OUT COME OF TEEN AGE PREGNANCY

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ABSTRACT

Introduction: Teenage pregnancy is pregnancy in a female under the age of 20 (when the pregnancy ends). A pregnancy can take place as early as two weeks before menarche (the first menstrual period), which signals the possibility of fertility, but usually occurs after menarche. Aim of the present study was to find out the fetal and maternal outcome of teenage pregnancy. It is a descriptive study carried out in one year, in District teaching hospital of Gomal Medical College D. I. Khan, Pakistan.

Methods: Patients with pregnancy and aging below 18 years presenting to Gynae unit were followed up since 1st antenatal visit to delivery. Patient with teenage pregnancy and presenting first time in labour were also included in the study. They were looked for associated medical problems. The main outcome measures were health of mother, mode of delivery, weight of the baby, neonatal nursery admission and postnatal complications of mother.

Results: There is marked increase in hospital admission of the teenage pregnancies in last 3 years, probably because of IDPS from Waziristan. The most common medical problems found was anaemia (HB < 10 gm) which was 67%. In a total of 92% of them delivered through. Normal vaginal delivery which shows close relationship of smaller babies, and laxity of the pelvic structure. Fifty four percent of the babies were weighing in 2.5-3 kg range.

Keyword: Teenage, antenatal care, anemia, neonatal jaundice.

INTRODUCTION

Teenage pregnancy is pregnancy in a female under the age of 20 (when the pregnancy ends). A pregnancy can take place as early as two weeks before menarche (the first menstrual period), which signals the possibility of fertility, but usually occurs after menarche. In healthy, well - nourished girls, menarche normally takes place around the ages 12 or 13. Whether the onset of biological fertility will result in a teenage pregnancy depends on a number of personal and societal factors. Teenage pregnancy rates vary between countries because of differences in the levels of sexual activity, general sex education provided and access to affordable contraceptive options. Worldwide, teenage pregnancy rates range from 143 per 1000 in some sub-Saharan African countries to 2.9 per 1000 in South Korea.1,2

Pregnant teenagers face many of the same obstetrics issues as women in their 20s and 30s. There are however, additional medical concerns for mothers younger than 15.4 However, research has shown that the risk of low birth weight is connected to the biological age itself, as it was observed in teen births even after controlling for other risk factors (such as utilization of antenatal care etc.).^{5,6}

In developed countries, teenage pregnancies are

associated with many social issues, including lower educational levels, higher rates of poverty, and other poorer life outcomes in children of teenage mothers. Teenage pregnancy in developed countries is usually outside of marriage, and carries a social stigma in many communities and cultures. Many studies and campaigns have attempted to uncover the causes and limit the numbers of teenage pregnancies. Among OECD developed countries, the United States, United Kingdom and New Zealand have the highest level of teenage pregnancy, while Japan and South Korea have the lowest in 2001.

METHODS

This descriptive study was conducted in Gynae unit of District teaching hospital of Gomal Medical College, Dera Ismail Khan. District Dera Ismail khan has diverse catchment areas, right from Waziristan on one side to Zhob on another side. All patients with teen age pregnancy were included in study since their first antenatal visit till delivery, patients with first visit during delivery were also included. Teen age pregnant patients who had abortion were excluded from studies. About 118 patients were studied in 1 year period from January till December 2011. Patient was examined on each antenatal visit with obs-

tetrical examinations along with general physical examinations. History and clinical examination based investigations advised, while all patients were investigated for routine tests. The main outcome parameters included were, number of pregnancies, period of gestation, medical disorder, mode of delivery, neonatal weight and post natal complications.

RESULTS

Result showed that number of admissions to labour ward have marked increase after the year 2010 though the total number of admissions also increased (Table 1). This may have an association with Waziristan military operations, as early marriages and teen age pregnancies are common in tribal culture.

Among all only three patients out of 118 were unmarried. Primigravida were 94%, gravida two were 4.2% and patients with third pregnancy in teen age were only two. (1.8%). Regarding medical disorders anaemia was found as the commonest medical problem (Table 4). Patients with full term pregnancy were 73% and those who had pre-term deliveries were 27% (Table 3). As regards, the mode of delivery, vaginal deliveries were conducted in 97 patients and caesarian section was performed in only 8 patients (Table 5). Majority of the neonates were of 2.5 to 3 kg weight (Table 6).

In postnatal complications mastitis was common, lactation establishment was difficult in those young mothers and 41.5% had failed lactation initiation.

Table 1: Frequency of Teen Age Pregnancy.

Year	Total Delivery Admission in Labour Unit	Teenage Pregnancy
2009	40212	49
2010	5132	67
2011	6202	118

Table 2: Number of Pregnancies.

	Cases	Percentage
Primigravida	111	94%
Gravida 2	5	4.2%
Gravida 3	2	1.8%

Table 3: Period of Gestation.

	Cases	Percentage
Full term pregnancy	87	73%
Less than 37 weeks	31	27%

Table 4: Medical Disorder in Teen Age Pregnancy.

	Case	Percentage
Anemia (Hb < 10 gm)	89	75%
Pregnancy induced hypertension	21	17%
Epilepsy	3	2%
Malaria	22	18%
Urinary tract infections	48	40%
Chest infections	13	11%
Jaundice	2	1.6%

Table 5: *Mode of Delivery.*

	Cases	Percentage
Spontaneous vaginal delivery	28	23.7%
Vaginal delivery with episiotomy	69	58.4%
Instrumental delivery	11	9.3%
Caesarian section	8	6.6%

Table 6: Neonatal Birth Weight.

	Cases	Percentage
3 –3.5 kg	46	39%
2.5-3 kg	64	54%
<2.5 kg	8	7%

Table 7: Postnatal Complications.

Complication	Case	Percentage
Post partum hemorrhage	22	18.64%
Urinary tract infections	29	24.5%
Mastitis	31	26.27%
Failed lactations	49	41.5%

Our study showed teen age pregnancy rate as 18 per thousand deliveries, which is not very high as compared to other studies.

DISCUSSION

In reporting teenage pregnancy rates, the number of pregnancies per 1,000 females aged 15 to 19 when the pregnancy ends is generally. "Used Save the Children" found that annually, 13 million children are born to women under age 20 worldwide, with more

than 90% cases in developing countries. Complications of pregnancy and childbirth are the leading cause of mortality among women between the ages of 15 and 19 in such areas.3 The highest rate of teenage pregnancy in the world is in sub-Saharan Africa, where women tend to marry at an early age. In Niger, for example, 87% of women surveyed were married and 53% had given birth to a child before the age of 18.10 In the Indian subcontinent, early marriage sometimes results in adolescent pregnancy, particularly in rural regions where the rate is much higher than it is in urbanized areas. The rate of early marriage and pregnancy has decreased sharply in Indonesia and Malaysia, although it remains relatively high in the former. In the industrialized Asian nations such as South Korea and Singapore, teenage birth rates are among the lowest in the world. The age of the mother is determined by the easily verified date when the pregnancy ends, not by the estimated date of conception.¹² Consequently, the statistics do not include women who became pregnant at least shortly before their 20th birthdays, but who gave birth, experienced a miscarriage, or had a voluntary abortion on or after their 20th birthdays.19 Similarly, statistics on the mother's marital status are determined by whether she is married at the end of the pregnancy, not at the time of conception.¹³ Maternal and prenatal health is of particular concern among teens that are pregnant or parenting. The worldwide incidence of premature birth and low birth weight is higher among adolescent mothers.^{4,7,20} In a rural hospital in West Bengal, teenage mothers between 15 – 19 years old were more likely to have anemia, preterm delivery, and low birth weight than mothers between 20 - 24 years old.21 Results of our study are similar to this study.

Research indicates that pregnant teens are less likely to receive prenatal care, often seeking it in the third trimester, if at all.⁴ The Guttmacher Institute reports that one – third of pregnant teens receive insufficient prenatal care and that their children are more likely to suffer from health issues in childhood or be hospitalized than those born to older women.²²

Young mothers who are given high quality maternity care have significantly healthier babies than those that do not. Many of the health issues associated with teenage mothers, many of whom do not have health insurance, appear to result from lack of access to high – quality medical care.²³

Many pregnant teens are at risk of nutritional deficiencies from poor eating habits common in adolescence, including attempts to lose weight through dieting, skipping meals, food faddism, snacking, and consumption of fast food.²⁴

Inadequate nutrition during pregnancy is an even more marked problem among teenagers in developing countries. 18,19 Complications of pregnancy

result in the deaths of an estimated 70,000 teen girls in developing countries each year. Young mothers and their babies are also at greater risk of contracting HIV.³ The World Health Organization estimates that the risk of death following pregnancy is twice as great for women between 15 and 19 years than for those between the ages of 20 and 24. The maternal mortality rate can be up to five times higher for girls between 10 and 14 years than for women of about twenty years of age. Illegal abortion also holds many risks for teenage girls in areas such as sub-Saharan Africa.¹²

Risks for medical complications are greater for girls 14 years of age and younger, as an under developed pelvis can lead to difficulties in childbirth. Obstructed labour is normally dealt with by Caesarean section in industrialized nations; however, in developing regions where medical services might be unoavailable, it can lead to eclampsia, obstetric fistula, infant mortality, or maternal death.³ For mothers in their late teens, age in itself is not a risk factor, and poor outcomes are associated more with socioeconomic factors rather than with biology.⁴ Results of our study show that obstructed labor and caesarian sections are uncommon in them. This might be due to small babies in our study group.

Several studies have examined the socioeconomic, medical, and psychological impact of pregnancy and parenthood in teens. Life outcomes for teenage mothers and their children vary; other factors, such as poverty or social support, may be more important than the age of the mother at the birth. Many solutions to counteract the more negative findings have been proposed. Teenage parents who can rely on family and community support, social services and child – care support are more likely to continue their education and get higher paying jobs as they progress with their education.20 According to the National Campaign to Prevent Teen Pregnancy, nearly 1 in every 4 teen mothers will experience another pregnancy within two years of having their first.21 Pregnancy and giving birth significantly increases the chance that these mothers will become high school dropout and as many as half have to go on welfare.22 Many teen parents do not have the intellectual or emotional maturity that is needed to provide for another life. Often, these pregnancies are hidden for months resulting in a lack of adequate prenatal care and dangerous outcomes for the babies.²³ Factors that determine which mothers are more likely to have a closely spaced repeat birth include marriage and education: the likelihood decreases with the level of education of the young woman - or her parents and increases if she gets married.24 Early motherhood can affect the psychosocial development of the infant. The children of teen mothers are more likely to be born with prematurity and low birth weight predisposing them to many other lifelong conditions.²¹ The hardships do not stop at birth for these children. The children are at higher risk and are usually plagued by intellectual, language, and socio-emotional delays.²² Developmental disabilities and behavioral issues are increased in children born to teen mothers.²³ One study suggested that adolescent mothers are less likely to stimulate their infant through affectionate behaviors such as touch, smiling, and verbal communication, or to be sensitive and accepting toward his or her needs. Another found that those who had more social support were less likely to show anger toward their children or to rely upon punishment.²⁴

Poor academic performance in the children of teenage mothers has also been noted, with many of them being more likely than average to fail to graduate from secondary school, be held back a grade level, or score lower on standardized tests.⁷ Daughters born to adolescent parents are more likely to become teen mothers themselves.⁷ A son born to a young woman in her teens is three times more likely to serve in prison.²⁵

Adolescents may lack knowledge of, or access to, conventional methods of preventing pregnancy, as they may be too embarrassed or frightened to seek such information.²⁶ Contraception for teenagers presents a huge challenge for the clinician. In 1998, the government of the United Kingdom set a target to halve the under - 18 pregnancy rate by 2010. The Teenage Pregnancy Strategy (TPS) was established to achieve this. The pregnancy rate in this group, although falling, rose slightly in 2007, to 41.7 per 1000 women. Young women often think of contraception either as 'the pill' or condoms and have little knowledge about other methods. They are heavily influenced by negative, second hand stories about methods of contraception from their friends and the media. Prejudices are extremely difficult to overcome. Over concern about side-effects, for example weight gain and acne, often affect choice. Missing up to three pills a month is common, and in this age group the figure is likely to be higher. Restarting after the pill - free week, having to hide pills, drug interactions and difficulty getting repeat prescriptions can all lead to method failure.27

It is *concluded* that teenage pregnancy is a high risk pregnancy, which need good antenatal and post natal care. They have less trends of obstructed labour, but high number of small babies. Anemia is common medical problem in them. Teenage pregnant patients need, extensive, medical and psychological support.

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