantly rising as a result of these societal trends, efficient birth control, and more options for treating infertility. Over-40-year-old women becoming pregnant is no longer unusual.[5] When it came to the combined short-term result of newborn mortality or illness and perinatal/neonatal death, scheduled cesarean delivery outperformed scheduled vaginal birth.[6] There has only been one prospective randomized trial on preterm breech births, including 38 individuals in early labor between 28 and 36 weeks. Of them, eighteen were scheduled for emergency cesarean sections and twenty had randomly assigned vaginal deliveries.[7] 25% of women who attempted vaginal birth ended up having cesarean sections due to inadequate fetal heart rate tracings.[8] Three children died from respiratory distress, two from fetal abnormalities, and one from sepsis, according to the documented reasons.[9]

Despite the severity of the issue, it is unclear if the unfavorable consequences of teenage pregnancy are exclusively the result of sociodemographic characteristics often linked to adolescent pregnancy, or if they are partially due to the biological reality of

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a young mother's age.[10] Compared to older moms, teenage mothers are more likely to be non-White, impoverished, have less education, be single, and have not had early prenatal care are all recognized risk factors for low birth weight in their offspring.[11]
Therefore, due to insufficient control for sociodemographic risk variables, the biologic risk linked to a young mother's age may have been overstated in earlier research.8–11. Nonetheless, certain epidemiological research and animal studies indicate that being young may be a stand-alone risk factor for unfavorable pregnancy outcomes.[12] This study aims to address the existing gap in the literature regarding fetal outcomes in young age females, especially in our local community. Previous studies have presented mixed findings, and the lack of local research on this subject motivates our investigation. Through this research, we aspire to reduce the risk of mortality and illness linked to this mode of delivery. The insights gained will serve as valuable guidance in implementing preventive measures, including closely monitoring labor and ensuring adequate preparation for neonatal resuscitation. The objective was to generate specific data that will contribute to a better understanding of fetal outcomes associated with young age female in our community.

MATERIAL AND METHODS

This cross-sectional study was performed in Department of Obstetrics and Gynecology at Mardan Medical Complex, Mardan. The study conducted in 12 months duration from January to December 2020. A total of 192 young pregnant female were recruited within age of 20-40 years with actively labor were included while multiple gestations, maternal inadequate pelvis, preterm delivery and know fetal anomalies were excluded from the study. Consent form from patients and ethical approval from hospital administration were obtained before conducting the study. Patients were clinical examined and then demographic and medical history were noted. Included patients were guided throughout the delivery process and monitor close both mother and baby. Data was entered using Microsoft Excel 2016, and statistical analysis was conducted. Percentages and descriptive details were calculated for all parameters and were presented in an organized manner through tables and graphs.

RESULTS

The mean and standard deviations for age, gestation time, gravidity, Apgar score, and parity were 23 ± 2.41, 39±0.73, 2.8±0.52, 7.2±0.44, and 2.1±0.54, respectively (Table 1).
Regarding age distribution, 103 patients (53.6%) were in the 18-25 age group, while 89 patients (46.4%) were in the 26-33 age group. The fetal outcomes table indicated that 31 (16.1%) patients had low Apgar scores, 34 (17.8%) had low birth weights, 63 (32.9%) experienced birth asphyxia, 24 (12.5%) had brachial plexus injuries, 22 (11.4%) suffered from fetal distress, and 18 (9.3%) faced stillbirths (Table 2).

Table 1: Descriptive Statistics (Mean and Standard Deviation of Pregnant Females) (n=192)

Parameter	Mean & Standard Deviation
Age	23±2.41
Gestation period	39±0.73
Gravidity	2.8±0.5.2
Apgar Score	7.2±0.44
Parity	2.1±0.54

Table 2: Age Distribution (n=192)

Age-wise (Years)	Frequencies	Percentages (%)
18-25	103	53.6
26-33	89	46.4
Fetal Outcomes	Frequencies	Percentages (%)
Still Birth	18	9.3
Birth Asphyxia	63	32.9
Low Birth Weight	34	17.8
Fetal Distress	22	11.4
Brachial Plexus Injury	24	12.5
Low Apgar Score	31	16.1

DISCUSSION

The impact of sociodemographic determinants on reproductive success is supported by our research; insufficient prenatal care, in particular, was linked to a significant rise in preterm. This conclusion is in line with the findings of several other research, which show that the outcomes of adolescent pregnancies are significantly influenced by sociodemographic characteristics and the quality of prenatal care.[13] There were 32.9% of birth asphyxia cases, 16.1% poor Apgar scores, 17.8% low birth weights, 12.5% brachial plexus injuries, 11.4% fetal distress, and 9.3% stillbirths among our patients. The following are the prenatal outcomes linked to our research; other results include low birth weights, injury to the brachial plexus, and fetal discomfort. During their pregnancies, 44.1% of women experienced various types of abuse from their spouses.[14] However, our findings also show that although teenage moms are significantly more likely to give birth to small-for-gestational-age, low-birth-weight, and premature infants, these risks still hold true when the analysis is restricted to married mothers who receive appropriate prenatal care and have age-appropriate educational levels.
Consistent during the 20-year period we examined, this increase in risk implies that a mother's early age inherently raises the likelihood of unfavorable pregnancy out comes.[15]
Our findings imply that the dangers associated with a dolescent pregnancy are not entirely eliminated by ap propriate prenatal care, most likely due to the increas ed likelihood of a bad outcome associated with biolo

gic immaturity. Beyond the increased risk resulting from the negative social and behavioral characteristics that are often linked with teenage pregnancy, being pregnant when still a young adolescent can itself lead to an inherent increase in the likelihood of unfavorable pregnancy outcomes.[16] Therefore, while improving the sociodemographic environment of pregnant teens may lessen the likelihood of unfavorable reproductive outcomes, it won't completely eradicate it. The burden of teenage pregnancy, according to our data, will likely continue to be unacceptably high unless steps are taken to determine the intrinsic biologic factors that raise the risk of unfavorable pregnancy outcomes for younger mothers and then work to reduce their effects.[17]

CONCLUSION

A lower birth weight was associated with a higher likelihood of unfavorable pregnancy outcomes. The illness has a significant detrimental effect on the health of both the mother and the infant and is associated with a variety of major health issues, such as low birth weight, premature labor, and miscarriage.

REFERENCES

1. Al Riyami A, Afifi M, Mabry RM. Women's autonomy, education and employment in Oman and their influence on contraceptive use. Reproductive health matters. 2004;12(23):144-54.
2. Cimadomo D, Fabozzi G, Vaiarelli A, Ubaldi N, Ubaldi FM, Rienzi L. Impact of maternal age on oocyte and embryo competence. Frontiers in endocrinology. 2018;9:327.
3. Brewster KL, Rindfuss RR. Fertility and women's employment in industrialized nations. Annual review of sociology. 2000;26(1):271-96.
4. Waldfogel J. Child care, women's employment, and child outcomes. Journal of Population Economics. 2002;15:527-48.
5. Inhorn MC, Patrizio P. Infertility around the globe: new thinking on gender, reproductive technologies and global movements in the 21st century. Human reproduction update. 2015;21(4):411-26.
6. Rydahl E, Eriksen L, Juhl M. Effects of induction of labor prior to post-term in low-risk pregnancies: a systematic review. JBI database of systematic reviews and implementation reports. 2019;17(2):170.
7. Schmidt S, Norman M, Misselwitz B, Piedvache A, Huusom LD, Varendi H, et al. Mode of delivery and mortality and morbidity for very preterm singleton infants in a breech position: a European cohort study. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2019;234:96-102.
8. Chauhan SP, Magann EF, Carroll CS, Barrilleaux PS, Scardo JA, Martin Jr JN. Mode of delivery for the morbidly obese with prior cesarean delivery: vaginal versus repeat cesarean section. American journal of obstetrics and gynecology. 2001;185(2):349-54.
9. Mathur N, Garg K, Kumar S. Respiratory distress in neonates with special reference to pneumonia. Indian pediatrics. 2002;39(6):529-38.
10. Mathewos S, Mekuria A. Teenage pregnancy and its associated factors among school adolescents of Arba Minch town, southern Ethiopia. Ethiopian journal of health sciences. 2018;28(3):287-98.
11. Amjad S, MacDonald I, Chambers T, Osornio-Vargas A, Chandra S, Voaklander D, et al. Social determinants of health and adverse maternal and birth outcomes in adolescent pregnancies: a systematic review and meta-analysis. Paediatric and perinatal epidemiology. 2019;33(1):88-99.
12. Ickovics JR, Reed E, Magriples U, Westdahl C, Schindler Rising S, Kershaw TS. Effects of group prenatal care on psychosocial risk in pregnancy: results from a randomised controlled trial. Psychology and Health. 2011;26(2):235-50.
13. Kramer MS, Goulet L, Lydon J, Séguin L, McNamara H, Dassa C, et al. Socio-economic disparities in preterm birth: causal pathways and mechanisms. Paediatric and perinatal epidemiology. 2001;15:104-23.
14. Ibrahim Z, Ahmed WS, El-Hamid S, Hagras A. Intimate partner violence among Egyptian pregnant women: incidence, risk factors, and adverse maternal and fetal outcomes. Clinical and experimental obstetrics & gynecology. 2015;42(2):212-9.
15. Lee K-s, Ferguson RM, Corpuz M, Gartner LM. Maternal age and incidence of low birth weight at term: a population study. American journal of obstetrics and gynecology. 1988;158(1):84-9.
16. Copping LT, Campbell A, Muncer S. Violence, teenage pregnancy, and life history: ecological factors and their impact on strategy-driven behavior. Human Nature. 2013;24:137-57.
17. Hackett K, Lenters L, Vandermorris A, LaFleur C, Newton S, Ndeki S, et al. How can engagement of adolescents in antenatal care be enhanced? Learning from the perspectives of young mothers in Ghana and Tanzania. BMC Pregnancy and Childbirth. 2019;19:1-12.