

# International Journal of Research in Pharmaceutical Sciences

Published by JK Welfare & Pharmascope Foundation

Iournal Home Page: www.iirps.com

## Teenage pregnancy: Prevalence and adverse outcomes in Baghdad city

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#### Article History:

Received on: 01 Feb 2020 Revised on: 20 Feb 2020 Accepted on: 03 Mar 2020

Keywords:

Adolescent, teenage pregnancy, NICU, pregnancy induced hypertension

## ABSTRACT



Pregnancy at an early age of life is a major challenge. The consequences of this problem have an impact on the quality of life of the young mother and her family, and determines an important risk for her offspring. The son of a teenage mother has, in general, greater risks than that of a mother of more than 20 years. The aim of this study is to determine the prevalence and outcome of teenage pregnancy. A descriptive data base study was conducted at Al-Elwia Maternity Teaching hospital in the period from January 1, 2019 to the end of June 2019 within the age between 12 and 19 years old. The mean age of the mother was 17.4  $\pm$ 1.5 years. The mean age of the father was 23.9  $\pm$  5.7 years with (69.5%) with Vaginal delivery and most of the teenage pregnant women were primigravidas (80.3%) and major group of birth weight neonate was in between 2500-4000 gm. Aanemia was the most common complication (55.8%) then pregnancy induced hypertension PIH (18.3%). The admission of the neonate to the neonatal intensive care unit (40.0%) are higher than other complications. In conclusion: Prevalence of teenage pregnancy was (21.9%), with high complications for mothers and neonate.

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ISSN: 0975-7538

DOI: https://doi.org/10.26452/ijrps.v11i3.2377

Production and Hosted by

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#### INTRODUCTION

The United Nations has determined teens to a group of people between 10 and 19 years (Bidla, 2012).

It's an age that carries risks for overall health through high consumption of beverages with sugar content, poor dental hygiene, drinking alcoholics and consuming drugs, indulge in sexual activities without proper education and unwarranted pregnancies behavior risks such as: no condom use, no use planning methods and high pregnancy rates unwanted (Ávila et al., 2013).

Pregnancy at an early age of life is a major challenge. The consequences of this problem have an impact on the quality of life of the young mother and her family, and determines an important risk for her offspring (Myrskylä and Fenelon, 2012).

The son of a teenage mother has, in general, has greater risks than that of a mother of more than 20 years. This risk is expressed in a higher frequency of low birth weight and morbidity in the perinatal period (including congenital malformations) and subsequently, greater probability of malnutrition and retardation in psycho motor and affective development, higher mortality rates in childhood. Research on sexual and reproductive health in adolescence has traditionally been directed to problems related to reproduction, specifically pregnancy and motherhood. Less attention has been given to problems related to sexuality and, consequently subsequently, there is an absence of unaccumulated information disaggregated by sex on these aspects and their impact on the health and lives of adolescents.

Table 1: Pregnancy history and obstetric outcomes of pregnant teenage women

Variables		First quarter of 2019		$2^{nd}$ quarter of 2019	
		N	%	N	%
Prenatal control	0	44	7.0	37	5.6
	1-4	258	41.1	240	36.5
	>4	326	51.9	381	57.9
Number of	Primigravida	501	79.8	532	80.9
pregnancies	Multigravida	127	20.2	126	19.1
Mode of	Normal VD	441	70.2	453	68.8
delivery	Cesarean section	187	29.8	205	31.2
Multiple	Single	626	99.7	651	98.9
pregnancy	Twin	2	0.3	7	1.1
	Multiple	0	-	0	-
Gestational age	<37 weeks	27	4.3	36	5.5
	37-41 weeks	600	95.5	620	94.2
	$\geq$ 42	1	0.2	2	0.3
Birth weight	<2500 g	26	4.1	28	4.3
	≥2500- 4000 g	582	92.7	604	91.8
	> 4000 g	20	3.2	26	4.0
Gender of the	Female	307	48.9	324	49.2
newborn	Male	321	51.1	334	50.8

Table 2: Distribution of adolescent pregnancy complications

Complications	No. (n=215)	%	
Anemia	120	55.8	
PIH	33	15.3	
GDM	13	6.1	
Oligohydramnios	9	4.2	
Preterm delivery	40	18.6	

**Table 3: Neonatal outcome** 

Neonatal complications	No.	%	
NICU	515	40.0	
LBW	451	35.0	
IUD	73	5.7	

The health of adolescents (10-19 years) is a key element for the social, economic and political progress of all countries and territories.

However, all too often, the needs and rights of adolescents are not included in public policies, or on the agenda of the health sector, except when their conduct is inadequate (Goicolea *et al.*, 2010).

World Health Organization (WHO) statistics of 2014 estimates that in 2014 there were about 16 million

teenagers, who were in the age group of 15 to 19 and one million girls who were below fifteen became pregnant and delivered babies; most of all these girls were in low and middle income countries shuffled between the ages of 15 and 19, and 1 million girls were become pregnant in age under 15 years and give birth every year ,most in low- and middle-income countries (Socolov *et al.*, 2017). Adolescents' birth rates between in 2005 and -2010 period in the USA for the region of America it was 66 % in

women aged between 15 and to 19 years in comparison, it was infected inferior to Africa (115 ‰) and superior to Southeast Asia(49 ‰), Europe (23 ‰), East Mediterranean(37 ‰) and Western Pacific (13 ‰) (WHO, 2013).

## Aim of the study

The aim of this study is to determine the prevalence and outcome of teenage pregnancy.

#### **MATERIALS AND METHODS**

A descriptive data base study was conducted at Al-Elwia Maternity Teaching hospital in the period from January 1, 2019 to the end of June 2019 within the age between 12 and 19 years old. In this study data were reviewed and full information's about the patients were taken from their files:Mother's age, and father's age, pregnancy history, prenatal control, type of delivery, gestational age, birth weight and gender of the newborn.

## Statistical analysis

Data entered by the researcher by use of computerized statistical software; Statistical Package of the Social Sciences (SPSS) version 23. Descriptive statistics are presented in the form (mean  $\pm$  standard deviation). To compare between more than two means we used One-way ANOVA. In all statistical analyzes, the significance level (p-value) was set at  $\leq 0.05$  and the result was presented in tables and / or graphs.

#### RESULTS AND DISCUSSION

## Socio-demographic characteristics

The provided database was created6,077 birth records; within the inclusion criterion, in which 5,848(96.2%) newborns alive: 2846 by 2019 (first quarter) and 3,200 for 2019 ( $2^{nd}$  quarter), of which teen-age delivery was 1286/5848 (21.9%). A total of 628 in (first quarter) and 658 in 2019( $2^{nd}$  quarter), the prevalence rate in first was 22.1% and in  $2^{nd}$  quarter was 21.9%. The mean age of the mother was 17.4  $\pm$ 1.5 years (Table 1).

The mean age of the father was  $23.9 \pm 5.7$  years. This prevalence in current study were less than (28.6%)that found in Ethiopian study (Habitu *et al.*, 2018) and less than that mentioned in Jordan, 25% (Ziadeh, 2001) and Turkey, 29% (Canbaz *et al.*, 2005), but it is higher than prevalence of teenage pregnancies that quoted by (Yasmin *et al.*, 2014) study 5.1% and (Dubashi and Wani, 2008) (4.5%).

Vaginal delivery teenage pregnancy was the most common type as it represents more than two third (69.5%) which is in agreement with that found by (Mohamed *et al.*, 2015) when he compare the type of the study between teenage and adult pregnancy and found that vaginal delivery were the most common type in teenage pregnancy. Most of the teenage pregnant women were primigravidas (80.3%) which is slightly less than that found by (Mahavarkar *et al.*, 2008) where 86.85% of teenage women were primigravidas.

#### Mother's complications

Table 2 show that anemia was the most common cause of adolescent pregnancy complications then NICU and low birth weight consistent with the study of (Mahavarkar et al., 2008), when anemia was also the most common complication. Then the second most complications was (pregnancy-induced hypertension (PIH). While (de Azevedo et al., 2015) study revealed that the main maternal and neonatal complications were hypertensive disorders of pregnancy, prematurity and low birth weight, respectively.

## **Neonatal complications**

Table 3 show that the admission of the neonate to the neonatal intensive care unit (40.0%) are higher than other complications which is similar to other Iraqi studies that revealed Neonatal NICU admission was (39%) (huda Anwar Mahomood, 2017) but it is higher than (Al-Ramahi and Saleh, 2006) study done in Jordan that found (22.7%) of teenage babies admitted to NICU.

## **CONCLUSIONS**

Prevalence of teenage pregnancy was (21.9%), and the mothers and neonatal complications was high. For this reason, it is important to promote commitment to prenatal control in pregnant adolescents. The promotion and prevention programs that have been developed for teens, they have to take into account variables as a level of education, place of residence and, specific conditions where develops and transmits life to this population.

#### **Conflict of Interest**

None

## **Funding Support**

None.

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