

Utilization, non compliance and causes of unmet needs of family planning among women served by family medicine centers in Menyat Sandoub , Dakahlia , Egypt

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Abstract

Background : Family planning has a great impact on women's health. The practice of family planning helps in reducing the rate of maternal and child mortality thus help in improving maternal and child health. **Aim:** To identify pattern of contraception use, causes of non compliance, and determinants of unmet needs among rural women in Menyat Sandoub, Dakahlia Governorate. **Subjects and methods:** A comparative cross sectional study was conducted in Menyat Sandoub family medicine center. The study composed of two groups, the first group were female contraceptive users, and the second group were FP un-met-needs outreached from the catchment area served by the study family medicine center . All target women groups were subjected to a structured questionnaire including sociodemographic, reproductive characteristics , contraception use pattern as well as causes of family planning and unmet needs client satisfaction with provided services. **Results:** Proportionate utilization rate among attendants was 73.14% while prevalence of contraception use was 58.8% with 3.9% discontinuation rate. Working husband and duration of marriage (≤ 10 years) decreased the risk for family planning unmet needs by logistic regression models (OR=0.28, delete OR=0.19 respectively). Causes of unmet needs were , male baby wish by the family (32%) and related health concerns (32%) , negative religious idea (28%). 68.6% of compliant users had health barriers during regular use . **Conclusion:** Contraception prevalence was 58.8%. Male baby wish, rumors about side effects, and husband disapproval were determinants of unmet needs that necessitate community based intervention to increase family planning utilization conducive to acceleration of Egypt's progress towards development goals.

Key words: Family planning, Female users, Women's health, Unmet needs

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Introduction

Family planning has a beneficial impact on women's health. The practice of family planning helps in reducing the rates of unintended pregnancies, maternal and child mortality and induction abortions.⁽¹⁾

One of the most important socio biological problem in Egypt is overpopulation .The population has increased from around fifty-eight millions in 1995 to about eighty two millions today excluding eight millions of Egyptians who live in other countries. The number marks a growth

of 18% since the last population census in 2006, when the Egyptian population was estimated to be 76.5 million. Egypt's economy suffers due to overpopulation. The policy leaders assured that the annual increase in population growth rate will be the main obstacle to the efforts of the government in achieving the economic growth and development. Therefore, Egypt has considered the family planning program as one of its national priorities.⁽²⁾

Despite the efforts exerted over the past decades, and the successes achieved in lowering the population growth rate from 2.8% in 1986 to 1.6 % in 2008. Egypt has a long way to go to overturn the population trend. The level and pattern of contraceptive methods use have changed during the last 28 years in Egypt. The average use doubled during the 11-year period between 1980-1991 (from 24% to 48%). The use rate continued to rise over the next 12 years although at a slower pace, where it reached a level of 60% in 2008 with no apparent rise till 2013. However, total unmet need in Egypt was 9%. About third of these unmet needs represented a desire to space the next birth (3.4%), the remainder represented an interest in limiting births (5.8%).⁽³⁾ This may be due to lack of family planning policies and, therefore, limited access to information, supplies and services. Inadequate availability and access to supplies and services Refusal of family planning, either on the woman's part or on the part of her partner or another influential person. EDHS, 2014⁽⁴⁾

According to United Nations definition, women with unmet needs are those who are fecund and sexually active but were not using any method of contraception, and report not wanting any more

children or wanting to delay birth of their next child.⁽⁵⁾

Unmet needs for contraception can lead to unintended pregnancies, which pose risks for women, their families and societies. In less developed countries, about one fourth of pregnancies are unintended that is either unwanted or mistimed. The particularly harmful consequence of unintended pregnancies is unsafe abortion for the mother, affection of child health and rapid population growth in resource strapped countries.⁽⁶⁾

The aim of this study was to identify pattern of contraception use, health related causes of non compliance, and determinants of Family Planning (FP) unmet needs.

Subjects and methods:

Study design:

A comparative cross sectional study was conducted in the family planning clinic in Menyat Sandoub family medicine center, in Dakahlia Governorate in Mansoura during the period from June to december 2013 targeting the registered women in the catchment area of the center.

Study Sample:

The study is composed of two women groups, the first group were 250 female family planning ever users including regular users for the last 6 month (n=220) and non regular users & discontinuation from one method to another (n=30). The sample was systemic random sample as we select every fifth women from regular attendants in family planning clinic in Meniat Sandoub family medicine center

(the response rate was 83.3%). The second group were 50 females not using family planning methods and not wanting any more children (fulfilling criteria of unmet needs) and they were enrolled in study through community outreaching home visits.

Study tools:

The target women groups were subjected to a structured questionnaire focusing on sociodemographic characteristics of contraceptive users in the reproductive ages including (age, education, occupation, income, husband age, family income and crowding index), reproductive characteristics of women group in reproductive ages using family planning methods such as age of menarche, age of marriage for husband and wife, duration of marriage, numbers of pregnancies, number of abortions/still births and number of living children. In addition to type of FP method, side effects and barriers to use of family planning methods. Also highlighting on client satisfaction towards the health services provided by the study family medicine center.

Community health workers known as (The Raidats) visited the homes of the unmet needs women; who are not using contraceptives or have stopped usage more than 2 years and not wanting more children. These women (n=50) were interviewed to explore their FP unmet needs and recognize barriers for non use of contraceptives.

Statistical techniques:

Data were analyzed with SPSS (Statistical Package for Social Sciences) (version 16.0). Descriptive statistics as number and percent were used for qualitative data. Chi Square test was used to compare between

groups. Significant predictors in the bivariate analysis were entered into the regression model for prediction of independent variables for unmet needs. Odds ratios and their 95% confidence interval were calculated. $P \leq 0.05$ was considered as the level of statistical significance.

Results

Reviewing the Family planning (FP) profile in Menyat Sandoub family medicine center located during 2013; it was found that six months contraception proportionate utilization among regular attendants was 73.14% and six month prevalence of contraception use among target women married in the child bearing period (15-49 years) was 58.8%. In addition, six month discontinuation rate among regular attendants was 6.67% and 3.9% among target women married in the child bearing period (15-49 years) (**Data are not tabulated**).

It was found that 88% of women were compliant users of family planning methods and 12% were non compliant users. Among current users, IUD was the most frequently used method (63.3%), followed by OCP and injectables (19.1%, 16.8%; respectively). However, OCP was the most frequently used method (83.4%) among past or non compliant users. The difference was statistically significant ($p < 0.05$) (**Table 1**).

There was no statistically significant difference between FP unmet needs women and FP ever users as regards age, educational status and occupation of the wives. The percent of employed husbands (93.6%) was higher among ever users. However, unemployment was higher among FP unmet needs (20%) with statistically significant difference ($p < 0.05$). Almost one quarter

of studied women groups had high level of education (28%, 22%; respectively). Sufficient income and able to save money was noticed more among ever users (73.6%) compared to FP unmet needs (66%) with no statistically significant difference ($p>0.05$) (**Table 2**).

There was no statistically significant difference between FP unmet needs and ever users ($p>0.05$) as regards age of marriage or age of menarche. However, shorter duration of marriage was noticed among ever users compared to FP unmet needs women. Number of previous pregnancies was statistically significantly higher among unmet needs compared to ever users ($p<0.05$). Also, shorter duration since last delivery (<1 year) was more frequent in ever users compared to unmet needs with statistically significant difference ($p<0.05$) (Table 3).

Working husband and shorter duration of marriage (≤ 10 years) were significant protective factors against non using of family planning method by logistic regression models among FP unmet needs group (0.28(0.1-0.72), 0.19(0.09-0.38); respectively) (**Data are not tabulated**).

It was found that 151 women out of 220 compliant FP users (68.6%) reported some problems during contraception use. Missed pills was the most common reason for OCP and progesterone only pills (46.2% & 75%; respectively). Abnormal bleeding was found in more than one half of women (55.4%) using IUD. These rates were higher among non compliant users, missed pills for progesterone only pills (83.3%) & offensive vaginal discharge (66.7%) for IUD users were the most common health concerns. The difference was not statistically significant ($p>0.05$) (**Table 4**). It was found that 46.6% of non

complaint users stopped using FP methods due to willing to get pregnant followed by husband travelling away (36.6%) and medical reasons was the least frequent cause (16.6%).

The causes of FP unmet needs were pregnancy wish (56%), male baby wish and fear of health concerns (32%, 32%; respectively), negative religious idea (28%), husband wish more babies (26%), husband travelling away (10%), defective information about FP (8%) (**Table 5**).

Discussion

Using contraceptives has been shown to promote a woman's sense of autonomy and increase her ability to make decisions in different areas of her life.⁽⁷⁾ Access to family planning (FP), quality of care and exploring barriers to utilization of services are key factors in the adoption and continuation of contraception in Egypt⁽⁸⁾

Egypt Demographic and Health Survey (EDHS) (2014)⁽³⁾ declared that, the contraception prevalence rate was 59% among currently married women. Urban women are more likely to be using contraceptive methods than rural women (61% and 57% respectively). Usage rate was higher in lower Egypt (64%) than upper Egypt (55%).

Reviewing Menyat Sandoub family planning health records revealed that, the contraceptive prevalence rates, in years; 2010, 2011, 2012 were (62.9%, 55.4%, 55.5% ; respectively). In the current study, we found that 58.8% of the female registered in Menyat Sandoub family center were contraceptive users. However, Me konnen and Worku (2011)⁽⁹⁾ reported

that contraceptive prevalence rate was only 25.4% among married women in Ethiopia. These differences may be contributed to different cultures as in some countries the parents may favor the bigger families in developing countries, also it can be attributed to poor family planning health services and facilities.

In addition, Egypt Demographic and Health Survey (EDHS) (2014)⁽³⁾ reported a prevalence of unmet needs of 9% all over the country with its highest level in rural upper Egypt reaching 17%. In the current study, level of unmet needs was lowest among young married group less than 20 years (0) and highest among age groups (20-35 years) (66%). Although these results were not significantly different from ever users but these results agreed with above results of United States Agency for International Development (USAID) for Egypt.

In our study, no statistically significant difference between ever users and unmet needs was found as regards age, educational level and occupation of the targeted women. However, percent of illiterate couples was higher among FP unmet needs group. In Egypt, the Demographic and Health Survey (DHS) reported higher FP unmet needs in illiterate (10%) compared to secondary and above education (7%).⁽⁴⁾

Also, EDHS (2008)⁽⁴⁾ showed that unmet need did not vary greatly by age, education or work status. This is in agreement with the study of Chacko (2001)⁽¹⁰⁾ who examined the determinants of contraceptive use among 600 married women in four villages in rural West Bengal, India. In their study, the educational level and the occupation of the studied women didn't influence the use of contraceptive

means. Similar findings were reported by a study in Beheira governorate of Egypt.⁽¹¹⁾

In the present research, higher income was noticed among users compared to unmet needs but with no statistically significant difference. This came in agreement with a study in rural Kashmir which assessed the knowledge, attitude and practice of contraception; they noticed a significant negative impact of low socioeconomic status on the rate of contraceptive use.⁽¹²⁾

Regarding predictors of FP unmet needs, husband occupation and shorter duration of marriage (≤ 10 years) decreased risk of unmet needs (OR=0.28; 95% CI (0.11-0.72), OR=0.19; 95% CI (0.09-0.38). However, Ali and Okud (2013)⁽¹³⁾ investigated FP unmet need in Kassala, Eastern Sudan. In their study, although age, age at marriage, parity, residence and experience of child death were not associated with total unmet need for family planning. Women education less than secondary level (OR=7.8; CI=5.6-10.9; P=0.00), husband education less than secondary level (OR=1.9; CI=1.3-2.6, P=0.00) and woman's occupation; housewife (OR=4.3; CI=2.5-7.2; P=0.00) were associated with the total unmet need.

As a possible cause for non compliance in FP use, missed pills was the most common one for OCP and progesterone only pills. Excessive bleeding was found to be prominent in IUD users. These findings are supported by the study of Khan (2004)⁽¹⁴⁾ who found that 40% of the women reported missing one active pill during the 6 months prior to the survey. Furthermore, Aisien (2007)⁽¹⁵⁾ reported that excessive bleeding is the most common cause of IUD discontinuation.

Regarding unmet needs, it was found that 32.0 % of women had past history of health problem, 32.0 % believed rumors about side effects of contraception, 28% had religious causes and husband disapproved in 26.0 % of women. This is in harmony with the results of Kotb et al. (2011)⁽¹⁶⁾ who identified risk factors of unmet contraceptive need in Cairo by home interviews. The study results showed that unmet need women were more likely to have a larger number of children, especially female children, believed that contraception is religiously prohibited, husband opposition to contraceptive use, a previous history of unwanted pregnancy, and experiencing side effects from previous contraceptive use.

Previous literature have reported that health concerns are an important cause for unmet need of contraception.^(17,4) The fear of side effects of contraceptives includes not only the expected physical discomfort, but also the fear of the expected time and financial costs of managing the side effects, and the possibility of interference with spousal sexual relations. Family planning providers must recognize the multidimensional nature of this cost of contraception in order to provide appropriate counseling.⁽¹⁸⁾

As 32% of FP unmet needs women reported husband's wish to have a son. Such son preference has been confirmed by Bhandari, 2006.⁽¹⁹⁾ Another study in Egypt also reported that son preference was a barrier to replacement fertility.⁽²⁰⁾

Conclusion

In Egypt about 60% of target women are family planning users, however there was high rate of unmet needs among Egyptian women. It was found

that male baby wish, history of associated health problem, rumors about side effects of contraception, and husband disapproval were the most common causes of unmet needs. Working husband and shorter duration of marriage (≤ 10 years) were significant negative predictors for FP unmet needs. More health education programs are needed targeting both parents as well as the need of more qualified, accessible and affordable family planning services. Having the correct information and means to decide the number and spacing of the children is a fundamental reproductive right.

Limitation of study

- Limited convenient sample of FP unmet needs women group outreached through home visit by Raidat Rifayat. Hence, prevalence of unmet needs in the catchment area could not be estimated.

- Causes reported by women for not using family planning may not express the opinion and attitude of the husbands or families.

RESEARCH ETHICS : The study protocol was approved by the Ministry of health research ethics committee. The study manuscript was checked by Institutional review board's plagiarism check program in Mansoura Faculty of Medicine.

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Conflict of interest: None

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Table (1): Proportion of Family Planning utilization according to type of method among studied women groups

Method	Female users N=250		P value
	Regular n=220	Non regular n=30	
	No (%)	No (%)	
IUD	140(63.6)	3(10)	0.001*
OCP	42(19.1)	25(83.4)	
Injectables	37(16.8)	2(6.6)	
Condom	1(1.4)	0(0)	

Non regular : include non compliant to hormonal pills and injection or discontinuation due to medical health hazards.

Table (2): Socio demographic characteristics of studied women groups

Sociodemographic characteristics	Studied groups		p value	OR (95%CI)
	FP n=50 NO (%)	Unmet needs FP Ever Users n=250 NO (%)		
Age Groups				
<20 years	0(0)	25(10)	0.01*	0.0(0.0-0.9)
20-35 years	33(66)	153(61.2)	0.7	0.9(0.46-1.84)
>35 years (r)	17(34)	72(28.8)	1	
Educational Status				
Illiterate	7(14)	31(12.4)	0.8	0.89(0.29-2.6)
Basic education	29(58)	164(65.6)	0.3	0.69(0.3-1.5)
High education (r)	14 (28)	55(22)	1	
Occupation				
House wife	38 (76)	165 (66.0)	0.16	1.63(0.77-3.5)
#Working (r)	12(24)	85(34)	1	
Husband Age				
≤40 years old	32(64)	186(74.4)	0.13	0.61(0.31-1.22)
>40 years old (r)	18(36)	64(25.6)	1	
Husband occupation				
Employed	40(80)	234 (93.6)	0.001*	0.27(0.11-0.7)
Unemployed (r)	10(20)	16(6.4)	1	
Husband education				
Illiterate	6(12)	19(7.6)	0.7	0.83(0.26 -2.5)
Basic education	20(40)	168(67.2)	≤0.001*	0.31(0.15-0.64)
High education (r)	24(48)	63(25.2)	1	
Income status				
*Insufficient	17(34)	66(26.4)	0.7	0.88(0.37-2.11)
*Sufficient	19(38)	136(54.4)	0.05	
Able to save money (r)	14(28)	48(19.2)	1	
Crowding index				
3 members	27(54)	168(67.2)	0.07	0.57 (0.3-1.11)
≥4members (r)	23(46)	82(32.8)	1	

Working women included technical jobs and office workers. *Insufficient: can't meet basic needs, sufficient can meet basic needs and emergencies.

Table (3): Predictors of FP unmet needs by logistic regression analysis

Predictors	B (Regression Coefficient)	p	OR (95%CI)
Husband Occupation Employed Unemployed(r)	-1.24	0.008	0.28 (0.11- 0.72)
Duration of marriage ≤10 >10 (r)	-1.64	≤0.001	0.19 (0.09 -0.38)
Constant	0.27		
Percent correctly predicted	81.5		
Model χ^2	32.9; P≤0.001		

r :reference group, OR: Odds Ratio, CI :confidence interval

Table (4): Health concerns and barriers for utilization of family planning methods

Health concerns and barriers	Regular users	Non regular users	P value
	No (%)		
<i>Oral contraceptive pills</i>	n=39	N=4	0.1
Missed pills	18(46.2)	1(25)	
Abnormal bleeding	12(30.8)	0(0)	
Headache	6(15.4)	2(50)	
Weight gain	3(7.7)	1(25)	
<i>Progesterone only pills</i>	N=16	N=6	0.1
Missed pills	12(75)	5(83.3)	
Abnormal bleeding	4(25)	0(0)	
Weight gain	0(0)	1(16.7)	
<i>Depo-Provera</i>	n=37	n=2	0.8
Abnormal bleeding	7(17.5)	0(0)	
Headache	1(2.5)	0(0)	
Weight gain	3(7.5)	0(0)	
Amenorrhea	29(72.5)	2(100)	
<i>IUD</i>	n=74	n=3	0.057
Heavy Bleeding	41(55.4)	1(33.3)	
Abdominal or back pain	22(29.7)	0(0)	
Offensive Vaginal discharge	11(14.9)	2(66.7)	
<i>Condom</i>	n=1	N=0	-----
Dyspareunia &discomfort	1(100)	0(0)	

NB: Total number is not absolute as multiple health complaints were present in same user

Table (5): Determinants of FP unmet needs

FP unmet needs	Studied group
	n=50
	No (%)
Perceived attitude	
Rumors about side effects	16(32)
Husband disapproval	13(26)
Religious causes	14(28)
High fertility motives	14(28)
Lactation amenorrhea	2(4)
Infrequent sex	8(16)
Age approaching menopause	11(22)
Less availability of FP options	1(2)
Family reproductive needs	
Pregnancy wish	28 (56)
Male baby wish	16(32)
Husband wish more babies	13(26)
Negative religious ideas	14(28)
Health concerns	16(32)
Permanent infertility	10(20)
Fear of weight gain	6(12)
Defective information about FP	4(8)

FP: Family planning

NB: Total number is not absolute