

CHARACTERISTICS OF ADOLESCENT PREGNANCY IN SANGLAH HOSPITAL DENPASAR BALI 2014-2015

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Abstract: The incidence of teenage pregnancy is quite high with different rates in some countries. Teenage pregnancy is an important health problem faced by governments in both developing and developed countries. This is associated with various kinds of complications, both in the fetus and mother, which can arise during the process of pregnancy and childbirth. This is a descriptive study of the medical records of teen pregnancy and childbirth at the delivery room of Sanglah Hospital Denpasar Bali for two years 2014-2015. During two years there were 2767 deliveries and 239 (8.63%) were teen pregnancy/childbirth, 135 cases (8.72%) and 104 (8.75%) in 2015. In this study it was found that most (54.29%) cases have secondary education and below. Even 7 cases (7.11%) did not complete their education in primary school. Most (58.15%) experienced maternal complications with preterm labor / delivery was the most common complication (33.47%) and severe preeclampsia in 8.36%. Neonatal complications occurred in 39.25% in the form of low and very low birth weight (33.83%), moderate and severe asphyxia, (16.94%), intra uterine fetal death 5 (2.06%), IUGR (2.47%) and congenital abnormalities (1.23%).

Keywords: Teenage pregnancy, characteristic, mother and baby outcomes.

I. INTRODUCTION

Teenage pregnancy is an important public health problem faced by governments both in developing and developed countries. This is associated with various kinds of complications, both in the baby and mother, which can arise during the process of pregnancy and childbirth. Aside from being a health problem, adolescent pregnancy also has a great social impact, both on the adolescent itself and on the child being born as well as on the surrounding community.

Based on data from UNICEF, around the world every five births occur, one of which is a baby born from a teenage pregnancy. It is estimated that 70 thousand adolescent women die from pregnancy each year, which is due to the fact that physically adolescents are not mature enough to be able to go through the process of pregnancy and childbirth properly.¹

In Indonesia, with a population group of 10-24 years old at 63.4 million people, the risk of adolescent pregnancy problems will be a major challenge for Indonesia.² Research data on adolescent pregnancy rates and their complications are still very limited in Indonesia. Based on data available from the Central Statistics Agency, the percentage of young mothers in Indonesia (under 20 years) is 1.61%.³

Teen pregnancy and childbirth are seen as high risk pregnancies, because they are closely related to various pregnancy complications such as preterm delivery, IUGR, low birth weight and neonatal or perinatal death. In addition there is also an increased risk of vaginal surgery and caesarean section.⁴

For this reason, we conducted a study aimed at finding out the prevalence, characteristics and obstetric complications

II. METHODOLOGY

This research is a retrospective descriptive study conducted at the Emergency Obstetrics and Gynaecology Department of Sanglah Hospital on October 1, 2015 to January 1, 2016. The sample of the study was all cases of teenage pregnancy giving birth at Sanglah Hospital Denpasar in the period January 1, 2014 to December 31, 2015. Data for This study was obtained from the register of obstetric IRD patients, obstetric room patient registers and medical records of study sample patients. The data obtained is then compiled and tabulated and presented in tables and narratives.

III. RESULT AND DISCUSSION

Within 2 years (1 January 2014 - 31 December 2015) there were 2767 deliveries taking place at Sanglah Hospital. Among the total deliveries, 239 cases were recorded as teenage pregnancy cases at the Sanglah Hospital, Denpasar. The percentage of teenage pregnancy in childbirth compared to the total delivery of all ages at the Sanglah Hospital during the 2 years was 8.63%, with details in 2014 of 135 cases (8.72%) and in 2015 as many as 104 cases (8.52%). This figure is similar to large studies conducted in the United States (8.75%) and Thailand (9%), but higher than similar studies in Canada (4.35%).³

In this study, it was found that most of the adolescents had a fairly good level of education, where adolescents with a high school education level (or equivalent) were 114 cases (47.71%), although there were still 17 adolescents (7,11%) who did not attend school. According to large-scale research conducted by Chen et al., socio-demographic factors that are often found in adolescent pregnancy are poverty, low levels of education, inadequate antenatal care and unmarried.^{4,5} Low level education has a strong correlation with the incidence of pregnancy in adolescents. Low education also reduces its accessibility to jobs and health care systems.^{5,6}

Table 1: Education Level of Adolescent Pregnancy

Level of Education	f	Percentage
Uneducated	17	7,11
Primary School	33	13,80
Junior High School	75	31,38
Senior High School	114	47,71
	239	100

In our study the majority of cases of teenage pregnancy were first pregnancies, amounting to 221 cases (92.47%). Research by Smith and Pell in Scotland reported that adolescent first pregnancies are independently not associated with an increased risk of poor outcomes, and have a lower risk of caesarean delivery.^{10,11} However, a second pregnancy in adolescence is associated with a threefold increased risk for preterm and stillbirth labour/delivery. Although most (92.47%) were first pregnancies, in this study there was 1 case (7.53%) which was the second pregnancy and the first child was 2 years old. Of the 239 cases of teenage pregnancy 25 (10.46%) were 10-16 years old, and 214 (89.54%) were 17-19 years old. As reported by other researchers, pregnancy and childbirth in adolescents have a higher risk of complications. In this study there are 136 cases were found with maternal complications (58.15%) and the remaining 103 cases were without maternal complications (41.85%). Preterm labour/delivery was the most common complication 80 cases (33.47%) and severe preeclampsia in cases (8.36%). Various studies that have been conducted in the country show that preterm labour/delivery is the most common complication in adolescent pregnancy, as for example reported by Dubashi 10.56%, Sharma et al., at 13.2%.^{1,11,12}

Obstetric complications and neonatal complications are followed by the costs associated with the care and care required and length of stay in hospital. Neonatal complications can also be followed by the emergence of a disabilities in subsequent baby growth and development. Table 2 below shows the complications that occur in pregnancy in adolescents at Sanglah Hospital. Not only Obstetric complications, but also neonatal complications. In this study we found 95 neonates (39.25%) had complications compared to 147 neonates (60.75%) who did not experience complications.

A large-scale study conducted on 340,000 pregnant women in the UK, adolescents aged less than 18 years have a far greater risk of preterm labour than those aged 18 years and over. The infant mortality rate, very low birth weight is said to be significantly higher in pregnant women less than 15 years of age compared to older ages.⁹

Socio-economic and even cultural factors in teenage pregnancy decrease their accessibility to work and also health services. In this study, the majority (64.44%) had done adequate antenatal care, but there were quite a few that had ANC less than 4 times (28.45%), in fact there were 7.11% who had never had ANC at all. The socioeconomic level proved to be very influential on the physical and psychological health condition of pregnant women.^{9,10}

Table 2: Obstetrics Complications of Teenage Pregnancy at Sanglah Hospital

Obtetrics Complication	f	Percentage
Anemia	8	3,34
Premature Rupture of Membranes	16	6,69
Malpresentation	17	7,11
Placenta Previa	1	0,41
Hypertension During Pregnancy		
Gestational Hypertension	7	2,92
Chronic Hypertension	0	0
Mild Eclampsia	6	2,51
Severe Eclampsia	20	8,36
Eclampsia	9	3,76
Superimposed Preeclampsia	0	0
Multiple Pregnancy	3	1,25
Preterm Labour/delivery	80	33,47
Dystocia	7	2,92
Fetal Distress	3	1,67
Post Partum Hemorrhage	0	0

Research at Chonburi Hospital, Thailand found that the number of teenage pregnancies was lower in terms of adequate antenatal examinations compared to the adult age group (74.1% vs 86.6%). This study concludes that teen pregnancy has a high rate in terms of inadequate antenatal care, this is likely due to low levels of education and also teenage pregnancies are often unplanned pregnancies.⁶

Neonatal complications that occurred in this study were low and very low birth weight, 82 cases (33.83%), moderate and severe asphyxia, 41 cases (16.94%), intra uterine fetal death 5 cases (2.06%), IUGR 6 cases (2.47%) and congenital abnormalities 3 cases (1.23%). The incidence of neonatal complications in the form of low birth weight, small gestational period and low Apgar scores were found to be higher in teenage pregnancies. This risk increases with the younger age of pregnant women, the highest risk found in the age of pregnant women less than 15 years. Research conducted by Chen et al. found that the increased risk of mortality in adolescent pregnancies can largely be explained by the high incidence of preterm labour/delivery and low birth weight in adolescent pregnancies.^{5,11,12}

Table 3: Neonatal Complications in Pregnancy Cases of Adolescent Maternity in Sanglah Hospital

Neonatal Complications	f	Percentage
Newborn Baby Weight		
< 1500 gr	19	7,85
1501 – 2500 grams	63	26,03
Asphyxia		
Mild Ashpyxia	19	7,85
Severe Asphyxia	22	9,09
Intra Uterine Fetal Death	5	2,06
IUGR	6	2,47
Congenital Abnormalities	3	1,23

IV. CONCLUSION

The World Health Organization (WHO) defines teenage pregnancy as a pregnancy that occurs in women aged 10 to 19 years. It is said that the best age for a woman to get pregnant and go through labour/delivery is between the ages of 20 and 35, at which time the risk of mother and child is lowest for complications¹³.

The incidence of teenage childbirth at the Sanglah Hospital in Denpasar in this study was 8.63%. Most of these teen pregnancies experience complications, with the most common maternal complications being preterm labour/delivery while the most common neonatal complications are low birth weight and very low birth weight, intra uterine fetal death, intra uterine growth restriction, and congenital Abnormalities

Teenage pregnancy is still an important health problem faced by health workers, this is associated with various kinds of complications, both for the fetal and mother, which can arise during the process of pregnancy and childbirth. Aside from being a health problem, adolescent pregnancy also provides a great social impact on adolescents themselves, children born and the surrounding community.

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