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Adolescent Pregnancies Managed at KK Hospital

S Nadarajah, N K Y Leong

ABSTRACT

Aim of Study: The aim was to analyse the pregnancy outcome among girls, aged 17 and below, at KK Hospital.

Methodology: This is a retrospective study. A total of 108 adolescent pregnancies were analysed with regards to pregnancy order, antenatal complications, mode of delivery and pregnancy outcome.

Results: The 2 most common antenatal complications were anaemia and preterm labour. The repeat pregnancy rate was 15.7%. Vaginal delivery was achieved in 7.2%; 21.2% of babies born weighed less than 2.5 kg.

Conclusions: Adolescent pregnancies accounted for only a small proportion of all deliveries in our hospital. Late or non-existent antenatal care was a feature in most pregnancies. The incidence of repeat pregnancies reflects the need for a more effective counselling on contraception.

Keywords: adolescent pregnancy, teenage pregnancy

INTRODUCTION

Adolescent pregnancy is really a problem of children having children, when they are on the threshold of adulthood. Adolescent girls who are pregnant are physically as well as socially disadvantaged when compared to their older counterparts. The aim of this study was to analyse the adolescent pregnancies managed at KK Hospital especially with regards to antenatal complications, mode of delivery and birthweights of the babies.

MATERIALS AND METHOD

The period of study was from January 1997 to December 1997. All deliveries of girls aged 17 and below were retrospectively analysed. The gestation at booking, number of antenatal visits, antenatal complications, mode of delivery, birthweights of the babies and postnatal complications were studied.

RESULTS

There was a total of 108 deliveries by girls aged 17 and below. This accounted for 0.7% of all deliveries in KK Hospital for 1997.

For 84.3% of the girls, it was their first pregnancy. For 5 in the 16-year age group and 12 in the 17-year age group, it was their second pregnancy. This accounts for 15.7% of all deliveries. Ninety-five percent (88%) of the girls had some form of antenatal care while 13 (12%) were unbooked ie. had no prior antenatal care. Among the girls who sought antenatal care, 51.9% had their first visit in their third trimester, with 30.5% and 5.6% having theirs in the second and first trimesters respectively. The average number of antenatal visits was 3.9 per pregnancy.

Twenty-four (22%) of the girls were unsure of their last menstrual period. Anaemia and preterm labour were the most common antenatal complications, each affecting 19 (17.6%) of the girls. Anaemia is defined as a haemoglobin level of less than 10 gm % and preterm labour as the onset of labour before 37 weeks of gestation.

Prelabour rupture of membranes affected 6 (5.6%) of the pregnancies. There was a single case each of gestational diabetes, syphilis, and intrauterine growth retardation. Two girls admitted to having abused drugs during their pregnancies.

Of the 108 pregnancies ,100 had normal vaginal deliveries, 3 (2.7%) delivered via lower segment Caesarean section, and 5 had forceps assisted vaginal delivery.

Two girls developed peripartum and post-partum pregnancy induced hypertension, and 1 girl developed post-partum haemorrhage.

Distribution of pregnancy by race and age

	Age			
Race	14	15	16	17
Malay (63) 58.3%	2	2	22	37
Chinese (38) 35.2%	1	6	12	19
Indian (7) 6.5%	0	0	1	6
	3 (2.8%)	8 (7.4%)	35 (32.4%)	62 (57.4%)

DISCUSSION

While 18 and 19-year old girls are by definition teenagers, the medical and social disadvantages of childbearing is apparently less in these girls when compared to girls who are 17 and below. Therefore this study was confined to the latter group of girls.

Department of Reproductive Medicine
KK Women's and Children's Hospital
100 Bukit Timah Road
Singapore 229899

S Nadarajah, MBBS, MRCOG
Registrar

N K Y Leong, MRCOG, FRCOG, FAMS
Senior Consultant and Head

Correspondence to:
Dr S Nadarajah

Distribution of birthweight according to maternal age

Age	Birthweight ELBW (< 1000)	VLBW (< 1.5 kg)	LBW (< 2.5 kg)
14	0	0	1
15	0	0	1
16	0	0	8
17	1	1	11

19.4% of the babies had LBW with 1 baby each with VLBW and ELBW.

While the Malay population forms only 23% of the population in Singapore, they formed 58.3% of teenage pregnancies in KKH. The same trend is seen in the general population with pregnancies of Malay girls aged 19 and below accounting for 42.3% of all teenage pregnancies in Singapore[15]. This may in part be explained by the fact that Malay women in general marry at a younger age. However it is questionable whether it alone accounts for the high proportion of teenage pregnancies in this racial group.

Most of the medical problems of teenage pregnancies are directly or indirectly related to psychosocial factors. Late or non-existant prenatal care is a feature in most pregnancies. While 53.3% of these patients had their first visit in their third trimester, 12.1% were completely unbooked, having their first contact with any form of obstetric care only when they went into labour. It is well documented that there are more complications in pregnancies when patients receive any prenatal care until they are into their third trimester[12].

Anaemia is one of the most common antenatal complications in teenage pregnancies. It was found to be twice as common in pregnant teenagers when compared to pregnant women who were more than 20 years of age[3]. This is usually due to poor nutrition secondary to financial reasons or to poor dietary habits of teenagers who do not have the benefit of nutritional advise. This is further compounded by late booking where they do not have the benefit of supplemental vitamins.

Preterm labour was as common as anaemia, affecting 17.6% of the pregnancies. The incidence of preterm labour in the general population in a developed country such as Australia, is 6.7%[5,6]. The higher incidence seen in teenage pregnancies is thought to be due to lifestyle factors such as smoking, drug abuse and the presence of genital tract infection in these teenagers, rather than to their age per se.

There were 4 girls with pregnancy-induced hypertension. It is well documented that pregnant teenagers have a higher risk of developing pregnancy-induced hypertension. There was a single case of syphilis. While all pregnant women are routinely screened for syphilis as part of the antenatal check up, they are not routinely checked for other sexually transmitted diseases like chlamydia, gonorrhoea and AIDS. Therefore the incidence of sexually transmitted disease may in reality be higher. Only two girls admitted to abusing drugs, but as drug abuse is a serious crime in Singapore, requiring mandatory detention and rehabilitation, most girls would have been reluctant to volunteer this information.

Adolescents, because of their smaller physical build, have always been thought to have a higher risk for cephalopelvic disproportion and subsequent Caesarean section. However this has been refuted by several studies[4,7,8]. In this study, the Caesarean section rate was only 2.7%. The reason for this may have been due to the high incidence of low birthweight among the babies born with 21.2% weighing less than 2.5 kg. Several studies have attributed the higher rates of low birthweight babies among adolescent pregnancies to unfavourable sociodemographic and health care factors such as substance abuse, low income, single parent status, low educational level and delayed or absence of prenatal care[9-11]. However, in countries where teenage childbearing is not concentrated in the lower socioeconomic classes, adolescents still have disproportionately high rates of low birthweight infants. In Saudi Arabia, where early marriage and teenage pregnancy is common in all socioeconomic groups as a result of religious beliefs, the incidence of low birthweight infants born to mothers 17 years of age or less has been reported to be 23%[12]. Therefore it is likely that a combination of factors are responsible for adolescents having low birth weight babies.

The repeat pregnancy rate was 15.7%. Of these, 10.2% had a termination of pregnancy in their first pregnancy and 5.5% delivered a live baby. It has been found that women who bear only one child during their adolescence seem to have the best chance of educational and economic achievement if they receive adequate support after birth of their first child. The birth of a second child during adolescence predicts a negative outcome. They are less able to achieve an education, independence and financial security[13,14]. The high rate of repeat pregnancy at such a young age is probably a reflection of inadequate counselling by health care workers with regards to contraception and the benefits of spacing subsequent pregnancies.

CONCLUSION

Fortunately adolescent pregnancy does not pose a major problem in Singapore as it does in some other countries. However, it must be recognised as a high risk pregnancy and managed accordingly. In addition, greater efforts must be directed towards reducing the high numbers of repeat pregnancies in a group that is ill equipped to handle even just one pregnancy.

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