

Effectiveness of Educational program on Primigravida Women's Childbirth Fear at Al-Elwea Maternity Hospital in Baghdad City

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ABSTRACT

Background: Pregnancy and childbirth are considered as normal physiological processes as well as it's significant physiological, social, and emotional events in a women and their family's life. Despite women's desire to have children, distressed women may choose to avoid pregnancy, terminate their pregnancy, or have a cesarean delivery without medical indication

Aim: To determine the effectiveness of the educational program on primigravida women's fear and to find out the relationship between fear of childbirth and demographical variables.

Methods: Quasi-experimental study design pre-test and post-test for both the study and the control group was used to collect the data from 100 women. A pilot-test is conducted to determine the reliability of the questionnaire. Educational program provided for study group and post-test conducted in the first stage of labor for both groups. Data were analyzed through the use of SPSS.

Results: The highest percentage of primigravida women have a severe fear of childbirth. There are no significant differences between study and control group in pre-test, while there are highly significant differences between study and control group in post-test. There are no significant difference between women's fear and demographic variable.

Conclusion: This study finds that primigravida women have severe childbirth fear before receiving the educational program, however their fear reduced to mild in post-test period. The educational program is effective in reducing fear.

Keywords: Childbirth, Fear, Primigravida, Pregnant women

INTRODUCTION

Pregnant women are generally have fear of childbirth because the pain is beyond their control and they are concerned about the health of their newborn, if the pregnant women perceived their ability to cope with stress, they will be resistant to the adverse effects of stress on health. There is a correlation between fear of childbirth and self-efficacy, according to previous studies^{1,2}.

Childbirth fear is a common phenomenon that has adverse effect on the women's birth experience. Because fear, the birth may take longer, and the women feels more severe labor pain. Pregnant women can request a caesarean section due to fear of childbirth, resulting increase in the incidence of elective caesarean sections. Instrumental vaginal birth or emergency caesarean birth can be occurred as a result of childbirth fear. Fear is also considered to have an adverse impact on the postpartum period, and is linked to post-traumatic stress disorder and birth trauma^{3,4,5}.

To prevent the FOC, pain of childbirth, and also to increasing the prenatal self-efficacy, it can be used to educate and provide guidance to increase women childbirth awareness and improve their psychological readiness⁶.

MATERIALS AND METHODS

Quasi-experimental study design pre-test and post-test for both the study and the control group was conducted among primigravida women attending outpatient clinics at Al-Elwea

maternity hospital. The study was performed from October 2020 to February 2021. Non probability purposive sample used to collect the data from 100 women, however there was 30% dropout from the study and control group. Inclusion criteria First pregnancy, Singleton pregnancy, Gestational age of 28 to 32 weeks, has no medical and obstetrical problem, Literacy, Accept participation in study. A pilot study conducted in order to determine the reliability of the questionnaire in a sample of 10 women who excluded from the study sample $r1 = 0.88$. Content validity was determined through a panel of 21 experts their experience mean and (SD) $25.8 \pm (11.1)$. The data was collected after obtaining the agreement from women to participant in this study. Questionnaires was completed through structured interview in both the study and control groups (pretest). Necessary coordination was conducted for study group to participate in education program. The education program was conducted using various methods includes lecture, discussion, demonstration techniques, and the use positive birth experience from multiparous women. The educational sessions was provided to the study group and follow up through social media, while the control group receive the routinely care. Questionnaires was completed through structured interview for both the study and control groups (post-test) at the delivery room in the first stage of labor. Data are analyzed through the use of SPSS version 26.

RESULTS

Table 1 shows that highest percentage 45.7% of the study group are at the age group 20-24 years and 40% of the control group are at the age group 15-19 years, mean age (SD) 20.28 (3.54) and 20.85(3.58) for study and control group respectively. There are no significant differences between study groups.

Table 2 reveals that there are no significant differences between women's age, educational level, gestational age, duration between marriage and pregnancy and childbirth fear during pre-test and post-test period among study group. While, there are significant differences between delivery preference and childbirth fear during pre-test.

Table 1: Distribution of Study Sample According to Socio-demographic Characteristics

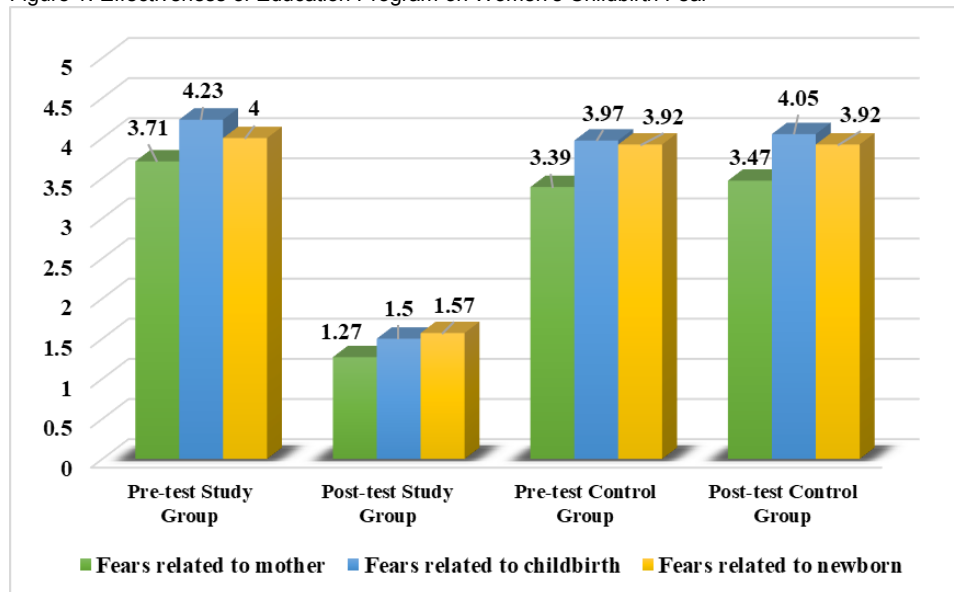
Variables	Groups				C.C. (*) P-value
	Study(n=35)		Control(n=35)		
	F	%	F	%	
Age / years					
15 - 19	15	42.8	14	40	C.C.=0.37 P=0.437 (NS)
20 - 24	16	45.7	13	37.1	
25 - 29	3	8.6	8	22.9	
30 - 34	1	2.9	0	0	
Mean (SD)	20.28(3.54)		20.85(3.58)		
Educational level					
Read & write	2	5.7	1	2.9	C.C.=0.55 P=0.925 (NS)
Primary school	11	31.4	9	25.7	
Intermediate school	15	42.8	14	40.0	
Preparatory school	1	2.9	4	11.4	
Institute graduate	3	8.6	3	8.6	
College graduate	3	8.6	4	11.4	
Occupational Status					
Employee	2	5.7	4	11.4	C.C.=0.28 P=0.077 (NS)
Housewife	33	94.3	31	88.6	

Table 2: Differences of women's Childbirth Fear with some study variables

Variable	Childbirth Fear in test periods (Study Group)							
	Pre-test				Post-test			
	F	Mean	SD	ANOVA	F	Mean	SD	ANOVA
Age / years								
15 - 19	15	65.6	6.93	F= .643 d.f= 3 P= .593 NS	15	21.46	2.5	F= .33 d.f= 3 P= .8 NS
20 - 24	16	61.8	9.1		16	24.18	11.57	
25 - 29	3	62	2		3	21	1	
30 - 34	1	66	-		1	22	-	
Total	35	63.6	7.7		35	22.6	7.9	
Educational level								
Read & write	2	64.5	16.2	F= 1.4 d.f= 5 P= .22 NS	2	23.0	.00	F= .47 d.f= 5 P= .79 NS
Primary school	11	62.9	5.5		11	20.7	2.93	
Intermediate school	15	65.0	5.2		15	24.73	11.64	
Preparatory school	1	70.0	-		1	27.0	-	
Institute graduate	3	66.6	8.02		3	19.33	3.05	
College graduate	3	53.3	16.7		3	21.33	.57	
Total	35	63.6	7.7	35	22.68	7.98		
Gestational Age/ weeks								
28	3	53.0	16.46	F= 2.34 d.f= 4 P= .07 NS	3	22.0	1.0	F= 1.02 d.f= 4 P= .4 NS
29	8	62.0	7.13		8	27.37	15.76	
30	6	63.5	5.08		6	19.5	3.56	
31	6	67.66	6.86		6	20.83	1.72	
32	12	65.33	5.31		12	22.25	2.8	
Total	35	63.6	7.79	35	22.68	7.98		
Period before conceive / months								
<6	23	63.6	8.98	F= .31 d.f= 4 P= .86 NS	23	23.13	9.64	F= .30 d.f= 4 P= .87 NS
7-12	6	64.16	5.45		6	22.6	1.96	
13-18	2	68.0	2.82		2	25.5	2.12	
19-24	1	59.0	.		1	20.0	.	
>24	3	61.0	5.0		3	18.3	2.51	
Total	35	63.6	7.79	35	22.68	7.98		

Delivery Preference								
NVD	14	59.92	9.06	F= 5.92 d.f= 1 P= .021 S	14	20.92	2.94	F= 1.13 d.f= 1 P= .29 NS
CS	21	66.04	5.84		21	23.85	9.95	
Total	35	63.60	7.79		35	22.68	7.98	

Figure 1: Effectiveness of Education Program on Women's Childbirth Fear



DISCUSSION

Show that less than half of the study group at the age group 20-24 years, and 40% of the control group are at the age group 15-19 years ranging from 15– 34 years. More than one-third of both groups graduated from intermediate school. The majority of study samples were housewives, which is consistent and supported by Ahmed & Khairi (2019) revealed that the mean age and SD (23.4±5.5) years in the study group. The majority of them 83.33% were housewives. The mean age and SD (20.2±4.1) years in the control group. All of them 100% were housewives⁷.

The present study found there are no significant differences (P>0.05) between the study and control group, Rouhe et al., (2013) who emphasized that there were no significant differences between the study and control group in age, social status, education, previous pregnancies, marital status, or fear of childbirth before implementing a psycho-education program⁸.

Though, the present study is inconsistent with Serçekuş (2016) who mentioned that the mean age and SD (28.8 ± 2.2) years in the study group. The majority of them 83.9% were university graduates and more than two-thirds 71% employed. The mean age and SD (27.7 ± 4.5) years in the control group. The highest percentage of them 86.8% were university graduates and more than two-thirds 81.2% employed⁹.

The current study show that women's fear of childbirth was severe among the study group and the control group. There were no significant differences between the study and the control group during the pretest period. These results are in line with the results from other studies

conducted by Alipour (2012) who mentioned that the higher percentage of women 80% had high levels of childbirth fear at 28-30 weeks gestation. This fear had increased about 83% at 38 weeks gestation [10]. On the other hand, these results are inconsistent with Toohill (2014) who reported that 98% of women n = 1,386 completed the scale of childbirth fear. About one-third 31% of the sample had low fear and 43% of women had moderate, while only 18.8% had severe fear².

These differences in results may be attributable to differences in population inclusion criteria, data collection methods, and measurement tools for FOC. Additionally, cultural and socioeconomic differences, attitude, perception of fear, quality of prenatal care, and educational level of pregnant women.

The present study found that there are no significant differences between the study group and control group in pre-test period, however there are highly significant differences between childbirth fear for the study group pre-test and post-test period, and also there are highly significant differences between childbirth fear between the study group and control group during post-test period. Women have a severe childbirth fear-related mother before study intervention, while they have mild fear after program implementation in post-test period.

This result is supported by Gao, et al., (2020) who revealed that a childbirth psycho-education program for primigravid women helps to solve the prenatal and childbirth emotional and psychological problems and acquire a positive childbirth experience¹¹.

Ahmed & Khairi (2019) reported that childbirth classes have a positive impact on maternal and fetal wellbeing and

reduced the adverse outcomes. It can increase primigravida women knowledge and skills during pregnancy and childbirth and increase their childbirth cooperation with health care professionals⁷.

The present study found there are no significant differences ($P>0.05$) between women's age, education, occupation, gestational age, delivery preference and childbirth fear, which are consistent with Kabukçu et al. (2020), who mentioned, no statistically significant relationships were found between women's age, educational level, family income, gestational age and fear¹².

These results are inconsistent with Fairbrother et al. (2018) who found there are significant differences between childbirth fear and age, income and education, which was consistent with the previous literature who found that nulliparas, younger age was associated with higher fear¹³.

Veringa-Skiba et al., (2021) stated that early identifying fear of childbirth and recognizing pregnant women with avoidant coping strategies to provide them fear of childbirth care and support could improve childbirth experience and reduce childbirth fear in the subsequent pregnancy. They found more than one-third 33.9% had a high level of fear, but only three percent of them receive care for their fear of childbirth¹⁴.

CONCLUSION

This study concluded that more than half of study sample have fear of childbirth. More than two-thirds of them were preferred cesarean delivery. There are significant statistically differences between women's age, education, occupation, gestational age, delivery preference with childbirth fear.

RECOMMENDATION

This study recommends routinely evaluate pregnant women's fear during second and third trimester, especially for young, low education pregnant through prenatal education regarding vaginal birth, increase their childbirth self-efficacy and encouragement to vaginal birth, rather than cesarean birth.

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Conflict of interest: None declared.

Ethical approval: clearance was taken from committee in College of Nursing/ University of Baghdad. The agreement was obtained from women to participant in this study and they filled the consent form.

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