# Effectiveness of antenatal education program on women expectation and experiences during childbirthin al-najaf governorate

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#### **ABSTRACT**

**Background;** Antenatal education is an essential component of antenatal care that prepares and facilitates the acquisition of women's skills and confidence required for positive experiences throughout pregnancy, birth and the postnatal period

Aim of the study; To investigate the effects of antenatal education program on women expectation and experiences during childbirth. Methods; Quesi-experimental study conducted, comparing two groups of women: an antenatal education intervention groupand a usual prenatal care control group,Non – probability / purposive sample which include 80 pregnant women who attended in the main primary health care centers at AL-Najaf AL-Ashraf governorate. Questionnaire used for data collection by interview forms and Wijma Delivery Expectancy/Experience Questionnaire B and A version (W-DEQ-A, W-DEQ-B). Data analyzed through utilize (SPSS) software version (26) where, included descriptive analysis and inferential data analysis.

**Results:** there is non-significant relationship between study and control group before education related to women expectations during the labor and delivery while after education the study find that there is high significant relationship between study and control group related to women experiences during labor and delivery.

Conclusion: Based on the finding of present study educational program effect on maternal expectations during labor and delivery.

**Recommendations:** Further testing is needed to assess WDEQ-A women expectation and experiences during labor in different cultural settings and to evaluate its potential applicability in clinical settings to evaluate the emotional health of women facing childbirth and identify those at risk.

Keywords: Antenatal, education program, childbirth,

#### INTRODUCTION

Pregnancy and childbirth are a critical experience in the lives of most women, it is considered a transition phase to motherhood at physical, psychological, and social levels, therefore women with difficulty accepting pregnancy have a harder time

adapting to pregnancy and mother-hood in addition to experiencing more fears related to childbirth (Toohill et al., 2014)

On the other hand, Childbirth cannot be fully controlled, is not completely understood and is unpredictable. Therefore, many women experience both anticipation and anxiety about the upcoming delivery it is a normal feeling and process that may help the women to prepare themselves, experiences of joyful anticipation can sometimes be accompanied by negative emotions(Sydsjö et al., 2013). These emotions may in some women cause in future mental disorders in the form of anxiety, lack of self-control and security, and be the cause of postpartum depression (Beata B, 2016).

Women's expectations and experiences of pregnancy and birth are both positive and negative in nature, involving feelings of joy and faith but also worries, anxiety and fears. Despite the fact that maternity care in high in- come countries is safe, fear of childbirth is a common problem affecting women's health and wellbeing before and during pregnancy, as well as after childbirth (Nilsson et al., 2018).

Antenatal education is a service requested by the majority of pregnant women throughout the world; it appears under various names such as 'childbirth education programs', 'prenatal classes' and 'childbirth preparation classes'. In some parts of the world, even today, this education is provided by the transfer of information or experiences from mothers, sisters or traditional midwives(Coşar & Demirci, 2012). This informal sharing in a social environment may have negative effects on pregnant women's thoughts about childbirth. Many study found that incorrect information and insufficient knowledge of delivery leads to fear and requests for a caesarean section (Karabulut et al., 2015). Therefore, Preparation for childbirth during prenatal period by attendance to antenatal classes seems to be helpful in achieving more optimal perand postnatal outcome moreover, organized group activities facilitate experience exchange and provide emotional support from other women in similar life circumstances (J. Kacperczyk-Bartnik et al. 2019). The content of antenatal preparation classes varies a lot between countries, towns and service providers. Prenatal classes can be run individually or in groups. The programs range from intensive one-day sessions to several sessions held over several weeks. The teaching method varies from discussion and group sessions to videos, Internet resources and lectures (Rouhe H, 2015)as well as Use of antenatal education program early in the pregnancy is professionally considered important to ensure that appropriate antenatal education is arranged and, therefore, good quality and quantity of information are delivered to improve pregnancy outcomes (M Al-Ateeq, 2015).

Antenatal education programs often have a range of aims, such as to influence health behavior; build women's confidence in their ability to give birth; prepare women for childbirth; prepare for motherhood; develop social support networks; and contribute to reducing perinatal morbidity and mortality (Boorman, R et al., 2016). Therfore, education may be provided during the antenatal period or childbirth or during the postnatal period or during all of these stages and encompasses the various aspects of childbirth care and health (A.-S.H. Aji et al., 2018). As well as antenatal education thus comprises a range of educational and supportive measures that help pregnant women to understand their own social, emotional, psychological, and physical needs during pregnancy, labor, and motherhood.(Gagnon AJ, 2011).

There are many studies done which found that educated women have better pregnancy outcomes compared with uneducated women and that education during the antenatal period can reduce pregnancy and delivery complications as well as other studies have shown the benefits of education for parenting. found that relaxation training during the antenatal period increased maternal attachment, and found that education intended to promote maternal attachment was successful(Serçekuş & Başkale, 2016).

#### Materials and methods

# 1. Design of the study:

Quesi-experimental study conducted, comparing two groups of women: an antenatal education intervention groupand a usual prenatal care control group to investigate the effects of antenatal education program on women expectation and experiences during labor.

## 2. Locale study:

Present study is carried at the main primary health care centers in Al-Najaf Al-Ashraf /Iraq

# 3. sample of the study

Non – probability / purposive sample which include 80 pregnant women who attended in the main primary health care centers at AL-Najaf AL-Ashraf governorate.

# 4. participants in the study

Participant in this study mothers were required to be nulliparous as well as multiparous, between 28 and 30 weeks' gestation, have no history of pregnancy complications, have their pregnancies be considered non high-risk, and not be attending any other antenatal program, the intervention group consisted of women who accept to participate in the study under the 'usual care' condition, and met the inclusion criteria. The control group was composed of women who were receiving usual prenatal care at primary health care centers and met the inclusion criteria.

# 5. The study instrument: -

For data collection a questionnaire by interview forms and constricted questions related to women expectation and experiences before and after program obtain from Wijma Delivery Expectancy/Experience Questionnaire B and A version.

The study tool consisted from two parts as the following:

First part Socio-demographic characteristic which include (4) items as regards to their age, educational level, place of residence and occupation.

Second part comprises (6) item; that concerned obstetrical Characteristics which include Gestational age, desired of delivery, Planning of pregnancy, Party, Previous abortion and Previous delivery.

Third part including (17) item about women expectation during labor before program and Maternal experience during labor and delivery after program also which consist from (17) item.

#### 6- Intervention

The sessions in the intervention group were conducted using animation videos, social media, boosters and slide presentations. Pregnant women assigned to the intervention program classes in singular or 2-3 women because covid-19 precautions. They were offered a structured antenatal education course consisting of 8 hours of instruction split into four 120-minute weekly sessions. Each session included presentation of theoretical information, videos for 60 minutes, warm-up and stretching exercises for 15 minutes and relaxation exercises for 15 minute as well as 30 Sharing thought and emotions about session subject.

#### 7-Data collection

Data were collected between September 2020 to February 2021

# 8-Validity of the instrument:

Firstly, the questionnaire items are translate from English to Arabia by a professional experienced in translating Health survey questionnaires and then the questionnaires back translated into English in order to check for possible discrepancies and incorporating appropriate changes.

Secondly, the content validity of questionnaire was determining through use of a panel of expert to examine the questionnaire content for adequacy and clarity to realize end goal to accomplish the targets of the present study. Preparatory questionnaire which designed and displayed to (11) experts for the determine it is validity; they were (6) members from faculty of nursing/university of Babylon, one member from Middle Euphrates university, one expert from Al-Mustaqbal University College, one member from ministry of health/ AL-Najaf health Directorate/ AL-Zahra teaching hospital. 2 members from university of Kufa/College of Nursing.

#### 9- Pilot study

A Purposive sample of 20 pregnant women was selected from primary health care centers in AL-najaf al-Ashraf during the period from 20th to 30th of September 2020.

This study aimed to:

Obtain the clarity and content adequacy of the instrument.

Determine the reliability of the instrument.

3-Estimate the average time required for the interview each interview took (15-25) minute and unlimited time for observation.

Identify barriers that may encountered during date collection process.

The sample of the pilot study excluded from the original sample of the study.

## 3.11 Reliability of the instrument

Reliability of an instrument was determining through (Cronbach's  $\alpha$  coefficient) for the present study. Cronbach's alpha Reliability coefficient for fear of pregnant women was (r=0.78), this value of Cronbach's  $\alpha$  for the study is considered acceptable.

Table 1: Reliability of the instrument

Sample	N. Items	Alpha Cronbach's	Acceptable value	Assessme
				nt
20	41	0.84	0.71 - 0.91	Pass

# **Results of study**

Table 2: Distribution of the Study and Control Groups according to Demographic Data.

Table (1) shows that 63% of studied and control group of participants were greater than 25 years old. 90% of both group (control and study) were housewife while 10%

Characteristics	Rating & Intervals	Study gro	up	Control group		
		Freq.	%	Freq.	%	
Maternal age (year)	<= 25	11	36.67	11	36.67	
Material age (jear)	> 25	19	63.33	19	63.33	
Occupation	Housewife	27	90	27	90	
occupation .	Employee	3	10	3	10	
Place of residence	Urban	22	73.33	21	70	
7 07 . 207.00.000	Rural	8	26.67	9	30	
	Illiterate	3	10	3	10	
	Educated	4	13.33	3	10	
Educational level	Elementary	7	23.33	7	23.33	
Educational Tever	Intermediate	10	33.33	11	36.67	
	High school	3	10	2	6.67	
	Academic	3	10	4	13.33	

of them have employee. 73.33% from experimental group and 70% from control group were lived in urban area. 37% in control group and 33% in studied group have

intermediate education while equal percentage (23%) of both group have elementary education.

Table 3: Distribution of the Study and Control Groups according to Obstetrical Characteristics.

Rating & Intervals	Study g	roup	Control group			
Rating & Intervals	Freq.	%	Freq.	%		
28 weeks	9	30	7	23.33		
30 weeks	21	70	23	76.67		
Spontaneous vaginal delivery	14	46.67	6	20		
Caesarean section	16	53.33	24	80		
Spontaneous vaginal delivery	28	93.33	8	26.67		
Caesarean section	2	6.67	22	73.33		
Planned	24	80	26	86.67		
Unplanned	6	20	4	13.33		
Nulliparous	18	60	15	50		
Multiparous	12	40	15	50		
Yes	9	30	10	33.33		
No	21	70	20	66.67		
Spontaneous vaginal delivery	11	36.67	13	43.33		
Caesarean section	0	0	1	3.33		
Induction labor	1	3.33	1	3.33		
Forceps labor	0	0	0	0		
Non-labor	18	60	15	50		
	30		30			
	30 weeks  Spontaneous vaginal delivery  Caesarean section  Spontaneous vaginal delivery  Caesarean section  Planned  Unplanned  Nulliparous  Multiparous  Yes  No  Spontaneous vaginal delivery  Caesarean section  Induction labor  Forceps labor	Rating & Intervals  Freq.  28 weeks  30 weeks  21  Spontaneous vaginal delivery  Caesarean section  Forceps labor  Induction labor	Freq.   %   30   30   30   30   30   30   weeks   21   70     Spontaneous vaginal delivery   14   46.67   Caesarean section   16   53.33   Spontaneous vaginal delivery   28   93.33   Caesarean section   2   6.67   Planned   24   80   Unplanned   6   20   Nulliparous   18   60   Multiparous   12   40   Yes   9   30   No   21   70   Spontaneous vaginal delivery   11   36.67   Caesarean section   0   0   Induction labor   1   3.33   Forceps labor   0   0   Non-labor   18   60	Rating & Intervals   Freq.   %   Freq.     %   Freq.		

Table (2) show that 70 % of studied and 76 % of control group in 30 week of gestational age. 86% from control and 80% from experimental groups they are planned to pregnancy. 60% from experimental group and 50% from control group they are nulliparous women while 50% from control group and 40% from experimental group they are multiparous.70% from experimental group and 67% from control group they did not have previous abortion. 80 % from control group and 53% from study group have Caesarean Section desired while 47% from study group and 20% from control group have spontaneous vaginal delivery desired, whereas after education program 93% from study group and 27% from control group chooses spontaneous vaginal delivery while 73% from control group and 7% from study group have Caesarean Section desired. Previous delivery of 43% from control group

and 37% from study group were spontaneous vaginal delivery. Since the sample includes nulliparous women, 60% in the study sample and 50% of the control sample have not had a previous birth.

Table 4: Distribution the Study and Control Group according to their W-DEQ-A response regarding women expectation during labor and deliverybefore education (Pre-test)

	Stu	ly grou	ıp (P	re-test)	)			Cor	itrol	grou	p (Pre-	test)		
ems	F			%			MS	F			%			MS
	N	S	A	N	S	A	MS	N	S	A	N	S	A	
Do you think your labor and delivery will be fantastic?	2	12	16	6.67	40	53.33	2.47	2	23	5	6.67	76.67	16.67	2.10
Do you think your labor and delivery will be scary?	0	9	21	0	30	70	2.70	0	22	8	0	73.33	26.67	2.27
Do you think you will be strong during the labor and delivery?	4	23	3	13.33	76.6 7	10	1.97	10	20	0	33.33	66.67	0	1.67
Do you think you will be confident during the labor and delivery?	1	16	13	3.33	53.3 3	43.33	2.40	2	23	5	6.67	76.67	16.67	2.10
Do you think you will be afraid during the labor and delivery	0	11	19	0	36.6 7	63.33	2.63	0	21	9	0	70	30	2.30
Do you think you will be weak during the labor and delivery?	0	13	17	0	43.3 3	56.67	2.57	2	15	13	6.67	50	43.33	2.37
Do you think you will be independent during the labor and delivery?	7	23	0	23.33	76.6 7	0	1.77	4	26	0	13.33	86.67	0	1.87
Do you think you will be tense during the labor and delivery?	0	9	21	0	30	70	2.70	0	16	14	0	53.33	46.67	2.47
Do you think you will be glad during the labor and delivery?	0	25	5	0	83.3 3	16.67	2.17	5	14	11	16.67	46.67	36.67	2.20
Do you think you will be safe during the labor and delivery?	0	13	17	0	43.3 3	56.67	2.57	0	18	12	0	60	40	2.40

53.33% of study group always think that their labor and delivery will be fantastic, while 76.67 % from control group sometime think that their labor and delivery will be fantastic.70 % of study group always think that their labor and delivery will be scary however 73.33 % of control group sometime think that their labor and delivery will be scary.76.67 % and 66.67 % from both study and control group sometime think they will be strong during the labor and delivery. 53.33% and 76.67% from both study and control group sometime think they will be confident during the labor and delivery while from control group.63.33% from study group always think they will be afraid during the labor and delivery while 70 from control group sometime thinking that they will be afraid. 56.67 and 43.33 from study and control group always think they will be weak during the labor and delivery.76.67 from study group and 86.67 from control group sometime thinking that they will be independent during labor. 70 % from study group always thinking that they will be tense during the labor and delivery while 53.33 % from control group thinking that they will be sometime tense during

the labor and delivery. 83.33% from study group and 46.67% from control group they sometime glad. 56.67% from study group always think they will be safe and 60% from control group they sometime think they will be safe.

Continue table 4: Distribution the Study and Control Group according to their W-DEQ-A response regarding women expectation during labor and deliverybefore education (Pre-test)

Items	Stu	dy gro	oup (	pretest)				Control group (pretest)						
	F			%			MS	F			%			MS
	N	S	A	N	S	A		N	S	A	N	S	A	IVIS
Do you think you will be proud during the labor and delivery?	4	23	3	13.33	76.67	10	1.97	5	22	3	16.67	73.33	10	1.93
Do you think you will be quiet during the labor and delivery?	0	23	7	0	76.67	23.33	2.23	2	28	0	6.67	93.33	0	1.93
Do you think you will be relaxed during the labor and delivery?	0	11	19	0	36.67	63.3	2.63	0	16	14	0	53.33	46.67	2.47
Do you think you will feel panic during the labor and delivery?	0	4	26	0	13.33	86.67	2.87	0	11	19	0	36.67	63.33	2.63
Do you think you will feel hopelessness during the labor and delivery?	0	8	22	0	26.67	73.33	2.73	0	17	13	0	56.67	43.33	2.43
Do you think you will feel longing for the child during the labor and delivery?	15	12	3	50	40	10	1.60	4	11	15	13.33	36.67	50	2.37
Do you think you will feel self-confidence during the labor and delivery?	10	17	3	33.33	56.67	10	1.77	4	16	10	13.33	53.33	33.33	2.20
Do you think you will feel trust during the labor and delivery?	4	23	3	13.33	76.67	10	1.97	3	16	11	10	53.33	36.67	2.27
Do you think your labor will extremely painful?	0	4	26	0	13.33	86.6 7	2.87	0	12	18	0	40	60	2.60

76.67 from study group and 73.33 % from control group believed that they sometime will be proud during the labor and delivery. 93.33 from control group and 76.67 from study group believed that they sometime will be quiet during the labor and delivery. 63.3 % from study group always thinking that they will be relaxed during the labor and delivery while 53.33 % from control group thinking that they will be sometime relaxed during the labor and delivery. 86.67 % from study group always that will feel panic during the labor and delivery while 63.33 % from control group that will sometime feel panic during the labor and delivery. 73.33 % from study group always feel hopelessness during labor and delivery while 56.76 % from control group sometime feel hopelessness during labor and delivery. 50 % from control group always they feel longing for the child, while 50 % from study group they never feel longing for the child. 56.67 from study group and 53.33 % from control group that they sometime feel self-confidence. 76.67 from study group and 53.33 % from control group that they sometime feel trust. 86.67 from study group and 60% from control group think their labor will extremely painful.

Table (5) Distribution the Study and Control Group according to their W-DEQ-B response regarding women experience during labor and delivery after education (Posttest).

	Stuc	ly gr	oup	( Post -	test)			Control group ( Post -test)						
st Items	F			%			MS	F			%			MS
	N	S	A	N	S	A			S	A	N	S	A	
Did your experience was fantastic during the labor and delivery?	0	14	16	0	46.67	53. 33	1.47	1	23	6	3.33	76.67	20	2.17
Did your experience was scary during the labor and delivery?	12	17	1	40	56.67	3.3	1.63	0	15	15	0	50	50	2.50
Did you felt strong during the labor and delivery?	22	8	0	26.67	73.33	0	1.27	5	25	0	16.67	83.33	0	1.83
Did you felt you are confident during the labor and delivery	17	13	0	56.67	43.33	0	1.43	1	24	5	3.33	80	16.67	2.13
Did you felt you are afraid during the labor and delivery?	12	18	0	40	60	0	1.60	0			0	70	30	2.30
Did you felt you are weak during the labor and delivery?	14	16	0	46.67	53.33	0	1.53	0	18	12	0	60	40	2.40
Did you felt you are independent during the labor and delivery?	23	7	0	76.67	23.33	0	1.23	4	26	0	13.33	86.67	0	1.87
Did you felt you are tense during the labor and delivery?	23	7	0	76.67	23.33	0	1.23	0	12	18	0	40	60	2.60
Did you felt you are proud during the labor and delivery?	19	11	0	63.33	36.67	0	1.37	1	26	3	3.33	86.67	10	2.07
Did you felt you are safe during the labor and delivery?	16	14	0	53.33	46.67	0	1.47	0	13	17	0	43.33	56.67	2.57

This table shows that 53.33 % from study group always they have fantastic experience while 76.67% from control group sometime they have fantastic experience during labor. 56.67 % from study group and 50% from control group always they have had scary experience during labor. 73.33 % from study group always they felt strong during the labor. 73.33% from study group and 83.33% from control group they sometime felt strong during the labor and delivery.56.67 % from study group and 80 % from control group they sometime confident during the labor and delivery. 60 % from study group and 70 % from control group they sometime afraid during the labor and delivery. 53.33% from study group and 60% from control group weak during the labor and delivery. 76.67% from study group always felt independent during the labor and delivery and 86.67% from control group sometime felt independent during the labor and delivery. 76.67% from study group they never felt tense during the labor and delivery and 60% from control group always they felt tense during the labor and delivery. 63.33 % from study group always felt proud during the labor and delivery and 86.67 % from control group they sometime felt proud during the labor and delivery. 53.33% from study group and 56.67% from control group sometime they felt safe during the labor and delivery.

Continue table (5) Distribution the Study and Control Group according to their W-DEQ-B response regarding women experience during labor and delivery after education (Post-test).

Items	Study group (Post-test)								Control group (Post-test)					
	F			%			MS	F			%			MS
					S	A					N	S	A	IVIS
Did you felt you are glad during the labor and delivery?	0	15	15	0	50	50	1.50	12	18	0	40	60	0	2.40
Did you felt you are quiet during the labor and delivery?	0	10	20	0	33.33	66.67	1.33	2	28	0	6.67	93.33	0	1.93
Did you felt you are relaxed during the labor and delivery?		13		0	43.33	56.67	1.34			0	56.67	43.33	0	2.57
Did you felt you are panic during the labor and delivery?	16	14	0	53.33	46.67	0	1.47	0	7	23	0	23.33	76.67	2.77
Did you felt you are hopelessness during the labor and delivery?		17	13	0	56.67	43.33	1.57	0	11	19	0	36.67	63.33	2.63
Did you felt you had longing for the child during the labor and delivery?	-	5	25	0	16.67	83.33	1.17	2	16	12	6.67	53.33	40	1.67
Did you felt you had self- confidence during the labor and delivery?		8	22	0	26.67	73.33	1.27	7	23	0	23.33	76.67	0	1.77
Did you felt you had trust during the labor and delivery?		10		0	33.33	66.67	1.33	0	30	0	0	100	0	2.00
Did you felt your labor was painful?	0	30	0	0	100	0	2.00	0	19	11	0	63.33	36.67	2.37

This table shows that 50% from study group always they felt glad during labor while 60% from control group sometime they felt glad at labor. 66.67 % from study group always they felt quite during labor while 93.33% from control group sometime they quite at labor. 56.67 % from study group always they felt relax during labor while 56.67 % from control group sometime relaxed during labor. 53.33 % from study group they never felt panic during labor instead of 76.67 % from control group always they felt panic during labor. 56.67 % from study group sometime they are hopelessness during labor while 63.33 % from control group always they are hopelessness during labor. 83.33 % from study group they are always have longing for the child while 53.33 % from control group they are sometime longing for the child. 73.33 % from study group they always have self-confidence while 76.67 % from control group sometime have self-confidence. 66.67 % from study group always they felt trust during labor while 100% from control group they sometime feel trusting during labor. 100% from study group and 63.33 from control group they are felt painful during labor.

Table 6: Statistical comparison for Study and control groups according to their W-DEQ-A women expectation during labor and delivery before education (Pre test) by

Pre-test		N	3.6	an	t-test		a:	
(before education)	fore education)		Mean	SD	(df=58)	p-value	Sig.	
women expectation	Study Pre	30	2.34	0.30	1.432	0.158	NS	
	Control Pre	30	2.23	0.29				

using Independent t test. This table shows that there is non-significant relationship between study and control group before education related towomen expectation during the labor and delivery.

Table 7: Statistical comparison for Study and control groups according to their W-DEQ-A women experience during labor and delivery After education (Posttest) by using Independent t test

Post-test (After education)		N	Mea n	SD	t-test (df=58)	p- value	Sig.
	Study Post	30	1.43	0.24	-13.783		
Women experience	Control Post	30	2.21	0.19		<0.001	HS

This table shows that there is high significant relationship between study and control group after education program relatedwomen experience during labor and delivery.

Table (8): relationship between women expectation during labor Before education (Pre-test) and their demographic data for the Study and Control Group by using Chisquare test.

	Study	y Pre	,	Cont	rol Pre	
Demographic data	Chi-square (X <sup>2</sup> )	df	P-value (Sig.)	Chi-square (X <sup>2</sup> )	df	P-value (Sig.)
Maternal	0.06	1	0.80	.34	1	0.56 (NS)
age (year)			(NS)			
Occupation	0.02	1	0.89	.14	1	0.71 (NS)
			(NS)			
Place of	0.29	1	0.59	2.85	1	0.09 (NS)
residence			(NS)			
Educational	6.28	5	0.28	4.99	5	0.42 (NS)
level			(NS)			
Desired of	4.22	1	0.03 (S)	1.70	1	0.42 (NS)
delivery						
Planning of	0.04	1	0.84	3.53	1	0.06 (NS)

pregnancy			(NS)			
Party	1.30	1	0.25	0.14	1	0.71 (NS)
			(NS)			
Previous	4.00	1	0.04 (S)	1.09	1	0. 01 (NS)
abortion						
Previous	2.20	2	0.33	2.18	2	0.54 (NS)
delivery			(NS)			

This table shows that there are no significant relationships between women expectation before education and demographic data for the Study and control except there is significant relationships between women expectation and previous abortion, desired of delivery

Table 9: relationship between women experiences during labor after education (Posttest) and their demographic data for the Study and Control Group by using Chi-square test.

	Stud	ly Pos	t	Control Post			
Demographic data	Chi-square (X <sup>2</sup> )	df	P-value (Sig.)	Chi- square (X <sup>2</sup> )	d f	P-value (Sig.)	
Maternal age	0.08	1	0.90 (NS)	1.17	1	0.27 (NS)	
(year)							
Occupation	0.05	1	0.89 (NS)	.98	1	0.32 (NS)	
Place of residence	0.29	1	0.59 (NS)	4.47	1	0.63 (S)	
Educational level	6.28	5	0.28 (NS)	3.15	5	0.67 (NS)	
Desired of delivery	4.22	1	0.03 (S)	1.97	1	0.65 (NS)	
Planning of	0.04	1	0.84 (NS)	6.92	1	0.009 (S)	
pregnancy							
Party	1.30	1	0.25 (NS)	0.55	1	0.45 (NS)	
Previous abortion	4.00	1	0.04 (S)	2.50	1	0.11 (NS)	
Previous delivery	2.20	2	0.33 (NS)	2.65	3	0.44 (NS)	

This table shows that there are significant relationships between women experiences after education and demographic data which are previous abortion, desired of delivery for the study as well as there are significant relationships between women experiences after education and place of residence and planning of pregnancy for control group.

#### **Discussion of results**

Experiences of joy and happiness because of a new-born baby are emotions expected of mothers. However, for some of them pregnancy and childbirth are a major disappointment and leave behind painful, traumatic memories One of the tasks of the prenatal classes recommended by the Polish Gynecological Society is to prevent the unpleasant emotions associated with pregnancy and childbirth through education and training to prepare for motherhood .(Bak & Mastalerz, 2016)

# Part 1:Discussion of Demographic Characteristics

The results of current study shows that most participants were women aged greater than 25 years old, this results agree with study of Bak & Mastalerz in 2016; they found that a large percentage of study and control groups have 30-40 year. As well as the present study found that 90% of both group (control and study) were housewife while 10% of them have employee, 73.33% from experimental group and 70% from control group were lived in urban area. Rahmani et al., 2020 had support that most of participants are housewife(94%) as well as they lived in city with (72.22%) represented study group and (70.96%) from control group. In addition the present study had also revealed that 37% in control group and 33% in studied group have Secondary education Uçar and Golbasi in 2019 also found that most participants including interventional group with 50% and control group with 45% they have Secondary education.

# part 2:discussion of Obstetrical Characteristics

Current study shows that 70 % of studied and 76 % of control group in 30 week of gestational age in the same study Uslu Yuvaci et al., in 2020 they found that 80% from participants groups at 30 week of gestational age.

86% from control and 80% from experimental groups they are planned to pregnancy. This result agree with Rahmani et al., 2020 they found that 80% from study group and 87% from control group wanted pregnancy. On the other hand; 60% from experimental group and 50% from control group they are nulliparous women while 50% from control group and 40% from experimental group they are multiparous study of J. Kacperczyk-Bartnik et al, 2019 revealedthat women who attended study were more often primipara. 70% from experimental group and 67% from control group they did not have previous abortion. This result agree with study of Rahmani et al., in 2020 shown that women who attended study didn't have previous abortion.

Present study found that 80 % from control group and 53% fromstudy group have Caesarean Section desired while 47% from study group and 20 % from control group have spontaneous vaginal delivery desired, whereas after education program 93% from study group and 27% from control group chooses spontaneous vaginal delivery while 73% from control group and 7 % from study group have Caesarean Section desired. This result agree with study of Rouhe et al., 2013 they revealed that percentage of Caesarean Section desired increased in control and study group before intervention while decreased in study group after intervention, however parentage of spontaneous vaginal delivery desired in study group increased while decreased in control group and study of Uslu Yuvaci et al., 2020 also supported this result when

they found that the parentage of spontaneous vaginal delivery desired in study group increased after educational program while decreased Caesarean Section desired.

The present study shown that Previous delivery of 43 % from control group and 37% from study group were spontaneous vaginal delivery. Since the sample includes nulliparous women, 60% in the study sample and 50% of the control sample have not had a previous birth study of Stoll et al., 2015 they found that less than half of participants they have spontaneous vaginal delivery previously.

# part 3:discussion of women expectations during labor

Current study finds that high percent of the study group always think that their labor and delivery will be fantastic, scary, afraid, tense and safe while high percent of control group they sometime think that their labor and delivery will be fantastic, scary, afraid, tense and safe. On other hand high percent of both study and control group sometime think they will be strong, confident, weak, independent and glad during labor and delivery. the study of MoghaddamHosseini et al., in 2020support the present study when they find that high score of W-DEQ regarding Lack of positive emotions including the same items of present study which are fantastic, scary, afraid, tense, safe, strong, confident, weak, independent and glad.

The present study revealed that high percent of the study group always think that they will be relaxed, panic, hopelessness, and longing for the child during labor and delivery while high percent of control group sometime think that they will be relaxed, panic, hopelessness, and longing for the child during labor and delivery. on other hand high percent of both study and control group sometime think they will be proud, quiet, self-confidence, trust and painful during labor and delivery.

The study of (Preis et al., 2018) support the present study, when they find that high percent of participants they relaxed, panic, hopelessness, and longing for the child proud, quiet, self-confidence, trust and painful during labor and delivery.

#### part 4: discussion of women expectancies during labor

Current study finds that high percent of the study group always think that their labor and delivery will be fantastic while high percent of control group they sometime think that their labor and delivery will be fantastic as well as high percent of both study and control group they sometime think that their labor and delivery will be scary. also high percent of the study group always feel that they will be glad, Quiet, relaxed, longing for the child, have self-confidence, trust, independent and proud while high percent of the control group they sometime feel that they will be glad, Quiet, relaxed, longing for the child, have self-confidence, trust, independent and proud. Study of G. Gökçe İsbir et al., in 2016 support this results when they revealed that most of women who attended class have positive experience during childbirth.

on the other hand, present study finds that high percent of the study and control group that they will be, strong, afraid, weak and painful during labor and delivery. also present study find that high percent of the study group feel that they will be never tense and panic during labor while high percent of the control group feel that they will be sometime tense and panic during labor. present study also find that high percent of

the study group sometime feel hopelessness while high percent of the control group always feel hopelessness during labor.

# Part 5: Statistical comparison for Study and control groups according to their expectations during the labor and delivery.

In the current study there is non-significant relationship between study and control group before education related to women expectations during the labor and deliverywhile after education the study find that there is high significant relationship between study and control group related to women experiences during labor and delivery. This results agree with study conducted by Kizilirmak & Başer, 2016. When find that there is no significant relationship between study and control group before education related tomaternal expectations and experiences during labor while there is significant relationship after education program.

Part 6: Statistical comparison for Study and control groups according to their expectations during the labor and delivery.

there are no significant relationships between women expectation before education and demographic data for the Study and control except there is significant relationships between women expectation and previous abortion, desired of delivery. This results agree with study of (G. Gökçe İsbir et al., 2016)

present study finds that there are significant relationships between women experiences during labor after education and demographic data which are previous abortion and desired of delivery this results disagree with study of (Rahmani et al., 2020) and (D. Cosßkuner Potur et al., 2017) when they find that there is no relationship between women feelings and mode of deliver and abortion as well as there are significant relationships between women experiences during labor after education with planning of pregnancy for control group this results agree with study of Elvander et al., 2013 when they found that there are relationship between birth experances and planning for pregnancy.

#### Conclusion

In the current study there is non-significant relationship between study and control group before education related to women expectations during the labor and delivery while after education the study find that there is high significant relationship between study and control group related to women experiences during labor and delivery.

#### Recommendations

The current study recommends that the Ministry of Health in Iraq: must be improve women expectation and experiences educationprogram through:

- \* Providing educational programs in primary health care centers for pregnant women about labor and delivery.
- \*Further testing is needed to assess WDEQ-A women expectation and experiences during labor in different cultural settings and to evaluate its potential applicability in

clinical settings to evaluate the emotional health of women facing childbirth and identify those at risk.

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