

## Comparison of Clinical Profiles in Teenage and Adult Pregnancy

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### Abstract

**Background:** Clinical profiles of the teenage pregnancy are different from the adult pregnancy. **Objective:** The purpose of the present study was to compare the clinical profiles of teenage and adult pregnancy. **Methodology:** This comparative cross sectional study was conducted in the Department of Obstetrics and Gynecology at Dhaka Medical College & Hospital, Dhaka, Bangladesh and Sir Salimullah Medical College & Mitford Hospital, Dhaka, Bangladesh from April to July 1999 for a period of four (4) months. The teenage mothers with the age group of 11 to 19 years who were admitted in the study period were selected as group A and pregnant women with the age group of more than 19 years were selected as group B. All the clinical profiles of these two groups were recorded after admission of these pregnant women. **Result:** Among the primigravid patients, 50 cases with the age group 11 to 19 years were in the group A and 50 patients with the age group more than 19 years were in group B were selected. Among teens, 68 percent have no antenatal check-up. Moderate anaemia was more frequently found in the group A than group B which was 14(28.0%) and 9(18.0%) cases respectively. Moderate oedema was more frequently found in the group A than group B which was 16(32.0%) and 12(24.0%) cases respectively. In teenage group 32(64.0%) cases were without hypertension, whereas 44(88.0%) cases were in adult group. **Conclusion:** In conclusion anaemia and oedema are more commonly found in the teen pregnancy. [*Journal of National Institute of Neurosciences Bangladesh, 2018;4(1): 8-11*]

**Keywords:** Clinical profiles; comparison; teenage pregnancy; adult pregnancy

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### Introduction

Clinical features of the pregnant women are very important factors for the maternal and fetal outcomes<sup>1</sup>. In adult the clinical profiles are usually different from the teenage pregnancy. The reason is that the teenage pregnancy has been associated with an increased prevalence of domestic violence<sup>2</sup>. However, a recent review of 15 studies has failed to clarify whether there is a causal link between maltreatment or violence and adolescent pregnancy or whether there is an increased

risk of domestic violence to pregnant teenagers<sup>3</sup>.

Teenage pregnancy is often referred to as at-risk pregnancy and is of grave concern<sup>4</sup>. Teenage women face different clinical profiles than women in their twenties. The variations are greatest for the very poor who have worse diets and the least opportunity for prenatal care<sup>5</sup>. Social problems like illiteracy, poverty, and low socio-economic conditions aggravate the situation. Under the economic conditions prevailing in rural Bangladesh, coupled with poor utilization of health

services, the problem of teenage motherhood is linked with child survival and maternal mortality and morbidity<sup>6</sup>. In this context this present study was undertaken to compare the clinical profiles of teenage and adult pregnancy.

### Methodology

This was a comparative cross sectional study. This study was conducted in the Department of Obstetrics and Gynecology, Dhaka Medical College & Hospital, Dhaka, Bangladesh and Sir Salimullah Medical College & Mitford Hospital, Dhaka, Bangladesh from April to July 1999 for a period of four (4) months. The teenager mothers with the age group of 11 to 19 years who were admitted in the study period was selected as group A and pregnant women with the age group of more than 19 years were selected age group B. All the pregnancy status was confirmed by ultrasonography and other relevant test. At the time of entry, all relevant clinical features like anaemia, oedema and hypertension were recorded in a predesigned data sheet. Details about antenatal check-up were asked. Statistical analysis was performed by the Statistical package for the Social Science (SPSS, Texas, USA) version 22.0. The qualitative variables were expressed as frequency and percentage.

### Results

Among the primigravid patients, 50 cases with the age group 11 to 19 years were in the group A and 50 patients with the age group more than 19 years were in group B were selected. Prospective analysis of teenage mothers was made in each case on antenatal period, patient profile, course of pregnancy, perinatal outcome and the findings were compared to that of control group. Statistical significance tests for difference in proportions were conducted for some of the events of both groups.

Among teens, 68 percent have no antenatal check-up. They attended the hospital for the first time with some complications or with labour pain. In comparison to the adult, it is significantly lower which was 22.0% (Table 1).

Mild anaemia was more common in teenage pregnancy than adult which was 25(50.0%) and 17(34.0%) cases respectively. Moderate anaemia was more frequently found in the group A than group B which was 14(28.0%) and 9(18.0%) cases respectively. In teenage group 10(20.0%) cases were without anaemia, whereas 24(48.0%) cases were in adult group (Table 2).

Mild oedema was more common in teenage pregnancy than adult which was 15(30.0%) and 10(20.0%) cases respectively. Moderate oedema was more frequently

Table 1: Antenatal Check-Up among the Study Population

Status of Pregnancy	Group A	Group B	Total	Z	P Value
Regular	7(14.0%)	10(20.0%)	17(17.0%)	2.189	<0.01
Irregular	9(18.0%)	29(58.0%)	38(38.0%)	-	-
No check-up	34(68.0%)	11(22.0%)	45(45.0%)	4.109	<0.001
<b>Total</b>	<b>50(100.0%)</b>	<b>50(100.0%)</b>	<b>100(100.0%)</b>		

Table 2: Anaemia among the Study Population (n=100)

Types of Anaemia	Group A	Group B	Total	Z value	P Value
Mild	25(50.0%)	17(34.0%)	42(42.0%)		
Moderate	14(28.0%)	9(18.0%)	23(23.0%)		
Severe	1(2.0%)	0(0.0%)	1(1.0%)	3.09	<0.001
No Anaemia	10(20.0%)	24(48.0%)	34(34.0%)		
<b>Total</b>	<b>50(100.0%)</b>	<b>50(100.0%)</b>	<b>100(100.0%)</b>		

Table 3: Oedema among the Study Population (n=100)

Types of Oedema	Group A	Group B	Total	Z value	P Value
Mild	15(30.0%)	10(20.0%)	25(25.0%)		
Moderate	16(32.0%)	12(24.0%)	28(28.0%)		
Severe	5(10.0%)	3(6.0%)	8(8.0%)	0.43	>0.05
No Oedema	14(28.0%)	25(50.0%)	39(39.0%)		
<b>Total</b>	<b>50(100.0%)</b>	<b>50(100.0%)</b>	<b>100(100.0%)</b>		

Table 4: Hypertension among the Study Population (n=100)

Types of HTN	Group A	Group B	Total	Z value	P Value
Mild	14(28.0%)	5(10.0%)	19(19.0%)	2.927	< 0.01
Severe	4(8.0%)	1(2.0%)	5(5.0%)		
No HTN	32(64.0%)	44(88.0%)	76(76.0%)		
<b>Total</b>	<b>50(100.0%)</b>	<b>50(100.0%)</b>	<b>100(100.0%)</b>		

HTN=Hypertension; Mild=DBP 10-110 mmHg; Severe=DBP >110 mmHg

Table 5: Distribution of Albuminuria among the Study Population (n=100)

Albumin in Urine	Group A	Group B	Total	Z value	P Value
Present	16(32.0%)	4(8.0%)	20(20.0%)	3.145	< 0.001
Absent	34(34.0%)	46(92.0%)	80(80.0%)		
<b>Total</b>	<b>50(100.0%)</b>	<b>50(100.0%)</b>	<b>100(100.0%)</b>		

found in the group A than group B which was 16(32.0%) and 12(24.0%) cases respectively. In teenage group 14(28.0%) cases were without oedema, whereas 25(50.0%) cases were in adult group (Table 3). Mild hypertension was more common in teenage pregnancy than adult which was 14(28.0%) and 5(10.0%) cases respectively. Severe hypertension was more frequently found in the group A than group B which was 4(8.0%) and 1(2.0%) cases respectively. In teenage group 32(64.0%) cases were without hypertension, whereas 44(88.0%) cases were in adult group (Table 4).

Among teenage group albumin was present in urine more than adult group which was 16(32.0%) cases and 4(8.0%) cases respectively (Table 5).

## Discussion

It has been reported that by age 20, nearly a quarter of the women had been pregnant at least once, with the majority of first pregnancies occurring between the ages of 17 and 20 years<sup>7</sup>. The profile of those at greatest risk of a teenage pregnancy (<20 years) was that of an early-maturing girl with conduct problems who had been reared in a family environment characterized by parental instability and maternal role models of young single motherhood<sup>2</sup>. As young adolescents, these girls were characterized by high rates of sexual risk-taking and deviant peer involvement. Exposure to social and individual adversity during both childhood and adolescence made independent contributions to an individual's risk of an early pregnancy<sup>8</sup>. These findings were most consistent with a life course developmental model of the etiology of teenage pregnancy.

The age at marriage varies in different parts of India,

according to different social customs and ethnic and religious groups. In rural areas, early marriage is perpetuated by traditional beliefs regarding preserving a girl's chastity and family needs to reduce expenditure<sup>9</sup>. Teenage pregnancy is therefore coming up as one of the most important social and public health problems. The practice of family planning is still very limited in this group. Most adolescent girls in rural areas being illiterate are not aware of family planning methods, and even if they are aware they do not have easy access to family planning services or fail to utilize them due to inhibitions or pressure to attain motherhood to satisfy their mothers-in-law or husbands<sup>10</sup>.

Across countries and cultures, women have been victims to social pressure and are often in a position to neither regulate their pregnancy nor make decisions regarding their reproductive performance<sup>8</sup>. Husbands and mothers-in-law are the primary decision-makers. In many cases, this decision making structure appears to be driven by a woman's lack of economic independence. Even access to the most effective services is highly dependent on the involvement of influential family members. As a result, early pregnancy and its complications continue to remain highly prevalent<sup>11-16</sup>.

In India, 10.3% of the female population belongs to the age group of 15 to 19 years. In 1997, the age specific fertility rate was found to be 52.5 live births per 1000 rural women aged between 15 to 19 years<sup>7</sup>. Over the years, there has not been much improvement in the country's scenario as reported by the National Family Health Surveys 1, 2 and 3 where the median age at first birth for women aged 25 to 49 years was observed to be 19.4, 19.3 and 19.8, respectively<sup>12</sup>. The prevalence

of teenage pregnancy in the study population was 24.17%, which lies within the range observed in India, which varies from 3.0% to 52.0%<sup>13</sup>. Anemia is a common complication of teenage pregnancy. It has been reported that 72.6% of teenage pregnant women are anemic<sup>14</sup>. In another study it has been observed that a highly significant increase in the incidence of anemia is found in pregnant teenagers, 11.1% as compared with 5.2% in the 20-24 year old age group<sup>15</sup>. In this study, the finding was similar.

### Conclusion

In conclusion anaemia and oedema are more commonly found in the teen pregnancy. Teenage pregnancy is thus seen to be a serious problem. The clinical variations give a clear cut outcome of the delivery. Therefore special management is needed for these teenage pregnant women.

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