

Impact of Education Program about Family Planning among Yemeni Women on their “Knowledge and Attitude” in Sana’a city

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Abstract

A rapid population growth is a burden on the resources of many developing countries. Unregulated fertility, which contributes to such situations, compromises the economic development and political stability of these countries. Contraceptive use is the lowest in Yemen where about 1 out of 5 married women of reproductive age use contraception and only about 1 out of 10 married women use a modern method. The study conducted to evaluate the impact of implementing an educational program of family planning upon Yemeni women at Sana'a City. The study was Quasi-experimental research design. It was conducted in Al-Sabeen Hospital and Al-Olofi Center for Childhood and Motherhood which included a sample of one hundred and forty women, divided equally into two groups: study group and control group (seventy for each group). It included three tools; tool one a social demographic data and women' knowledge about family planning. Tool two women' attitude toward birth control. Tool three educational program about family planning. More than half of the control group (57.1%) whose age was between 30 years and less than 40 years and (40%) of studied group and (45.7 %) of the control group had preparatory education. The number of pregnancies was more than two fifth (41.4%) of the study group had three or more times while (58.6%) about two third for the control group. Unwanted pregnancy represented (64.3% and 57.1% respectively) of both study and control group. Women' knowledge had a poor score on pretest, improved to good score on immediate post test, and remaining good score with slight decrease on follow up test. Their attitudes score were slight positive attitudes on pretest, but increased on immediate post test, and on follow up test. There was highly statistically significant difference between the women' knowledge about FP in pre, immediate post test and follow-up. Also, there was a highly statistically significant difference between women' attitude in pre and immediate post test and follow-up test. Family planning program should involve men as well as women, design and implement a strategy to ensure all primary health care clinics provide counseling on FP.

Keywords: Family planning, Control birth, Spacing, Contraception.

1. INTRODUCTION

An unplanned pregnancy can have an impact on many areas of a woman's life including academics, finances, future plans, relationships and her mental and physical health. It can have a tremendous impact on her partner's life as well. Perhaps you think that it won't happen to you; however, the risk of becoming pregnant is a real one for young women (*Gray & Kinneer, 2012*).

The latest estimates of maternal mortality, using data from 2008, indicate that around 358000 women die each year from complications of pregnancy, childbirth or unsafe abortion. However, increased use of contraception would also have an obvious and direct effect on the number of maternal deaths, simply by reducing the number of pregnancies. It has been estimated, for instance, that if all women who say they want no more children were able to stop childbearing, the number of births would be reduced by 35% in Latin America, 33% in Asia, and 17% in Africa. If this happened, maternal mortality would be expected to fall by at least these proportions (*WHO, 2003*).

Family planning clinics are sources of knowledge for birth spacing and help make known the benefits of spacing births. Access to family planning resources has led to the reduction of infant and maternal mortality, unwanted births, teen pregnancy, spread of STDs and HIV, and improve the overall health of mother, child, and, ultimately, the family unit (*Gold R.B. et al., 2009*).

A nurse or midwife plays a many-faceted role in maternal and child health services into which family planning has been integrated. Many factors influence her role, including professional preparation, work-situation, level of responsibility, regulatory policies, socio cultural factors, and personal attitudes and beliefs toward health and family planning. Maintenance of high educational standards for nurses and midwives is required to prepare them to work with the medical profession toward the common goal of better national health standards (*Kamal, 2012*).

The aim of the study:

The aim of the present educational program is to increase a good knowledge and attitude of family planning methods and improve reproductive health and quality life, which will be capable of meeting the needs of the

women and the family for good life.

Significance of the study:

In Yemen, women face enormous challenges and obstacles. Young girls are often married by the age of 8 and receive little more than a primary school education. The population number in Yemen was reported 23.69 millions persons in 2009, according to the IMF. In 2015, Yemen's population is expected to be 28.28 millions persons. Population density is 35 per square kilometer. Yemen's population growth rate 3% and maternal mortality ratio 366 per 100.000 live births in 2009. A Yemeni woman will bear, on average, seven children. One in 19 women dies in pregnancy, making Yemen's maternal and infant mortality rates among some of the highest in the world (*Saleh, 2009 & MOPHP, 2009 & IMF, 2009*).

2. Subjects and method:

2.1 Study design:

Quasi-Experimental design was utilized in the study.

2.2 Setting:

The study was conducted in Al-Olofi Center for Childhood and Motherhood and Al-Sabeen Hospital. They are located in Sana'a city, which is the capital of the Republic of Yemen.

2.3 Sampling:

The target populations for this research were women in the previous setting. The total number of the sample was 140 women which had been calculated based on the last statically reports of women attendant Al-Sabeen Hospital and Al-Olofi Center for Childhood and Motherhood (2996 women) and took 5% of them. The sample was divided equally into two groups (study group and control group; seventy women in each group), 50% from Al-Sabeen Hospital and 50% from Al-Olofi Center. The sample was selected by a systematic random sample "every second woman comes to the maternal clinic outpatient took in our sample and stay to make interview with them".

2.4 Tools of data collection :-

2.4.1 Tool I:

A structured interview sheet was designed by the researcher to assess the study sample knowledge before application of the program, immediately after the program and in the follow-up after 3 months.

The questionnaire sheet covered the following:

Part 1) A Socio-demographic Characteristics of the sample

Which includes the personal and social data such as; age, level of education, occupational status, years of marriage, number of pregnancies, number of living children, unwanted pregnancies, number of previous abortions, and type of abortion.

Part 2) Assessment of women knowledge about family planning

Which includes sources of information, definition of family planning, ideal number of children, the ideal period between pregnancies, the ideal age for women to stop having more children, benefits and methods of family planning,

2.4.2 Tool II:

Likert's scale was used to assess the studied sample attitudes toward the different program items before the application of the program, immediately after the program and after 3 months. It consist of 24 statements. Response was measured 5 points Likert scale ranging from strongly agree, agree, unsure (uncertain), disagree and strongly disagree.

2.4.3 Tool III:

Educational program about family planning.

2.5 Content of instruction :-

Instructional units were selected to be used. It is a flexible method in the field of learning, also, it allows evaluation. The researcher is designed in 3 sessions.

1- Session 1: Introduction & Importance of family planning.

2- Session 2: Benefits of family planning.

- Benefits for the mothers.

- Benefits for the baby.

- Benefits for the whole family.

3- Session 3: Types and methods of family planning.

- Natural methods

- Chemical methods

- Non hormonal (mechanical Methods)

- Surgical Methods.

2.6 Scoring system:

The following step; to evaluate knowledge and attitude this were under taken by test before and after the

application of the program.

The total mean attitude score was calculated by:

- 1- Middle response (uncertain) given a score of zero.
- 2- Positive responses (strongly agree and agree) given 2+, 1+.
- 3- Negative responses (strongly disagree and disagree) given 2-, 1-.

In this way, a score was calculated for each individual in relation to the highest possible score (*Kaliyaperumal, 2004 and El-Houfey, 2007*).

The attitude that had five degrees (strongly agree, agree, uncertain, disagree, and strongly disagree), and each question scored (5) grades. Therefore, the women attitude total score equals "120".

The cut-point = Total score of the attitude / 2 the two degrees of the attitude (positive attitude and negative).

Likert scale adopted from (*Johns, 2010*).

Positive attitude had a score " >60 ".

Negative attitude had a score " < 60 ".

The states of the studied sample knowledge in the pretest, immediate post-test, and in late follow-up test were judged as the following:

Poor < 50%

Fair 50% -< 70%

Good = 70+%.

(*Kaliyaperumal, 2004 and EL-Houfey, 2007*). who estimated the answer by taking points as; poor (<50%), Fair (50-<70%) and good (70 %+).

2.7 Ethical consideration:

The purpose of this study was explained for every interviewed individual of the studied sample. Women have ethical rights to participate or refuse participation in the study; oral consent was taken from all women who participated in the study to ensure active participation and cooperation during implementing of the program and informed that the information obtained will be confidential and used only for the purpose of the study.

2.8 Methods:

The study was executed on two phases:

Phase (1): preparatory phase:

In this phase, the tools for data collection after reviewing the related literature were developed. Preparation of sheets for questionnaires and the education program, which took 4 months to write it after reviewing literatures and textbooks that consist of family planning subject. Obtaining the necessary approvals from the directors of Al-Olofi Center for Childhood and Motherhood and Al-Sabeen Hospital in order to collect the necessary data from selected departments and to gain their cooperation. Preparation of teaching aids to help and facilitate teaching to women such as blackboard, booklets, brochures, pamphlets, posters, data show and slides (this took one month). A pilot study was carried out before starting data collection on 20 women. Data obtained was analyzed manually. The aim of it was to test the reliability and validity of the tools as well as the clarity of the wording as well as the time needed to fulfill each questionnaire. The necessary modifications were done to reach the final form.

Phase (2): implementation phase:

Collection of data; an explanation of the purpose of the research was made to the participated women to gain their cooperation before starting data collection. The interview of the women took 15- 30 minutes and the daily number of women was 4- 5 women. Preparation of the educational program materials, data collection with the followed up the case study and control sample were done in 11 months from the end of 1/9/ 2011 to the end of 30/8/2012.

Implementing the educational program: phase of delivery of an educational program, was implemented in the period of about 3 months for each group. The tested groups were divided into 5 groups each group 10-15 women. The subgroup was received the educational intervention program in 3 sessions for 3 days; each session was consumed about two hours to two hours and fifteen minutes per day. Two days off between the sessions. Motivations aids; the researcher tried to explain the importance of family planning by giving the attenders booklets, brochures, male condoms, and breakfast with drinks after every interview and during the break of the sessions. Moreover, the researcher gave the women and the calibrates staff certificates at the end of the program.

2.9 Data analysis :-

Statistical data were coded and verified prior to computerized data entry. The statistical package of SPSS version 13 for windows was used for data entry. Descriptive statistics were calculated frequency, percentage, mean, standard deviation, chi- square test, F test, P- value less than 0.01 were considered as statistically highly significant while P- value less than 0.05 were considered as statistically significant. Participants' knowledge and attitudes were assessed by a scoring system, scored of one grade was given for each correct answer and zero grade of each incorrect or don't answer.

3. Results:

Table (1) shows the distribution of the studied women and the control group regarding the Socio-demographic characteristics. It was found that nearly half of the studied women (48.6%) aged 20 years and less than 30 years while more than half of the control group (57.1%) aged 30 years and less than 40 years. The mean age of the studied group was (mean±SD 2.53 ± 0.793) while the mean age of the control group was (mean±SD 2.81 ± 0.666).

Regarding the women educational level, it was clear that (40%) of studied group and (45.7 %) of the control group had preparatory education. According the women occupation status, it was found that most women in control and study group were housewife (80.0% and 71.4% respectively).

Regarding years of marriage, the highest percentage was (28.6%) and their years of marriage were between five years and less than ten years of the study group. On the other hand, the highest percentage of women (34.3%) and their years of marriage were between five years and less than ten years of the control group. Concerning the number of living children, it was found that the highest percentage of women who had between one to four children of both study and control group were representing (60.0%, and 55.7% respectively).

Figure (1) shows the distribution concerning women knowledge score about the family planning. It showed that; (62.8%) of the studied group had poor score on pretest, improved good score to (75.7%) on immediate post test, and dropped to (51.4%) on follow up test. While poor score (68.6%) of the control group appeared. There are highly statically significant differences (PI=0.001), and statically significant differences (PII=0.006).

Figure (2) shows the distribution concerning women attitudes score, it was found that there were positive attitudes (57.1%, 91.4%, and 94.3% respectively) of the studied group on pretest, on immediate post test, and on follow up test respectively. There are a highly statically significant differences (PI=0.001). While there were no statically significant differences (PII=0.512).

Table (2) shows the relation between women attitude toward family planning and their education status. It was found that, there was highly statistically significant difference between women attitude and their education status (PII=0.005) in the follow up test.

Table (3) shows the relation between women attitude toward family planning and their number of pregnancies. It was found that, there was highly statistically significant difference between women attitude and their number of pregnancies (PII=0.003) in the follow up test.

Table (4) shows the relation between women knowledge about family planning and their occupation status. It was found that, there was highly statistically significant difference between women knowledge and their occupation status (PI=0.001) in immediate post test, and statistically significant difference (PII=0.031) in follow up.

Table (5) shows the relation between women score of knowledge about family planning and their education level. It was found that, there was highly statistically significant difference between women knowledge and their education (PI=0.001) in immediate post test as well as statistically significant difference (PII=0.013) in follow up.

4. DISCUSSION:

Family planning allows couples to anticipate or attain their desired number of children, control spacing between pregnancies and timing of births. It is achieved through the use of contraceptive methods and the treatment of involuntary infertility. A woman's ability to space and limit her pregnancies has a direct impact on her health and well-being as well as on the outcome of each pregnancy (*WHO, 2013*).

There are different family planning methods. Each of these methods suits a particular need, desire or condition of a couple. What is important for each one of us is to choose a family planning method that meets our needs and conditions (*Aradhya, 2009*). Family planning methods can be divided based on several criteria such as natural or artificial, traditional or modern, temporary or permanent, male or female and oral or injectables or IUCDs (*Almuallm, 2007*).

In Yemen, women face enormous challenges and obstacles. Young girls receive little more than a primary school education, and then are often married by the age of eight. The population number in Yemen was reported 23.69 millions persons in 2009, according to the International Monetary Fund (*IMF, 2009*). According to the final results of the 2004 census, women represent 49 percent of the total population (*Mwanawasa, 2007*).

The present study aimed to evaluate the impact of an educational program of family planning intervention upon women in Sana'a city, Yemen.

Considering their age, the current study (table1) showed that, the age of nearly half (48.6%) of the studied women ranged from twenty to thirty years old. This may be due to Yemeni women in this age focus about taking care for their health. Therefore, they follow up and attended hospital or centers for any health problem. This disagreed with (*Rabbee, 2003*) reported that, a significant percentage of young women are below the age of 14 in Yemen.

Regarding the educational status, the present study (table1) found that, 40% of the studied women received

preparatory education. This result is similar to (*Rabbee, 2003*) who found that women's access to education has increased significantly in basic education classes. Also, agree with (*UNDP, 2005 & Gunter, 2012*) estimated that about 43% of females attend school in basic education programs.

Regarding the occupation, the present study (table1) showed that, more than two third (71.4%) of the studied women were housewives. This is due to the fact that most husbands do not want their wives to be employees; they prefer women to be housewives. Besides, women get more load and can not manage their responsibilities at home and work. This agree with study in Yemen by (*Mashrai et al., 2005*) found that (77%) of women were housewives.

However, regarding the years of marriage, the results of the present study (table1) indicated that, more than one quarter of the studied women were married for <5-<10years. This finding is in contrast with the study in Mahidol at Bangladesh by (*Yunus, 2006*) which mentioned that about one third (32.57%) of the participants were married for ≥ 16 years.

As for the number of living children, the results of the present study (table 1) indicated that, three fifth (60%) of the studied women had from one to four children. This finding agreed with the study in Washington by (*Seyfried, 2011*) which found that more than half (58.8%) of the studied women had from one to four children. On the other hand, the study agreed with (*Fahimi et al., 2012*) who reported that more than three quarter of Yemeni women had between one and four children.

Regarding the total women knowledge score about the family planning, the present study (Figure 1&2) found that, the majority of the studied women had a poor score on pretest, improved good score on immediate post test, and remaining in good score with slight decreased in percentage on follow up test. Therefore, there were highly statically significant differences (PI=0.001), and statically significant differences between pre test & immediate post test between immediate post test & follow up test (PII=0.006).

As for the score of their total attitudes, there were slight positive attitudes on pretest, but the percentage score increased on immediate post test, and on follow up test respectively. So, there were highly statically significant differences (PI=0.001). This finding was matching with the results of other studies conducted in Jordan by (*Mahamed et al., 2012*) which showed that, there was a significant improvement in respondents' knowledge and attitude after educational program in the experimental group ($p<0.001$).

As regards to the relation between the studied women' attitudes and education status, the present results (table 2) revealed that, women who had preparatory education had positive attitudes with highly statically significant difference between women' attitudes and education status on immediate post test and follow up test ($p=0.005$). This result agreed with (*Ayaz, 2009*) in Ankara Kale, who mentioned that, attitudes of women towards family planning are influenced by education.

Concerning the relation between studied women' attitudes and number of pregnancies (Gravidity), the present study (table 3) found that, there was highly statically significant difference between women' attitudes and number of pregnancies on immediate post test and follow up test ($p=0.003$). It may be attributed to the fact that women's desire to take period of rest between pregnancies because they felt tired. The result agreed with (*Ayaz, 2009*) in Ankara Kale who indicated that, there were women who had 1-3 pregnancies and did not wish any more children in the future with statistically significant ($p<0.05$).

According to the relation between studied women' knowledge and occupation status, the current study (table 4) indicated that the scores of knowledge were better among the housewife women than among employee women in immediate post application the program. (48.6%) of housewife and (24.3%) of employee had obtained a good score knowledge while declined in the percentages on late follow up (28.6%) of housewife and (20.0%) of employee had obtained a good score of knowledge with statically significant difference between women' knowledge and education status on immediate post test and follow up test ($p=0.031$). It may be related to the number of housewife women more than the number of employee women. This finding agreed with (*Mohamed, 2006*) in Beni-sueif who found that, there were statistically significantly associated with women' knowledge and their occupation status ($p<0.001$).

Concerning the relation between studied women' knowledge and education status, the present study (table 5) revealed that, the scores of knowledge were better among the women who had preparatory education than among those who "read and write" in immediate and post application program. Although declined in the percentages on late follow up of preparatory education with highly statically significant difference between women' knowledge and education status on pre test and immediate post test ($p=0.001$). It may be related that women who had preparatory education understood the information better due to different sources of knowledge from schools, families and were less affected by rumors.

5. CONCLUSION

Based on the results of the present study it can be concluded that; studied women knowledge about family planning were poorly scored on pretest, improved to good score on immediate post test, and remaining in good score with slight decreased in percentage on follow up test. There were slight positive attitudes on pretest but

the percentage score increased on immediate post test, and on follow up test with highly statically significant differences ($PI=0.001$).

6. RECOMMENDATIONS

The researchers came up with the following recommendations:

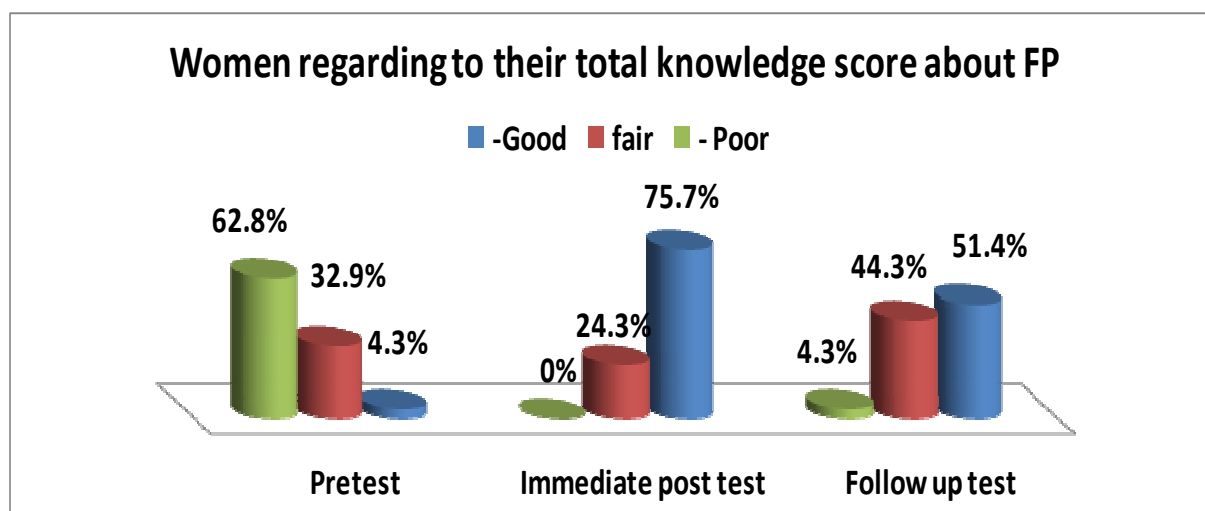
- 1-Family planning program should concentrate on young age women and offer spacing method to them while offer prolonged or permanent methods for old age women.
- 2- improved quality of counseling for couples need to address fear of side effects through helping the women to receive adequate information about the correct way of using the methods and the related problems that women probably encounter to overcome contraceptive failure and discontinuation.
- 3-Family planning program should involved men as well as women. Men involvement in FP counseling will reduce opposition to FP programs and also encourage their wives to use contraceptive methods.
- 4- Increase quality of FP services staff through training program and updating information.
- 5- Design and implement a strategy to ensure that all primary health care clinics, reproductive health centers and maternity units nationwide are routinely offering counseling on FP and providing appropriate methods for their clients.
- 6- Family planning counseling should be a part of pre and in service training program for nurses and counselors in reproductive health services.
- 7- The intervention program needs to enlarge and scale –up stress in different defect and applicable in different places of Yemen.
- 8- The need for depth research to understand the various social and cultural reasons for not using contraceptives. In particular, this will widely help to design more effective target messages.
- 9- Further research is required to assess logistic activities across all levels of the supply chain for all types of needed contraceptives.
- 10- Husband based research stated the conducted to identify the deeply related barriers in family planning acceptance and developing husband-wife states.
- 11-Identify the unmet needs of family planning and types to satisfy these needs.

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PI= between pre test & immediate post test.

PII= between immediate post test & follow up test.

Figure (1) Distribution of women regarding to their total knowledge score about the FP at Al-Sabeen

Hospital and Al-Olofi Center, in Sana'a, 2011-2012.

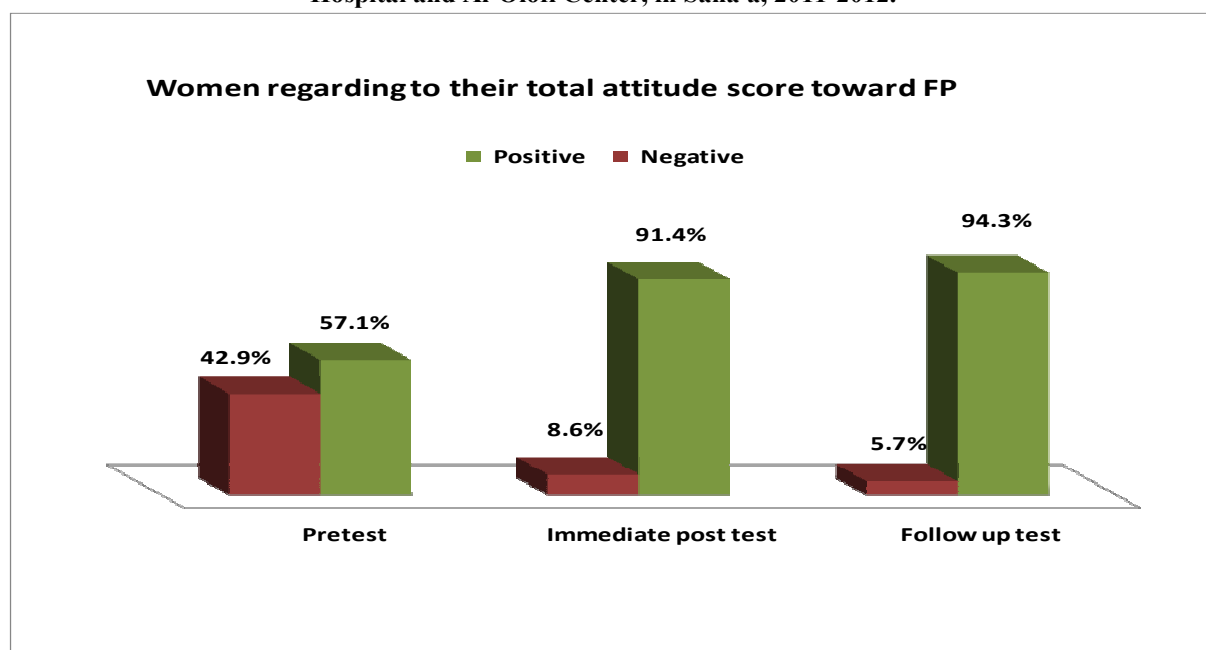


Figure (2) Distribution of women regarding to their total attitude score toward the FP at Al-Sabeen Hospital and Al-Olofi Center, in Sana'a, 2011-2012.

Table (1) Distribution of women (the control and study groups) regarding their socio demographic characteristics at Al-Sabeen Hospital and Al-Olofi Center, in Sana'a, 2011-2012.

Items	Group			
	Control (n=70)		Study(n=70)	
	No.	%	No.	%
Age: (years)				
< 20	1	1.4	4	5.7
20-<30	20	28.6	34	48.6
30-<40	40	57.1	23	32.9
40-<49	9	12.9	9	12.8
Mean ± SD	2.81 ± 0.666		2.53 ± 0.793	
Education status :				
- Illiterate	8	11.4	7	10.0
- Read and write	6	8.7	10	14.3
- Preparatory education	32	45.7	28	40.0
- Secondary education	16	22.8	20	28.6
-Diploma & Bachelor Degree	8	11.4	5	7.1
Occupation status:				
- Housewife	56	80.0	50	71.4
- Employee	14	20.0	18	25.7
- Student	0	0.0	2	2.9
Years of marriage:				
< 5	6	8.6	20	28.6
5-<10	24	34.3	20	28.6
10-<15	24	34.3	18	25.7
15>	16	22.8	12	17.1
Number of living children:				
None	1	1.4	7	10.0
1-4	39	55.7	42	60.0
5-6	18	25.7	15	21.4
7+	12	17.2	6	8.6

Table (2) Relation between attitude of women about family planning and education status.

Items	Pre- test (n=70)			Post – test (n=70)			Follow-up test (n=70)		
	Negative	Positive	Total	Negative	Positive	Total	Negative	Positive	Total
	%	%	%	%	%	%	%	%	%
Education status									
- Illiterate	8.6	1.4	10.0	0.0	10.0	10.0	2.9	7.1	10.0
- Read and write	8.6	5.7	14.3	1.4	12.9	14.3	0.0	14.3	14.3
- Preparatory education	12.85	27.14	40.0	5.71	34.28	40.0	2.9	37.1	40.0
- Secondary education	11.4	17.1	28.6	1.4	27.1	28.6	0.0	28.6	28.6
- Bachelor Degree	1.4	5.7	7.1	0.0	7.1	7.1	0.0	7.1	7.1
Total	43.0	57.0	100.0	8.6	91.4	100	5.7	94.3	100.0
$X^2_1= 3.950$							$X^2_2=11.100$		
$PI=0.460$							$PII=0.005^*$		

* Statistically significant difference

Chi-square test was used

Table (3) Relation between attitude of women about family planning and number of pregnancy

Items	Pre- test (n=70)			Post – test (n=70)			Follow-up test (n=70)		
	Negative	Positive	Total	Negative	Positive	Total	Negative	Positive	Total
	%	%	%	%	%	%	%	%	%
Number of pregnancies									
- Once	7.1	7.1	14.3	1.4	12.9	14.3	4.3	10.0	14.3
- Twice	8.6	12.9	21.4	1.4	20.0	21.4	1.4	20.0	21.4
- Three times	8.6	14.3	22.9	1.4	21.4	22.9	0.0	22.9	22.9
- More than three times	18.6	22.9	41.4	4.3	37.1	41.4	0.0	41.4	41.4
Total	42.9	57.1	100.0	8.6	91.4	100.0	5.7	94.3	100.0
$X^2_1= 0.633$							$X^2_2=8.814$		
$PI=1.000$							$PII=0.003^*$		

* Statistically significant difference

Chi-square test was used

Table (4) Relation between women score of knowledge about family planning and their occupation.

Items	Pre- test (n=70)				Post – test (n=70)			Follow-up test (n=70)			
	poor	Fair	Good	Total	Fair	Good	Total	poor	Fair	Good	Total
	%	%	%	%	%	%	%	%	%	%	%
Occupation status											
Housewife	55.7	15.7	0.0	71.4	22.9	48.6	71.4	4.3	38.6	28.6	71.4
Employee	7.1	15.7	2.9	25.7	1.4	24.3	25.7	0.0	5.7	20.0	25.7
Student	0.0	1.4	1.4	2.9	0.0	2.9	2.9	0.0	0.0	2.9	2.9
Total	62.9	32.9	4.3	100.0	24.3	75.7	100	4.3	44.3	51.4	100.0
$X^2_1= 22.157$								$X^2_2=9.446$			
$PI=0.001^*$								$PII=0.031^*$			

* Statistically significant difference

Chi-square test was used

Table (5) Relation between women score of knowledge about family planning and their education level.

Items	Pre- test (n=70)				Post – test (n=70)			Follow-up test (n=70)			
	poor	Fair	Good	Total	Fair	Good	Total	poor	Fair	Good	Total
	%	%	%	%	%	%	%	%	%	%	%
Education status											
Illiterate	10.0	0.0	0.0	10	8.6	1.4	10.0	1.4	7.1	1.4	10
Read and write	11.4	2.9	0.0	14.3	7.2	7.2	14.4	0.0	11.4	2.9	14.3
Preparatory education	27.1	12.9	0.0	40.0	5.7	34.2	39.9	1.4	14.3	24.3	40
Secondary education	11.4	14.3	2.9	28.6	2.9	25.7	28.6	1.4	11.4	15.7	28.6
Bachelor degree	2.9	2.9	1.3	7.1	0.0	7.1	7.1	0.0	0.0	7.1	7.1
Total	62.8	33.0	4.2	100.0	24.4	75.6	100	4.3	44.3	51.4	100.0
$X^2_1= 20.660$								$X^2_2=18.491$			
$PI= 0.001^*$								$PII= 0.013^*$			

* Statistically significant difference

Chi-square test was used

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