

Socio-Demographic Profile Association With Pregnancy Outcome among Adolescents in Al_ Najaf City

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Abstract

➤ *Background:*

Pregnancy during teenage years is associated with adverse outcomes for both mother and baby. The aim of our study was to identify potential factors on early pregnancy and pregnancy outcomes.

➤ *Methods:*

Cross-sectional, comparative study was adopted it was conducted in main hospitals in Najaf during the period Nov. 1st, 2018 until March 20th, 2019. A total of 209 mothers were interviewed (99 cases under 19year old and 109 for 19year old and more). Data were collect using a structured questionnaire containing maternal and neonatal data. Data were analyze by using Statistical Package for Social Sciences version 22.

➤ *Results:*

The main results showed that all influencing factors are non-significant in more than 0.05 P.value just smoking which is significant in 0.0004 P.value.

➤ *Conclusion and Recommendations:*

Influencing factors were more likely related to. In other respects, there were no significant differences between teenage and non-teenage mothers.

Keywords:- Teenage Pregnancy; Perinatal Outcomes; Low Birth Weight.

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often born prematurely and of low birth weight. In addition, children of teen mothers are at increased risk for intellectual disability (mental retardation), poverty, welfare dependency, and poor school performance. They are also more likely to grow up without a father. In addition, they suffer higher rates of abuse and neglect than would occur if their mothers had delayed childbearing (2).

Over the last several decades the teenage pregnancy rate in the United States has shown a continual downward trend; however, adolescent pregnancy rates in the United States continue to rank higher than other developed nations. The 2010 teen birth rate was 34.3 per 1000 females aged 15 to 19 years (1).

Contraception use among adolescents is variable, with decisions made within the context of the relationship. The less familiar an adolescent is with his or her partner, the less likely it is that they will use contraception during intercourse. Contraception use increases among girls as the duration of the relationship increases. A hormonal method (OCs, contraceptive patch, injectable progesterone) is more likely to be used in later relationships than in first sexual relationships. Discontinuation of contraception is common; 46% of women have discontinued at least one method because of dissatisfaction (4).

Concern is that young adolescent girls are often coerced into having sexual contact by an older partner and are exposed to more violence than others in many cases nonconsensual sex is involved (3).

Noting 16 million births among girls between the ages of 15 and 19 each year, about 11 percent of all births worldwide. Moreover, 95% of this manner occurs in low- and middle-income countries. In addition, the average birth rate among teenagers in middle income about double the average in high-income countries, while five times in low income countries. The ratio of births occurring during adolescence about 2% in China and 18% in Latin America and the Caribbean and more than 50% in sub-Saharan Africa. In addition, half of all teenage births occur in only seven countries: Bangladesh, Brazil, the Democratic Republic of the Congo, Ethiopia, India, Nigeria and the

I. INTRODUCTION

Adolescent pregnancy is a health and social issue with no single cause or cure For a teen, pregnancy comes at a time when her physical development and the developmental tasks of adolescence are incomplete. She may not be prepared physically, psychologically, or economically for parenthood. Thus both she and her child are at high risk for a number of adverse outcomes. Compared with women of similar socioeconomic status who postpone childbearing, teen mothers are less likely to finish high school, less likely to go to college, more likely to be single, and more likely to end up on welfare. Babies of adolescent mothers are

United States. Young teenage pregnancy is a big problem (6).

In low and middle income countries, the proportion of girls who become mothers before reaching the age of sixteen, nearly 10% of the total girls, sub-Saharan Africa and South Central and South East Asia highest in this track. Proportion of women who become pregnant before Age of very different even within the same region in Africa South of the Sahara, for accounted for 0.3% 12.2% vs. Rwanda in Mozambique . Therefore the example, pregnancy of the age of 20 and above is better for the slow and the child of pregnancy age 19 or less because it Pregnancy in adolescence constitutes a danger to the mother even though the proportion of registered births among adolescents aged 10 to 19 years, 11% of all births worldwide, but they contribute to 23% of the total burden of disease (DALYs disability) due to antivirus If at pregnancy and childbirth. and going on 14% of all unsafe abortions in low and middle income countries for girls aged between 15 and 19 years. About teenage 2.5 subject to unsafe abortions every year, and the more serious complications of teenagers from those experienced by older women. And in Latin America are adolescent girls under 16 years old are more prone to the risk of death in pregnancy and childbirth fourfold women in their twenties (6).

Many health problems are associated with adverse effects of pregnancy during adolescence. These problems include infection, anemia, malaria, HIV and other sexually transmitted infections and bleeding that occurs after childbirth and mental disorders like depression. It has been observed that up to 65% of women suffering from fistula contracted in adolescence, which adversely effect on their lives both physically and socially (6).

A teenage child danger noted that stillbirth and infant death in the first week of age 50% higher among infants born to women under the age of 20 years, compared with infants born to women aged between 20 and 29 years old. And cases of infant death in the first month of life than by 50 and 100% if the mother was a teenager and not in older age, the smaller the mother's age increased the risk. Birth rates prior to the completion of the period of pregnancy and low birth weight newborn and neonatal exposure to choke higher among children born to teens, and more than all these cases of infant death or potential health problems in the future. The pregnant teenagers are more popular with older women on smoking and alcohol, which can cause a lot of problems for the child either at birth or after completion of the period of pregnancy and low birth weight newborn and neonatal exposure to choke higher among children born to teens, and more than all these cases of infant death or potential health problems in the future. The pregnant teenagers are more popular with older women on smoking and alcohol, which can cause a lot of problems for the child either at birth or after (6).

High risk pregnancy is one in which a condition exists that jeopardizes the health of the mother, her fetus, or both Approximately one in four pregnant women is considered to be at high risk or diagnosed with complications (Gilbert, 2011). Women who are considered to be at high risk have a higher morbidity and mortality compared with mothers in the general population. The risk status of a woman and her fetus can change during the pregnancy, with a number of problems occurring during labor, birth, or afterward, even in women without any known previous ante partial risk. Examples of high-risk conditions include Gestational diabetes and ectopic pregnancy. Many obstetric complications and conditions are life-threatening emergencies with high morbidity and mortality rates. It is essential that these be identified early to ensure the mother and infant.

II. METHODOLOGY

➤ *Design of the study*

Cross-sectional (comparative) study was conducted from the first of November -2018 until the 20th of May, 2019) study to achieve the early stated objectives .the study

➤ *Study Sample:*

A non-probability (purposive sample) of 91 teen age and 109 adult of pregnant mothers, who admitted to hospital for delivery, used in order to obtain the representative sample according to the following criteria:

- Mothers admitted to hospital for delivery
- All sample was from Najaf city
- Teenage pregnant mother age (<19) years and adult pregnant mother age (≥19)years

➤ *The Study Instrument:*

An assessment tool was adopted and developed by the researcher to identify influencing factors on early pregnancy & to identify influencing of factors on pregnancy outcomes. The last study instrument consisted from (2) parts as the following:

Part 1: demographic social economic data:

This part consists of 4 items including the age of mother, Educational level, Occupation, Residence, Economic status, Type of family, and smoking.

Part 2: Obstetric and Gynecological and health History

This part consist of 8 items the menstrual history & family planning history, medical history, previous delivery (date of pregnancy, duration of pregnancy, intended or unintended of pregnancy, outcome pregnancy), complication of pregnancy, birth attendant, violence, and exercise.

III. RESULT

Items	Sub-groups	< 19 years Total = 99		≥ 19 Total = 110		Chi Square P value Sig.
		Freq.	Percent.	Freq.	Percent.	
Husband's Age /year	16-26	67	67.7	25	22.7	45.37 0.000
	27-37	31	31.3	72	65.5	
	38-48	1	1.0	11	10.0	
	49-59	0	0	2	1.8	
Family Type	Alone	22	22.2	47	42.7	9.91 0.0016
	With another family	77	77.8	63	57.3	
Monthly Income	Enough	42	42.4	36	32.7	2.13 0.34
	Not enough	10	10.1	14	12.7	
	Somewhat Enough	47	47.5	60	54.5	
Residency	Urban	75	75.8	86	78.2	0.17 0.67
	Rural	24	24.2	24	21.8	
Levels of Education of Mother	Illiterate	19	19.2	16	14.5	9.65 0.04
	Primary School	31	31.3	45	40.9	
	Intermediate School	28	28.3	24	21.8	
	Secondary School	13	13.1	6	5.5	
	Graduate	8	8.1	19	17.3	
Levels of Education of Husband	Illiterate	17	17.2	15	13.6	5.7 0.22
	Primary School	42	42.4	35	31.8	
	Intermediate School	17	17.2	29	26.4	
	Secondary School	10	10.1	9	8.2	
	Graduate	13	13.1	22	20.0	
Mother's Job	Student	11	11.1	2	1.8	7.78 0.05
	Left study	44	44.4	56	50.9	
	Does not work	37	37.4	44	40.0	
	Employee	7	7.1	8	7.3	
Husband's Job	Free Jobs	69	69.7	64	58.2	10.54 0.014
	Employee	22	22.2	28	25.5	
	Not employee	5	5.1	2	1.8	
	Unemployed	3	3.0	16	14.5	
Smoking	No	99	100.0	99	90.0	10.45 0.0012
	Yes	0	0.0	11	10.0	
BMI	Underweight	2	2.0	1	0.9	13.12 0.004
	Normal	55	55.6	36	32.7	
	Overweight	31	31.3	47	42.7	
	Obese	11	11.1	26	23.6	

Table 1:- Statistical distribution (percentage and frequency) of women by their Socio-demographic data and differences according to age

Table 1 and figure 1 show statistical distribution of women by their socio-demographic data, it explains that there is a significant difference between the two women subgroups (below 19 years) and (those equal and above 19 years) according to the following items : husband's age, family type, educational level, father's job, mother's job, smoking and BMI

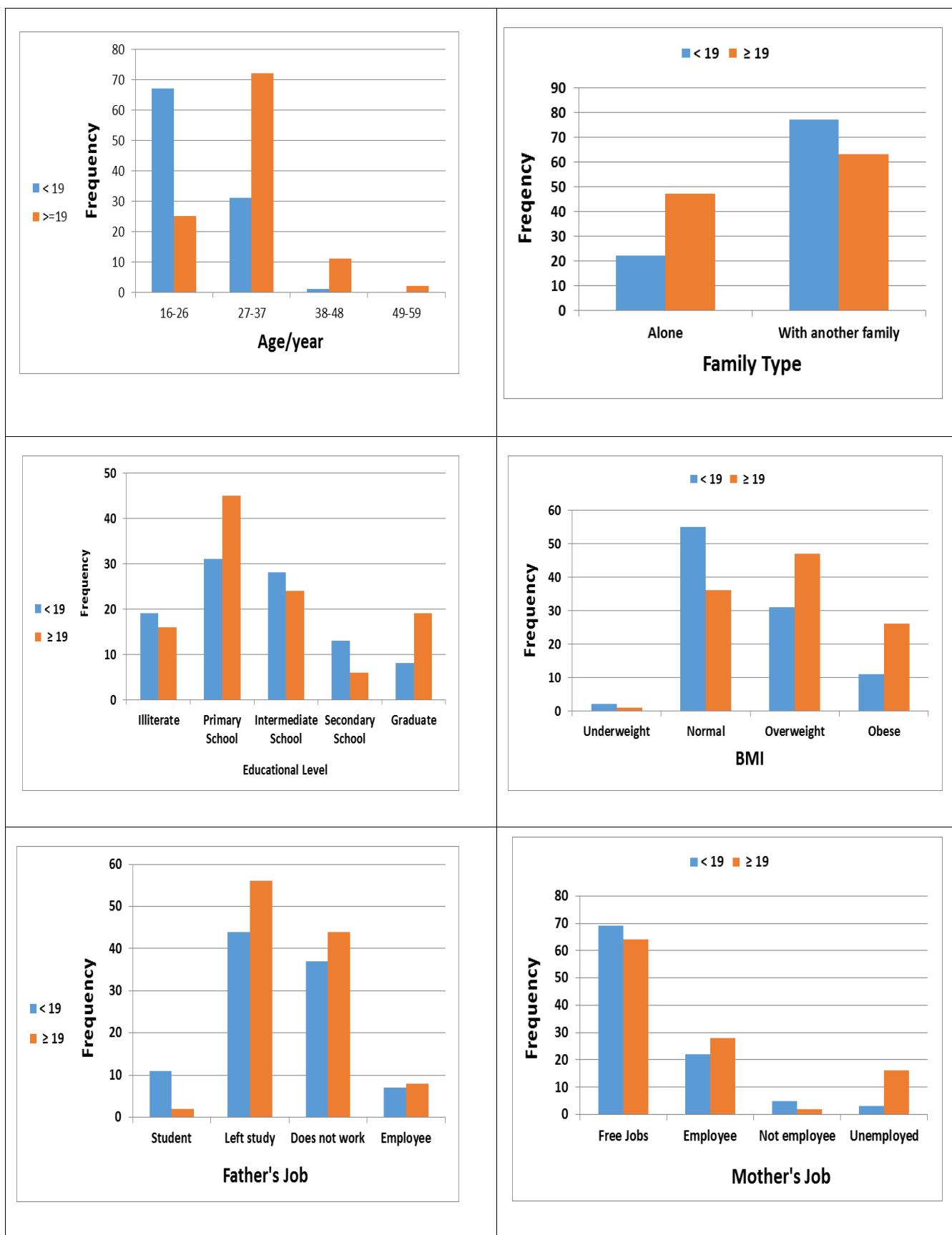


Fig 1:- Bar charts for Statistical distribution (frequencies) of women by their Socio-demographic data

Items	Sub-groups	< 19 years Total = 99		≥ 19 Total = 110		Chi Square P value Sig.
		Freq.	Percent.	Freq.	Percent.	
Years	1996-2001	0	0.0	2	1.8	50.05 0.000
	2002-2007	0	0.0	13	11.8	
	2008-2013	7	7.1	42	38.2	
	2014-2019	92	92.9	53	48.2	
Duration (month)	1-3	13	13.1	1	0.9	25.66 0.000
	4-6	10	10.1	0	0.0	
	7-9	76	76.8	109	99.1	
Voluntary/Not	Voluntary	95	96.0	110	100.0	4.53 0.03
	Involuntary	4	4.0	0	0.0	
Results	Normal	62	62.6	63	57.3	3.85 0.42
	Cesarean Section	28	28.3	39	35.5	
	Abortion	9	9.1	6	5.5	
	Miscarriage	0	0.0	1	0.9	
	Ectopic	0	0.0	1	0.9	
Complications	No complication	68	68.7	79	72.5	1.04 0.76
	Anemia	25	25.3	22	20.2	
	Hypertension	3	3.0	5	4.6	
	Diabetes Mellitus	0	0.0	0	0.0	
	Bleeding	3	3.0	3	2.8	
	Others	0	0.0	0	0.0	

Table 2:- Differences between women subgroups according to profile of the first pregnancy

Table 2 Differences between women subgroups according to their profile of the first pregnancy, it explains that there is a significant difference ($p < 0.05$) between the two women subgroups (below 19 years) and (those equal and above 19 years) according to the following items : years of pregnancy, duration of pregnancy, and voluntary pregnancy .

Items	Sub-groups	< 19 years Total = 41		≥ 19 Total = 82		Chi Square P value Sig.
		Freq.	Percent.	Freq.	Percent.	
Years	1998-2000	0	0.0	1	1.2	25.89 0.0002
	2001-2003	0	0.0	1	1.2	
	2004-2006	0	0.0	3	3.7	
	2007-2009	0	0.0	10	12.2	
	2010-2012	2	4.9	13	15.9	
	2013-2015	4	9.8	23	28.0	
	2016-2018	35	85.4	31	37.8	
Duration (month)	0-1	39	95.1	0	0.0	114.21 0.000
	≥ 2	2	4.8	82	100	
Voluntary/Not	Voluntary	36.4	88.8	81	97.6	7.01 0.008
	Involuntary	5	12.2	1	1.2	
Results	Normal	25	61.0	56	67.5	7.25 0.06
	Cesarean Section	11	26.8	25	30.1	
	Abortion	4	9.8	1	1.2	
	Miscarriage	0	0.0	0	0.0	
	Ectopic	1	2.4	0	0.0	
Complications	No complication	31	75.6	49	59.0	4.92 0.29
	Anemia	9	22.0	18	21.7	
	Hypertension	0	0.0	4	4.8	
	Diabetes Mellitus	0	0.0	1	1.2	
	Bleeding	1	2.4	0	0.0	
	Others	0	0.0	0	0.0	

Table 3:- Differences between women subgroups according to profile of the Second pregnancy

Table 3 Differences between women subgroups according to their profile of the second pregnancy, it explains that there is a significant difference ($p < 0.05$) between the two women subgroups (below 19 years) and (those equal and above 19 years) according to the following items : years of pregnancy, duration of pregnancy, and voluntary pregnancy .

Items	Sub-groups	< 19 years Total = 99		≥ 19 Total = 110	
		Freq.	Percent.	Freq.	Percent.
Years	2005-2009	0	0.0	3	6.0
	2010-2014	0	0.0	11	22.0
	2015-2018	0	0.0	36	72.0
Duration (month)	7-8	0	0.0	4	8.0
	9-10	0	0.0	46	92.0
Voluntary/Not	Voluntary	0	0.0	47	94.0
	Involuntary	0	0.0	3	6.0
Results	Normal	0	0.0	35	70.0
	Cesarean Section	0	0.0	15	30.0
	Abortion	0	0.0	0	0.0
	Miscarriage	0	0.0	0	0.0
	Ectopic	0	0.0	0	0.0
Complications	No complication	0	0.0	36	72.0
	Anemia	0	0.0	11	22.0
	Hypertension	0	0.0	1	2.0
	Diabetes Mellitus	0	0.0	0	0.0
	Bleeding	0	0.0	2	4.0
	Others	0	0.0	0	0.0

Table 4:- Differences between women subgroups according to profile of the Third pregnancy

Table 4 Differences between women subgroups according to their profile of the third pregnancy, it explains that the women subgroup (below 19 years) has no third pregnancy.

Items	Sub-groups	< 19 years Total = 0		≥ 19 Total = 24	
		Freq.	Percent.	Freq.	Percent.
Years	2009-2011	0	0.0	1	4.2
	2012-2014	0	0.0	3	12.5
	2015-2017	0	0.0	4	16.7
	2018-2020	0	0.0	16	66.7
Duration (month)	2-5	0	0.0	1	4.2
	6-9	0	0.0	23	95.8
Voluntary/Not	Voluntary	0	0.0	23	95.8
	Involuntary	0	0.0	1	4.2
Results	Normal	0	0.0	14	58.3
	Cesarean Section	0	0.0	9	37.5
	Abortion	0	0.0	1	4.2
	Miscarriage	0	0.0	0	0.0
	Ectopic	0	0.0	0	0.0
Complications	No complication	0	0.0	14	58.3
	Anemia	0	0.0	7	29.2
	Hypertension	0	0.0	2	8.3
	Diabetes Mellitus	0	0.0	0	0.0
	Bleeding	0	0.0	1	4.2
	Others	0	0.0	0	0.0

Table 5:- Differences between women subgroups according to profile of the Fourth pregnancy

Table 5 Differences between women subgroups according to their profile of the fourth pregnancy, it explains that the women subgroup (below 19 years) has no fourth pregnancy.

Items	Sub-groups	< 19 years Total = 0		≥ 19 Total = 9	
		Freq.	Percent.	Freq.	Percent.
Years	2017	0	0.0	1	12.22
	2018	0	0.0	8	97.78
Duration (month)	1	0	0.0	1	12.22
	9	0	0.0	8	97.78
Voluntary/Not	Voluntary	0	0.0	1	12.22
	Involuntary	0	0.0	8	97.78
Results	Normal	0	0.0	7	85.56
	Cesarean Section	0	0.0	2	24.44
	Abortion	0	0.0	0	0.0
	Miscarriage	0	0.0	0	0.0
	Ectopic	0	0.0	0	0.0
Complications	No complication	0	0.0	8	97.78
	Anemia	0	0.0	1	12.22
	Hypertension	0	0.0	0	0.0
	Diabetes Mellitus	0	0.0	0	0.0
	Bleeding	0	0.0	0	0.0
	Others	0	0.0	0	0.0

Table 6:- Differences between women subgroups according to profile of the Fifth pregnancy

Table 6 Differences between women subgroups according to their socio- profile of the fifth pregnancy, it explains that the women subgroup (below 19 years) has no fifth pregnancy.

Items	Sub-groups	< 19 years Total = 99		≥ 19 Total = 110		Chi Square P value Sig.
		Freq.	Percent.	Freq.	Percent.	
First Pregnancy Age	13-15	12	12.1	0	0.0	209 0.000
	16-18	87	87.9	0	0.0	
	19-21	0	0.0	34	30.9	
	22-24	0	0.0	46	41.8	
	25-27	0	0.0	23	20.9	
	28-30	0	0.0	7	6.4	
Period between first and last pregnancy (years)	12-14	30	30.3	7	6.4	121.66 0.000
	15-17	69	69.7	21	19.1	
	18-20	0	0.0	28	25.5	
	21-23	0	0.0	28	25.5	
	24-26	0	0.0	16	14.5	
	27-29	0	0.0	8	7.3	
	30-33	0	0.0	0	0.0	
	33-35	0	0.0	2	1.8	
person who wanted pregnancy	Wife	3	3.0	0	0.0	13.21 0.03
	Husband	6	6.1	9	8.2	
	Grandmother	9	9.1	2	1.8	
	Grandfather	1	1.0	0	0.0	
	None	1	1.0	0	0.0	
	All	60	60.6	67	60.9	
	Wife and husband	19	19.2	32	29.1	
Medical History	Chronic Disease	90	90.9	91	82.7	3.01 0.22
	Previous Operations	3	3.0	6	5.5	
	Congenital defects	6	6.1	13	11.8	
Using Contraceptives	No	74	74.7	69	62.7	3.84 0.06
	Yes	25	25.3	41	37.3	
Working Hard	No	98	99.0	103	93.6	4.06

Subjected to violence	Yes	1	1.0	7	6.4	0.044
	No	92	92.9	106	96.4	1.23
	Yes	7	7.1	4	3.6	0.26

Table 7:- Differences between women subgroups according to gynecological and medical history

Table 7 Differences between women subgroups according to their gynecological and medical history, it explains that there is a significant difference ($p < 0.05$) between the two women subgroups according to : first pregnancy age, period between first and last pregnancy, person who want pregnancy, and hard work .

Demographic Data	Correlation Coefficient	Significance p- value
Mother's Age	0.2	0.92
Husband's Age	0.12	0.95
Family Type	0.3	0.45
Monthly Income	0.16	0.7
Levels of Education of Mother	0.25	0.68
Levels of Education of Husband	0.3	0.56
Mother's Job	0.27	0.16
Husband's Job	0.25	0.25
Smoking	0.32	0.0001
BMI	0.17	0.9

Table 8:- Correlation between pregnancy results and women's demographic data

IV. DISCUSSION

➤ **Part-1: discussion of the study sample socio-demographic data**

Throughout the course of the present study (table3-1) refer to the statistical distribution of the observed frequencies, percentage for some related demographic variable characteristics for the study sample

- According to the mother's age /years, the majority of study sample are within (14-18). This result is supported with (7). Their result indicated that young pregnant mother under age 18 years old a dominant age for complication of pregnancy & adverse outcome
- Concerning the mother's education ,the present study indicated that the highest percentage of the study is primary school this result agreement with (Fitzpatrick,etal 1997), who mentioned that most adolescent mother drop out school& also agree with another study (9) who mentioned that most adolescent mother are primary school
- In regarding to mother's occupation, the highest percentage is does not work (house wife). This result is supported by (8) who reported that most adolescent pregnancy mothers were house wives.

➤ **Part-2: Discussion the study sample first & second pregnancy**

- According to the mother 1st & second pregnancy the high percentage of pregnancy duration is ≥ 7 months , this result is supported with (10) their result & how that adolescent pregnant women under 18 years is dominant age for premature delivery.
- According to the result of mother first & second pregnancy in al- najaf city show that highest percentage is normal pregnancy. This result is disagree with many

previous studies who find that must women under 19years old their pregnancy are cesarean section (11).

- In regarding to mothers complication at first pregnancy , 8second pregnancy the results show that majority complication is anemia , & this result is supported by (12) who reported that most pregnancy mothers are suffered from anemia

➤ **Part-3: Discussion the study sample third & fourth pregnancy**

- According to the mother's 3rd & 4th pregnancy ,the high percentage of pregnancy duration ≥ 9 months , this result is supported with (7) their result show that adolescent pregnant women under 18 years old is dominant age for preterm delivery
- According to the result of 3rd & 4th pregnancy in alnajak city , show that highest percentage is normal pregnancy either cesarean section this results are agree with (13) this study show that pregnant women in 3rd or 4th pregnancy many borne by cesarean section
- in regarding to mother complication at 3rd & 4th pregnancy the results show that majority complication is anemia & and this result is supported by (12) who reported that most pregnancy mothers are suffered from anemia

➤ **Part-4: Discussion of Gynecological & medical history**

- The result of present study show that the majority of teenage pregnant mothers are with chronic diseases, these result are agrees with many previous. Studies who find that most women under 18years old with chronic disease (Pinto esilva, 1998), this results that teenage mother have low knowledge about who maintain their health & poor health education.

- According to the study of using contraceptives , this study show that teenager pregnancy in alnajaf city have highest percentage of not use contraceptive, this result that teenager mother in alnajaf city has low knowledge about family planning , this study agree with (15).
- In regarding to mothers working hard & violence , the highest percentage , is not working hard & suffering from violence, this study result that teenager mother in alnajaf city has good dealing from their husband & there is not domestic violence this study dis agree with (15) which said that many teenager mothers around the word are suffering from Domestic violence

V. CONCLUSION

According to the results, the study concludes the following:

- Most teenage pregnant mother in alnajaf are primary school & housewives
- The majority of teenage pregnancy are within economic status are sufficient to extent & passive smoking.
- Majority of teenage mothers are with history of chronic diseases.
- The most teenager mothers have no knowledge about family planning techniques & poor health education.
- Most teenage pregnancies are complicated with anemia.
- Complication of pregnancy has storage relationship between sociodemographic data, age, education level, occupation, residency, type of family & smoking.
- working hard & Demestic violence against teenager pregnancy in alnajaf city are very low but they are neglect the antenatal care & immunization during their pregnancy
- Congenital defects in teenager mothers are lower

RECOMMENDATION

- Confirming on pregnancy teenager to have appropriate antenatal care to avoid medical problems during pregnancy.
- Educational programs should be emphasized to pregnant teenage mothers for increasing their knowledge and interest about pregnancy.
- Advanced the family to provide the right conditions to the pregnant woman's.

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