# Effect of a Guideline on Awareness and Intention to Use Family Planning Methods Among Newly Married Women''

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Abstract: Family planning defined as the practice that helps individuals or couples to attain certain objectives such as avoiding unwanted pregnancies, bringing about unwanted babies at the right time, regulating the interval between pregnancies, controlling the time at which birth occurs in relation to the ages of the parents and determining the number of children in the family Aim of this study: to assess the effect of an implemented guideline on awareness and intention to use family planning methods among newly married women through pre-test and post-test and increase their knowledge about family planning methods through health education and a guideline Subjects and methods: A Descriptive cross sectional research design has been utilized in the present study. Sample: 300 participants were included in this study from two MCH centers, 150 participants were taken from each MCH center. A pre-evaluation was done on the knowledge about family planning using a structured interviewing questionnaire sheet. Then health education and booklet was given for participants, Post evaluation was done to test improvement of their awareness among the respondents after 3 months of intervention. Results: showed that there was a statistical significant difference in the respondent's knowledge about different types of contraceptives after educational program ( $p \le 0.001$ ), and the majority of the participants change their opinions posttest regarding some methods after correction of their misconceptions inherited from others about F.P. (P < 0.05) Conclusion: health education method is effective in increasing the knowledge of women regarding family planning, there were a relation between participant's age, education and occupation with their level of knowledge. Level of knowledge is better among age group (20-25 yrs), university education and housewives. With high statistical significant difference at (P= 0.001). Recommendations: Premarital family planning counseling should concentrate on young age women, Further and in-depth research is required to understand the various social and cultural reasons for not using contraceptives, and Training programs about F.P for nurses and counselors and continuous updating of their information.

Key words: awareness, intention, and family planning.

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### I. Introduction

Contraceptive use is a key factor in preventing unwanted pregnancies, reducing maternal and child mortality, and improving the lives of women and their families <sup>(2, 3, 4, and 5)</sup>. A recent study estimated that contraceptive use could avert more than two-fifths of maternal deaths <sup>(6)</sup>. Increased access to contraceptive services has been established as a cost-effective strategy for countries to reduce maternal and child mortality <sup>(7)</sup>. The benefits of contraceptive use go beyond the health sector. Providing unrestricted access to contraceptives will help ensure a reduction in unwanted pregnancies and thereby contribute to increased female education, women's empowerment, poverty reduction, and even environmental sustainability <sup>(7, 8, and 4)</sup>.

Family planning as used by Christian Connections for International Health (CCIH), also enabling individuals and couples to determine the frequency and timing of pregnancies, including the use of a variety of methods for voluntary prevention of pregnancy. Family planning assists families in achieving the number of children desired with appropriate spacing and timing, ensuring optimal growth and development of each family member. <sup>(9)</sup>

Family planning (FP) is a process that usually involves a discussion between a woman, a man, and a trained FP service provider focusing on family health and the desires of the couple to either limit or space their children<sup>(10)</sup>. The aims of the current study were to Assess the effect of an implemented guideline on awareness and intention to use family planning methods among newly married women through pre-test and post-test.

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Iincreasing their knowledge about family planning methods through health education and a guideline in the form of a booklet

# II. Subjects and Methods

Research Design: A Descriptive cross sectional research design has been utilized in the present study.

**Setting:** This study was carried out at MCH centers in Minia city especially at premarital counseling services office; there are 2 MCH centers in Minia city. Western MCH center serving Minia city only and consists of 3 floors, the 1st floor contains family planning services, pediatric clinic, antenatal care clinic, premarital counseling services, pharmacy and laboratory. The 2nd floor contains neonate registration office, and the 3rd floor contains immunization office. The center works from 9 a.m to 2 p.m. Eastern MCH center serving the whole Minia centers (9 centers). It works also from 9 a.m to 2 p.m. it is composed of 2 floors where 1st floor contains family planning services, dentist clinic, antenatal care clinic, premarital counseling services, pharmacy and laboratory. While the second floor contains pediatric clinic and other specialties.

**Sample:** After exclusion of participants who didn't match the inclusion criteria of this study, and based on the flow rate in each MCH center, a purposeful sample of 300 pride was utilized in the current study according to 10% of total prides presented to MCH center in 2016 which is about 3000 prides in both MCH, 150 pride was taken from each MCH center.

**Inclusion criteria:** All newly married women, Women who can read and write to be able to read the guideline. **Exclusion criteria:** Previously married, divorced or widow women and Prides who went to perform the certificate after marriage has occurred

# Tools of the study:

A structured interviewing questionnaire sheet was designed by the researcher that aims to identify the effect of a guideline on awareness and about family planning methods among newly married women in Minia city. The questionnaire was composed primarily of closed-ended questions with a set of defined answers, from which the interviewee was asked to choose one response in some questions and more answer in other questions. The interviewer read the questions aloud and record respondents' answers.

# The questionnaire includes the following parts:-

#### Part 1: Personal data:

This includes (Participant's age, educational level, occupation, Residence, Husband's age, Husband's occupation, average monthly income).

#### Part 2: Awareness about family planning methods:

This includes questions to assess the woman's knowledge about family planning methods such as: Whether she heard about the word "birth spacing", What does birth spacing mean to her, different types of contraceptives, the first choice of contraceptive methods for newly married women, whether she use any one of them, Sources of information regarding contraceptives, Side effects of family planning methods, the possible complications that may arise after using contraceptives, Who must prescribe the contraceptive methods, What are places to go that introduce family planning services, and whether she need for more information about contraceptive methods.

# **Scoring system**

Level of knowledge was assessed by evaluating questions of awareness, Each correct answer corresponds to 1 point, some questions have one answer so it takes either (zero if no answer or 1 if correct answer) and other questions have more than one answer that takes either (zero if no answer, 1 if one answer or 2 if more than one answer) so there was a total of 31 points for questions that evaluate awareness.

Score	Level of knowledge
(≤10)	Poor knowledge
(11-19)	Average knowledge
(≥20)	Good knowledge

#### Validity of tools

To establish validity, the questionnaire was piloted on Jury committee composed of a panel of 4 experts of Obstetrics and Gynecological staff, and Nursing professors (Minia and Asiut universities) who reviewed the tool for clarity, relevance, comprehensiveness, understanding, applicability and easiness. A pilot study was done for (10%) of the participants (30 pride) from the sample to test the applicability and clarity of the questions in

the tool and the necessary modification was done. According to the results of the pilot study, tools modifications were done and the prides that were tested in the pilot study were excluded from the main study sample. And the total sample was collected on the modified sheet.

#### **Ethical consideration:**

Before the conduction of the pilot study as well as the actual study, an official permission and consent was obtained from the dean of the Faculty of Nursing, as well as the directors of both MCH centers after explaining the nature and purpose of the study. Study subject have the right to refuse to participate and or withdraw from the study without any rational any time. Study subject privacy was considered during collection of data no health hazards were present. Participants were assured that all their data are highly confidential.

#### **Procedure:**

An official permission was obtained from the research ethical committee of faculty of Nursing, MCH centers. Data was obtained and recorded by the researcher from the prides in the MCH center. Data included assessment of the nurses' knowledge regarding family planning methods, at the beginning of interview the researcher greeted each participant, explained the purpose, duration, and activities of the study and taken oral consent. Based on baseline data obtained from assessment and relevant review of literature, the guideline was developed by the researcher in a form of printed Arabic brochure to satisfy the studied prides deficit knowledge regarding different family planning methods. After three months of implementation of the guideline, the follow up test for prides knowledge were done by the same format of the questionnaire to evaluate the effect of the implemented guideline.

# Statistical analysis

The collected data was tabulated, computerized, analyzed and summarized by using descriptive statistical tests to test research questions by using SPSS version (20). Comparison between pretest data and posttest data was done using Chi square and P. value considering P. value  $\leq 0.05$  (significant) and  $P \leq 0.001$  (highly significant).

III. Result

Table (1): Distribution of studied sample according to Personal data:

Items	Frequency (N= 300)	Percent (%)
Age / years:		
Less than 20 years	128	42.7
20-25 years	108	36.0
25-30 years	46	15.3
More than 30	18	6.0
Mean age ± S.D	21.7± 4.5	
Educational levels	·	
Read and write	72	24.0
Primary	44	14.7
Secondary	112	37.3
University	72	24.0
Occupation	·	
Student	36	12.0
Working	38	12.7
Housewife	226	75.3
Residence		
Rural	234	78.0
Urban	66	22.0

Table (1): show the distribution of the studied sample according to personal data in which the mean prides age was  $(21.7\pm4.5)$  years. Regarding educational level, it was observed that more than one third of the studied sample (37.3%) was secondary school, while (14%) only were primary education. By looking to occupation of the prides, the majority of the sample (75.3%) was housewives. According to residence, it was found that (78%) reside in rural areas. On the other side, it was found that the mean husbands age is  $(25.8\pm3.8)$  yrs.

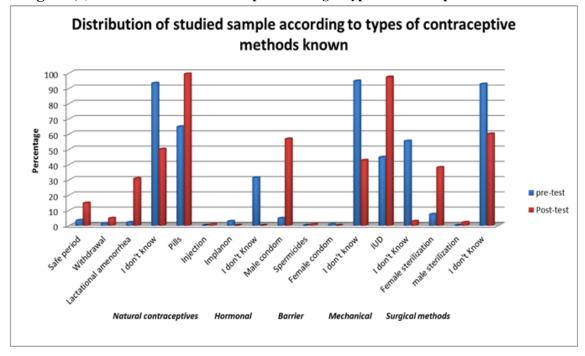


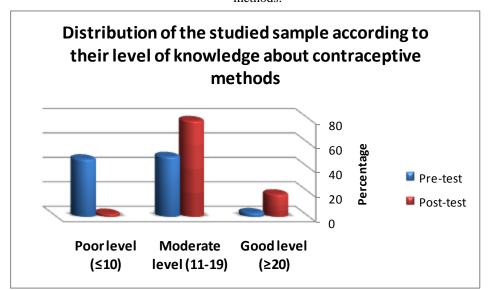
Figure (1): Distribution of studied sample according to types of contraceptive methods known

Figure (1) show that there was a statistical significant difference at  $P \le 0.05$  between pretest and posttest information about types of contraceptive methods known.

Table (9): Distribution of studied sample according to the possible complications that may arise after using contraceptives pretest and posttest:

Alternate	Test (N=	300)	Chi2	P.						
	Pre-test			post-test					value	
	No.		%		No.		%			
	Yes	No	Yes	No	Yes	No	Yes	No		
Affect fertility later on	64	236	21.3	78.7	229	71	76.3	23.7	181.599	0.001**
PID	6	294	2.0	98.0	218	82	72.7	27.3	320.175	0.001**
Pain	12	288	4.0	96.0	183	117	61.0	39.0	222.154	0.002
Psychological disturbances	2	298	0.7	99.3	215	85	71.7	28.3	327.531	0.001**
Infection	10	290	3.3	96.7	191	109	63.7	36.3	245.098	0.004
Menstrual disorders	24	276	8.0	92.0	186	114	62.0	38.0	192.264	0.005
Cancers	4	296	1.3	98.7	14	286	4.7	95.3	5.727	0.5
Others	126	174	42.0	58.0	12	288	4.0	96.0	122.304	0.001**
I don't Know	82	218	27.3	72.7	4	296	1.3	98.7	82.581	0.001**

<sup>\*\*</sup> Highly statistical significant at  $P \le 0.001$  # others include congenital anomalies, uterine diseases, etc. Table (2): revealed that there were high statistical significant differences between pretest and posttest information about complications that may occur after using contraceptive methods such as it may affect fertility later on, PID, psychological disturbances, etc. while there was no statistical significant difference with pain, infection, menstrual disorders and cancers as a complication.



**Figure (2):** Distribution of the studied sample according to their level of knowledge about contraceptive methods:

Data in figure (2) illustrates the distribution of the studied sample according to their level of knowledge about contraceptive methods where there was high statistical significant difference at ( $P \le 0.001$ ) between the level of knowledge pre and post intervention. In which about half of them (49.3%) had moderate level of knowledge before health education while their level of knowledge increased after intervention to be (78.7%). Also good level of knowledge improved from (3.3% to 18.6%) pre and post test respectively.

**Table (3):** Relationship between the personal data of studied sample and their level of knowledge before and after intervention:

	Level of know	Chî <sup>2</sup>							
Items	Poor knowled	ge	Moderate knowledge			Good knowledge			P- value
	pre-test (n=142)	Post-test (n=8)	pre-test (n=148)	post-test (n=236)	pre-test (n=10)		post-test (n=56)		
Age/years:									
Less than 20 years	71 (50%)	4 (50%)	57 (38.5%)	110 (46.6%)	0 (0	%)	14 (25%)		
20-25 years	45 (31.7%)	2 (25%)	53 (35.8%)	74 (31.4%)	10 (	100%)	32 (57.1%)	22.968 <sub>1</sub>	0.001, **
25-30 years	18 (12.7%)	2 (25%)	28 (18.9%)	36 (15.3%)	0 (0%)		8 (14.3%)		0.0272
More than 30	8 (6.5%)	0 (0%)	10 (6.8%)	16 (6.8%)	0 (0%)		2 (3.6%)		
Educational level	<u> </u>								
Read and write	42 (29.6%)	4 (50%)	30 (20.3%)	66 (28%)		0 (0%)	2 (3.6%)	47.056	0.001.00
Primary	22 (15.5%)	2 (25%)	22 (14.9%)	40 (16.9%)		0 (0%)	2 (3.6%)	47.056 <sub>1</sub> 52.504 <sub>2</sub>	0.001, **
Secondary	61 (43%)	2 (25%)	51 (34.5%)	90 (38.1%)		0 (0%) 20 (35.7%)	20 (35.7%)		
University	17 (12%)	0 (0%)	45 (30.4%)	40 (16.9%)		10 (100%)	32 (57.1%)	7	

	Level of knowl								
Items	Poor knowledge		Moderate kno	Moderate knowledge			ge	- Chí²	P- value
	pre-test (n=142)	Post-test (n=8)	pre-test (n=148)	post-test (n=236)		pre-test (n=10)	post-test (n=56)		
Occupation					•		1	_	•
Student	8 (5.6%)	0 (0%)	18 (12.2%)	16 (6.8%)		10 (100%)	20 (53.7%)	83.8181	0.001,*
Working	13 (9.2%)	0 (0%)	25 (16.9%)	24 (10.2%)		0 (0%)	14 (25%)	53.635₂	0.0012**
Housewife	121 (85.2%)	8 (100%)	105 (70.9%)	196 (83.1%)		0 (0%)	22 (39.3%)		
Husband's occu	pation							•	
Not working	86 (60.6%)	2 (25%)	68 (45.9%)	144 (61%)		0 (0%)	8 (14.3%)	17.110,	0.0011
Working	56 (39.4%)	6 (75%)	80 (54.1%)	92 (39%)		10 (100%)	48 (85.7%)	41.8452	0.0012*

<sup>\*</sup> Statistical significant at P≤0.05

knowledge at  $P \le 0.001$ .

Table (3): show the relationship between the personal data of studied sample and their level of knowledge before and after intervention in which there were highly statistical significant difference between socio-demographic data (woman's age, educational level, and occupation also husbands occupation) and level of

Table (4): Distribution of the studied sample according to intention to use family planning methods:

	Test (N=300)									
_	pre-test				post-test					
	<u> </u>			No. %						
Response	No.		%		No.		90		Chi2	P. value
	Yes	No	Yes	No	Yes	No	Yes	No		
Is it right for married couple to decide how many children to have according to their economic situation?	111	189	37.0	63.0	280	20	93.3	6.7	209.702	0.01*
Are you Planning to have a child in the future?	203	97	67.7	32.3	276	24	92.0	8.0	227.051	0.02*
Wanting to delay the first pregnancy:	40	260	13.33	86.66	77	223	25.7	74.3	11.273	0.048*
The main reason you do not want to have a baby now (N=40):										
Financial reasons	2		5.0		2		5.0			
Wanting to pursue their education before having a/another pregnancy	14		35.0		14		35.0		186.495	0.06
You feel that you are too young to have a child	8		20.0		12		30.0			
Other reason	16	·	40.0	•	12	·	30.0			

# IV. Discussion

Use of family planning (FP) methods can contribute to a substantial reduction in fertility and reduce the proportion of unwanted pregnancies as well as maternal deaths that would otherwise occur in the absence of contraception. Contraception as a method of family planning promotes survival of infants as it supports birth spacing and reduces high-risk pregnancies. It allows couples to anticipate or attain their desired number of children, control spacing between pregnancies and timing of births (11).

<sup>\*\*</sup> high statistical significant at P≤0.001 1: for Chi<sup>2</sup> and p. value before health education 2: for Chi<sup>2</sup> and p value after H.E

The present study aimed to assess the effect of an implemented guideline on awareness and intention to use family planning methods among newly married women through pre-test and post-test. And increase their knowledge about family planning methods

The present study showed that the mean age and S.D of the participants was  $(21.7\pm4.5)$  years, and the great proportion of them were less than 20 yrs. This came in accordance with the study of <sup>(12)</sup> about "Impact of Family Planning Health Education on the Knowledge and Attitude among Yasoujian Women" in which the mean age was  $(23.27\pm3.96)$  yrs. This is the commonest age of marriage, the present study showed that more than one third of the sample had completed their secondary school, this is agreed with the study of <sup>(13)</sup> who study" Knowledge and Practice of Family Planning by Women of Childbearing Age in Delta State, Nigeria". And noticed that more than one third of participants were secondary school.

This study found that about three quarters of the sample were housewives, this came in contact with the study of <sup>(14)</sup> who study" Impact of Education Program about Family Planning among Yemeni Women on their "Knowledge and Attitude" in Sana'a city" who found that more than two thirds of the study sample were housewives.

In relation to types of contraceptive methods known, the present study revealed that the majority of the sample (near two thirds) pre intervention versus near all of the sample post intervention know oral contraceptive methods (pills), this agreed with the study of <sup>(15)</sup> who found that more than four fifths of participants know oral contraceptive pills. The second method following pills was IUD which represented (less than half versus the majority of participants) pre /post intervention respectively, this came in accordance with the study of <sup>(16)</sup> who found that more than three quadrants of participants knew IUCD following oral pills and male condom. But these results wasn't agreed with <sup>(13)</sup> who studied " Awareness and Practice of Contraception Among Child Bearing Age Women" and found that a great proportion know barrier method , more than two thirds know OCPs, more than the half know IUCD, and who know injectable representing near one third of the sample.

By looking to the total participants' knowledge scores about family planning methods, it was found that less than half of the sample pretest had poor score of less than 10 points, improved to good score on the posttest with high statistical significant difference at ( $p \le 0.001$ ). These results came in contact with the study of <sup>(12)</sup> who found that there was a significant improvement (P < 0.001) in the level of knowledge regarding family planning among experimental group (enhancement from  $3.67 \pm 4.04$  to  $9.67 \pm 3.15$ ).

Also these results came in the same line with the study of <sup>(14)</sup> in sana's city. In which the majority of the studied sample had poor score in pretest that is improved to good score on immediate posttest and remaining in good score with slight decreased in percentage on follow up test.

In relation to the relationship between socio-demographic data and participant's level of knowledge, it was found that there was high statistical significant difference between woman's age, educational level, and occupation, in which the scores of knowledge were better among age group (20-25) yrs than other age groups. These results came in accordance with the study of (17) who found that awareness is lowest among adolescents and best among age group (20-35) yrs.

In relation to educational level, this study indicate that there was high knowledge scores among university and high education than low primary and secondary education. theses results came in the same line with the study of <sup>(18)</sup> who found that women who managed to attain a higher level of education exhibited greater awareness and utilization of contraceptive methods.

This study revealed that there was highly significant difference between woman's occupation and level of their knowledge in which housewives enjoy with high scores. This came in the same line with the study of  $^{(14)}$  who found that the scores of knowledge were also better among housewives than students and employee (P= 0.001).

In relation to intention to use family planning methods, it was found that near two thirds of participants agree that it isn't right for married couples to decide how many children to have in the future according to their economic level in the pretest but posttest especially after receiving information about benefits of using F.P methods and dangers of having many children without plan on woman's and child's health, the majority of the sample choose to decide and plan number of children based on economic level. These results disagreed with the study of <sup>(18)</sup> who said that the largest proportion of women (near two fifths) gave a number from 5-9 children, followed by near one third of women who wanted 10-14 children. Less than one fifths wanted 4 children or less.

In relation to intention to delay 1st pregnancy, more than three quadrants of the sample didn't want to delay 1st pregnancy in the pretest that is dropped to three quadrants posttest. This may be because some couples want to delay but they fear from their fertility being affected later on if they use the wrong method but after receiving the health education provided by the researcher and giving full information about F.P, some of them could decide the right method. These findings came in accordance with the study of <sup>(18)</sup> who found that the majority of the sample reported that they want to become pregnant at the time and (more than one tenth) only would have preferred to wait.

#### V. Conclusion

This study can conclude that there was a statistically significant improvement in participants' knowledge three months after intervention. The implementation of an educational intervention was effective and significantly improved participants' knowledge regarding family planning methods. And the majority of participants change their intention regarding the use of contraceptives after correction of their misconceptions inherited from others.

#### IV. Recommendations

- 1. Training program about F.P for nurses and counselors and continuous updating of their information.
- 2. Further and in-depth research is required to understand the various social and cultural reasons for not using contraceptives. In particular, this will widely help to design more effective target messages.
- 3. Government should support all F.P programs through the different mass media Efforts should be made to strengthen the media for providing accurate knowledge and government should take initiatives to support such programs about F.P.
- 4. Family planning program should involved men as well as women. Men involvement in F.P counseling will reduce opposition to FP programs and also encourage their wives to use contraceptive methods.

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