



Characteristics, complication and outcomes of adolescent pregnancy in baghdad, a cross sectional study.

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Abstract

Adolescent pregnancy is a global public health problem that affects both developed and developing countries. This study aimed to determine the frequency and outcome of adolescent pregnancy in Baghdad. A cross-sectional study was conducted at tertiary care hospitals in Baghdad. All pregnant females of 13-19 years including primary or multiparous delivered at tertiary care hospitals, had and other medical illnesses except pregnancy-associated problems were excluded. The data were analyzed using SPSS-20. Our finding 98 (28%) of adolescent pregnant females were in an age group of 13-15 years. The main maternal complication was anemia 123(35.2%), Caesarean section 82 (23.4%), PIH 46 (13.1%), PPH 42 (12%), instrumental delivery 57 (16.3%). Respiratory infections and pre-mature were the main fetal complication among adolescent mothers. The multigravida of adolescent mothers was more than primigravida. Half of them live under moderate SES. Adolescent pregnancy needs to be tackled as a priority to ease the burden of socioeconomic and health problems.

Keyword: Adolescent, Pregnancy, Factors, Anemia, Premature babies, Complication.

Introduction

Adolescent pregnancy is a global public health problem that affects both developed and developing countries [1]. Nearly 25% of adolescent women have gotten pregnant worldwide [1–3]. Globally an estimated 3.9 million adolescents experience unsafe abortions, which contribute to the highest maternal mortality and morbidity [4-5]. Adolescent pregnancy is considered the leading cause of newborn and maternal mortality in developing countries [6-8]. Pregnancies among adolescents are associated with several adverse healths, educational, social and economic outcomes [9-10]. Adolescent pregnancies typically occur in poor populations, which could be influenced by poverty, lack of education, and work opportunities [11].

Every year, an estimated 21 million girls aged 15–19 years in developing regions become pregnant and approximately 12 million of them give birth [12]. At least 777,000 births occur to adolescent girls younger than 15 years in developing countries [13]. Adolescent pregnancies have significant health, psychological and socioeconomic impacts on the mother. It increases the risk of low birth weight, premature delivery, mortality, preeclampsia, social isolation, delayed or neglected educational goals, and maternal depression [14].

The social consequence includes stigma, rejection, violence and dropping out of school [15-16]. Due to their direct association with adolescent sexual intercourse, several biological factors such as the timing of pubertal development, hormone levels, and genes, are also related to adolescent pregnancy [17]. In general, adolescent mothers had a low level of education and low level of antenatal care and faces a higher risk of developing pregnancy-induced hypertension (PIH), Preeclampsia toxemia [18], eclampsia, premature labor onset, and premature delivery with increased risk of neonatal morbidity and mortality [19-21].

In 2012, the adolescent's fertility rate in Iraq was 69 per 1000 women aged 15-19 years whereas in Syria (42), Iran (32), Turkey (31), Jordan (26), Kuwait (14) and Saudi Arabia (10)[22]. In 2014, Pakistan has a very high number of adolescents i.e. 22.3% of the total population, as compared to only 16% in the USA and Japan [22-23]. Efforts should be made to develop national educational policies designed to assist communities confronting this Problem and to produce awareness in the prevention of adolescent pregnancy and the consequences of adolescent parenthood. Unfortunately, very limited latest data is available regarding the frequency and outcomes of adolescent pregnancy in Iraq. The study aimed to determine the frequency and outcome of adolescent pregnancy in Baghdad.

Patients and Methods

A cross-sectional study was conducted for one year from 1st January 2021 to 31st December 2021 at tertiary care hospitals of Baghdad. Three hundred and fifty women who delivered at the age of 13- 19

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years either booked or not, visiting tertiary care hospitals was included. All pregnant females of 13-19 years including primary or multiparous delivered at tertiary care hospitals, had and other medical illnesses except pregnancy-associated problems were excluded. The data were analyzed using SPSS-20.

Results

Among 350 respondents, 98 (28%) of adolescent pregnant females were in an age group of 13-15 years, 142 (40.6%) were in an age group of 16-17 years, 110 (31.4%) were in an age group of 18-19 years after delivery (Table 1). Table 2 showed the maternal complications in adolescent mothers, anemia in mothers were 123(35.2%), Caesarean section 82 (23.4%), PIH 46 (13.1%), PPH 42 (12%), instrumental delivery 57 (16.3%). Regarding fetal complications in adolescent mothers, low birth weight babies were 61 (17.4%), pre-mature were 97 (27.7%), stillbirth 22 (6.3%), birth trauma 34(9.7%), Respiratory infections 136 (38.9%) [Table3]. The adolescent mothers (primigravida) were 43.4% whereas adolescent mothers (multigravida) were 56.6% in a population of Baghdad (Figure 1). According to socioeconomic status, 61(17.4%) were good SES, 111(31.7%) were poor and 178(50.9%) were intermediate SES [Figure2].

Table 1: Age of adolescent pregnancy after delivery

Maternal age (year)	Frequency	Percent
13-15	98	28
16-17	142	40.6
18-19	110	31.4
Total	350	100

Table 2: Frequency of maternal complications in adolescent mothers

Complications	Frequency	Percent
Anemia	123	35.2
Cesarean section	82	23.4
PPH	46	13.1
PIH	42	12
Instrumental delivery	57	16.3
Total	350	100

Table 3: Fetal complication in adolescent mother

Fetal complication	Frequency	Percent
Low birth weight	61	17.4
Premature babies	97	27.7
Still birth	22	6.3
Birth trauma	34	9.7
Respiratory infection	136	38.9
Total	350	100

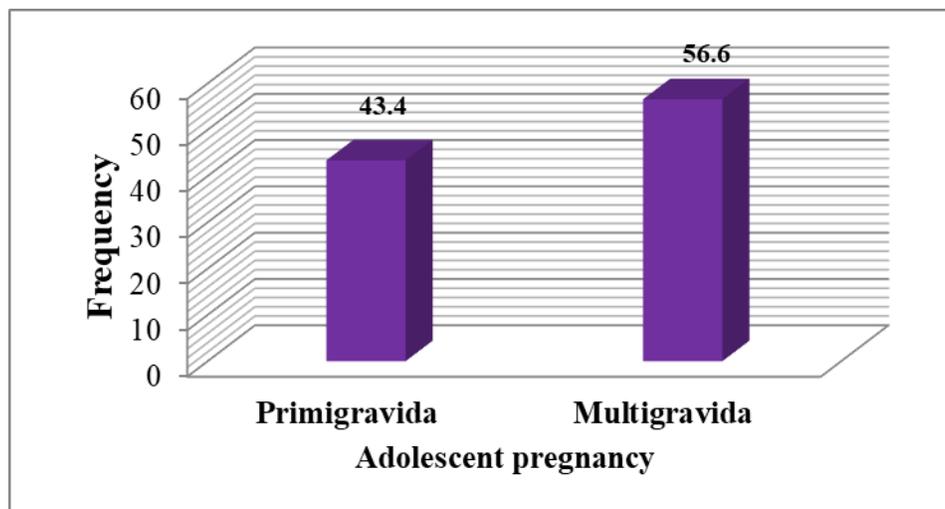


Figure 1: Frequency of adolescent pregnancy

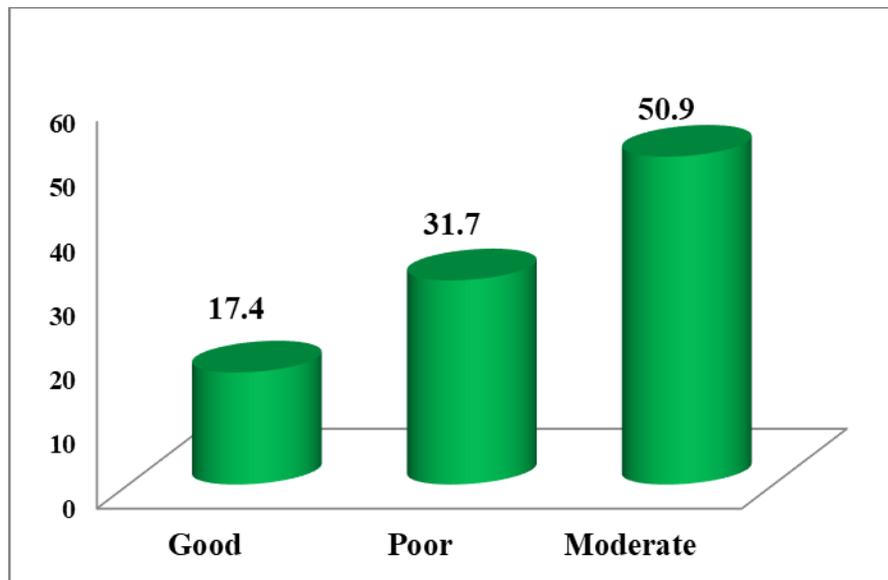


Figure 2: Socioeconomic status among adolescent mother

Discussion

The frequency of teenage pregnancy in Iraq as a developing country is very high compared to other developed countries. The reasons for this difference could be cultural and religious norms. Many women in teen age were married due to cultural factors. Women who married after 20 years old are considered taboo for their family and also low sexual education in school lead to unprotected sexual behavior resulting unintended pregnancy and sexual transmitted disease. In this study the most of them 40.6% were married at the age groups 16 to 17 years old, compared with other study in Indonesia, the authors found the age of teenage patients ranged from 12-18 years with a mean age of (17.4 ± 1.0) years[24]. A case control study was conducted in Uganda, the authors found the age of the respondents and place of residence of respondents were not significantly associated with teenage pregnancy after adjusting for all independent factors. However, after effect modification by marital status, older teenagers (15–19) were found to be less likely at risk of teenage pregnancy as compared to younger teenagers (13–14) [9]. Poor antenatal care, lower educational status and unintended pregnancy, married at less 6 months. In the same study the limited knowledge of young women about antenatal care programs and the fear of HIV testing have been further obstacles to efficient antenatal care [24].

In this study we found the most complication of pregnancy among adolescent mother was anemia 40.6%; followed by CS 23.4%, instrumental delivery 16.3%, PPH and PIH 13.1% and 12 respectively. Compared with another studied in Pakistan, the authors reported the main maternal complications in adolescent mothers was anemia 144(72%), C section 15 (7.5%), PIH 16 (8%), PPH 13 (6.5%), instrumental delivery 12 (6%) [19]. A study done it in Indonesia, the authors reported the pregnancy complications like preterm

labor, eclampsia and intra uterine infection occurred more commonly in teenagers compared to adult primigravid mothers [24].

Regarding to fetal complication we found the respiratory infection 38.9% was the main complication and premature 27.7%. another study done it by Shah et al in Pakistan, Regarding fetal complications in adolescent mothers, low birth weight babies were 109 (54.5%), pre-mature were 26 (13%), still birth 18 (9%), birth trauma 17(8.5%), Respiratory infections 30 (15%)[19].

In this study we found the most of adolescent mother were living under moderate socioeconomic status and compared with another study in done it USA and in Turkey , the authors reported the socioeconomic factors associated with young age, such as low economic status, and insufficient education, are also blamed for poor outcomes in adolescent pregnancy[25-26].

Conclusion

Frequency of adolescent pregnancies is still remained high in multigravida. Anemia was more common as compare to other maternal complication appeared soon after delivery. Most common fetal outcome includes respiratory infection and pre mature babies among all delivered babies. The multigravida of adolescent mothers was more than primigravida. Half of them living under moderate SES.

Recommendation

Government should improve the reproductive consequence and reduce the incidence of adolescent pregnancy by increasing public awareness, ensuring female education and enforcing marriage law. Adolescent pregnancy needs to be tackled as a priority to ease the burden of socioeconomic and health problem.

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