

Factors Affecting Uses of Different Family Planning Methods among Women from Different Social Levels at Minia University

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**Abstract**

Family planning plays a pivotal role in population control and human development. Aim of this study was to assess the factors affecting acceptance and uses of family planning methods among women from different social levels at Minia University. Design was descriptive explanatory. Sample: purposive sample of 488 women in reproductive age from eight Minia University Faculties and hospitals. Tools: A structured interviewing questionnaire was used including, Part I: Personal and demographic data, part II: assessment acceptance level about family planning services, part III: assessment used Family planning methods, part IV: knowledge about other different family planning methods. Results: The majority of participants was Muslims; above half of participant received family planning methods from governmental units and (31.4%) deliver it from private clinics. Satisfaction of services provided by the Family Planning Clinics was insignificance. Participants who used Family planning methods had significantly lower age than those who do not and significantly higher educational level, there were no significant differences between participants who used Family planning methods and who did not use in obstetric history. , husband did not agree to use contraception was Significance. Conclusion: The acceptance of family planning influenced by many socio-cultural and demographic factors at levels of individual, family and society. Among these different factors, education is considered to exert an almost profound effect on family planning acceptance and fertility. Recommendations Facilitate women awareness in Family planning methods in an early marital age that can increase their use of these different methods.

Keywords: Factors, Acceptance, Uses, Family planning methods, Social Levels, Minia University

**Introduction**

Family planning (FP) plays a pivotal role in population control, poverty reduction, and human development. FP services have a range of benefits, including maternal and infant survival, better nutrition and prevention of sexually transmittable diseases (STDs), and environmental conservation (1). Good reproductive health implies that people are able to have a satisfying and safe to have the capability to reproduce and the freedom to decide, when, and how often to do so. Men and women should be informed about and have access to safe, effective, affordable, and acceptable methods of family planning of their choice, and the right to appropriate health-care services that enable women to safely go through pregnancy and childbirth (2).

In Egypt, the latest demographic and health survey (EDHS) in 2008 acknowledged that many Egyptian women are having more births than they consider ideal. Overall, 14 percent of births in five years prior to the survey were reported not wanted among these, 5% of births were identified as "mistimed", meaning wanted later; while 9% were unwanted entirely (3).

There are many factors, which affect women utilization of family planning services. Factors related to contraceptive methods as (safety of the method, effectiveness, availability and the cost of all contraceptive methods); Factors related to the couples using contraceptives includes (demographic and biological factors as age of women, maternal education and husband education, parity, Sociocultural factors, occupational and economic factors, religious factors, legal factors and psychological factors) (4).

The acceptance of family planning influenced by many socio-cultural and demographic factors at levels of individual, family and society. Among these different

factors, education is considered to exert the most profound effect on family planning acceptance and fertility. In other words, education is the most dynamic and influential tool for inducing positive attitude among couples towards the method and measures of family Planning (5).

**The aim of this study was:**

Assess factors affecting acceptance and uses of different family planning methods among women from different social levels.

**Research Question :**

What are the factors affecting acceptance and uses of family planning methods among women from different social levels?

**Significance of the study**

The low uptake of family planning is largely blamed on many factors. It has been observed that the awareness of the availability of family planning services has a great influence on the uptake of family planning services. (6)

In last decades Egypt had suffered major socioeconomic consequences of overpopulation problem. This resulted from high level of birth rate (7). Every 10 seconds the world population increases by 30 individuals and is likely doubled over the next 40 years. Over population and unplanned population growth impede the socioeconomic development, hinder prosperity, and threatens the health status of community members (8) So this study will be conducted to assess the factors affecting acceptance and uses of family planning methods because take these factor in consideration and develop family planning program .

## Subjects and Methods

### Research Design:

Descriptive explanatory study was adopted to meet the aim of the study.

### Study area and sittings:

The study was carried out at Minia University, Minia governorate, Egypt (28.10 N° and 30.75 E° and the distance from Cairo was 241 km). Sample collected from eight University Faculties and Minia University Hospitals all of this faculties and two university hospitals located inside Minia University build only Minia university hospital it's in the south of Minia town.

### Sample:

Sample was staff members, employees and workers from eight Minia University Faculties (Nursing - Science - Agriculture - Pharmacy - Arts - Education - Physical education and Dar-ELuloom) and Minia University Hospitals (Renal and Urinary Hospital - Obstetric Gynecological and Child Hospital and Minia University Hospital).

### Sample size and sampling procedure:

Sample size calculation was done using (Epi-info status, CDC, 2000) program take on consideration prevalence of family planning use of purposive sample technique of 488 women in reproductive age are included in this study 20% of the total number in every setting participated in this study. Inclusion Criteria: All married women in reproductive age range (15-49 years) in chosen organizations. Exclusion Criteria: not married women; newly married women; unwilling to participate in the study; women who were sterile or had sterile husbands; and too sick to be given consent or to be interviewed.

### Tool and technique of data collection:

Tools developed by researcher after extensive review of literature and it was structured from in-depth interviewing questionnaire which was developed & translated into

Arabic language and was consisted of the following parts:-

- Part I: Personal, socio-demographic data, obstetrical and medical history: such as (age, sex, address, social level, occupation etc.);
- Part II: Includes assessment acceptance level about family planning services such as (From where you get your method? Does the provider in the family planning clinic treated professionally with you?, What is your acceptance level about services? There are medical centers or health unit offering family planning services in the vicinity of where you live? etc..)
- Part III: it includes knowledge about used family planning method: such as (type of method e, how to choose the method, where get the method, etc.)
- Part IV: It includes knowledge about other different family planning methods: such as (do you hear about emergency contraceptive before? do you know about the effect of some method on the vascular system? etc.).

### Validity and reliability:

Validity is the accuracy and meaningfulness of inferences, which are based on the research results. Tool tested for content validity by a Jury of three experts in the field of the study who reviewed the instruments for clarity, relevance, comprehensiveness understanding, applicability and easiness for administrative minor modifications and necessary modifications were done.

Also, tool was tested for internal reliability (reliability referred to the consistency of measurement and was frequently assessed using the test-retest reliability method). To achieve reliability of the questionnaire, the instrument was designed with great care matching questions with objectives for the study it was found (87.3) respectively.

### Ethical Considerations:

- Approval was sought from the Provincial and District ethical committee before undertaking the research.
- The purpose of the study was explained to all participants.
- The participant had ethical rights to agree or refuse to participate in the study.
- Written consent was obtained from every participant.
- Every participant was informed that the information and data obtained was confidential and used only for the purpose of the study.

### Study procedure:

An official letter of the study approval was obtained from the Dean of the Faculty of Nursing at Minia University to Head Manager of Minia University, then to the chairmen of the previously mentioned setting. This letter included a brief explanation of the aim of the study and permission was requested from each chairman to carry out the study. Written consent was obtained from the participants before being involved in the study after explanation of the nature of the study, its benefits and there are no risks or cost in participation, and there are voluntary participation and confidentiality of each subject who agree to participate to fill the questionnaire. Data was collected two days per week, at official work time. Data were collected within 5 months from May to October 2016, two days/week at official work time from 8 Am: 12 pm. The researcher met the participants and they were interviewed in their work place at times that were convenient for them. The time spent to fill the questionnaire ranged between 20 to 30 minutes according to the needed explanation. Measures were taken to protect ethical rights of participants

### Statistical Design:

Data entry was done using the compatible personal computer by the researcher. The statistical analysis was done using Spss17 statistical software package and excel, 2007 for figures. The content of each tool was analyzed, categorized by the researcher. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables and was presented in the form of mean  $\pm$  SD for quantitative data. Quantitative continuous data were compared using student T-test in case of comparisons between two groups. For multiple groups, F-

test or (ANOVA) was used. Pearson correlation analysis was used for assessment of the inter-relationships among quantitative variables. Multiple regression analysis was used to determining the significance of factors affecting using FP

methods. Statistical significance was considered at p. value < 0.05. Pvalue was considered to be significant if less than 0.05, high significance if less than 0.01, or insignificant if more than 0.05.

**Results**

**. Table (1): socio-demographic data of all participants**

Variable		Description (n=488)
Age (year) method ±SD, range		33.2± 7.0(21-84)
Occupation	Staff member	148(30.3%)
	Employee	284(58.2%)
	Worker	56(11.5%)
Educational level	Read and write	27(5.5%)
	Basic education	26(5.3%)
	Secondary education	77(18.5%)
	University education	358(73.4%)
Religion	Muslim	433(88.7%)
	Christian	55(11.3%)
Residence	Urban	286(58.6%)
	Rural	202(41.4%)
Income (EGP)	<1000	56(13.3%)
	= 1000	59(12.1%)
	>1000	364(74.6%)
Husband income (EGP)	<1000	52(10.7%)
	= 1000	58(13.9%)
	>1000	368(75.4%)
Husband age (year)		37.2± 7.5(32-60)

Socio-demographic characteristics are shown in the table (1). The age of the participants ranged from 21 – 48 years with a mean of 33.2 years, (30.3%) participants of them were staff members, (58.2%) were employees and (11.5%) of them were workers.

**Table (2): Assessment of acceptance level about family Planning services.**

Question	Description (n=441)
Did you use family planning method?	No 47(9.6%)
	Yes 441(90.4%)
From where have you got your family planning method?	Did not use 47(9.6%)
	Govern.org. 288(59.0%)
	Private org. 153(31.4%)
There are medical centers or health unit offering family planning services in the vicinity of where you live?	No 173(39.2%)
	Yes 268(60.8%)
Does the provider in the family planning clinics treat professionally with you?	No 255(51.0%)
	Yes 216(49.0%)
Does there a private room for counseling?	No 243(55.1%)
	Yes 198(44.9%)
Do you find an appropriate place for waiting in the place?	No 259(58.7%)
	Yes 182(41.3%)
Do you found guidelines, protocols, charts or visual aids for counseling?	No 221(50.1%)
	Yes 220(49.9%)
Do you have privacy during discus your problem and during the consultation?	No 262(59.4%)
	Yes 179(40.6%)
Is there room dedicated to family planning services?	No 209(47.4%)
	Yes 232(52.6%)
Have you been examined before getting your method?	No 276(62.6%)
	Yes 165(37.4%)
Have you chosen the appropriate method based on your medical history and your physical examination?	No 265(60.1%)
	Yes 176(39.9%)
	No 240(54.4%)
	Yes 201(45.6%)
Did your privacy respect during insertion of the method?	No 214(48.5%)
	Yes 227(51.5%)

Question	Description (n=441)	
Did you spend a lot of time during installing the FP method?	No	268(60.8%)
	Yes	173(39.2%)

Table (2) presents the results of the assessment of acceptance level about family planning services. study participants, 90.4% used family planning methods and the rest of them (9.6%) did not use family planning methods (59.0%) of them got family planning methods from governmental organizations and (31.4%) deliver it from private clinics. (60.8%) of cases had medical centers or health unit offering family planning services in the vicinity of where they live. (49.0%) said that the provider in the place treated well with them, but (58.7%) were not satisfied that there was an appropriate place for waiting in the place

**Table (3): Data about the knowledge of other family planning methods.**

Question	Description (n=488)	
Do you agree with do tubal ligation? Did you know the Islamic view in this process?	<input type="checkbox"/> No	443(90.8%)
	<input type="checkbox"/> Yes	45(9.2%)
Do your doctors tell you any information about them before it?	<input type="checkbox"/> No	449(92.0%)
	<input type="checkbox"/> Yes	39(8.0%)
Did you know that it is a contraceptive for men?	<input type="checkbox"/> No	389(79.7%)
	<input type="checkbox"/> Yes	99(20.3%)
Are your husband agrees to use contraception for men?	<input type="checkbox"/> No	461(94.5%)
	<input type="checkbox"/> Yes	27(5.5%)
Do you ask religious view when choosing the contraceptive method?	<input type="checkbox"/> No	374(76.6%)
	<input type="checkbox"/> Yes	114(23.4%)
Do you think that some	<input type="checkbox"/> No	296(60.7%)
	<input type="checkbox"/> Yes	192(39.3%)
Do you think that the contraceptives religiously impermissible?	<input type="checkbox"/> No	407(83.4%)
	<input type="checkbox"/> Yes	81(16.6%)

Also, high percent of them (88.3%) did not know the effect of contraceptive methods on your eyes or blood vessels and clots, however, (91.6%) of them did not know what is tubal ligation and did not know the Islamic view in this process.

**Table (4): Factors affecting acceptance and uses of family planning methods**

Variable	Using P methods		P. value (Sig.)
	Do not use (n=47cases)	Use (n=441cases)	
Age (year) method ±SD, range	35.9± 7.2	32.9± 6.9	0.005**
Occupation	Staff member	23(48.9%)	0.012*
	Employee	19(40.4%)	
	Worker	5(10.6%)	
Educational level	Read and write	2(4.3%)	NS 0.947
	Basic education	2(4.3%)	
	Secondary education	7(14.9%)	
	University education	36(76.6%)	
Religion	Muslim	42(89.4%)	NS 0.885
	Christian	5(10.6%)	
Residence	Urban	32(68.1%)	NS 0.165
	Rural	15(31.9%)	
Income (EGP)	<1000	3(6.4%)	NS 0.202
	= 1000	4(8.5%)	
	>1000	40(85.1%)	
Husband Income (EGP)	<1000	4(8.5%)	NS 0.424
	= 1000	4(8.5%)	
	>1000	39(83.0%)	
Husband age (year) method ± SD, range	39.5± 8.2	36.9± 7.4	0.029*
Age at marriage (year)	18-20	11(23.4%)	NS 0.856
	20-25	28(56.9%)	
	25-30	5(10.6%)	
	30-35	2(4.3%)	
	35-40	1(2.1%)	
Duration of marriage (year)	2-5	16(34.0%)	NS 0.075
	5-10	11(23.4%)	
	10-20	11(23.4%)	

Variable		Using P methods		P. value (Sig.)
		Do not use (n=47cases)	Use (n=441cases)	
	>20	9(19.1%)	37(8.4%)	
No .of boys	0	13(27.7%)	123(27.9%)	NS 0.973
	1	34(72.3%)	318(72.1%)	
No .of girls	0	13(27.7%)	124(28.1%)	NS 0.945
	1	34(72.3%)	316(71.7%)	
	2	0	1(0.2%)	
Mode of last delivery	Vaginal	33(70.2%)	276(62.6%)	NS 0.612
	Caesarian	14 (29.8%)	163 (37.4%)	

\*Significant (p<0.05). \*\*Significant (p<0.01). NS Not significant

Results of the table (4) showed that relation between participants who used FP methods and who did not use in demographic data. Participants who did use FP methods had significantly lower age than those who do not use family planning methods and significantly higher educational level among participant and significant difference between participants who have high educational level and who have lower educational level Table (4) revealed that there were no significant differences between participants who used FP methods and who did not use in obstetric history.

**Discussion**

Family planning is widely acknowledged as an important intervention towards achieving Millennium Development Goals (MDGs) four and five as it has proven to reduce maternal and child mortality , Family planning can prevent unwanted pregnancies and unsafe abortions. Also, some family planning methods such as condom usage can protect individuals from Sexually Transmitted Infections (STIs) including HIV/AIDS (9).

The present result of this study showed that the prevalence of using FP methods was very high. Similarly, El-Shazly et al., (2015) examined the improvement in women’s health through assessment of knowledge, attitudes, and practices of family planning in Egypt locality, the study included 200 women who were selected from Menoufiya governorate. They found the prevalence of using FP methods was significant. (10).

The current study revealed that above half of participant did not satisfy with services provided by the Family Planning Clinics in living units and maternity and child care centers. The present studies were in agreement with those of El-Shazly et al., (2015). The reasons for this are many, including lack of awareness, no availability of accessible family planning services, and limitations on women’s mobility (10).

Nasr et al., (2016) studied the association between quality of family planning services and client’s satisfaction level in maternal and child health centers in Port Said city, Egypt. They found that almost of participant were satisfied with family planning services. Also, in the same line(11), Hutchinson & Agha (2011) who mentioned that clients reported that they were satisfied and had no problems with all of the following: waiting time ,ability to discuss concerns with provider, amount of explanation given, quality of examination and treatment provided, visual privacy during examination, auditory privacy during examination, availability of the methods at facility, hours of service provision, cleanliness of facility and how the staff deals with the client 100% (12) .

Family planning services should be convenient, accessible and acceptable to clients. In addition, it is essential to provide follow-up care to ensure continuity of services and an adequate logistics system to ensure continuity of supplies (Hutchinson & Agha 2011) (12). Nasr et al., (2016) found that almost of nurses perform family

planning logistics and supplies in all family planning centers (11). This finding is in line with (Tseganeh, 2005) who found that all family planning service delivery points had monthly family planning logistics and supplies due to supervisory visits on the family planning clinics (13).

It was reported that high percent number of nurses' help the clients to arrive at the best method of their choices. Tseganeh (2005) denoted that when clients get different methods in the health service delivery points, they can get the chance to prefer their choice. When clients get the method they want, they use them longer and more effectively. In addition, It was noticed that, there were about more than three-quarters of nurses explained the information about the chosen method. (13)

The current study revealed that about half of the participants did not think that some contraceptive method cause malignancy and or did not know the effect of contraceptive methods on breast feeding and the majority of them did not know the effect of contraceptive methods on your eyes or blood vessels and clots. Similar results were obtained by, El-Shazly et al., (2015) (10) found that most of the women in the study were not aware of physiological, surgical, and emergency contraceptive methods; hormonal methods were the most common contraceptive method used in the area of the study.

The present study, almost of the participants reported that their husband did not agree to use contraception. Two-third of them did not ask about the religious view when choosing a contraceptive method. Kabbash et al., (2007) (14) reported that men play a powerful role in reproductive decisions. Their actions can have unhealthy and even dangerous results. Men’s participation is a promising strategy for addressing some of the world’s pressing reproductive health problems. The Arab region, though diverse, is characterized by patriarchal social systems and family structures that give prominence to the role of men in both public and private spheres (Awadalla, 2012) (15). It was reported that the majority thought family planning decisions should be made by both partners (DeJong and El-Khoury, 2006) (16).

Awadalla, (2012) (15) found that the majority of contraceptive users made the decision jointly with their husband, more than third of secondary school educated participants saw the decision as one they made mainly on their own, and about third of illiterate individuals indicated

that their husbands were mainly responsible for the decision to use contraception.

The present study revealed that participants who did use FP methods had significantly lower age than those who do not and significantly higher educational level. These results agreed with those of Awadalla, (2012) "in Egypt" who found that most women reporting the use of contraceptive methods were 30–39 years old, were employed, were rich, educated and belonged to urban governorates (15) .

Alvergne et al., (2011) found that individual socio-demographic characteristics were the most likely explanatory factors for temporal and spatial patterns of contraceptive uptake. In previous studies, economic status has been identified as one of the key factors affecting contraceptive use. In Egypt, household wealth status is associated with IUD use from private sources, perhaps because services from public or not-for-profit sources can be obtained with minimal cost, whereas access to private services usually involves higher cost (17). (Hong et al., 2006) The results of this study indicated that one-fifth of poor women used methods other than IUD and pills (18).

El-Shazly et al., (2015) examined the improvement in women's health through assessment of knowledge, attitudes, and practices of family planning in Egypt. They found that Socio-demographic factors played a minor role in the usage of contraceptive methods; women's level of education and socioeconomic status were not significant determinants of the likelihood of contraceptive use (10).

The present study showed that IUD was most commonly used by higher educated women more than pills were most commonly used by graduates of secondary schools. In India, the low-income urban population is aware of the importance of limiting the family size and has family planning facilities yet has less contraceptive use because of the low level of education (Kumar et al., 2011) (19).

Brown et al., (2011) reported a positive correlation between perceived benefit regarding ease of contraception use and educational level. In the Eastern province of Saudi Arabia, socio-economic factors were related to their use (20). The most important variables that were found to be significantly correlated with the birth intervals were maternal age, level of education, family size and breastfeeding (al-Almaie, 2003) (21).

Sharma et al., (2012) reported that women of higher age and parity used family planning methods more than those of lower age and parity (22). NFHS-III, (2007) reported more use of family planning methods by women of higher age group and parity (23). Mohanan et al., (2003) also highlighted that acceptors of contraception were of higher age and parity. The prominent reason for this finding was that couples usually start using family planning methods only after they have reached the desired family size which usually corresponds to older ages and higher parities of women. Use of family planning methods increased sharply with the education of women in this study (24). According to Mohanan et al., (2003) a significant influence of monthly income was found on acceptance of family planning methods but education level of women was not found an influencing factor in acceptance of family planning(24). NFHS-III, (2007) (23) also found that more use of family planning methods was seen in women of higher wealth index.

Women of higher educational level are more likely to be aware and able of taking care of their health and hence avoid pregnancies by use of family planning methods. More Hindus as compared to Muslims used family planning methods in this study. NFHS-III, (2007) (23) also reported more use of family planning among Hindus as compared to Muslims. Mohanan et al., (2003) (24) noted that religion played important role in determining family planning acceptance. Among Muslim women, non-acceptors of family planning were found to be highest in their study. In our study, most of the Muslim women who did not use family planning methods reasoned religious beliefs and husband's decision for non-acceptance.

### **Conclusion**

The acceptance of family planning influenced by many socio-cultural and demographic factors at levels of individual, family and society. Among these different factors, education is considered to exert an almost profound effect on family planning acceptance and fertility. Nurse practitioners (NPs) provide the majority of family planning services in public health departments, community health centers. The conclusions of the current study support research question.

### **Recommendations**

Based on results of the present study the following can be recommended:

1. Facilitate women awareness in Family planning methods in an early marital age that can increase their use of these different methods.
2. Promote premarital counseling programs to enhance family planning use.
3. Governmental efforts must be done to enhance and improve the performance of the Family Planning Clinics in living units and maternity and child care centers to raise the satisfaction towards FP services.

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